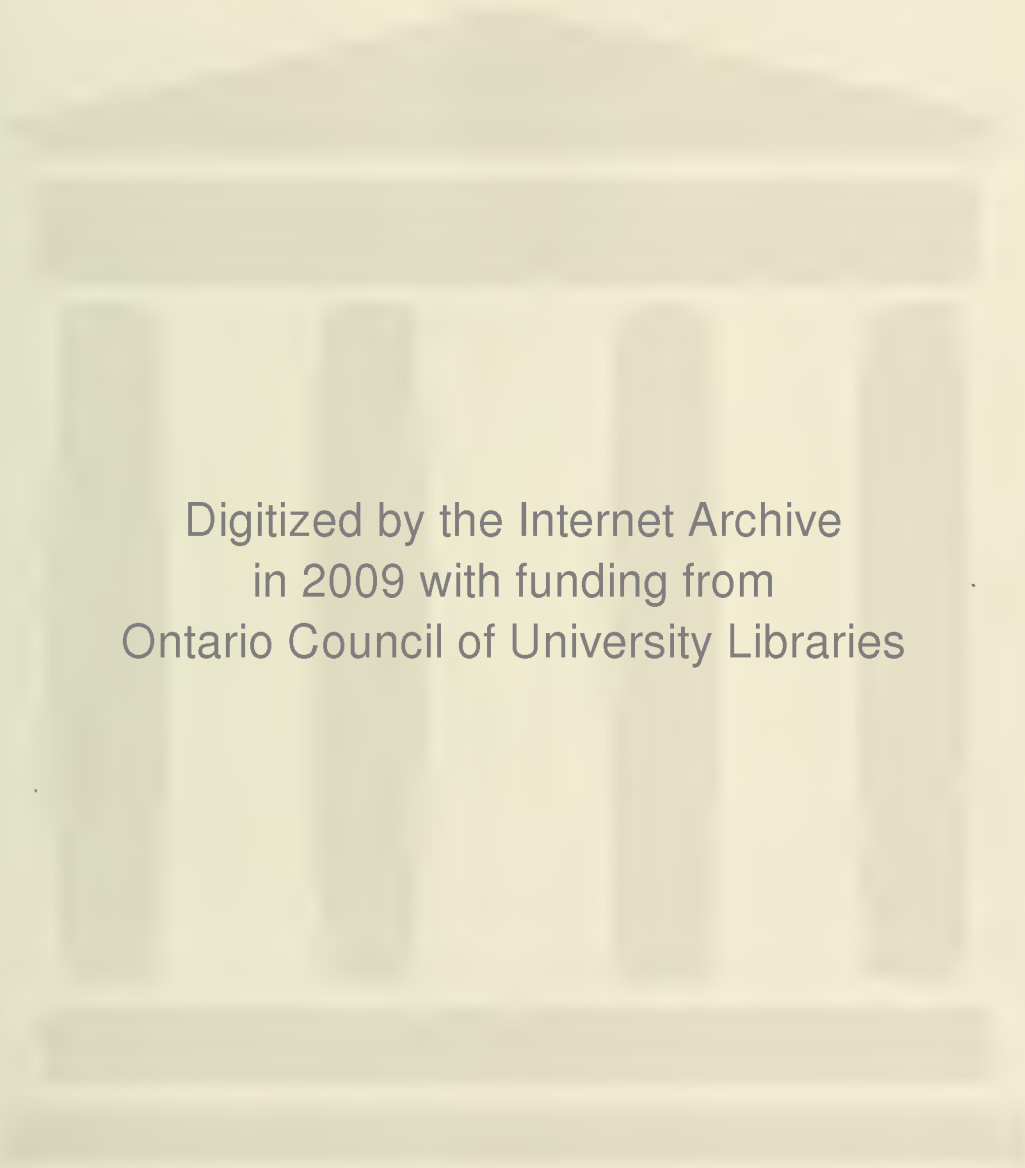




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THE following Reports have been published in the present volume.

The Antagonism of Aconite and Digitalis. By Dr. J. M. Fothergill. In JOURNAL of May 4th.

The Physiological Action of the Chinoline and Pyridine Series of Compounds. By Dr. J. G. McKendrick. In JOURNAL of May 4th.

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LECTURES ON THE INFECTIVE PROCESSES OF DISEASE.

Delivered in the Theatre of the University of London.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,

Professor of Physiology in University College; and Superintendent of the Brown Institution.

LECTURE II (*continued*).—*Etiology of Septicæmia.*

WE have seen that it is easy to prepare from putrid infusion of muscle an extract which, while perfectly soluble in water, possesses the toxic property of the original material in such intensity that a very small dose of it (less than half a grain), if infused into the blood-stream of a dog, is sufficient to produce fatal septicæmic effects. We have also seen that there is good reason for thinking that these effects are entirely independent of the direct action of septic organisms, inasmuch as they are not attended with the development of such organisms in the body of the poisoned animal. If we were to limit our view exclusively to such considerations as these, we should be not unlikely to swing round to a way of thinking which might be defined as the very opposite of the germ-theory, and to express ourselves in this way: "You see, after all, that these gentlemen who have been talking about germs, Pasteur, Tyndall, Roberts, Lister, etc., are all under a delusion. These supposed organisms, whatever may be their nature, whether aerial or aquatic in their habits, whether actual or hypothetical, have nothing to do with septicæmia, and, by inference, nothing to do with disease."

To meet this tendency, I will ask your attention to the evidence by which we may assure ourselves that, although bacteria are not the agents in septic infection, they are, nevertheless, the producers of the septic poison, and that the mistake, if any mistake have been committed, consists in this: not in stating that bacteria are of pathological importance, but in asserting that because A produces B and B produces C, therefore, C cannot be produced unless A is present. It would, I think, be erroneous to say that the yeast-plant is the agent in the production of the evils of intemperance, and it is a mistake to say that bacteria are the agents in the production of septicæmia; but just as, if there were no yeast-plant there would be no drunkenness, so, if there were no bacteria there would be no septicæmia. I have now to bring before you the evidence that this is so.

As I stated yesterday, all the earlier experiments on septic infection were made with putrid infusions of the tissues of animals or plants. As all such liquids must necessarily contain proteid material, it was thought that the specific virulence must attach to some particular chemical product of the putrefactive disintegration of albuminous compounds. It was, therefore, suggested by Virchow that the proper way of searching for the septic virus was first to determine what these products were, and then to test each of them by physiological experiment. But this method is much more easily proposed than carried out, for chemists are not as yet in a position to give us very exact information as to the nature of these products. What we find in animal putrid infusions when we examine them is this. If we slightly acidulate the liquid and boil it, we find that it contains common albumin. In the uncoagulated liquid, we throw down a further quantity of proteid material by the addition of alcohol—this being in the state of peptone. The unprecipitated liquid, partly aqueous and partly alcoholic, contains two well-known bodies, leucin and tyrosin, the presence of both of which may be readily recognised by their several characters. In addition to these, various volatile products of definite chemical constitution

are present, one of which, the body indol,* distinguished by its peculiar odour recalling that of feces, can be prepared in larger quantity and with greater facility by the action of septic bacteria on albumin than in any other way. All of the bodies I have mentioned, peptones, leucin and tyrosin, indol, and the rest, are known to occur in the small intestine as products of the action of the pancreatic ferment, so that there is a very striking resemblance between the action of the pancreatic ferment and putrefaction. The resemblance, however, by no means implies identity; for, although bacteria are always present, and must, therefore, in actual digestion, mix their fermentative influence with that of the proper digestive ferment, it has been proved by the most careful experiment, that, so far as relates to the conversion of the proteids of food into the soluble and diffusible peptones, the process of pancreatic digestion can begin and be completed without them. The ultimate products, however, are not precisely the same when bacteria are excluded, the most characteristic difference being that the volatile products I have mentioned, and particularly indol, do not appear when albumin or fibrin is subjected to the digestive action of the pancreatic ferment under conditions which either exclude the septic organisms or inhibit their development.†

So far as our present knowledge reaches, none of the known chemical products of the putrefactive disintegration of albuminous compounds can be indicated as the cause of the toxic action of putrid infusions; for in respect to each of them we have experimental evidence that, when separately introduced into the organism, in such quantity as would correspond to a poisonous dose of the septic liquid of which it is a constituent, it produces no toxic effect whatever. The inference is, therefore, suggested that the poison is not any product of the septic disintegration of proteid bodies, but a something which is much more intimately associated than any of them are with the existence and growth of the ferment-organisms themselves.

This inference has been fully justified by experiment. It has been shown by Professor Bergmann that the septic poison can be produced by the action of bacteria on material which contains no albuminous compound. He found—and we are now familiar with the fact by repeated experiments—that, if you grow bacteria in the cultivating liquid to which I previously referred, of which the composition is given in the table,‡ the first crops of bacteria are inert; but eventually you obtain a product which possesses all the virulence of putrescent animal or vegetable infusions, notwithstanding that the original liquid contained only sugar, ammoniac tartrate, and certain inorganic salts.

Let us endeavour to realise what happens. We have, to begin with, virtually a solution of ammoniac tartrate; for it can be shown that it is all that is wanted at the outset. Into that solution you introduce at one side, say a bit of glass which has not been calcined and of which the surface is consequently contaminated, *i. e.*, beset with germinative particles. The vegetation takes its start from the surface of the glass. One after another bacteria emerge into existence and visibility, and multiply with a rapidity which you can easily calculate, on the datum that each becomes two within about an hour after its birth.

Having our bacterium, how does it manufacture its virus? In order to obtain an answer to this question, I will ask your attention to the following experimental results, which, irrespectively of their bearing on the present question, are of value for the additional evidence they afford of the fundamental proposition of this lecture, *viz.*, that septicæmia is not due to the direct action of living bacteria on the blood and tissues.

Indol (C₁₁H₉N) is a crystallisable body, obtained by the reduction of certain derivatives of indigo, which fuses at 52 deg. C., and is volatile at ordinary temperatures. It has no toxic properties; but its solution in water, when injected into the circulation, gives rise to the appearance of indican in the urine in corresponding quantity. See M. Jaffe, Ueber den Ursprung des Indicans im Harn; *Centralblatt für die Medicin. Wissenschaften*, 1872, p. 2; and Koukol-Jasnepolsky, Ueber die Bildung von Indol, u.s.w.; *Pflüger's Archiv*, vol. xii, p. 73.

† Nencki, *Ueber die Zersetzung der Gelatine und des Fibrins*, Bern, 1866, p. 31.—Kühne, *Erfahrungen und Bemerkungen über Enzyme und Fermente*, *Abhandl. des Physiol. Institutes der Universität Heidelberg*, vol. i, part iii, p. 13, of the reprint. Kühne has lately found that, when an artificial pancreatic digestion of albumin or fibrin is conducted with the addition of thymol, no indol is formed, although the process is not otherwise interfered with.

‡ The cultivating liquid contains, in 100 cubic centimètres, 10 grammes of cane-sugar, 1 gramme of ammoniac tartrate, and 0.5 gramme of potassic phosphate.

Some years ago, Dr. Hiller,* one of the most energetic and able of the opponents of the germ theory, made an experiment which has been the subject of much discussion. Having succeeded in collecting a considerable mass of bacterial material, that is, of bacteria obtained from various fluids in advanced putrefaction, on a filter, he washed the mass, just as one washes a precipitate, a great number of times; then diffused the material which had been so washed in distilled water, and injected it in repeated doses into the circulating blood of animals. The injections were entirely without effect. Hiller next proceeded to inoculate himself with the same material, and again without effect. The advocates of bacteria at once objected to Hiller's experiment, that the bacteria, not being accustomed to distilled water, were so injured by the repeated washings that they had lost their activity. The criticism, however, might just as well have been spared; for it afforded Hiller the opportunity of proving by experiment, which was of course easy enough, that the washed bacteria were as lively and as capable of development as ever.

But there is another way in which inactive bacterial liquids can be prepared: a way to which I have already adverted. In any cultivation of bacteria in a nutrient solution, the first crop (if I may use the expression) is always inert. It is not until the bacteria have gone on for many days dividing and dividing, that they begin to develop their poisonous properties, at all events, in appreciable quantity. This can scarcely mean anything else than that the mode of vegetation changes; viz., that the bacteria first formed have their place taken by others of which the form and the physiological endowments are different. Every one who is familiar with the growth of bacteria in cultivating liquids knows that there is a marked difference in appearance between the first and the subsequent growths, the former consisting mostly of rods (bacteria proper), which appear early, the latter of spheroids or micrococci. They differ not only in form, but also in the fact that, whereas the rods are endowed with great mobility and appear to act independently, as if each had a consciousness of its own, the latter are held together in masses by transparent interstitial substance (glea), and usually form a scum or pellicle on the surface of the liquid.

The meaning of these facts seems to be this. It is obvious that, in every liquid in which successive generations of organisms grow in the way I have described, each generation must alter the composition of the liquid; and that this change may consist, not merely in the discharge into the liquid from the bodies of such organisms of the "waste products" of their vital processes, but also (in case any of the earlier generations, instead of continuing to live, are disintegrated) of the products of such disintegration; so that, in the latter case, it is quite possible that a liquid which was at first non-albuminous may, as the process goes on, contain an appreciable quantity of proteid matter. That any such formation of plasma actually takes place, cannot be asserted. All that we know on observation is, that the later generations differ, as regards their morphological characteristics, from the earlier, and that they alone possess toxic properties; so that two processes must go on side by side: a change in the composition of the liquid, and a corresponding change of the organisms which grow in it.

The question whether the chemical changes of the soil determine the morphological characters of the vegetation, or are determined by them, must remain open; for the scanty facts which we have before us admit of being explained either way consistently with what is known as to the origin of organisms. Thus it may be supposed either that there exist originally in the liquid a variety of latent germs which, as the soil gradually changes its characters, emerge in succession into activity, the moment of germination of each being determined by the adaptedness of the soil for its development; or that the successive generations of organisms are organically continuous with each other, the forms first produced being gradually modified under the influence of the gradual change of environment. Both of these theories are open to objection. Against the first it might be advanced that we have as yet no sufficient evidence of the plurality of germs;† against the second that so rapid a process of evolution is scarcely consistent with our experience of the process by which other organised forms are evolved. In relation to our present inquiry, it is of comparatively little moment which of the two views is accepted, so long as it is clearly understood that the relation between the evolution of *organised form* and the concomitant changes of *environment* is of such a nature that, while neither can go on without the other, neither can be said to be the cause of the other.

I mentioned a while ago, that the fact of the gradual development

of toxic properties in liquids which contain no nitrogenous constituents excepting ammonium salts was first discovered by Bergmann. The same line of inquiry has been pursued further by several of his pupils; and I am now going to ask your attention to some recent researches undertaken by one of them, Dr. Anders,* for the purpose of determining how far it holds true as regards these originally non-albuminous liquids, that (as has been shown to be the case as regards putrid infusions) the poisonous action is exerted independently of the vital endowments of the organisms which produce it.

Of the various methods of experiment employed by Dr. Anders for this purpose, the one which yielded the most interesting results was the employment of antiseptics, using the term in its physiological sense as applicable to any body which destroys or annuls the physiological properties of septic organisms and of their germs. But before I proceed to discuss the application of this method to the question at issue, it will be necessary to say a word or two as to the relative values of the various bodies known as antiseptics in destroying the vitality or arresting the development of septic bacteria.

The best known antiseptics, and those of which we are most certain, are chlorine, potassic permanganate, carbolic acid, and salicylic acid, and lastly, the camphor-like products obtained by the distillation of the essential oils of thyme and of caraway—thymol and carvol. We know by experiment that these bodies differ very materially in antiseptic, or as it is sometimes called, germicidal power. My friend Dr. Buchanan Baxter found that in a cultivating solution, of which the composition agreed very closely with that on the table, chlorine produced sterilisation in the proportion of 1 in 100,000, potassic permanganate in the proportion of 1 in 10,000, and carbolic acid only when in the proportion of 1 per cent. About the same time that Dr. Baxter's researches were published, an entirely independent investigation of the same question was conducted by Dr. Bucholtz.‡ His researches extended over a larger number of disinfectants (although they did not include potassic permanganate), and had this additional advantage, that the value of each disinfectant was determined with reference to two properties, viz., first, that of destroying the germinative power of the liquid used, and secondly, that of preventing or checking the further growth of the bacteria already growing in it. The results are exhibited in the table. It is seen that, as regards the relative values of chlorine, sulphurous acid, and carbolic acid, they agree very closely.

At the time that Dr. Baxter made his experiments, salicylic acid had scarcely taken its place as an antiseptic. It appears, indeed, to have been first experimented on with a view to its germicide properties by Bucholtz, who was led to think that it would probably be an antiseptic by the consideration of its constitution and chemical relations. Bucholtz tells us that his experiments were already concluded, when he was anticipated by the publication of the well known paper of Kolbe, on Salicylic Acid, in *Erdmann's Journal* (vol. x, p. 89). Kolbe discovered that salicylic acid had a very remarkable power of preventing, even when added in a proportion which did not exceed 0.05 per cent., the fermentation of beer, and this led him to make a number of experiments as to its influence in arresting putrefaction, from which it appeared that meat, urine, milk, and other things could be kept exposed an indefinite time when small percentages of salicylic acid were added to them.

It was on the basis of these facts that Dr. Anders proceeded in his investigation of the toxic action of a liquid of the same kind as that which yielded the poisonous scum to which I before drew your attention. It was necessary to show by experiment, first, that the material to be used was toxically active; secondly, that the dose of salicylic acid to be added to it was without physiological action; thirdly, that the liquid in question was completely sterilised (*i.e.*, that a cultivating liquid, to which a few drops of it were added, remained transparent although placed in a warm chamber at the proper temperature); and lastly, that it was still active, producing death in a few hours with the usual symptoms, after the addition of the antiseptic.

I have only to add that similar experiments were made with chlorine, of which the results were equally unequivocal. Here, as in the case of salicylic acid, it was shown conclusively that a dose of chlorine which was more than sufficient to destroy, and actually did destroy, the vitality of the living organisms present, left the virulence of the liquid unimpaired.

* Anders, Giftige Wirkung von durch Bakterien betriebene Nahrflüssigkeit, *Deutsche Zeitschrift für Chirurgie*, vol. vii, p. 1.

† Bucholtz, Antiseptica und Bakterien, *Archiv für Experimentelle Pathologie*, vol. iv, p. 1. Bucholtz found that, while carbolic acid prevented the development of bacteria when added to his cultivation-liquid in the proportion of half per cent., the same result was produced with 0.15 per cent. of salicylic acid, with 0.1 per cent. of carvol, and 0.05 per cent. of thymol. The percentages of the same bodies required to sterilise a liquid already containing bacteria were, for carbolic acid, 4 per cent.; for salicylic acid, 0.3 per cent.; and for carvol and thymol, each 0.5 per cent. It was for this reason that salicylic acid was selected by Dr. Anders for his experiments.

* Hiller, Untersuchungen über die Bacterien in ihre Beziehung zum menschlichen Organismus, *Med. Centralzeitung*, 1874.

† This objection is deprived of whatever weight might otherwise attach to it by the beautiful experiments of Professor Lister, which appear to prove that even a single drop of water may contain a great variety of germinal particles.

ABSTRACT OF CLINICAL LECTURE

ON A

CASE OF NASO-PHARYNGEAL POLYPUS.

By WILLIAM S. SAVORY, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

THE form of tumour called polypus is more common in the region of the nares than in any other part: here it varies in structure and site. While from their shape they all are properly termed polypi, some—and these are the most frequent—have a simple loose fibro-cellular structure, with much fluid in the meshes—the familiar mucous, gelatinous, or, as it is now termed, myxomatous polypus; some are firmly fibrous—fibromata; while others, consisting of the more immature elements of connective tissue, are sarcomata. I need not add that these several kinds of polypi vary in their nature: some are innocent, others are recurrent, or even malignant. Let us, however, be clear about this. Every one knows that even the simplest and most innocent—the common polypus of the nose—very frequently recurs after removal. It is apt to grow again and again, and its complete and final extirpation is at times a matter of very great difficulty; while even the sarcomatous polypus—the kind consisting chiefly of immature forms, the texture which emphatically suggests recurrence—may yet, provided it can be entirely removed, even to the base of its stalk, and the surface from which it grew destroyed, never return. Indeed, in these polypi, beyond all other tumours, this seems to be a point of the first importance. When, after an apparently satisfactory removal, the nostrils again become plugged with the ordinary gelatinous polypus, either (which is only too likely) some fragment of the original stalk has been left, or other small polypi, which, having been compressed by the first, could not expand, as soon as they obtain space rapidly fill up the nostril. Pott, in his chapter on Nasal Polypus, very clearly points this out (see works by Earle, vol. iii). I fancy these common polypi are more often multiple than they are usually supposed to be, because after the entire removal of a large one with a typical shape and perfect stalk, I have often seen the apparently vacant nostril rapidly occupied by several very small and distinct growths; and for this reason it is always well to employ an astringent for some time after an operation. On the other hand, we see cases in which when a polypus possessing a structure suggestive of very ugly inferences is cleanly and thoroughly swept away, it never recurs. Of course, there is a wide difference in the liability to recurrence of these various kinds, determined by their nature and independent of the mode of removal; and perhaps, a yet more important distinction, in the fact, that while the more innocent forms, although recurring for many years, are not wont to trespass beyond their original site, the worse forms are sadly prone to extend their base of growth, and to invade and occupy without scruple adjacent parts. They may grow from any portion of the surface, either of the nares, sinuses, or pharynx. They often, in their progress, expand, and sometimes even pass through bone and intrude on the brain (see Preparation 2210a—fourth volume of *Pathology*—in the museum of the Royal College of Surgeons).

Another fact which, in more than one way, is of great clinical importance, is that these several kinds of polypi are apt to spring from different parts, so that the situation of a polypus, or more precisely of the surface from which it grows, is strongly suggestive of its structure and character. Every one, for instance, knows how the common gelatinous polypus affects the turbinated bones, and how usefully, when we proceed to remove them, we are guided by this knowledge; whereas the polypi which occupy the pharynx are fibrous or sarcomatous, these latter springing far more indifferently from any portion of the surface of the naso-pharyngeal region. Their favourite sites are the posterior border of the nares, about the edges of the pterygoid plates, sometimes the margin of the septum or the upper wall of the pharynx, the under surface of the body of the sphenoid or basilar portion of the occipital.

Some one may perhaps ask why I have not mentioned cancer among the forms of polypi. Because I do not think that cancer, in its proper sense, forms the structure of polypi, strictly so called, whether nasal, pharyngeal, or naso-pharyngeal, to which form of tumours these remarks apply. You meet, of course, with cancer in the nose and pharynx. It will grow into and destroy those parts, but not as a polypus; not, I think, as a pyriform tumour with a well defined stalk, springing either from the mucous membrane or the fibrous tissue be-

tween it and the bone. The stalk of the firmer kinds of polypus is usually, indeed, directly continuous with the periosteum.

Now, I must not here enter at any length into the question of treatment of these various kinds of polypi. The principle is the same in all: to remove as cleanly as possible the whole of the growth, to detach thoroughly the base of its stalk—to destroy its roots, as some say. In order to secure its thorough extirpation, we do not think of attacking the bulk of the tumour; its neck and base are the parts at which we aim. We may grasp the pedicle with strong forceps, or secure it by a ligature, or use the knife or *écraseur*, or cautery, or carry out the principle in other ways: but the operation is never satisfactory when the polypus is brought away piecemeal or torn and mangled. The simple object is, I repeat, to bring the whole thing away at once by its neck, and to leave a bare surface, with no fragment projecting beyond the level of the surrounding mucous membrane. In the case of the more doubtful forms, it is well to cauterise the surface afterwards.

In accomplishing this, lies the whole art of removing these polypi; and I need not tell you that the degree of difficulty of this operation varies widely in different cases. In the nose, we are guided by our knowledge of the parts apt to be involved, sometimes assisted by the gentle and cautious use of a probe, with which we may define the neck. When they occupy the upper part of the pharynx, we examine with our finger passed up behind the soft palate, assisted usually by a director or something like it, passed through the nostril. But from whatever part the tumour may grow, the difficulty of defining and commanding it is, I think, always invariably increased by any previous attempt at extirpation. When these polypi have been rudely attacked and injured, their usual form is altered; the distinction between the base of the tumour and adjacent parts becomes obscured. You cannot then so clearly distinguish between what ought and what ought not to be there. It is certainly most satisfactory to have to do with polypi which have not been previously interfered with. When they recur after removal, it almost always happens that they are removed with more difficulty than at first. Seldom, very seldom, can a second or third growth be so neatly detached as the first one. I think the base usually spreads more widely with each recurrence, and the surrounding membrane is apt to become more and more changed.

In order, then, to carry out our plan efficiently, we must, of course, be able not only to reach, but also in some measure to command, the base of the polypus. The first step, therefore, is to define, as well as we can, its point of attachment. Now, in illustration of the extent to which it is sometimes necessary to proceed, let me ask your attention to the following case.

Ernest Scott, aged 13, apparently a healthy boy, but small for his age, was brought to the hospital in May 1874, with a polypus in the nose and pharynx. The right nostril was tolerably free, but, when a director was carried along the left nostril, it came into contact with a firm foreign body at the back part, which prevented it from passing into the pharynx. The soft palate was pushed somewhat forward, and appeared unduly convex. When the finger was carried up behind it, a well-defined polypus could be made out, occupying much of the space behind the posterior nares, principally on the left side, and attached to the upper portion of the margin of the septum and the roof of the left side.

A few days after admission, the boy being under chloroform, a strong pair of forceps was passed along the left nostril, and, guided by the finger behind the soft palate, the blades were separated and carried on each side of the neck of the growth. This being firmly grasped and twisted, a large portion of the mass was torn away and brought through the nostril. A second and third attempt removed all that remained or could be detected, and the boy very speedily recovered from the operation. A week or two afterwards, a second and very thorough examination was made of the region, but no traces of the polypus could be discovered, and the boy left the hospital seemingly quite well.

Mr. Butlin examined the tumour, and described it thus: "Very firm and tough, presenting to the eye the appearance and to the touch the characters of firm fibrous tissue. Section streaked occasionally with red or purple. The masses were irregularly lobulated, apparently not encapsuled. Microscopical characters: sections, carefully examined, appeared to consist of wavy fibrous tissue, but mingled with round, oval, or even stellate cells in various proportion. The character of the connective tissue varied very much, even in different parts of the same section. Each of the polypoid growths was covered with a thick layer of tessellated epithelium, several cells deep." He adds: "It is probable that these tumours are outgrowths of the mucous and submucous tissues of the interior of the nostrils. No distinct follicles, lined with epithelium, were observed, although it might have been expected that adenoid structures would exist in them. It is not unlikely that they will recur."

We saw no more of the lad for a year, until May 1875, when he returned, now fourteen years old, in a very sad state; and told us that he had been suffering from a recurrence of the disease for the last three or four months. He looked ill and had evidently lost flesh. It was at once evident that a large and formidable mass occupied a great portion of the left nostril, some part at the back of the right, and the whole of the upper region of the pharynx. The left nostril was visibly expanded. On opening the month, the soft palate appeared forcibly thrust forward. It was very convex and extremely tense, and below its free border the convex surface of a smooth firm pale tumour could be seen. This so entirely blocked up the naso-pharyngeal region, that the finger could not at any part be carried up to the side of it, nor could any instrument be passed far into the nostril. Moreover, the outline of the left side of the face differed from that of the right. It was fuller, the cheek was wider, and further examination showed that this depended on an extension of the growth laterally behind the left jaw and past the pterygoid plates, until it could be obscurely felt as an ill-defined mass below the zygoma. There had been no hæmorrhage from the tumour, but it was apt to bleed a little when touched by a probe or other instrument in the nostril. There was no glandular enlargement. The local effects of this very ugly tumour were distressing enough. The poor boy swallowed with difficulty, he articulated indistinctly, he was very deaf, especially on the left side, and—gravest result of all—his respiration was embarrassed. This latter effect was gradually increasing. When first admitted, the respiration was noisy and laboured. During sleep, it became so difficult that he was continually awakened, and at length could only doze for short periods, and the noise he then made disturbed the whole ward.

Now, it was very clear that, if this recurrent polypus were left alone, the boy had not long to live; and the important question was, in what way an attempt should be made to remove it. Was there any chance of detaching it by the plan previously adopted—by any kind of manipulation through the mouth or nostril? Was it practicable to get sufficient command of the tumour this way, assisted by the division of the nostril, or soft palate, or both? We thought not. It seemed to us highly improbable that by this means I could get at the base: and, moreover, even when in far more favourable circumstances I removed it in this way, it recurred. Then what further should be done? The tumour was behind the left upper maxilla, and if I previously removed this, there was every probability that I should freely expose the mass. But would nothing short of this severe measure suffice? Might I not, as some have done in similar cases, cut away the back part of the hard palate, and thus get room? But the patient was so small and the mass so large, that it was probable that even this might prove inadequate, and it hardly seemed wise to attempt any means that did not offer a strong chance of success. Therefore, we decided to remove the bulk of the upper maxilla and the palate; not absolutely the whole of the left bone, but all of it except the orbital and nasal portions. But again the question occurred, might we not adopt a proceeding which has occasionally found favour at the hands of some eminent surgeons on the Continent? Might we not, short of completely removing the upper jaw, detach it from adjacent bones, turn it upward or aside awhile, get in this way sufficient space to deal with the tumour and then replace it, and so, after all, save this important bone? Well, the proposition was to me, in this instance, a tempting one. If I could only have done this, then, indeed, there would have been but little to qualify the advantage of the operation. But on considering the case in all its bearings, we came to the conclusion that I ought not to run the risk which it involved. In the first place, as before mentioned, I was loath to adopt any operation that did not offer a strong probability of success, and I doubted whether by this plan, after all, I should obtain sufficient room to reach the attachment of the tumour. Remember that in the child the maxilla is not only absolutely but relatively smaller than in the adult. Again, every fraction of space is important in this operation, not only in enabling one to command the growth, but because the avulsion of such a mass is, as we well know, liable to be followed by profuse hæmorrhage, and, chiefly on this account, it was desirable to see as much of the region as possible. Lastly, time is a matter of moment in such an operation, and, therefore, I was anxious to avoid all unnecessary complication, to make the steps as simple as practicable. So on June 9th, I began by removing the upper jaw through a vertical incision made from the nostril to the lip, then carried upward round the ala to the root of the nose and outward below the margin to near the external angle of the orbit. The facial artery was thus divided at its distal extremity only, and no ligature was required. The soft and hard palate having been divided in the usual way, the body of the maxilla was cut through obliquely from immediately below the zygoma upward and inward into the nostril, and thus detached. Then passing

my finger backward, I could just make out the neck of the polypus, but in order to command the morbid growth satisfactorily, it was necessary to remove the pterygoid plate and to divide the soft palate vertically through the upper three-fourths of its extent. After this had been done, the neck of the polypus, which was now well in hand, could be securely grasped with very stout forceps, and by two or three forcible twists and wrenches it was torn away. It was generally pyriform, and consisted of two principal and two or three smaller lobes, all pendulous. The largest lobe, of the size of a common egg, lay to the left and came out of the pterygo-maxillary and temporal fossa. As the tumour came away, an artery of some size, deep in the left side, no doubt the internal maxillary, bled freely. This was at once secured, and no other vessel needed a ligature. As soon as the tumour was removed, I could feel, denuded to a large extent of its periosteum, the under surface of the body of the sphenoid and the basilar portion of the occipital. On this site, the stalk of the polypus was implanted, and hence it grew downward and then outward into the pharynx and behind the left jaw. I touched the surface of the bones with a hot iron, put a silver suture through the upper angle of the partially divided soft palate, and then accurately adjusted the flap of the integument.

The boy bore the whole operation remarkably well, and never for an instant appeared faint. He was sometimes only partially under the influence of chloroform, for while he was on the table before the operation there was so much difficulty of breathing that it was not thought prudent to push chloroform far. He lay very quiet after the operation, showing no signs of distress, and having taken a few teaspoonfuls of wine and beef-tea, sank into a heavy, but natural, sleep. When I saw him in the evening, he was still sleeping soundly and naturally. The respiration calm and deep, and the pulse 110. As the sister said, No wonder, for he wanted sleep, having had, from the impediment to respiration, no long interval of sound sleep since his admission. During the last few days, especially, his respiration had been extremely embarrassed. On the night preceding the operation, he was suddenly aroused by a choking fit, and until he was enabled to sit up suffocation appeared imminent.

The boy recovered directly and rapidly, without any untoward symptoms. On the third day, the twisted and some other sutures were removed; and on the next, the rest, except that in the palate, which was left for some days longer. The slit in the soft palate united perfectly throughout; and a week after the operation, the boy was sitting up. I have seen him repeatedly since. Within the last month—now two years and a half from the removal—I have carefully examined the region without detecting any sign whatever of recurrence of the tumour. The boy is quite well and strong, and has grown rapidly. He wears an artificial palate on the left side, which is of great service to him, especially in articulation; but when it is removed, the hole that it covers will hardly admit a finger. As is usual after excision of the upper maxilla, there is very little difference in the contour of the two sides of the face.

I am again indebted to Mr. Butlin for a description of the polypus. "The growths were more abundant than on the first occasion, but otherwise presented almost precisely the same characters. In minute structure, they were alike. They showed various forms of connective tissue more or less highly nucleated; but in these, rather less cell-growth."

There are two or three points in relation to large operations in this region to which I should, in conclusion, like to call your attention. These operations are, you know, dangerous ones—dangerous during the performance. A patient may die on the table under the surgeon's hands. Nay, I may say that they are never quite free from this danger even with the utmost skill and care. Therefore, in such cases especially, you can never afford to throw away the slightest chance. Now, in order to avoid danger, it is well to know where it lies. In these operations, a patient may die from loss of blood or from suffocation—more likely from these two causes combined. The heart's action is weakened, and the respiration becomes embarrassed. In the first place, which is the best position for the patient during the operation? Should he recline or sit? In my opinion, the objection to the horizontal posture is so grave that it far outweighs all advantages on the score of lessening the degree of faintness. Blood is apt to find its way into the larynx and air-passages—a risk unfortunately increased by the use of anesthetics; and the danger of this terrible evil is undoubtedly augmented when the patient lies with the head low. For this reason beyond all others, I prefer to have the head and shoulders well raised. The patient may lie on a couch rather than a chair; but the head and chest should be more nearly vertical than horizontal.

But the next matter is, I think, one of still more serious influence. In these operations, although anesthetics are employed, yet it is usually impracticable, without undue risk, to keep a patient during the

whole time so thoroughly under their influence that he is perfectly passive. Of course, the operator may be embarrassed in his work if the patient be not thoroughly under control. Of course, means must be adopted to prevent any untoward movement. I need hardly say that the head must be fixed, and, if necessary, the action of the limbs restrained. But the surgeon, while legitimately securing every advantage for himself, must see that he does not lay upon the patient any additional danger. Now, my meaning is, that I have great objection, in these operations, to binding patients firmly down. It is very easy for the surgeon to secure the patient's arms closely to his side by towels or bandages; but reflect for a moment on the effect of this. If you were required to limit the movements of respiration, how could you more effectually accomplish that end than by drawing the arms forcibly down and fixing them tightly to the sides? And think, too, of what a free respiration means in such a case; not only how the circulation and respiration are associated, but of the urgent need from time to time of forcible expiratory efforts to clear the glottis and adjacent parts. Therein, indeed, lies the prime objection to anaesthetics; but their use saves so much in another way, that some extra risk may be justified on this account. But, for the sake of a little, if any, more convenience to the operator, ought a patient at such a crisis to be burdened thus? A couple of assistants will suffice to control all troublesome movement without mischief. I dare say some may consider this unnecessary refinement; that nothing can turn upon so trivial a point. Are you quite sure of this? And, if there be any question on the matter, there can be no doubt about the duty of the surgeon.

Lastly, the patient's danger may be increased from the interest of those around. As the operation proceeds, in a natural anxiety to see everything, those looking on, or even assisting, are apt to crowd closely around the table, and thus largely to deprive the patient of what just then he very much wants—fresh air. A hint before on this point, to be repeated if necessary, may not be amiss. I bring these points forward, not because I deem them important beyond all others, but because I think they especially are apt to escape attention.

CLINICAL OBSERVATIONS ON OVARIOTOMY.

By J. THORBURN, M.D.,

Professor of Obstetric Medicine in Owens College; Obstetric Physician to the Manchester Royal Infirmary; etc.

GENTLEMEN,—You have just recently seen—that is to say, those of you who are not engaged in anatomical or *post mortem* work—two very satisfactory cases of ovariectomy. Before your interest is absorbed by other cases, I propose to make a few clinical observations upon these. There are so many interesting abdominal tumours in our wards or out-patient *clinique* at present, that I want to fix a few points regarding each of them on your memory before they pass from our sight.

The two ovarian cases recently operated on are those of Mary Hughes, aged 45, and Susan Hoggard, aged 26, in the Dorcas Ward. You have heard from time to time full details of their past history, and have seen how a diagnosis was arrived at. Time does not allow me to repeat these details now, and I shall, therefore, briefly say that both cases were well marked examples of multilocular cystic disease; that each had been three times tapped, at rapidly lessening intervals; that each was free from other organic disease, as far as could be ascertained. Adhesions were slight in the case of Hughes, but more numerous in that of Hoggard; and, as they were very high in the abdomen, and required some force to break them down, I was not without anxiety on the score of secondary hæmorrhage.

I hope both cases may now be considered as convalescent. Now, I have been considering what are the chief points to which I can most profitably call your attention. The ordinary steps of the operation of ovariectomy you will find in every recent text-book; you have had leisure to study them, and two very good opportunities of seeing them. Judging, moreover, from the present state of our out-patient *clinique*, there will be no lack of similar opportunities in the future. Instead, therefore, of recapitulating these details, I will confine myself to one or two points which I have been trying to think out for myself, as far as my opportunities have permitted.

1. I have come to the conclusion that the operation of ovariectomy is beginning to be far too rashly undertaken, or, at any rate, in too early a stage of the disease. When ovariectomy was a new operation, those who practised it were often accused of selecting their cases, *i.e.*,

of operating only on those cases which appeared likely to be good ones, and refusing to operate on those which, although they might possibly save a patient from inevitable and almost immediate death, were more likely, by their issue, to discredit the operation and the operator. If Sam Slick's statement that there is a good deal of human nature in man be true, these accusations were probably not quite unfounded. But, as the operation has been more largely studied and practised, and especially as it has been gradually found out that the unpromising cases, *i.e.*, the cases of women past middle life, reduced, not in size, but in apparent vigour, by formerappings, with a peritoneum accustomed to the presence of tumours and trocars, are by far the most favourable ones, this kind of selection is becoming a thing of the past. But another, and, in my opinion, as great a danger is arising. Everybody is now supposed to be capable of performing ovariectomy, and the *clat* of a successful case among the patients and friends of the operator is so great, that such cases are eagerly sought after, and a curious page of medical history would be furnished by a collection, if such a thing were possible, of the results of ovariectomy during the last ten years in purely private practice. The splendid lists of successful operations which have been published by our great English and American ovariectomists are not without danger also to younger men who aspire to follow in their wake. During the past twelve months, I have tapped three healthy and otherwise vigorous women for ovarian tumour, and in each case have counselled considerable delay before having recourse to ovariectomy; in all these cases, the urgency of the friends has led to other advice, to operation, and to death. I have just heard also, within the last few days, of the case of a young lady who, after ailing for some time, was found to have ovarian tumour. Immediately she was taken to London for a consultation, operation was decided on, and, in less than three weeks, she was diagnosed, consulted over, operated on, and buried. Let me give you my very decided opinion that ovariectomy should not be so rapidly and rashly undertaken. I would advise you, in every case, to try one tapping at least; it will help in diagnosis, and it may cure. I have cured one case in this way which I thought was a growing multilocular cyst. If your patient be comparatively young, and otherwise in fair condition, try a second tapping at least, and carefully ascertain the rate of growth. If, after this, you are satisfied that life is beginning to be jeopardised by the exhaustion of tapping, by wearing pain, or otherwise, then ovariectomy may be performed with hopefulness and with greater probability of another addition to the splendid *résumé* of increased years of human life referred to with justifiable pride by Mr. Spencer Wells at the late meeting of the British Medical Association.

2. Another point to which I may allude, in connection with the operation, is the size of incision advisable. The question of a long or a short incision has been much discussed formerly, and statistics have been drawn up as to their relative value. Such statistics have, in my opinion, no importance whatsoever. The larger incisions were made, as a rule, for larger or more adherent tumours, or for cases more difficult in other ways; hence the short incisions were pretty sure to have the best of it. I cannot see myself what difference an inch or two more can make in the danger of an incision of the kind, and I have seen, both in my own practice and in that of others, great danger from adhesions which might have been much better treated with a larger wound, and from dragging at, instead of enlarging, the opening. Even in the case of unilocular cysts, there are often adhesions which require a good opening to treat them safely. I would advise you, then, in almost every case, to make an incision of fully four to five inches, and not to hesitate to enlarge it at once as freely as seems necessary to command a good view of what you are doing.

3. The treatment of the pedicle is a subject which has from the first been much discussed. You will find in Mr. Wells's work a most temperate and thorough discussion of the various methods that have been used, including its retention outside the peritoneum by the clamp, and its treatment within the peritoneum by ligatures, *écraseur*, acupressure, cautery, etc.; and his vast experience has led him to a laudable clamp for the great majority of his cases. I am bound to say, however, that the use of a strong well tied silk ligature, cut short and allowed to fall into the abdominal cavity, has so far commended itself to me. The late Dr. Tyler Smith had a very fine series of cases treated in this way; it was this which induced me to try the plan, and it is so superior in handiness, and in every way, to my mind, so much more simple, that I fancy I am likely to continue its use until I have met with a case where I find inconvenience from the after-presence of the ligature, or until I have been unfortunate enough to meet with one where a ligature of my own tying has proved insufficient to prevent hæmorrhage. I have unfortunately seen a very promising case lost in this institution from the slipping of the pedicle out of the clamp, which certainly looked as if nothing could have escaped from it. Bear in mind, how-

ever, that very powerful and pure silk, *i.e.*, animal tissue, well carbolised, should be used. This must perforate the stump of the pedicle, so that it cannot slip off at the end, and must then be tied in two separate portions. If the pedicle be very thick or broad, three or even four portions must be tied separately. If these precautions be observed, sufficient force may be used in tying to render any danger from shrinking an impossibility. A touch with the galvanic-cautery might add to the apparent safety where the operator is timid; the ordinary cautery is apt to leave behind it some *débris*, which is at any rate unnecessary.

4. The influence of a hospital atmosphere for evil upon cases of ovariectomy has been so clearly proved that it can hardly admit of any doubt; and possibly the Infirmary Board, when it has overcome some of its more pressing difficulties, may be induced to provide us with a separate building or thoroughly detached ward for such cases alone. It is not, therefore, with the view of disputing the dangers incurred from hospitalism that I point out how, nevertheless, with reasonable care, much may be done to obviate these dangers. We are now in a building which is acknowledged on all hands to be, in many sanitary respects, as bad as it can be, and where erysipelas has frequently been peculiarly rife. During the short time that I have been connected with it, there have been ten cases of ovariectomy: three by Mr. Southam, two by Mr. Heath, and five by myself; of these, eight have recovered with hardly a bad symptom, and there has been no septicæmic mischief. One, already referred to, died from the slipping of a clamp, and one (my own) from secondary hæmorrhage from numerous pelvic adhesions.

5. Antiseptic treatment, in its relation to ovariectomy, is a subject full of immediate interest. The intimate connection between all forms of septicæmia and certain germs, and the destructive effect of carbolic acid and other agents upon the latter, so ably advocated by Mr. Lister, seems to have passed into the region of absolute fact. Though not yet convinced, even by the exhaustive researches of my friend Dr. William Roberts, or by those of my old Edinburgh Infirmary colleague Mr. Lister, that there may not be some *tertium quid*, chemical, electric, or otherwise, which may stand in the relation of cause, or at any rate of promoter, both of sepsis and of germ-growth, the practice dependent on the theory that the one is the cause of the other seems so consonant with all present available hypothesis, and so approved by clinical facts, that I consider it utterly unjustifiable to deny our patients its fullest advantages. I will not enter into the question as to whether, in ordinary surgery, the processes of dressing advocated by some are not so complicated and unnecessarily troublesome as to deter many from the use of antiseptics—*ne sutor ultra crepidam*—but, in ovariectomy, I am sure that simpler and more effective, *i.e.*, more antiseptic, methods will suffice. The plan I have adopted in twenty-five successive cases of ovariectomy has been this: after tying the pedicle, I thoroughly smear it with carbolic glycerine and drop it into the cavity of the abdomen. This imparts a strong carbolic atmosphere to the peritoneal cavity, thereby increasing the effect of carbolised sponges, ligatures, etc. The well known effect of glycerine upon the uterus, which you have seen in our ward practice, is, no doubt, exerted also on the pedicle and adjacent parts; a good deal of their redundant moisture is absorbed, and the natural process of shrinking is hastened. In these last two cases, I have also used the carbolic spray apparatus, and my friend Mr. Lund has kindly directed its application. After passing a sufficient number of silver sutures across the abdominal wound, I next smear every interstice of it with the same carbolic glycerine, not forgetting its free application to the peritoneal edges. I then tighten and twist the sutures, and apply a piece of lint dipped in carbolic glycerine. Some long adhesive straps, a clean napkin, and a binder complete the process.

How or when the wound heals, I cannot exactly tell you: for I do not look at it for ten or twelve days. In the case of Hughes, it was first looked at on the eleventh day; the stitches were taken out as free from discharge as if they had been imbedded in a turnip or other vegetable body. To-day, we will open up the dressings of Hoggard, and you will find the same result. All that is required is to remember that the cicatrix consists of very new tissue; and that you must provide, by adhesive straps and binder, for many weeks against the giving way of this new tissue; indeed, I consider such precautions more than usually necessary, seeing that you have, while hastening the adhesive process, diminished some of the inflammatory action which is usually supposed to make adhesion more complete. It is hard to say how far this real antiseptic treatment has modified the mortality of these twenty-five cases; but I will give you the results, premising only that, in every case, I have followed out the rules I have tried to impress upon you. I have not operated on a single case which did not appear to have a certainty of death within two, or at the most three, years; and in two of them death was immi-

nent from peritonitis within a few hours. Six of these twenty-five cases have died—one from hæmorrhage—I might almost say on the operating-table—two from peritonitis, which existed at the time of operation (in one of these I operated by gas-light; the symptoms were so urgent); one from hæmorrhage from adhesions in the pelvis, about forty-eight hours after operation; one from shock on the night of the operation; and one from pneumonia coming on on the fourth day after operation, after the patient had twice managed to escape from her bed in the search for stimulants. The most vivid imagination could not possibly trace the existence of septicæmia in any one of them.

If the clamp were used, this mode of procedure would not be quite so easy; but I think it would be quite available if the whole were well saturated with the carbolic glycerine, and if, as suggested by Dr. Marion Sims, some cotton-wool were placed above it, to prevent, by its filtering properties, the entrance of germs from outside.

Time will not allow me to touch on any further points; but there are one or two others to which I hope to draw your attention after our next case.

ABSTRACT OF HARVEIAN LECTURES

ON

THE MECHANICAL SYSTEM OF UTERINE PATHOLOGY.

Delivered before the Harveian Society of London.

By GRAILY HEWITT, M.D., F.R.C.P.,

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LECTURE III.

CONTINUING the analysis of uterine symptoms, amenorrhœa was mentioned as occasionally produced by compression in cases of uterine distortion. Sterility is necessarily produced by such compression of the uterine canal as prevents the passage of fluids. Another cause of sterility in these cases is the altered condition of the lining of the uterus when retention of secretions occurs; this damaging the products of conception.

Abortions have as their most common cause flexions of the uterus. Repeated observation of the frequency with which abortion and flexion are witnessed in conjunction, first led the author to this conclusion. Other causes of abortion, syphilis, lead-poison, accidents, mental emotions, account only for a comparatively few cases. Retroflexion is already admitted as a cause of abortion. It is not well known that antelexion is a very common cause. Considering the part the uterus has to play in pregnancy, it is not surprising that decided distortions should have a disturbing influence. The organ is then more exposed to disturbance by straining efforts. The tissue-alterations produced by flexion must also interfere with its extensibility; and the condensation, puckering, and atrophy present at the seat of flexion are decidedly inimical to the healthy progress of pregnancy. Further, actual disease of the decidua may result (cases by Slavjansky). In many cases, as pregnancy advances, the flexion is relieved, but otherwise abortion generally occurs. Natural cure in this way is easier in antelexion than in retroflexion cases.

Reflex Phenomena.—Of these, sickness or nausea stands first. This symptom is almost universally observed, more or less marked, when the uterus is diseased. It may be very slight, or it may be so severe and continuous that finally there is a fear of starvation occurring. It may be looked for almost as commonly as dyskinesia. In dysmenorrhœa, sickness is often a very prominent symptom. This nausea and vomiting are reflex in nature, the irritation being in the uterus. In some cases, like symptoms are observed from dislocation and compression of the ovary. Organic disease of the uterus also may occasion it. Putting aside these causes, we find that the most common uterine irritation is flexion of the organ. Indeed, severe reflex uterine symptom is invariably due to flexion. It is worse when the flexion is conjoined with considerable uterine congestion. In the slighter continuous forms, it is frequently conjoined with very undue softness of the uterus. The erect position, even sitting in such cases, induces nausea, in consequence of a slight temporary increase of the flexion so produced. Other reflex symptoms, hysteria, convulsions, etc., were next briefly discussed.

Disorders of the Function of the Rectum and Bladder are witnessed with great frequency in cases of flexion. When the axis of the uterus is more or less at right angles to the proper one, the rectum is often obstructed, defecation is hindered in retroversion, and flexion especially

so. Occasionally the fundus uteri invaginates the rectum, and acts as a complete ball-valve. Diarrhoea is sometimes the result of friction of the bowel, produced by flexion. Pain in defecation is another common symptom; prolapsus of the bowel occasionally results. As regards the bladder, friction of micturition is most commonly the symptom, and antelexion the cause. Pain, after emptying the bladder, is due to this also. Retention of urine is most commonly caused by retroversion or retroflexion.

The Changes in the Uterus were next considered. Change of shape and position has been shown to be the most important of these changes in congestion or engorgement of the uterus. It has a very intimate connection with change in shape; hence, in fact, diversity of opinion. Finally, the question really is, what is the cause of the uterine congestion? Congestion pure and simple is not perhaps rare, but it is rarely witnessed. It may give rise eventually to hypertrophy, but it does not usually occasion marked symptoms. It is when conjoined with flexion that it assumes clinical importance. Congestion is inevitable when the uterus is compressed at its centre; which happens more or less when the uterus is flexed. Klob and Thomas also take this view. The two extremities of the uterus, or one more than another, exhibit this result in particular cases. That mere congestion does not occasion flexion, has been ably argued by Dr. John Williams. That flexion is only important when conjoined with congestion—a view advocated by many, is erroneous. No doubt the advent of congestion aggravates the suffering. It is equally certain its removal is a blessing to the patient; but the fact that the congestion disappears or undergoes material diminution, by simply straightening the uterus, shows what is the real relation of the connection between the two. It is sufficient to carefully watch the behaviour of the uterus in such cases to become convinced of the importance of the flexion. There are many varieties of congestion; the uterus attacked by it being in different states in different cases. Mere softness of the uterus must not be confounded with it, though a soft uterus is very liable to become congested. The manner in which local hypertrophies of the os originate from long-standing flexion, congestion at these situations, were next described. "Congestive hypertrophy" is the term proposed to describe the changes hence resulting. ("Areolar Hyperplasia," Thomas). The other changes observed at the os—swelling, turgescence, redness, abrasion of epithelium, etc., have a close connection with congestion, produced as above described. "Chronic inflammation", which is the term which has been applied to the conditions giving rise to these changes, is more accurately described as "congestion".

The varieties of uterine distortions come under two principal heads: *a.* Anterior flexion; *b.* Posterior flexion. Lateral flexions are rare. The local secondary effects are very important: the undue thickening of the uterine wall at some situations, the great thinning of it at others. It may be found as thin as brown paper at the internal os. Hence the great difficulty of absolute cure in very long-standing cases.

Disorders of innervation have been already discussed.

Peri-uterine Inflammation.—On this latter subject, the only remark for which there is space is that, in some cases, an oedematous effusion is liable to occur near the uterus as a result of displacement.

Principles of Treatment.—"Preventive medicine" is the medicine of the future. From this point of view, the previous considerations suggest important generalisations. The mechanical diseases of the uterus being the most important, and such disease almost never occurring except when the uterus has become greatly weakened in consequence of the general condition of the body being at a low ebb, it follows that the greatest care should be exercised in nourishing and sustaining the strength of the body as a preventive measure. Exercises and exertions will have to be regulated. Pain following exertions will not be lightly regarded. The effects of long-continued nausea will not be overlooked. As regards the cure of the diseases, first, it must be admitted that all are not alike. Duration of the disease alters the curative aspect of cases, the consistence of the uterus also, the soft uterus being more easily curable. The great object is to restore the uterus to its proper shape: 1. By positional treatment, which is capable of doing very much, and sometimes all that is required. This fact is very important, as it enables us to treat rationally, and without necessity for local measures, cases of commencing disease in young women. Instances of this were given. The horizontal position is best, either prone or supine, according to the nature of the case, *i.e.*, whether the flexion is backwards or forwards. In severe cases, it is not enough, but is still absolutely necessary, otherwise failure will result; and, as a part of the treatment may have to be more or less insisted on for a long time, the knee-elbow position is a further aid. 2. Mechanical internal treatment is required in long-standing cases. Pessaries, by which pressure is made upwards, in front of or behind the uterus, are of the greatest service, aided by positional treatment. For backward flexions, modifications of

the Hodge pessary; for forward flexions, the author's "cradle" pessary are recommended. Pessaries ill-fitted are worse than useless. If the uterus be hard, the sound must be also frequently employed to aid in the unbending. Tents also effect this object. Uterine stems, improved by Meadows, Bantock, Chambers, and others, are of great assistance in some cases. The congestion which forms so important an element in cases of this kind is generally at once relieved by straightening the uterus, by position, by a pessary, or by the sound.

The general treatment is of the utmost consequence. One of the principal merits of the system of uterine pathology now expounded is, in the author's opinion, the explanation offered of the process by which health passes into diseases, and why the sound uterus becomes predisposed to injury from accident, or, more slowly, by the debilitating influence of semi-starvation. A generous diet is always required. Frequent small meals are necessary, especially is animal food required. Tonics are useful. Fresh air, but not long walks or long drives, unless in the semi-horizontal position. Baths, frictions, and other hygienic measures, are useful adjuncts.

In conclusion, expressing his regret that time did not admit of even an arrangement of the facts which he would have been glad to bring forward in support of the arguments employed, Dr. Graily Hewitt said: "My appeal is confidently made to unbiased intelligent observation for confirmation of the facts on which these conclusions are based. How far I have succeeded in my endeavours to deduce from clinical facts a rational and intelligible system of uterine pathology, it must be for you to determine."

CHEIRO-POMPHOLYX.

By WAREN TAY, F.R.C.S.,

Surgeon to the Hospital for Skin-Diseases, etc.

It is with great regret that I help in any way to prolong a most unnecessary and unfortunate discussion as to a "simple question of priority"; but I feel compelled to do so by the kind of evidence Mr. Tweedy adduces, namely, his own familiarity with Dr. Fox's teaching since 1870, and a conversation he had with Mr. Hutchinson in 1873, leaving any one to infer that, whilst Dr. Fox recognised a certain skin-disease as peculiar in 1870, Mr. Hutchinson was just taking notice of it in 1873. Now, I have no wish to detract in the slightest from the credit due to Dr. Fox for recognising the disease as far back as 1870, or for publishing his description, in 1873, under the term "Dysidrosis"; but, on the other hand, I must carry my memory back six years further than Mr. Tweedy does, namely, to 1864, when the portrait published by Mr. Hutchinson was taken. I distinctly recollect the fact of the artist being sent to Nottingham; I saw the portrait when finished, and Mr. Hutchinson talked to me (and others) about the features of the disease on many occasions. There are others besides myself who can assert that the essential clinical features of the description given by Mr. Hutchinson in his *Atlas* formed subjects of conversation at the London Hospital, the Hospital at Blackfriars, and elsewhere, whenever the portrait was shown, or a case bearing any resemblance presented itself. There is also the fact that, in Mr. Hutchinson's Clinical Lecture of April 1871 (*Lancet*, April 29th, 1876), a case is quoted, of which the notes were taken in December 1867. The portrait and the notes surely form more definite evidence than any statement by Mr. Tweedy or myself, founded on familiarity with the teaching of Dr. Fox and Mr. Hutchinson.

Then, again, as to comparing certain vesicles to grains of boiled sago, I had become so accustomed to hear Mr. Hutchinson use this strikingly apt illustration, that I failed to realise how much originality there was in it till I read Dr. Fox's communication to the *Lancet*. Though Dr. Fox is to be congratulated on having also been attracted by the resemblance, there is no doubt that sago grains had been made to do duty long before he wrote his paper. Had Mr. Tweedy even occasionally seen cases of diseases of the skin with Mr. Hutchinson, I have no doubt he would have made acquaintance with the views of the latter much sooner than 1873; but they had only been in the habit of meeting for a few months, and then ophthalmic subjects engaged attention almost exclusively.

Dr. Liveing's suggestion as to hyperidrosis seems to me worthy of consideration, for Dr. Fox's description of profuse discharge of acid fluid, in his last communication, certainly points to a different state of things from what I have found in real (or suspected) cheiro-pompholyx. Dr. Thin may place too much reliance on Dr. Robinson's negative observations; but, on the other hand, Mr. Tweedy has not proved the fluid he saw at the apertures of sweat-ducts to be other than serum. It is to be hoped that some patient who is not "nervous" will afford a believer in dysidrosis the opportunity of setting our minds at rest by demonstrative (positive) sections.

REPORT OF FIFTH SERIES OF FIFTY CASES OF OVARIOTOMY.

By THOMAS KEITH, M.D.,

Surgeon for Ovarian Diseases to the Royal Infirmary, Edinburgh.

I HAVE again to record a diminishing mortality after ovariectomy. In the first series of fifty cases, there were 11 deaths; in the second, 8; in the third, 8; in the fourth, 6; in the fifth, 4. Of the four fatal cases, two died comatose, with suppression of urine, within thirty hours after operation; two died from blood-poison. One was a case of tumour of 53 lbs., complicated by a large fibroid uterus. I unwisely removed a pediculated portion of the fibroid, which seemed to be much in the way. A drainage-tube was put in behind the tumour in the pelvis. The tube was displaced, probably as the patient was moved into bed. No serum escaped by it; and a fatal result happened in a case that promised to do well. I have no hesitation in saying that earlier operation would have saved the other three, for they were originally healthy women. One was a large sarcoma of slow growth. When seen, the patient had been little out of bed for sixteen months. The tumour was removed quite easily; but extensive adhesions to the mesentery and intestine led to the tying of nearly a hundred vessels. In the third, also complicated by a large uterine tumour, an inflammatory affection of the knee prevented the patient from coming to town when she was prepared to do so six months before. During this time she was tapped six times, seven gallons of fluid being removed on each occasion. The cyst-walls alone weighed upwards of 50 lbs.; adhesions were universal, and of the utmost firmness, especially to the liver. The fourth fatal case—one of double dermoid cyst—had been often urged by Dr. Mackenzie of Larkhall to have the tumour removed in a favourable time. An injury caused rupture of the cyst, and for nine months she was confined to bed. For long she was blood-poisoned, and had double phlegmasia dolens, the oedema extending even into the axilla; yet she rallied after many tapplings. The operation lasted three hours

and a half. Masses of fat and hair had escaped into the upper part of the abdomen, and had become encysted by thick deposits of lymph in a most wonderful way. All this had to be dissected out. When she was placed in bed after operation, the temperature had fallen to 92 deg.

Not included in the table is that of a case in which ovariotomy was performed a second time. The patient recovered. In two cases of acute suppurating dermoid cysts—one seen with Dr. Keiller, the other in Lanarkshire with Dr. Lindsay and Dr. Lennox of Hamilton—the pelvic adhesions were such that relief by ovariotomy could not be thought of; yet as both were in the last stage of the disease, it seemed right to try something. They were treated by incision and drainage, and both recovered perfectly. A third, similarly treated nearly two months ago, so far promises well in the hands of Dr. J. Cox of Innerleithen. Two cases of cyst of the broad ligament are apparently cured by tapping.

In three cases I was unable to complete the operation. One, aged 67, a patient of Dr. Lorraine, had been often tapped. On exposing the tumour, it was found to be malignant, with disease of the peritoneum. There was no ascites; the tumour was not disturbed. The second was sent by Dr. William Bell. Ascitic fluid surrounded a papillomatous growth. Early operation was advised, in the hope that no secondary affection of the peritoneum had yet taken place. The pelvis was filled with secondary growth, involving the base of the tumour, and I was unable to remove the pelvic portion. The third came from Dr. Borthwick of Dumfries. A large thin-walled cyst was so adherent that, though part of it was separated, the pelvic portion could not be removed. The cyst was fixed in the wound and drained. These three cases ultimately proved fatal.

As in former reports, every case is now given in which I have interfered with any abdominal tumour except by tapping. In the first hundred cases (*Lancet*, 1867 and 1870), deaths after incomplete operations were included amongst the deaths of the completed cases. A short history was also given of every case of ovarian tumour that was seen and not operated on, as well as the reason for not operating. A sort of balance-sheet was thus formed, by which the value of the oper-

Table of Fifty Cases of Ovariectomy.

No.	Medical Attendant.	Date.	Age.	Adhesions, Weight of Tumour, etc.	Result.
201	Dr. Dobie, Chester	June 1875 ..	52	Parietal, omental, and mesenteric adhesions; sarcoma; some ascites; 14 lbs. ..	Recovered
202	Dr. Binny, Denny	June	48	Inflamed burst cyst; 20 lbs. ..	"
203	Dr. Greig, Dundee	July	23	Extensive parietal and omental adhesions; 40 lbs. ..	"
204	Dr. Dobie, Chester	September ..	49	Slight parietal and omental; 53 lbs.; pediculated uterine fibroid also removed ..	Died
205	Professor Lister	September ..	40	No adhesions; 26 lbs. ..	Recovered
206	Dr. Herring, Builth, Brecon ..	September ..	68	General parietal adhesions; 47 lbs. ..	"
207	Dr. Ross, Inverness	October	48	Extensive parietal and omental adhesions; 17 lbs.; fibroid of uterus ..	"
208	Dr. Campbell, Dundee	November ..	55	Omental adhesions; 33 lbs. ..	"
209	Dr. Logie, Kirkwall	November ..	21	Semi-solid; 18 lbs. ..	"
210	Dr. Hay, Carlisle	January 1876 ..	35	Burst cyst; 17 lbs. ..	"
211	Dr. S. Moore, Glasgow	January	37	Very firm and extensive adhesions; 68 lbs. ..	"
212	Dr. Logie, Kirkwall	January	47	Jelly tumour; 21 lbs.; sarcomatous disease of peritoneum ..	"
213	Dr. Wedderburn, Forfar	January	13	Omental adhesion; dermoid tumour; 18 lbs. ..	"
214	Dr. Lumgair, Largo	February	47	Extensive parietal and omental adhesions; large fibroid of uterus ..	"
215	Dr. Bramwell, Perth	February	23	Omental, parietal, and pelvic adhesions; 35 lbs. ..	"
216	Dr. Logie, Kirkwall	March	30	Parietal, omental, and intestinal adhesions; 56 lbs. ..	"
217	Dr. McCulloch, Dumfries	April	38	Extensive omental adhesions; 35 lbs. ..	"
218	Dr. Ross, Stonykirke, Wigtown ..	April	51	Firm adhesions to uterus and in pelvis; both ovaries removed; 34 lbs. and 1 lb. ..	"
219	Dr. M. Duncan	May	44	Both ovaries removed; 12 lbs. and 7 lbs. ..	"
220	Dr. Skae, Larbert	June	35	No adhesions ..	"
221	Dr. Meadows, London	June	50	Omental, mesenteric, and intestinal adhesions; sarcoma; some ascites ..	Died
222	Dr. Dobie, Chester	July	18	No adhesions; 31 lbs. ..	Recovered
223	Dr. Henderson, Liverpool	September ..	51	Parietal and omental adhesions; 40 lbs. ..	"
224	Dr. Graham, Liverpool	September ..	30	Omental and extensive pelvic adhesions; 15 lbs. ..	"
225	Dr. Weilobyski	September ..	44	Very extensive and firm parietal and omental adhesions; 65 lbs. ..	"
226	Dr. M. Duncan	October	24	No adhesions; 37 lbs. ..	"
227	Dr. Gowans, South Shields	November ..	26	Adhesions very extensive; burst putrid cyst; pyæmic fever ..	"
228	Dr. Scott, Dumfries	December ..	57	General parietal and omental adhesions ..	"
229	Dr. Holman, Reigate	December ..	34	Pelvic adhesions to uterus and rectum ..	"
230	.. ..	March 1877 ..	73	Parietal adhesions; 22 lbs. ..	"
231	Dr. Croom	March	50	General parietal adhesions, 19 lbs. ..	"
232	Mr. Covey, Puckeridge, Herts ..	March	60	No adhesions; 43 lbs. ..	"
233	Dr. Sidey	March	67	Parietal adhesions, to bladder and in pelvis; suppurating cyst; 60 lbs. ..	"
234	Dr. MacLagan, Dundee	April	19	No adhesions; 16 lbs. ..	"
235	Dr. Mackenzie, Larkhall	April	26	Adhesions universal; burst dermoid cyst; both ovaries removed ..	Died
236	Dr. Brown, Dunfermline	April	21	Very firm and extensive adhesions, parietal and omental; 47 lbs. ..	Recovered
237	Dr. Lorraine, Castle Douglas ..	April	53	Adhesions universal, extensive to liver; 95 lbs.; large fibroid of uterus ..	Died
238	Dr. Wilson, Gateshead-on-Tyne ..	May	41	Burst jelly cyst; both ovaries removed ..	Recovered
239	Dr. Edmond, Stonehaven	May	40	Firm and extensive pelvic adhesions; 20 lbs. ..	"
240	Dr. Montgomerie Bell	July	62	No adhesions; 36 lbs. ..	"
241	Dr. Dick, Harrington	July	54	General parietal adhesions; 17 lbs. ..	"
242	Dr. Dobbie, Ayr	August	27	No adhesions ..	"
243	Dr. Gordon, East Linton	September ..	22	No adhesions; 28 lbs. ..	"
244	Dr. Gemmill, Kirkmaiden	September ..	24	Parietal adhesions; 10 lbs. ..	"
245	Dr. Gemmill, Kirkmaiden	September ..	57	Very firm parietal and omental adhesions; 26 lbs. ..	"
246	Dr. Bell, Buchhaven	October	28	Parietal, extensive omental, and pelvic adhesions; 25 lbs.; ascites ..	"
247	Dr. Johnston, Stirling	October	48	Parietal; 34 lbs. ..	"
248	Dr. De Vitre, Lancaster	October	53	Extensive adhesions to uterus, bladder, and pelvis; 27 lbs. ..	"
249	Dr. Cullen, Helensburgh	October	20	Omental adhesions; sarcoma; 7 lbs.; ascites; double pleurisy ..	"
250	Dr. Dickson, Carnoustie	November ..	27	Parietal and omental adhesions ..	"

ative results might be judged. In the second hundred cases, the London example was followed, and the deaths after completed and incomplete operations were separated; but details were given of every case of incomplete operation. Now, the practice seems to be to ignore altogether incomplete operations, exploratory incisions, or errors of diagnosis.

My confidence in the cautery in the treatment of the pedicle was some time ago shaken by hearing of a death from hæmorrhage the day after operation in a case where it was employed. In four-fifths of the cases in this series the clamp was used, the cautery being reserved for very short pedicles. Of late, my faith in the cautery has returned, and I have used it in some ordinary operations. The last twenty-one operations were performed under the carbolic acid spray.

Sulphuric ether has now been given in two hundred operations. Properly administered, it is nearly a perfect anæsthetic. I have pleasure in acknowledging the value of Mr. Ormsby's simple inhaler.

JABORANDI PROPOSED AS A REMEDY IN HYDROPHOBIA, FROM OBSERVATIONS IN TWO CASES OF THE DISEASE IN MAN.

By J. G. SINCLAIR COGHILL, M.D., F.R.C.P. Edin.,

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THE attention both of the public and of the profession is at present so much taken up with the subject of hydrophobia, that I have thought my experience of two cases of this disease, presenting some special features of interest in connection with its etiology, and perhaps suggesting a means of relief, if not of cure, might perhaps be of service in elucidating the natural history of this obscure disorder. During my residence in China, I had an opportunity of seeing the only two cases of hydrophobia which, so far as I have been able to ascertain, have ever occurred among the European residents in that empire. Rabies is by no means uncommon among the native dogs, but not so much so as one would expect from their neglected condition and cruel treatment. The cases to which I refer created great interest, I may almost say excitement, among the European community at the time, not only from the rarity of the affection, but also from the circumstances under which they were presented.

The first case occurred during the hottest part of the season of 1866. The sufferer was a young Englishman in robust health, tea-taster in one of the leading mercantile houses, who had recently arrived from England, and, like many of the new comers, had been attacked with an abundant crop of boils; some of these, in the neighbourhood of the ankles, had become somewhat ulcerated from rubbing. On the Sunday afternoon, he had been awakened from a nap by his little English bull-terrier licking one of the ulcerated spots on the ankle. The dog had been observed for some days previously to be somewhat cross and snappish, and much less playful than usual; but this was attributed to the oppressive heat of the Chinese summer, of which this was its first season's experience. Within fourteen hours, the unmistakably characteristic symptoms of the dreadful disease had manifested themselves, and within thirty-six hours proved fatal. Morphia, and then the sulphate of atropia, in heroic doses, were injected hypodermically without the slightest effect. Extract of belladonna was applied with the same result along the spine; but the only relief obtained, and that for brief intervals only, was by applying an improvised ice-bag to the back, and the inhalation of chloroform as continuously as the greatly embarrassed condition of the respiration would permit. The infecting dog was destroyed before any more active signs of rabies developed themselves.

The second case presented itself in the person of another young Englishman, an *employé* in the Imperial Customs at Shanghai. He was brought to the General Hospital two days after the death of the preceding, and had been greatly impressed by hearing of it. His attention was drawn to what had hitherto been an almost imperceptible scar on the ball of the thumb, which had resulted from the bite of an "angry" dog in England, nearly two years before. It had now become irritable and red, but did not actually open or ulcerate; but in this case also the same terrible symptoms developed themselves with an equally rapid and fatal result.

These two cases involved me in a somewhat lively correspondence with my friend Sir Edmund Hornby, the Chief Judge of the Supreme Court, who, without having seen them, wrote to the papers, saying he believed they were cases of a purely nervous character, terminating fatally from the intensity of the mental impression, and that he had seen many cases of the same kind

during his official residence in Constantinople. But of the true hydrophobic character of these two cases there could be no doubt whatever in the minds of all who saw them. Indeed, I for one do not know any disease of which the symptoms, in form and sequence, are more characteristic. The pathogeny of the disease in each of the cases in question was peculiar. In the first, the inoculation was effected by the saliva of a dog in whom the disease was not markedly developed, and then by absorption from the ulcerated surface. This did not prevent the disease from being at once developed, and running its course with extreme rapidity. In the second case, the original site of inoculation nearly two years before had completely healed, but the poison evidently remained latent in the system until the circumstance of a new case again directed the mind of the patient strongly to his own experience, with an intensity sufficient to rouse the slumbering mischief into fatal activity. It is impossible, I think, to overlook the mental impression as an important factor in the morbid process, where a sufficient predisposing etiological element exists in the potentially affected organism. The exciting cause need not be essential in character, and very often is here as elsewhere out of all proportion to the morbid action which it initiates.

Among the pathological lessons taught by the study of this disease, is to be noted the variety in the morbid species produced by transmission from the lower animals to man. The natural history of hydrophobia shows abundantly that, in the lower animal, very often the phenomena of the disorder are altogether less strikingly developed, and do not present that terrible intensity which agonises the human sufferer and appals the beholder. The dog may only appear dull and stupid and disinclined to play, perhaps a little cross and snappish with strangers, able to swallow both solids and fluids, as shown by voluntarily licking its master's sores, showing therefore none of the purely *hydrophobic* phenomena, and yet be capable of communicating the malady in its most acute form to man, in whom the hydrophobic character is so markedly pathognomonic.

I do not know that I would have thought these reminiscences of hydrophobia of sufficient interest to add them to the already teeming literature of the subject, except that, in recalling the individual symptoms, I remember one at least which suggests that, in a recent proposed addition to our *materia medica*, we may possibly have a means of relieving the most distressing symptoms of hydrophobia, if not of eliminating the poison itself and curing the disease. In the first of these cases, I particularly noticed that there seemed to be an entire suspension of the functions of the whole salivary apparatus. The tongue, mouth, and fauces were perfectly dry; and of this condition, and an intense sensation of thirst apparently associated with it, the patient chiefly complained as his greatest source of distress in the intervals of the tetanic spasm. Strong efforts only resulted in the collection of pieces of tough viscid mucus, which could not be swallowed, and which were ejected with frequent and difficult efforts. This is in striking, and, as I would point out, important contrast to the dog, where the saliva may be seen flowing abundantly from the open mouth. The specific animal as well as the mineral poisons, appear to have a special affinity for particular organic systems, as the vehicle or apparatus for their elimination from the body. Of these organic systems, the skin and the salivary glands seem to be by far the most active, and it is more than probable that their action is mutually vicarious. These facts are too well known to require any further illustration. Now, as the saliva is evidently the secretion in which the poison of rabies, in the dog at least, is found most abundant, and by which it is propagated, it follows that the salivary glands must be largely, if not specifically, involved in the morbid action. If we find, then, the whole salivary function suspended, or at least impeded, in cases of hydrophobia in the human subject, ought we not to accept the physiological indications so plainly presented, and endeavour to restore the action of the salivary glands as the special emunctories of the morbid poison. I think that this is the direction in which we are to look for our remedy; and I believe that it will probably be found in the *jaborandi* of Mexico, the latest transatlantic addition to our *materia medica*, and which has shown itself to be the most potent sialagogue and diaphoretic known. The only cures of hydrophobia (for such are reported on credible authority) have been in cases where either the morbid nervous phenomena have been reduced by their physiological antagonistic curare, while the *materies morbi* has been allowed to exhaust itself, or its elimination has been left to the natural efforts; or, on the other hand, where the excretory action of the skin and salivary glands have been excited by the hot-air or mercurial bath. Even admitting that such cases were not those of true hydrophobia, at least they are evidence that symptoms, markedly partaking of this grave character, have been at least relieved by rousing the action of the skin and salivary apparatus.

The dose of the powdered leaves of *jaborandi* is from sixty to eighty

grains; and, as no dangerous effects have attended the somewhat free experiments hitherto made with it in the healthy subject, it may be given with confidence. I would propose that an infusion of one drachm of the powder, in an ounce of water, be injected at a blood-heat into the rectum, and repeated every two hours until the full influence of the drug is established. If there be intolerance of the simple infusion, it may be medicated by the addition of liquor opii and starch, so as to facilitate its retention. If the active principle of the drug could be obtained, it would, of course, be much more easily managed in the form of a concentrated solution for hypodermic injection. The liquid jaborandi of Messrs. Ferris and Co. I have found to be a reliable test. The dose is from five to ten drops. It is therefore presented in a handy form for injection either *per rectum* or hypodermically.

ON THE TREATMENT OF HIP-JOINT DISEASE BY EXTENSION WITH MOTION,

AS PRACTISED BY THE AMERICAN SURGEONS, INSTEAD OF LONG-CONTINUED REST AND IMMOBILITY.*

By WILLIAM ADAMS, F.R.C.S.,

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THE object of the present paper is to direct attention to the recent advances which have been made in the treatment of hip-joint disease by the American surgeons, to whom we are indebted for the discovery of two very important principles, and also for their practical application by means of most ingeniously contrived instruments.

The first principle is that of extension, as a means of relieving the most acute pain in joint-diseases, especially applicable to the knee and hip-joints.

The second principle is that of extension combined with motion during the progress of disease, the patient being allowed to walk about, so as to promote recovery with free motion in the joint, instead of the ordinary result of ankylosis obtained by long-continued rest and immobility.

There can be no doubt that the discovery and practical application of these two principles have completely revolutionised the treatment of joint-diseases, and changed our opinion with regard to the pathological conditions existing, especially as to the production of acute pain which, formerly, was believed to depend upon acute inflammation, requiring active local, as well as general antiphlogistic treatment, such as leeches, blisters, calomel and opium, etc. It has now been proved to depend upon undue articular pressure and contact of inflamed surfaces, produced by reflex muscular contraction, and capable of relief by mechanical means alone, producing extension, whether this be applied by means of the weight and pulley, or by the screw and cog-wheel.

The object of extension is not, as generally supposed, to separate articular surfaces, but to overcome reflex muscular contraction, and, by relaxing the muscular rigidity, to prevent undue pressure of inflamed articular surfaces, or their margins, when the joint is held in a flexed position by muscular contraction.

Extension, for the relief of pain, is applied by means of the weight-and-pulley apparatus whilst the patient is in bed, the extension always being made in the same direction as the long axis of the limb. It will vary, therefore, when first applied, as the leg may be flexed, adducted, or abducted; but as soon as the reflex muscular action has been overcome, the weight will be made to pull in the direct horizontal line. After the pain has subsided, the object with which the weight-extension is continued is to secure sufficient rest to the joint, and at the same time permit a limited amount of motion, as the patient varies his position in bed. It is not found, by experience, that the limited amount of motion thus permitted in any way interferes with, or retards, the favourable progress of the case; but, on the contrary, this may be looked forward to with confidence in the great majority of cases after the pain has been relieved by the weight extension. The health of the patient also improves rapidly after the relief of pain.

The successful application of weight-extension as a remedy for pain, however acute it may be, in joint-disease, is the greatest discovery of modern times in the treatment of these affections. The originality of this discovery is claimed by Dr. Henry G. Davis of New York. In his work on *Conservative Surgery*, published in the year 1867, at

page 206, Dr. Davis observes: "We consider it fully established that, when disease about a joint renders the movement of that joint painful, the joint is always liable to be destroyed by uninterrupted pressure effected through the contraction of the muscles passing over it." And again at page 212, "In diseases of joints, we were the first to point out, as an always present factor in their destruction, the existence of unremitting pressure, as effected by contraction of muscles passing over the joints, causing constant forcible apposition of the surfaces within the joint. This is a general principle appertaining not only to the hip, but to all joints similarly affected. The application of this universal principle should guide us in any joint-affection, whether the disease be internal or external, as soon as the disease renders the movements of the joint painful. When this fact was fully established in our mind, we were led to seek the best way of counteracting the contraction of the muscles, and soon came to the conclusion that a constantly acting force, however moderate, must eventually weary muscles by giving them no respite. We adopted the weight as applied by means of the cord, pulley, and adhesive strips for this purpose, when the patient was confined to his bed or couch. This answered the indication perfectly, relieving all pain and constitutional disturbance, enabling the patient to enjoy his days free from pain, and to rest quietly at night, to relish his food, and to be nourished by it; in short, it robbed the disease of all its terrors".

Dr. Davis does not precisely state the period at which he arrived at the above conclusion as to the cause of the acute pain and its method of treatment; but it must have been anterior to the year 1855, which is the date affixed to his extension splint by the instrument-makers Otto and Reynders of New York. At page 308 he states: "In 1856, I had fully established the treatment of morbus coxarius upon the plan of overcoming the pressure effected by the muscles, through the means of *continued elastic extension*, and the mode with its results was very flatteringly commented upon by one of the editors of the *American Medical Monthly* of this city, in March 1857."

There can be no doubt that interarticular pressure, or the pressure of inflamed articular surfaces—one surface being generally pressed against the margin of the opposite articular surface—must take place when the joint is drawn into a flexed position by the rigid contraction of the muscles, more or less of a spasmodic character, which always coexists with the period of acute pain. Mr. Hilton has particularly pointed out this fact in his *Lectures on Rest and Pain*, and has explained it to be the result of reflex nervous irritation, depending upon the anatomical fact of the various muscles surrounding the joint being supplied by branches of the same nerves, which are also distributed to the interior of the joint. The explanation of this period of acute pain in joint-disease, and its dependence upon interarticular pressure, produced by the abnormal contraction of the muscles surrounding the articulation, has been brought before the profession in a very able paper by Mr. Howard Marsh, in the *St. Bartholomew's Hospital Reports*.*

The English idea has always been rest and immobility to the joint. The American idea, during the last ten years, has been extension with motion, *i.e.*, preserving motion in the joint whilst the pain is relieved by extension.

In the treatment according to the English system, immobility of the joint is obtained by various instruments and splints; from that piece of surgical antiquity, the *long straight splint*, reaching from the axilla to the foot, necessitating the confinement of the patient in the horizontal position for many months, and many other contrivances, such as metal and leather splints to the joint, which permit the patient to move about on crutches, to the now somewhat fashionable Thomas's splint, invented by Mr. Thomas of Liverpool, and described in his recently published work.

All these means succeed, more or less, in relieving pain and promoting recovery, although ankylosis is frequently produced, and this has generally been regarded as the most desirable termination; but in many cases they all fail in relieving pain, for want of the American extension principle, and also they do not prevent the occurrence of dislocation, or partial dislocation, the effect of which is to produce shortening of the limb with permanent lameness.

An example of this occurred recently in my own practice, dislocation, or partial dislocation, taking place whilst the patient was wearing a Thomas's splint. A young gentleman, aged 6, was brought to me in March of the present year, suffering from slight symptoms of hip-joint disease; no pain, but limping, with muscular rigidity, and and slight flexion of the hip-joint. I ordered Thomas's splint, which

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

* On the Prejudicial Effect of Interarticular Pressure in Joint-Disease; and the Application of Continuous Extension by means of a Weight, as a Remedy for this Condition. By F. H. Marsh.—*St. Bartholomew's Hospital Reports*, vol. ii. London: Longmans, Green, and Co.

was made by Mr. Krohne, and applied by myself, with his assistance. I also ordered an extension-apparatus to be used at the same time with Thomas's splint, as the absence of extension appeared to me to be its chief defect. The splint, however, appeared to answer its purpose so well, and the child could be so readily moved about and taken into the open air, and at the same time apparently improving, that the extension-apparatus was not used by the parents, and I saw no more of the patient until sent for in consequence of the occurrence of pain, chiefly at night. This took place nine weeks after the application of Thomas's splint, and it continued two or three weeks before I was sent for; and I then discovered that a dislocation, or partial dislocation, of the head of the femur had taken place; shortening of the limb was apparent, the top of the great trochanter being nearly on a level with the anterior superior spinous process of the ilium. After this the pain ceased, and the disease will probably be arrested; but there must remain permanent shortening, with lameness, and probably complete loss of motion. I am, however, now trying persistent extension night and day, in the hope of diminishing these evils, which could not have occurred if the American system of extension had been relied upon, or extension combined with Thomas's splint, which I ordered. On July 17th, Professor Sayre went with me to see this patient, as he was desirous of seeing cases in which Thomas's splint had been applied.

In my own practice, during the last ten years, since the publication of Dr. Davis's book, I have, in the treatment of hip-joint disease, relied chiefly upon weight-extension, at the commencement, continued day and night with the patient in bed, especially if pain exist; but, as improvement takes place, I allow the patient to walk about with the assistance of crutches, wearing at the same time a firm leather splint moulded to the hip, reaching from the waist to the knee. This secures rest and immobility to the joint, whilst general exercise of the body is permitted; but during the daytime, whilst the patient is not walking about, the leather splint is removed, and the weight-extension applied whilst the patient is on the sofa. Immobility, therefore, is not long continued; and in all cases where the disease has been arrested in the early stage, after treatment lasting from one to two years, motion at the hip-joint has always been preserved, and no lameness whatever remains. Patients treated in this way some years ago are now able to walk and take horse exercise without any fear of the recurrence of pain or any inconvenience.

When disease has not been arrested in the first stage, but has advanced to abscess, with destruction of the joint, motion is generally lost, and ankylosis results; but in some cases, in which I have relied upon extension throughout the disease, an useful though limited amount of motion has resulted.

Before concluding this paper, I will allude to the second principle in the treatment of hip-joint disease, for which we are indebted to the American surgeons—viz., that of extension combined with motion, allowing the patient to walk about during the progress of disease, so as to promote recovery with free motion in the joint, instead of the ordinary result of ankylosis obtained by long continued rest and immobility.

The most recent American advance has been to combine extension with the preservation of motion, and at the same time to allow the patient to walk about without crutches, the weight of the body being transmitted to the ground by a steel instrument applied to the limb from the waist to the foot, or rather a little below the foot. Attached to the steel band round the waist, are two firm inelastic perineal bands, which, passing from before backwards below the tuberosity of the ischium on each side, receive the weight of the body. A raised boot of one inch in thickness is worn on the foot of the sound limb. The limb is connected with the foot-piece of the instrument by means of two long strips of plaster, extending from a little above the ankle to the middle of the thigh, and retained in position by a circular bandage. Attached to the lower extremity of each strip of plaster is a buckle, to which is fastened a strap coming upwards from the foot-piece of the instrument. When thus connected, extension is made by means of a rack and pinion in the longitudinal bar of the instrument at about the middle of the calf. Inversion and eversion of the foot can also be controlled by a circular cog-wheel placed a little below the hip-joint.

The instruments now generally in use in America for the application of extension with motion, whilst the patient is allowed to walk without crutches, are those invented by Dr. Taylor and Professor Sayre of New York, also one by Dr. J. C. Hutchinson of Brooklyn, all of which are modifications of the instrument first invented for this purpose in the year 1855 by Dr. Henry Davis of New York.

My own experience in the use of these instruments is very limited; but, during my visit to America last year, I had the opportunity of seeing them applied in a large number of cases, and as it appeared to me

with great advantage. In one case, that of a young lady, who was residing in Dr. Taylor's private establishment in New York, where patients are received for the treatment of various deformities, the hip-joint disease appeared to be in a more active stage, judging from the pain she suffered, than I should have thought the walking instrument could have been applicable; still, when the extending force was applied pretty nearly to its full extent by Dr. Taylor, she was enabled to walk without pain, and therefore it seemed to be a test-case of the value of extension. Children with hip-joint disease in a more chronic form are frequently seen walking about the streets of New York wearing these supports, and are enabled to get in and out the tramway-cars without difficulty.

Dr. Sayre applied his walking instruments (represented in fig. 2), made by Ernst of London, a fortnight ago, to one of my cases, a young gentleman six years of age, from Ireland, and he was enabled to walk about with ease and comfort; but, as he was previously free from pain, the case was less a test of the value of extension than that previously alluded to.

These instruments and their mode of application are described by Dr. Sayre in his *Lectures on Orthopaedic Surgery*, published in 1876; and, as we have now the pleasure of welcoming Dr. Sayre amongst the distinguished guests present at this meeting of our Association, I am glad to state that he will exhibit the hip-joint instrument of his own construction, with the latest improvements, and make some observations on its application.

The accompanying woodcuts, which were kindly forwarded to me by Dr. L. Sayre of New York, for the purpose of illustrating this

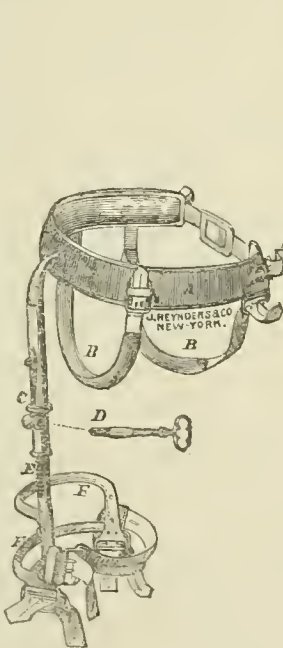


Fig. 1.—Dr. Sayre's short Hip-Joint Splint.

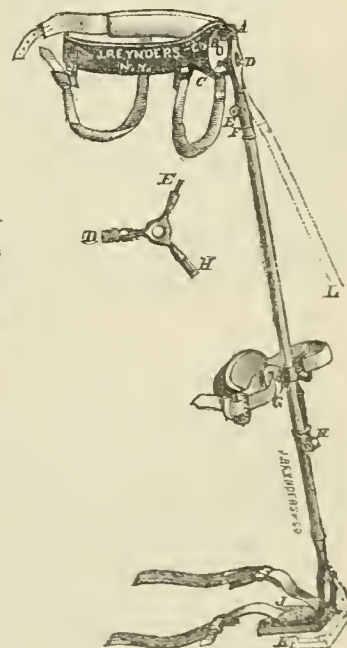


Fig. 2.—Dr. Sayre's long Hip-Joint Splint.

paper, represent the two hip-joint instruments used by him for combining extension with motion in the treatment of hip-joint disease. Both these instruments are figured and their application described in Dr. Sayre's recently published *Lectures on Orthopaedic Surgery*, pp. 262 and 269.

ALCESTER.—A considerable portion of the report for the quarter ending September 30th was taken up with the details of the action taken for the prevention of the spread of scarlatina and typhoid. As regards the former, he regrets not having a disinfecting chamber, and relates a successful prosecution for the exposure of some children while in an infected state. As regards the latter—typhoid—Mr. Fosbrooke relates the history of two outbreaks in some isolated cottages, which occurred at first from polluted water-supply arising from defective drains, and afterwards from the excreta of the infected having been thrown into the common privy without disinfection. The annual death-rate was only 14.9 per 1,000 living.

CLINICAL MEMORANDA.

PYLORIC DISEASE.

DR. SUTTON's success in his cases of pyloric disease, treated by withholding food, and reported in the JOURNAL for December 8th, is confirmed by a case that occurred in my private practice many years ago. A lady of middle age, with great strength of character, was the subject of scirrhus of the pylorus, attended with distressing pain and vomiting after taking food. As the disease was rapidly advancing, I consented, at her own request, to abstain from giving food by the mouth, with the exception of a few teaspoonfuls of milk that were swallowed in the twenty-four hours to satisfy the natural craving of the stomach. She was fed, during the last three months of her life, by the injection of animal broths; and the gastric pain was in great measure subdued by opiate enemata. This patient was contented with the method of sustaining life she had herself suggested; and as I watched the case from day to day, I could not help being convinced that she had been spared much of the usual suffering, under such circumstances, by the negative treatment adopted. The *post mortem* examination showed the existence of a large areolar cancerous ulcer, occupying a circular space of six inches in diameter and including the pyloric orifice. The margin of the ulceration was hard and thickened, and the surface exhibited the characteristic submucous degeneration of advanced malignant metamorphosis. There were but few altered blood-particles, and, consequently, but little of the usual coffee-ground appearance in the stomach.

HENRY DAYMAN, F.R.C.S., Millbrook, Southampton.

PROLAPSE OF THE INTESTINES.

IN reference to Dr. Joy's case of prolapse of the cæcum, reported in the JOURNAL of December 15th, 1877, I may state that a case very similar occurred at St. Bartholomew's Hospital in the autumn of 1860 or 1861, and was reported by me in one of the medical journals. The patient was a child about two years old, admitted under the care of the late Dr. Edwards, but died in a few hours, before any notes could be taken of the case.

At the *post mortem* examination, the whole of the large bowel was found to be invaginated within itself, the cæcum being quite protruded, the ileum opening without the anus. After some research, I discovered some notice of such cases in a French pathological work; but the reference has been mislaid, and I cannot remember the name of the author.

THOMAS FAIRBANK, M.D., Windsor.

CASE OF VILLOUS DISEASE OF THE BLADDER:
CATHETERISM: ABORTIVE ATTACK OF
URETHRAL FEVER OR SEPTICÆMIA.

MR. T. D. C., aged 62, a total abstainer, has had for the last two years irregular fits of hæmaturia, accompanied with a frequent desire to micturate and more or less pain. On July 23rd, he came to me complaining of inability to pass urine, severe pain at the neck of the bladder, and frequent straining; he had for several days been voiding large quantities of bloody urine. I had no difficulty in passing a No. 9 catheter, and drew off about two pints of urine largely mixed with blood. I prescribed complete rest and ten-grain doses of gallic acid, with tincture of digitalis, every four hours. On July 24th, he had passed a better night than he had done for a long time, but was still unable to pass more than a few drops of urine. I again introduced a catheter with the same result as before. On July 25th, my friend Mr. W. H. Rix saw the case with me; and we decided to tie a catheter in the bladder, thinking that, if any of the hæmorrhage came from the prostate, which was somewhat enlarged, it might help to check it, and would also avoid the necessity of straining. The catheter was provided with a plug, and the patient could empty his bladder as often as required. The blood in the urine was not diminished. On the morning of July 27th, the patient told me he felt very comfortable and had passed a good night. I changed the catheter, and all appeared to be going on well until about 6 P.M., when I was hastily summoned and found him suffering from a severe rigor, which had lasted for nearly an hour, and talking incoherently. The catheter had been withdrawn. The temperature, which that morning had been normal, had now risen to 105.6 deg. His skin was very dry. I learnt that about midday he had been to stool, and in straining had apparently somewhat squeezed out the catheter from its position. On returning to bed, he had felt what seemed to be the point of the instrument, the pressure of which caused intense pain. I saw him again that evening at 9.30. The tempera-

ture had fallen to 102.5 deg. and the skin was acting profusely. Next morning, the temperature was normal, and has remained so since. I passed the catheter daily for about a week afterwards, and since then he has been able to empty his bladder fairly and the blood has almost disappeared. There can be no doubt, from the history of the patient, that the case is one of villous disease of the bladder, to which the hæmaturia is due. The feature of interest, however, in the case is the occurrence of the rigor on July 27th, following a misplacement of the catheter, which he had worn without hindrance for four days. To what may that rigor be referred? It was of extreme severity, as evidenced by the sudden and alarming rise in temperature and the equally sudden fall. That it was not the precursor of any febrile symptoms puts the view, I think, of its being due to septic absorption from the seat of disease out of the question. It would rather be compared to examples of so-called "urethral fever", following slight laceration or injury to the urethra during catheterism; or occurring even simply from the mere passage of a catheter in a subject not previously accustomed to the operation. If it be of this nature, the remarkable severity of the transient pyrexial state is worthy of note.

WM. STAMFORD, L.R.C.P. Lond., M.R.C.S., Tunbridge Wells.

SURGICAL MEMORANDA.

FOREIGN BODIES IN THE EAR.

IN further confirmation of the well-known principle referred to by Mr. Dalby, in the BRITISH MEDICAL JOURNAL of December 15th—viz., that a foreign body in the external meatus, if "left alone, cannot do harm"—the following case is interesting.

E. R., a professional gentleman, aged 41, came to me on September 21st, 1877, complaining of deafness in the right ear that had come on during the last fortnight. He attributed it to a violent catarrh, accompanied by a sore throat, that had troubled him considerably of late. On examination, his tonsils proved to be slightly enlarged; the pillars of the fauces, uvula, and soft palate relaxed. The ear-speculum revealed the presence of a dark-looking body, resembling wax, that appeared to half fill the right meatus. Appropriate remedies relieved the catarrh and throat trouble, but the deafness remained. A few days later, the right ear was thoroughly syringed with tepid soap and water, when, to our astonishment, in addition to an abnormal quantity of wax, a foreign body was removed, which proved to be about a quarter of an inch of the cedar shaft of a penholder. On examining the meatus after removal, it presented no abnormality. The patient remembered distinctly the fact of its introduction, when he was a boy at school, quite thirty years ago. No attempt had ever been made to extract it, and its presence had not troubled him until now. His deafness entirely left him within a few hours of its removal.

H. HABGOOD, M.R.C.S., Eastbourne.

ANEURISM OF THE ANTERIOR TIBIAL ARTERY,
TREATED BY COMPRESSION.

MR. T. came under observation on July 12th, 1877. He had suffered from rheumatism (?) since November 1876. He was spanæmic, extremely feeble, much emaciated, and complained of pain in the right ankle and up the leg, which was slightly larger than its fellow, but neither inflamed nor œdematous. He had walked up about thirty stone steps with difficulty on the previous day. He had a loud mitral murmur, which had probably existed for many years (after scarlatina), as Dr. Walshe, fourteen years ago, enjoined abstinence from the ordinary sports of boyhood. I ordered belladonna liniment to the feet, and syrup of iodide of iron, and ceased attendance, as he improved, after four days.

On July 30th, I again visited him. There was much pain in the right leg below the knee externally, and down the outside of the leg. I ordered a warm lotion of iodide of potassium; and two days afterwards, for the first time, I discovered a distinct pulsating swelling between the tibia and fibula, at the upper part of the leg. There was no discoloration. The tumour could be emptied on pressure, and the pulsation controlled by compression of the popliteal artery. It seemed to be nearly as large as a small hen's egg. A to-and-fro murmur was audible with the stethoscope. Ten grains of iodide of potassium were ordered every four hours, and, after consultation with Mr. Bickersteth on August 3rd, a trial of compression was determined on, although it was agreed that the patient was a most unfavourable subject for such treatment, for the ligature, or any surgical procedure. I fortunately obtained the aid of Mr. Jones, House-Surgeon to the Liverpool Royal

Infirmiry; and on August 4th, at 11.30 A.M., two tourniquets were applied to the limb, with intervening pads of cotton-wool: one (Signoroni) over Poupart's ligament; the other (Liston) a little above the middle of the thigh. These respectively controlled the common and the superficial femoral, and were every hour tightened and relaxed. A quarter of a grain of morphia was injected hypodermically at the commencement of the compression, and again at 3 P.M., and the patient exhibited scarcely any manifestation of pain. The tourniquets were removed at 6.30 P.M. (*i. e.*, after seven hours), when the tumour was found to be consolidated. The tissues were red over the seats of pressure, and the leg was a little swollen. Its temperature, to the hand, appeared to be higher than that of the opposite limb. The patient remained in a very lethargic state; and, at 11 P.M., catheterism was performed, as he had not passed any urine during the day. The next morning, the tumour was free from pulsation; there was not any discoloration; and the leg was nearly of the size of its fellow. He had slept much, but taken very little food beyond half a cup of turtle-soup. He was rather incoherent, but this had been noticed before the treatment. He spoke a little the next day, but never left his bed, or thoroughly regained consciousness until his death on August 25th. There was also an aneurism of the facial artery, larger than a cherry, below the jaw, on the same side of the body, and a very small one of the temporal, in front of the meatus of the ear; and the cerebral symptoms under which he sank were consistent with the suspicion that the intracranial arteries were similarly involved. According to Lisfranc, quoted by Druitt, out of one hundred and seventy-nine cases of spontaneous aneurism, exclusive of the aorta, there were three of the anterior tibial and two of the temporal. The facial is not mentioned, not having been affected.

The above case is interesting from its relative infrequency, and the existence of what may be termed an aneurismal diathesis; also from the favourable result, as far as the aneurism was concerned, in a very unpromising subject with cardiac mischief; from the tolerance of the pressure, and absence of subsequent local inflammation, irritation, or cedematous enlargement.

W. BOYD MUSHET, M.B.Lond., M.R.C.P.Lond.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. MARY'S HOSPITAL.

DR. BROADBENT'S WARDS.

Cases of Mitral Stenosis.—A boy had, from some cause not apparent, acquired a distorted condition of the spine, and, as a secondary result, the capacity of his chest was much diminished, so that, when admitted to the hospital suffering from bronchitis, his respiration was very embarrassed. At this time, a well marked tricuspid murmur was heard, the regurgitation apparently depending upon the impeded pulmonary circulation; this tricuspid murmur has now given place to a presystolic *bruit* at the apex. Dr. Broadbent remarked that the case is now in a very instructive stage of the disease; there is a loud and sharp first sound heard at the apex, while the *second sound* is not heard at the apex at all, so that, if the second sound be traced downwards from the second right cartilage towards the apex-beat, it is rapidly extinguished on passing from the right to the left ventricle; at the same time, the pulmonary second sound, as heard at the second left cartilage, is accentuated, owing to the impeded pulmonary circulation. This condition of the second sound is very characteristic of mitral stenosis.

In the case of a woman with a presystolic *bruit* at the apex, the murmur occupied almost the whole of the diastolic period, the apex thrill being of the same duration. The case appeared to afford strong evidence of the view that the presystolic *bruit* is due to the auricular systole, as opposed to the view that the sound is due to the imperfect closing of the stiffened margins of the mitral curtains at the beginning of the ventricular systole, an act necessarily of short duration; while we can readily conceive that the auricular systole may be easily prolonged, as it probably is in this case.

After a careful examination of many cases of heart-disease, Dr. Broadbent has never seen auricular pulsation at the surface of the chest, such as has been described by other authors.

Disease of the Aortic Valves.—An old man presented the signs of extensive dilatation and hypertrophy of the ventricles, accompanied by a loud double aortic murmur. The chest heaved with the impulse of the

heart, and the right ventricle was seen beating in the epigastrium; the apex-beat was displaced outwards and downwards. At a point just below the left nipple, the cardiac impulse produced a systolic and diastolic blow against the chest-wall, while only a systolic impulse was seen at the apex-beat. This phenomenon appeared to be due to the great amount of cardiac hypertrophy; at each of the points the systole produced a blow against the chest-walls, and at the higher point the thickening of the hypertrophied ventricle caused also a diastolic impulse, which was not produced at the apex. The dilated aorta produced a visible systolic impulse to the right of the upper part of the sternum. It appeared impossible to say whether the aorta was simply dilated or whether there was a small aneurism; but Dr. Broadbent did not think aneurism was present, as there was neither extended area of dulness nor any sign of pressure.

Salicylic Acid in Acute Rheumatism.—Dr. Broadbent has used salicylic acid largely in the treatment of acute rheumatism. He usually orders twenty-grain doses of the acid, dissolved by means of carbonate of soda, to be given every hour, to six doses, on two successive days. This drug has been found exceedingly useful, not only in lessening the pain and lowering the temperature, which it undoubtedly does, but also in preventing endocarditis and other complications.

Relapses have occurred in many of these cases, but only when the salicylic acid has been omitted too early. The drug also appears distinctly to encourage sweating.

Pleuritic Effusion.—A woman was admitted with the following physical signs: extensive dulness over the lower part of the right chest, extending much higher posteriorly than at the side or front, and bronchial breathing posteriorly, which rapidly extended; there was no elevation of temperature. The case appeared to be one of consolidation of the lung, when suddenly the physical signs of pleuritic effusion manifested themselves: the heart was slightly displaced to the left, the bronchial breathing disappeared at the base, and the whole of the right chest became very dull, although the vocal vibration remained well marked. Probably the lung had previously been extremely congested, and this condition was relieved when effusion occurred into the pleura. At present, tubular breathing is heard in the axilla and above the spine of the scapula; vocal vibration is diminished but not altogether absent below this line, while it is exaggerated above it; there is well marked zephyrony over a considerable area below the angle of the scapula, and distinct bronchophony above. Probably there is a moderate amount of effusion into the pleura, with either adhesions of the lung, or, as is more probable, a certain degree of congestion remaining, which causes the lung to be deeply immersed in the fluid, instead of being pressed upwards by the effusion.

Temporary Hemiplegia.—A middle-aged man was admitted on account of a recent slight attack of right hemiplegia. For several months previous to the present illness, he had been totally unable to work on account of chronic gout, from which he had suffered on and off for many years. It is noteworthy that, when attacked with hemiplegia, his speech became "stuttering": a very unusual concomitant. This and the paralysis have now completely passed away. He suffers much from his heart, the least exertion or excitement causing faintness and distress. No cardiac impulse is seen or felt; and the first and second sounds, as heard at the apex, are alike in character and almost equidistant, resembling the sound "tick-tack". There appears to be dilatation of the ventricles, and probably some fatty degeneration. There is no albuminuria.

The temporary paralysis was attributed to cerebral congestion, dependent upon the gouty condition and the state of the heart.

EAST LONDON HOSPITAL FOR CHILDREN.

CASES OF SAYRE'S METHOD OF TREATING SPINAL CURVATURE.

(Under the care of Mr. ROBERT WILLIAM PARKER.)

CASE 1.—A. J., aged 3, an only child, pale and weakly, would be best described as a "backward child". There was a history of phthisis on the mother's side. In September, when first brought to the hospital, the mother said that, during the past month, the child had winced and seemed uncomfortable when walking about, but had not complained of pain; he also had a slight attack of jaundice, with symptoms of catarrh. On examining the back, a slight projection of the lower dorsal spines was recognised; there was, however, little or no tenderness on pressure. In reply to direct questions, the mother stated that the child was fretful and cross, and that he was steadily getting worse: the walking had gradually become more and more laboured and irksome, so that now he could hardly stand. There could be but little doubt that the case was one of early caries of the dorsal vertebrae. On September 6th, the child was suspended in a Sayre's tripod, and a

plaster of Paris jacket was applied, according to the instructions given by Sayre. For a few days afterwards, the child was kept in bed, in order to give the jacket time to dry. No marked alteration or improvement was observed in his general condition. At the end of a week, however, he began to recover his spirits and became more lively, and, by the end of the second week, he seemed to be much better, *i.e.*, he was less fractious, and seemed to walk about without much trouble. An interval of six weeks elapsed before he was again seen. The mother then gave the following account. "After the first fortnight or three weeks, the child began to droop again, and he soon became nearly as bad as before the jacket was applied. One morning, just a month after the plaster of Paris had been put on, the boy came out 'full of measles', and this completely took him off his feet. He went through a rather severe attack of measles, from which, however, he recovered." When seen (on November 16th), the jacket was, of course, at once removed. The prominent dorsal spines were a little reddened; but there were no other signs of friction and no signs of pressure. The lungs seemed normal. The boy was sent home, and the mother was ordered to well wash him and bring him back in a day or two to be again "jacketed". This was done accordingly. When the boy was brought for his second jacket, the mother spontaneously remarked that "he seemed to miss his support very much, and that he could not walk at all unless supported either by a hand or a chair". Three weeks after the application of the second jacket, the following note was taken. "The boy is much better in all respects; he walks about without any support."

CASE II.—A. R., aged $3\frac{1}{2}$, first came under observation in November 1876 for spinal disease. There was no projection of the vertebrae, but there was tenderness over the spine, and progressive loss of power in the legs was coming on. The disease was situated in the lower cervical and high dorsal vertebrae. In August 1877, there was complete loss of power in the lower extremities. The diseased vertebrae now projected considerably. A Sayre's jacket was applied: not quite as Sayre recommends for cervical disease, for the head was not suspended in the "jury-mast", which is, no doubt, an essential part of the treatment of disease in this region. When, therefore, a week later, the child was brought to be looked at, it was not thought strange to have to record "he is not much better for the jacket". Nevertheless, after having worn the jacket for a month, the following note was made. "He can only just support himself; he is, however, much improved in his general health." His mother added: "He can kick his left leg now anywhere, and his right one is beginning to come to life again." This improvement is continuing steadily.

CASE III.—W. W., aged 3, twelve months ago first commenced to "grow out". He was found to have disease in the high dorsal vertebrae. There was a considerable curve in this region, which suggested disease in several vertebrae. It was supposed to have been caused by a fall which he had sustained three months previously to the "growing out". His legs dangled uselessly; he could not perform any voluntary movements whatever, and, as he lay in bed, if he wanted to move his legs, he had to do so with his hands. He had been "off his legs" for upwards of twelve months. The boy's general health was of a low scrofulous type; he was pale and flabby. A plaster of Paris jacket was applied in the usual manner. A fortnight later, the following note was taken. "He cannot yet stand, even with the aid of a chair; but he can flex his thigh and leg, *i.e.*, he can draw them up when he is on his back without the aid of his hands." A fortnight later, again, this note was made: "He can barely support himself on his legs, even with the aid of a chair." The boy can now walk without any support. He has worn his jacket six weeks in all.

REMARKS.—The foregoing cases illustrate various stages of spinal disease as seen in the out-patient department of a children's hospital. Other cases might have been added in which the same satisfactory results were obtained. Case II had been under observation for many months; he had taken cod-liver oil and various other tonics, and had been kept in bed. When first seen, there was no projection of the vertebrae whatever; there can be no doubt that, if he had been "jacketed" at first, the disease might have been arrested. When treatment as out-patient had failed, he was admitted into a hospital; but not only was there no improvement, the disease even progressed. In the other cases, there was more or less paraplegia; but, nevertheless, the extension effected by suspension and the support afforded by the plaster jacket together seemed to remove the pressure, which probably caused the paraplegia. Recovery took place because no very permanent secondary changes (as the result of this "slow compression") had taken place.

Mr. Parker is of opinion that the most satisfactory result will be obtained by treating cases which are progressing, but which are still in a comparatively early stage. If adhesions and consolidation have

taken place, extension ought to be practised with great care. Considerable art is required to adapt the jacket so as not to compress the chest too much, on the one hand, and for it not to be too loose, on the other. For, if the jacket be too tight, pressure-sores on prominent bony projections will result in spite of wool-pads; while, if it be too loose, friction-sores will be found. The latter are more likely to occur, and, with a view to obviate this as much as possible, Mr. Parker now advises, in all cases, that the spines of the vertebrae, and even the angles of the ribs, be covered with a good and unirritating adhesive plaster on wash-leather. This thoroughly protects the chest, and is far more efficacious than any amount of wool. More serious consequences than sores are said to have followed a too tightly fitting jacket; but such accidents will probably be as rare as gangrene of a limb after tight bandaging, and, like this, will not occur in the hands of a skilful surgeon.

BRADFORD INFIRMARY.

TUBERCULAR PIITHSIS: RIGHT HEMIPLEGIA, WITH EMPOLISM OF LEFT MIDDLE CEREBRAL ARTERY.

(Under the care of Dr. ALEXANDER.)

JOHN McM., aged 30, a tailor, was admitted into the Infirmary on April 6th, 1875. He stated that five weeks ago he was in his usual good health, but that a month since he began to complain of cough, tightness across the chest, loss of appetite; and with these symptoms he remained in bed, growing daily weaker, until the day before admission, when he got up, dressed, and went down stairs. Upon the following day, it was discovered that he was paralysed; and it was believed that the hemiplegia had followed a severe fit of coughing. He had a pale emaciated appearance, and was very weak. There was absolute loss of sensation and motion in the right arm, and loss of motion, but not complete loss of sensation, in the right leg. There was partial paralysis of the right side of the face; and, on pinching the leg, he contorted the left side of his face; the left angle of the mouth being strongly drawn, and the left ala nasi notably raised, whilst the right half remained unaffected. The tongue was dry, red in the centre, slightly fissured, and, when protruded, turned to the right. The pupils were equal and dilated. There was no ptosis. He could close both his eyes, and the right half of the occipito-frontalis muscle was in action. Articulation was in a great measure abolished; he could say "No" pretty distinctly, but could not say "Yes" clearly. There was difficulty in swallowing, and slight deafness. Over the right lung, upon percussion, there was a flat dull sound at the apex both anteriorly and posteriorly, with prolonged wheezy expiration and suspicion of moist râles. Over the left lung, there was dulness, which diminished from above downwards. At the apex, the breathing was tubular; and near the nipple there was a whistling sound accompanying inspiration. Behind the left lung, there was dulness over the whole surface. The patient had a cough, but no expectoration. The heart-sounds, though faint, seemed normal.

April 7th. The patient was restless and exhausted. He attempted to get out of bed, and seemed to be sinking.

April 8th. He was better and stronger this morning, and more rational. Temperature 101; pulse 100, feeble; respirations 37 per minute. The tongue was moist, loaded with white fur. The urine was acid, of specific gravity 1028; no deposit or albumen. At ten o'clock, he became violent, began to suffer from hallucinations, and to cry out. The right arm and leg were both moved. I injected one-sixth of a grain of morphia. As he was no quieter, in fifteen minutes, another sixth of a grain of morphia was injected; and, he being no quieter in thirty minutes after this, ten grains of chloral-hydrate were given, which produced sleep in fifteen minutes. The respirations were reduced to 20 per minute.

April 9th. He had eight hours' sleep, and remained quiet all day. Respirations 30 per minute.

April 10th. He could swallow much better, and had a little feeling in the right arm and leg. He could draw up the right leg slightly.

April 15th. Crepitation was heard over the whole of the left lung and lower two-thirds of the right lung. He was a little better.

April 19th. His pulse was very weak, but he took his food well. The urine and feces had passed involuntarily ever since admission. He was rapidly losing flesh. The paralysis was no better. Bed-sores were forming.

The patient became gradually weaker, and died exhausted on April 27th.

NECROPSY.—The lungs (especially the left) were densely studded with milary and caseous tubercles, scarcely any healthy tissue being left. Numerous small cavities were also present. The left middle

cerebral artery, opposite the third left frontal convolution, was occluded by a decolorised clot; and the cerebral substance immediately surrounding the obstructed artery was soft and slightly yellow. The heart was healthy. There were no tubercles elsewhere.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, DECEMBER 5TH, 1877.

CHARLES WEST, M.D., President, in the Chair.

Calcified Fibroid Tumour of Uterus.—Dr. ROPER showed a specimen of calcified fibroid tumour of the uterus; and a tumour of the placenta believed to be an organised blood-clot or a growth intermediate between myxoma and fibroma.

Secondary Puerperal Hemorrhage.—Dr. C. S. REDMOND described a case in which hemorrhage came on a month after confinement. The woman lost a great amount of blood. A portion of placenta was found in the uterus and removed, and perchloride of iron solution was injected. Some febrile disturbance followed, but the patient made a rapid recovery.

General Dropsy in the Fœtus with Hypertrophy of the Placenta.—Dr. BASSETT described a case. During labour, delay had occurred after the birth of the head. It was believed, after auscultation of the mother's abdomen, that the child was dead. Delivery was effected by drawing down an arm by the blunt hook. The child was greatly œdematous; the placenta large and hypertrophied, weighing three pounds and a half, and in twelve hours it discharged one pound of fluid.—Dr. JOHN WILLIAMS said that what we knew of the production of dropsy in the child was the result of our knowledge of the mode of production of it in the adult. Heart-disease never caused in the adult uniform general dropsy; that condition was always the result of a blood-state. The effect of central obstruction was to cause œdema of the most distant parts from the heart. In the fœtus, the placenta would suffer first. This would interfere with the flow of blood through that organ, and dropsy of the fœtus would follow. The placenta acted not only as an organ of respiration for the fœtus, but probably also as a renal organ; and anything which interfered with the circulation in it, or increased the thickness of its tissues, would interfere with the elimination of excrementitious products from the blood of the child. This would bring about a blood-condition similar to that met with in Bright's disease, and general anasarca in consequence.—Dr. EDIS thought that it ought to have been learned whether or no the child was dead without the aid of chloroform. The proper treatment was to have brought down an arm at once; the issue might then have been different.—Dr. ROPER said when a head had been born an hour or two without the body, the probability was the child was dead. The delay is due to disease of the fœtus, ascites, or something else. In that case, he would perforate the thorax and deliver.—The PRESIDENT regretted that no reference had been made to the researches of Simpson. New observations should be made and compared with those made before.

Complete Rupture of the Perineum.—Mr. C. R. THOMPSON described a case in which the arm of a dropsical fœtus appeared through the anus of the mother and ruptured the perineum completely. Deep sutures were at once inserted. On the third day, they were removed. On the fifth day, an aperient was given. The patient was perfectly recovered at the end of a month.—Dr. HAYES was in favour of the use of sutures in laceration of the perineum; he kept them in five days.—Dr. BANTOCK used silk-worm-gut.—Dr. WYNN WILLIAMS used the first material at hand.—Dr. MURRAY recommended lateral incisions of the vaginal orifice with a view to prevent rupture.—Dr. EDIS thought that the treatment of the bowels was an important point. It was important to ensure regular action from the first. He used silver wire covered with gutta percha.

Meningocele complicating Labour.—Dr. S. WORDSWORTH POOLE described this case. Version by the bipolar method was tried, but ineffectually. The hand was then introduced into the uterus and version effected by the feet. At the back of the head was a large translucent cyst, measuring fourteen inches in circumference.

Double Vagina and Uterus.—Dr. HENRY GERVIS described a case of this kind. The patient had been married four years, suffered from dysmenorrhœa, and sometimes dyspareunia. There were two vaginæ, separated by a septum, from one-twelfth to one-eighth of an inch in thickness. The left vagina was larger than the right. At the top of each vagina was a cervix with a small os uteri. A probe could be introduced into the left for half an inch; into the right for an inch and

a half. There were two uteri present. The septum between the vaginæ was divided by the galvanic *éclateur*, with a view of relieving her suffering.

Extra-uterine Pregnancy.—Dr. HENRY M. MADGE said that, though there are differences of opinion with regard to the varieties of extra-uterine pregnancy, yet most cases may be referred to the tubo-ovarian and tubo-abdominal. The author was of opinion, however, that the placenta may be developed within the ovary, and also when attached to the peritoneum. Mr. Jessop's case was clearly abdominal. In such a case, there are no decidua, and there can be no uterine sinuses nor utero-placental vessels—the so-called curling arteries and veins of the size of crow-quills—passing from the peritoneum to the placenta; and, therefore, there must be an absence of what is called the sinuss system. The membrane to which the placenta is attached allows interchange of fluids, and the nourishment of the fœtus is thus provided for. Nothing is known of the structure of extra-uterine placenta, but it is evident they must be all foetal. Many questions were raised by such cases as Mr. Jessop's, where the fœtus was not surrounded by membranes, such as the source of the liquor amnii, the origin of vernix caseosa, the disposal of the foetal urine, etc.

Removal of Large Uterine Myomata by Abdominal Section.—Mr. LAWSON TAIT gave an account of four cases of this operation. The first operation was performed on account of recurrent intestinal obstruction due to a myoma. The patient recovered. The next was the removal of a rapidly growing soft myoma, reaching nearly to the xiphoid cartilage, in a woman aged 45. The tumour was freely movable, with but few adhesions. The pedicle was clamped. The patient died on the fifth day after operation. It was found that the uterine cavity entered the tumour for about six inches. The third case was a patient aged 41, suffering from a multiple fibroid, reaching above the umbilicus. There was no distress, except occasional pressure on the intestines. The author urged her to leave it alone. She determined to have it removed, however, and the operation was performed on May 19th, 1877. The patient died on May 22nd. The last case was a patient suffering from a tumour of somewhat doubtful nature. A medical practitioner tried to tap it, and the tumour then grew rapidly, and the patient's health suffered in consequence. The tumour was removed, the pedicle being clamped; the patient made a good recovery.—Dr. FANCOURT BARNES had assisted at an operation for the removal of a fibroid complicating pregnancy. The tumour was in the pelvis. There was great difficulty in removing it. The patient died in five or six hours.—Dr. PLAYFAIR said that in two of the patients operated upon the diagnosis was doubtful. In one, it was done against Mr. Tait's advice. Why was it done? The course of fibroids was not usually fatal; and abdominal section should not be undertaken for their removal unless life was endangered.—Dr. ROUTH said the great point in this operation was how the pedicle could be secured. He had collected cases, and found that death was due to slipping of the ligature or clamp. The pedicle ought to be transfixed. The rule should be never to listen to what a patient said of the desirability of an operation. Unless there were danger, the operation was not justifiable.—Dr. BANTOCK said the feasibility of the operation depended on the presence of a pedicle. If the fibroid involved the body of the uterus, the operation was contraindicated. He recommended ligaturing the pedicle in small pieces by transfixion, each ligature linking to its neighbour like the links of a chain.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 12TH, 1877.

Surgeon-General JOHN MURRAY, M.D., President, in the Chair.

Variolæ Anomale.—Dr. COLLIE read a paper entitled "Variolæ Anomale" (Sydenham), with suggestions and reflections. He began by stating the object of his paper to be "to notice some points in which the recent epidemics resemble the great epidemics of the past; to call attention to the inefficiency of the existing vaccination law, and the grave dangers which may be incurred if this inefficiency be permitted to continue". After giving details of two cases of hæmorrhagic small-pox, one following an attack of scarlet fever, the other an attack of enteric fever, in both of which death took place suddenly and without any warning, he went on to show how closely such cases resembled the accounts of the black death of the middle ages, as given by Vinario and others. To his mind, there was no doubt that black small-pox and black death were identical; and he further thought that black small-pox formed the chief part of the plague of Athens, so graphically described by Thucydides. In recent epidemics, as well as in the present one, there had been a large and increasing proportion of black cases, and should vaccination be neglected, Dr. Collie thought that small-pox might again assume its mediæval virulence. He stated

that black small-pox occurs invariably in unvaccinated persons or in persons who have not been re-vaccinated after fifteen. He then gave the history of a case of what appeared to be, from the eruption, mild small-pox. The patient, aged 21, had two good vaccination-marks. Death occurred an hour after admission. The *post mortem* examination showed that the anterior part of the corpus striatum and the whole of the right hemisphere were ploughed up with blood. So far as he knew, this was the first case of the kind on record. Then followed a case of confluent small-pox, with extensive hæmorrhage into the vesicles, in a female aged 60, with no evidence of vaccination, in which, contrary to expectation, recovery took place. With regard to the compulsory vaccination laws, he thought that compulsory laws, which are practically not compulsory, were ridiculous, and that as regards vaccination, such laws served to retard, rather than to advance, its progress. Dr. Collie concluded by saying that no vaccination can be held to be efficient which did not include re-vaccination about puberty, and that vaccination should be the business of the State, and be performed by specially trained State officers, private practitioners, except in exceptional circumstances, being interdicted from vaccinating.—In the discussion which followed the reading of the paper, the PRESIDENT, Dr. C. E. SAUNDERS, Dr. MACKENNA, Mr. NETTEN RADCLIFFE, and Dr. ARGLES took part.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

THURSDAY, DECEMBER 13TH, 1877.

Enlargement or Inflammation of Mediastinal Glands.—Dr. GOODHART read a paper on enlargement or inflammation of the mediastinal glands. Four cases were narrated in which enlargement of the bronchial glands or thymus had existed in children, with marked paroxysmal dyspnoea, and in all of which death had apparently resulted from suffocation. In another case, similar enlargement in an adult, due to acute inflammation, was thought to explain coma and other symptoms of defective function of the medulla oblongata and pons Varolii: viz., staggering gait, defective speech, difficult deglutition, salivary dribbling, and disturbed cardiac rhythm. The author called attention to the fact that many of these cases of bronchial adenopathy occurred in robust-looking children; and he drew the conclusion from this, that the origin of the enlargement was a state of continued overfeeding, and suggested that neither this form of the disease nor *tabes mesenterica* were necessarily to be treated with cod-liver oil and steel-wine. These remedies tended to make matters worse rather than better in some cases; and restriction of diet, both in quality and quantity, often did more than medicine. He next discussed the pathology of the affection, and considered that the theory of reflex paralysis, advocated by Brown-Séquard in genito-urinary affections, held good here; and that, as a consequence of the involvement of the peripheral branches of the vagus, which was shown to be present, there was a central arterial spasm or immediate irregular nervous discharge; and thus the various morbid phenomena observed in these cases came about. He considered the paroxysmal dyspnoea due to a muscular spasm all through the lung, not merely to a glottic spasm; and, with regard to the more serious condition of coma, this also might be occasioned in a similar manner, and some corroborative proof of this was afforded by certain instances of sudden death after surgical interference with the pleura. He did not think, however, as some would appear to do, that all forms of paroxysmal dyspnoea in children were due to enlargement in the mediastinum: on the contrary, some appeared due to central and possibly epileptic disturbance, others to various peripheral stimulants, of which glandular enlargement formed only one. Under the head of treatment, discussion was invited upon the following lines. 1. Tracheotomy is of no use in urgent inspiratory dyspnoea, a fact strongly pointing in favour of the effective spasms being not in the glottis alone. 2. If any remedies are useful, belladonna in large doses, twenty or thirty drops of the tincture, repeated every three or four hours, is the most promising. 3. With respect to diet, starving is better than stuffing in some cases. In concluding, the difficulties of diagnosis were alluded to, and the impossibility in most cases of establishing anything upon a sure basis by means of percussion.—Dr. PHILPOT said that the same general symptoms were produced by other causes, and that the diagnosis was only to be made upon the *post mortem* table.—Dr. DUNCAN inquired whether there was any diabetes in these cases, which was a symptom of irritation of the vagus.—Mr. DIVER inquired as to the class of patients in which these cases were found; he would rather alter the character than lessen the quantity of the food.—Dr. GOODHART would hope, by severe cases, to prove points in other cases of inspiratory crow. There was no diabetes in the man. The form of dyspnoea would not distinguish cases. These occurred among poor but perfectly healthy-looking children.

Sayre's Plaster Jacket.—Mr. MARSH exhibited Dr. Sayre's method of treating spinal curvatures with the plaster-of-Paris jacket, and gave his experience of its use. He had applied it in six or eight cases of lateral and in about twenty of angular curvature. All the patients had been between three and fifteen years of age. He had had no opportunity yet of employing it in the adult. In lateral curvature, where the use of the jacket was combined with careful suspension, as recommended by Dr. Sayre, twice a day, he thought it quite proved that it was the best appliance that had yet been brought before the profession. In two of the cases he had mentioned, lateral curvature was extremely marked. In the first of these, that of a girl aged thirteen, the curvature had commenced when she was three years old, and had continued to increase in spite of the usual steel support, with arm crutches, and means for lateral pressure. In the other, a boy aged fourteen, the curvature had resulted from an empyema, which had discharged for three years. Here also the steel support had proved useless. In both, there was a great contrast as to the comfort with which the rival apparatus were worn. The steel supports had produced painful spots on the skin in several places, and had caused considerable distress. The jacket, however, was borne without any kind of inconvenience. Both patients were taller by rather more than one inch after the jacket was applied than before. The girl had worn the plates for four months, and during that time her general health had much improved; she could now take long walks and active exercise, and her mother stated that her voice had become much stronger. In the remaining cases, the children, who were out-patients, had all worn the jacket without any kind of inconvenience and with marked benefit. In the cases of angular curvature, the result of the treatment had on the whole been satisfactory. Many of the children had been able to take exercise, and had felt no pain or discomfort; in some, however, the jacket had not removed pain, and the treatment by rest in the recumbent position had been resumed. This method of treatment could not, he thought, be safely employed, unless the patients could be kept under very careful watching; and he had seen two cases in which ulcers formed from pressure on a projecting point of the spine. And the utmost gentleness and care were absolutely necessary in suspending the patient while the jacket was being applied. Children generally felt relieved when the spine was gently and very slightly extended; but, if the extension were either sudden, or more than very slight, great damage might be done; and, as soon as the plaster had hardened, openings should be cut opposite all prominent points, so as to relieve the skin from pressure. The jacket was not suitable for curvatures in quite the lower dorsal and lumbar regions of the spine; for, when the disease was thus low in the column, no adequate *point d'appui* could be obtained for the support of the trunk and upper limbs. But some cases had occurred in which very striking relief had followed when disease was in the upper dorsal and cervical regions. Dr. Sayre's "jury-mast" was in many instances very useful. A great difficulty, and one which it seemed very hard to deal with, was met with in children. The abdomen was frequently very prominent, and also liable to considerable variations in size, so that only very imperfect support could be obtained for the anterior and lower segment of the jacket, which was sometimes found to become very loose when the abdomen was less distended. This circumstance had seemed to render the support quite useless in some cases; in two or three instances, too, the jacket had gradually slipped down, the pelvis in children being small and with its prominent points little marked. In only one case had there been anything to suggest that the jacket might dangerously impede respiration. When the patient, who had formerly had empyema, was suspended, the shape of the thorax was so much changed that his breathing was seriously embarrassed, and the jacket was therefore at once removed; but next day it was again put on, while he was very slightly raised, and was then borne without any kind of discomfort, and no further trouble of any kind ensued. Yet this case showed that great care should always be taken against this possible source of danger; and he thought some means should always be at hand for removing the jacket, should it be necessary to do so. There were many points respecting this method of treatment in which further experience was required; but, on the whole, he thought it very valuable, and worthy of extended trial.

Calomel as a Medicine.—Dr. LANCHESTER read some remarks on calomel as a medicine. After stating that fashion had been against calomel of late, he remarked that its evils had been exaggerated, and, in attempting to do without it, we were depriving ourselves of an useful medicine. Calomel was spoken of as an alternative, but its best known effect was purgative. As a cholagogue, there was no increase of bile or stimulation of liver; and the bile, after its use, was due to rapid action preventing the ordinary changes of bile in the colon. As an antiphlogistic, he contrasted Sir T. Watson's "sheet-anchor in inflammations" with Mr. Holmes's "no power to resist inflammation, but

induces cachexia, which prevents adhesive formations". Calomel was a diaphoretic, diuretic, and sedative; useful as a purgative in children, from small dose and freedom from colour or smell. He found it very useful in gastric catarrh, with rapid pulse and rise of temperature; in dentition, with confined bowels; convulsions, with throbbing fontanelle; and in croup; and, with other aperients, in worms. In adult life it gave great relief in sluggish liver, in gouty persons, in cases simulating puerperal fever, urgent sickness in peritonitis, in red and oedematous throat. In congestion of the liver, he advocated its use as a convenient purgative, not continued. In acute gout and rheumatism, he gave a full dose at the commencement. In syphilis, he gave a course of mercury, and in this way it was stated to be a means of warding off megrim. He relied upon the drug principally for occasional use, but was loth to practise the continued use of a medicine which was not a natural constituent of the blood.—Dr. PHILPOT affirmed that doubt about the effect of medicine was generally due to ignorance of the natural course of disease. Calomel was the most valuable form of mercurial in syphilis. He followed Ricord's plan to keep under treatment for one year, avoiding salivation, giving one-third of a grain of calomel three times a day.—Mr. BERNEY had adopted the calomel treatment in two epidemics of Asiatic cholera, the sign of recovery being sea-green tint of the evacuations.—Dr. PARSONS-SMITH drew attention to peculiarities of constitution, which rendered some more liable to evil effects of mercury.—Dr. DUNCAN inquired whether there was any ground for the idea of peculiar susceptibility to cold after mercury.—Mr. NAPPER had never given up the use of calomel, and alluded to its use in laryngismus stridulus.—Dr. HOLMAN gave with great advantage one-twelfth of a grain of calomel, every hour, to children with intestinal catarrh, attended with profuse pumping-up of the contents of the stomach. He had also used calomel as a sedative.—Mr. HEARNDEN advocated local use of calomel in phlyctenular ophthalmia, also internal in the vomiting of pregnancy.—Dr. COLES thought that too much importance was attached to the experiments of Dr. Bennett on mutilated dogs. In children with aggravated sickness and diarrhoea, he gave one to two grains of calomel.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

NOVEMBER 23RD, 1877.

JAMES THOMPSON, M.B., President, in the Chair.

Prolapse of the Bowel.—Dr. JOY (Tamworth) read notes of a case of prolapse of the bowel in the adult. The case was published in the BRITISH MEDICAL JOURNAL of December 15th.

Skin-grafting.—Mr. ALEXANDER HAWKINS showed a male patient, aged 30, who had been admitted three months previously into the General Hospital with diffuse cellular inflammation of the forearm, followed by sloughing of the entire thickness of the skin of the back of the forearm, the slough extending from the elbow to the wrist. After he had been in the hospital seven weeks and the large raw surface had assumed a perfectly healthy appearance, skin-grafting was commenced. About one hundred grafts were applied, most of them taken from the cadaver. The surface was healed over in five weeks, except four little patches, each about the size of a sixpenny-piece.

The Use of Alcohol in Disease.—Dr. RUSSELL read a paper on the use of alcohol in the treatment of disease. He considered the subject in four relations, viz., the historical, the moral, the scientific, and the practical. He referred to the great changes in opinion as regards stimulating and depleting in the treatment of disease which had taken place during a single generation, as suggesting caution in opinion and forbearance in discussion. Under the second head, he dwelt upon the responsibility which the present tendency to licentious indulgence attaches to the prescribing of alcohol, and pointed to some important limitations, whilst expressing the opinion that the share attributable to the profession in inducing intemperance among out-patients had been much exaggerated. From the scientific point of view, the observations of Baudot, of Anstie and Dupré, and Binz were quoted as having corrected previous objections against the utility of alcohol, grounded on the supposition that all the alcohol taken was excreted unchanged; and, referring to Dr. Frankland's estimate of the force-producing power of alcohol, he noticed its capacity for developing energy within the system, and connected this capacity with Anstie's definition of stimulants and his arrangement of food at the head of that group. The power of alcohol as a cardiac stimulant, as a vaso-dilator, and as an antipyretic, was briefly noticed; and the paper concluded with caution against the too unlimited influence of the purely scientific aspect of the question, and the necessity of checking that influence by certain practical considerations which were shortly recounted.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, NOVEMBER 7TH, 1877.

F. OGSTON, M.D., President, in the Chair.

Digital Dilatation of the Os Uteri as an Aid to Labour.—Dr. LYON had come, from large experience, to the conclusion that digital dilatation of the os was no aid to labour; and he thought the following reason explained this. During pregnancy, the cervix had an internal and an external opening, and, forming no part of the cavity of the uterus, was under the influence of the reflex action of the spinal cord. When labour commenced, the cavity of the cervix became completely obliterated, and the os, instead of being an opening from a canal, became a hole in the wall of the uterus and the direct outlet of its cavity. By the process of thinning and expanding, the os gradually enlarged till no trace of it could be found. The distended bag of membranes seemed to exert some influence in dilating the os, but this was chiefly brought about by the uterine longitudinal fibres. While these changes were taking place on the lower part of the uterus, constituting the first part of natural labour, there was always an accompanying state of the body of the uterus characterised by regular contractions gradually increasing. This process of dilatation, etc., was never affected by the kind of presentation. But, in all cases of labour characterised by rigidity, and a consequent dry and unyielding state of parts, there was want of dilatation; and all efforts, digital or otherwise, were ineffectual so long as the attendant pains were irregular and without downbearing tendency. After more or less delay, when pains became regular and expulsive, the parts became lubricated with mucus, soft and yielding; and the dilatation was then speedily effected, and not till then. He had often tried to dilate the os with the finger in those tedious cases, and must, had he persisted, have simply torn the part. He had also succeeded in slipping the stretched os over the occiput, but these efforts had no beneficial effect on the labour. He thought it not improbable that the want of dilatation in such cases might arise from increased tonic contraction of the os caused by some continued peripheral irritation, and thus would be explained the beneficial effect often produced by removing accumulated faeces by enema. He inferred from what he had observed that want of dilatation was no cause of hindering the progress of labour, and that the want of dilatation was owing to the state of the uterus characterised by the absence of true labour-pains, and disappeared on their occurrence. Venesection and nauseating doses of emetic tartar had been used to facilitate dilatation, and more recently chloral and chloroform; and, if the object of treatment were to relieve a state of spasmodic contraction, these means appeared more likely to effect the purpose than digital efforts. If the os could yield to the gentle pressure of the finger, why did it not yield to the pressure from above? The necessity for digital interference never existed at all except in rigidity, and then it was impracticable. If it were to be used at all, Burns's rule was the only safe one, "If the os uteri be lax and thin or soft, it is both safe and advantageous to dilate it gently with the finger nipping a pain"; and, if we got the parts into the condition Burns indicated, there would be no difficulty in producing dilatation, because the cervix, which before was unyielding, had assumed the condition of natural labour and needed no interference.—Dr. GEORGE agreed with Dr. Lyon. The only thing he had found useful was smearing extract of belladonna on the rigid os.—Dr. COLLINS had not found in his experience dilatation of much service.—Dr. HIRSCHFELD thought digital dilatation was often impossible. He had found dry cupping the back very beneficial in cases of rigidity and dryness of the parts. He thought the presentation had much to do with it.—Dr. ALEXANDER REITH had been in the habit of dilating with two or three fingers, and always had the os yielding and papery in ten minutes. He first introduced two fingers and stretched them, and then three. This was done *between*, not *during*, the pains. He was in the habit of rupturing the membranes as soon as he arrived in every case, and had found this very useful.—Dr. GARDEN thought there was no doubt as to dilatation producing pain; but he was inclined to question its power in hastening the labour.—The PRESIDENT thought dilatation with one finger during a pain was not valuable, as indicated by his own experience. He could not say anything regarding the effect of two or more fingers during the interval.—Dr. STEPHENSON said that dilatation was good to remove the valve or diaphragm; but in the earlier stage, if there were a real cervix, then working at the os only could do no good. Dilatation could be properly practised only after the cervix was obliterated. The size of the os was not to be regarded, but the state of the cervix. If the lower segment of the uterus were not fully expanded so as to let the head down, there was no use in dilating. In great agony or sickness, chloral or chloroform should be given, or cupping might be used, but he would not use belladonna. When, however,

between the operator and the head there was nothing but a diaphragm, then was the time for dilatation. During a pain, the cervix was to be slipped over the occiput, and then, the other part being over the forehead, a more downward tendency is given to the occiput, and labour is facilitated. He thought the presentation was very important as to rapidity of labour, occipito-posterior and breech cases being much slower. As to the time of rupturing the membrane, he thought this should be done when the lower segment of the uterus was expanded.—Dr. LYON, in reply, said that at one time he thought the membranes were of some use, but he did not now believe it. The os opened quite well with arm and shoulder presentations by means of the longitudinal fibres. He saw no difference between one, two, and three fingers. He did not think the os not being open was the obstacle; it was the irregular pains which caused the delay; for, as soon as the pains became regular, the os opened, and the parts became moist and natural.

Three Cases of Tetanus, with Remarks.—Dr. COLLINS of Bervie reported these cases. Case I might not by some be considered as a case of tetanus; but it was given chiefly to illustrate the power of Calabar bean in relaxing tonic muscular spasm. An old man aged 80 had an attack of apoplexy and right hemiplegia on January 4th, 1870. He gradually recovered to a certain extent, with slightly thick articulation and some power in the limbs, though never to the extent of walking. On June 4th (five months after the attack), he was seized with what he called "cramp," but which had more the character of tetanic spasm, depending probably on an unabsorbed fibrinous clot. Rubbing and warmth were observed to increase the severity of the spasms. The affected limbs, which before were limp, became rigid. Five-grain doses of Calabar bean powder were given every two hours, and these were continued for five doses, when complete relaxation took place, and he slept quietly for several hours. On awaking, the spasms recommenced, increased in severity, and extended to the left side. Other five doses had to be given as before, and then he slept again. From day to day, the spasms returned, each time more extensively; and the Calabar bean, though continued, lost its effect. On the 15th, he lost the power of swallowing; and on the 18th he died exhausted. The most remarkable feature in the case was the long period between the injury to the brain and the symptoms.—Case II. This was a case of traumatic tetanus in a boy about five years old. He was dragged along the road in front of a farmer's roller on which he was riding, and had his right thigh abraded, the skin not being entirely removed. A poultice was applied, and he went on well, the wound granulating, till the ninth day, when Dr. Collins found his jaws clenched and slight spasmodic rigidity of the limbs. Three grains of Calabar bean were ordered every two hours till relaxation took place. During next day, he seemed but slightly relieved; and the day after the spasms became much more severe, and chloroform was administered intermittently for over two hours whenever the spasms would allow, and he then fell asleep and slept throughout the night. On the fourth morning, he was free from spasms, and the powders were ordered to be continued. During the same afternoon, however, a severe attack came on, and he was dead before he could be seen. In this case, the symptoms increased rapidly from the first, and the bean had little effect, in the doses given at any rate. Chloroform seemed useful; and, had it been at once given on the coming on of the final attack, the fatal result might, perhaps, have been averted.—Case III. A healthy active boy, aged about 8, fell from a wall and cut the sole of his right foot on a piece of broken bottle. The wound was dressed; and healed by first intention in a few days, except behind the ball of the great toe, where there was a slight suppurating wound. The dressing was renewed, and not disturbed for eight days more, when the whole was found healed. In about ten days, he became affected with trismus and tonic contraction of the muscles of the face and neck generally. Although there was no pain, etc., in the foot, it was constantly poulticed, the room was ordered to be darkened, and all excitement to be avoided. He had ten grains of chloral-hydrate every two hours for four times, and then he slept throughout the night; and after this he was kept constantly under the influence of chloral, being roused at intervals to take food and medicine. After the first day, he had ten grains of chloral and ten grains of bromide of potassium every three hours, and thus slept almost constantly for the first week, at the end of which time the rigidity began to give way. The medicines were then diminished in frequency, and he continued steadily to improve until he became quite well. This case might be considered slight and the prognosis favourable, and the length of time between the wound and the coming on of the symptoms was undoubtedly encouraging, yet it was doubtful if the patient would have recovered without treatment. It had been held by great authority that such cases never recovered spontaneously; and, therefore, chloral-hydrate might fairly be credited with the cure.—Dr. FRANCIS OGSTON,

asked if no symptoms of irritation of the stomach arose from the chloral administered for some time in one of the cases.—The PRESIDENT remarked that he had found chloroform of no use.—Dr. ALEX. OGSTON had for some time given up regarding tetanus as a nervous disease, and was inclined to consider it to arise from blood-poisoning. Hence, the spasms were like the rigors of fever; and, although we might prevent the spasm, yet the patient died as if nothing had been effected. He had not seen any good practical results as yet from the view he took. He hoped something from salicylic acid, but had not tried it yet. Amputation and other local means he had found of no value.—Dr. HIRSCHFELD had seen several cases, but had never seen a bad case recover. He had seen two recoveries; one in the Franco-Prussian war, and the other in the Edinburgh Hospital. In the former, no wound could be discovered; and in the other a small piece of glass was the irritant. He did not think the symptoms had any connection with blood-poisoning. He wished to know if the Calabar bean had been pushed to the extent of contracting the pupils.—The PRESIDENT had examined cases coming under his notice very carefully, and had found thickening of the nerve only. The wounds healed very easily.—Dr. COLLINS agreed with Dr. Alexander Ogston as to the cause being blood-poisoning. He had not found the chloral produce any irritation of the stomach. The Calabar bean had contracted the pupils.

Cases of Scarlatina with Diphtheria.—Dr. GEORGE of Keith related these cases as examples of complications of scarlet fever and diphtheria, and of the modes in which these diseases were propagated in a country district. He held that scarlet fever and diphtheria could be conveyed not only from one person to another, but by cats, dogs, etc., which ought to be shut up during the prevalence of these diseases. In his locality, he had found it impossible to prevent the females from conveying infection from house to house. During April and May 1876, a number of families in a healthy locality were attacked with scarlatina and diphtheria. In the scarlet fever cases, the rash was well marked, and the throat-affection was quite different from that in the diphtheritic cases, the specks being less coherent and spreading simultaneously over all the mouth, whereas in the diphtheritic cases there was the appearance of false membrane, circumscribed at first, and then going into the larynx. The scarlet fever cases were not prostrated as the diphtheritic cases were; and were with difficulty kept in bed. Albumen was in the urine of all the scarlet fever patients. The treatment of these was gentle purging, liquor ammoniæ acetatis, mistura camphoræ, infusion of dulcamara, and sponging the body with vinegar and water. The diphtheritic cases were treated with strong solution of nitrate of silver locally, and copper, quinine, and iron internally, with wine and whisky. Most were convalescent in a fortnight. A few, with whom it was otherwise, he gave more in detail. He wished to bring copper very prominently under the notice of the Branch as being a far more powerful tonic than iron, and to claim a high place for decoction of dulcamara as a sedative in scarlatina.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THURSDAY, NOVEMBER 22ND, 1877.

G. RIGDEN, Esq., in the Chair.

Poisoning by Yew-Leaves.—Mr. T. WHITEHEAD REID, in the course of a paper on a case of poisoning by yew-leaves, drew attention to the caution given in the Scotch Lunacy Blue Book for 1875, to avoid yew, either as decorations or as growing shrubs in asylums. In the Cheshire County Asylum a death occurred within an hour or two after taking the yew; five grains being the total quantity found. In Mr. Reid's case the quantity collected from the stomach and dried weighed twenty-two grains.

The Forceps in Midwifery.—Mr. RIGDEN read a report of the last 200 obstetric forceps cases that had occurred in his practice during the last eighteen years; the proportion being about 7 per cent. of the total number of labours. The forceps cases had been generally those in which there was either considerable inertia or marked disproportion, and yet there had been no maternal death, and but nine stillbirths. He advocated the more frequent use of the forceps than was generally taught, the object being to assist, and not, as some practitioners imagined, to interfere with Nature. His experience had taught him that the dangers of the forceps were not in its early use where there were no contraindicating circumstances, but in the delay in its application, as the operation certainly prevented much additional suffering and anxiety to the mother, and was a preservative of the life of the infant. His practice was to make as little ceremony as possible about its application; generally to have the forceps with him if likely to require it, and to inform the patient that there was no danger in its

careful employment. He deprecated the delay as well as the alarm caused to the patient and her friends by calling in further advice, or by making much ceremony about the application. He believed that obstetric practitioners are now much more than formerly in the practice of using the forceps; and his object in bringing the subject before the meeting was to instil more confidence in its employment.—Dr. LEWIS thought that the use of the forceps once in fifteen cases was unnecessary, and that the interference was excessive.—Dr. BOWLES was of opinion that the forceps was more frequently used at the present day than it was a few years ago; and that this earlier and increased use of the forceps was justified by experience. The general feeling of the meeting coincided with this view.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 7TH, 1877.

EBEN WATSON, M.D., President, in the Chair.

Popliteal Aneurism.—Dr. PATTERSON read notes of a case of popliteal aneurism, which recurred three days after ligature of the superficial femoral. As pressure over the artery in Hunter's canal caused all pulsation in the aneurism to cease, the vessel was ligatured in that region twenty days after the first operation with the result of completely curing the disease.—The PRESIDENT related a case of his in which pulsation returned after ligature of the superficial femoral, and in which he also tied the vessel in Hunter's canal with no effect, and consequently he was led to tie the external iliac, which cured the aneurism; but gangrene of the limb ensued, necessitating amputation.—Dr. G. H. B. MACLEOD mentioned a case of multiple aneurisms over the whole body, in which, at the earnest entreaty of the patient, he amputated one thigh, in which there were three aneurisms, the result being a permanent cure of all the others. He also detailed the case of a sailor with a popliteal aneurism, who, without consulting any surgeon, bent his leg to ease the pain; after keeping it so for two days, he found that all pain had ceased, and the large swelling at the back of his leg was quite firm. This case was interesting with reference to the treatment of such cases suggested by Mr. Ernest Hart. Dr. Macleod doubted the advisability of taking Dr. Patterson's case as a precedent for ligaturing in Hunter's canal after failure of operation at apex of Scarpa's triangle, as by so doing no additional vessel was commanded, and he could only account for the success of Dr. Patterson's case by an unusual arrangement of the vessels.—Dr. A. M. BUCHANAN stated that, in an anatomical point of view, he agreed with Dr. Macleod, and he would rather have recommended ligature of the internal iliac.—Dr. HECTOR CAMERON thought that in a similar case, he would be inclined to adopt Dr. Patterson's line of treatment, as the fact that pressure in Hunter's canal caused cessation of pulsation was sufficient indication that ligature would be successful.—Dr. WATSON stated that, as in his case, pressure causing absence of pulsation was not a certain sign that ligature would be successful.—Mr. REID asked if the first ligature, which was catgut, could not have slipped.—Dr. PATTERSON did not think this possible, as there was no pulsation in the femoral at the site of the first operation.—Dr. RENTON showed a sphygmographic tracing of the aneurism.

Hydrophobia.—Dr. PERRY read notes of a case of hydrophobia, the symptoms of which commenced ten months after the patient—a female—had received a bite on the hand from a dog. The patient died twenty-four hours after the symptoms manifested themselves. Dr. Foulis made a *post mortem* examination of the body, and the organs were recommended to be sent to the Committee at present investigating the subject.—A discussion took place, in which Drs. J. COATS, MACLEOD, and CHARTERIS took part. [The above case is the first which has happened in Glasgow for many months, due, in all probability, to the vigorous efforts which the sanitary authorities have made to destroy all stray or suspicious dogs.]

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THURSDAY, DECEMBER 13TH, 1877.

G. B. MORGAN, Esq., President, in the Chair.

Prevalent Diseases of the District.—Mr. H. E. ARMSTRONG (Medical Officer of Health for Newcastle-on-Tyne) presented a report of the cases admitted to the Fever Hospital during the month of November, and stated that the town was healthy.—Mr. SPEAR (Medical Officer of Health for South Shields, Jarrow, and Hebburn) stated that scarlet fever was epidemic at South Shields. In several cases, the disease had been propagated by children being sent to school while still convalescent.—A committee, consisting of the President, Mr. Spear, Mr. H. E.

Armstrong, and Dr. Byrom Bramwell, was appointed to consider the subject and to report to the Society.

Pathological Specimens.—Dr. ANDERSON showed three calculi removed by lithotomy. The first patient was a boy aged $4\frac{1}{2}$, the second a man aged 32, the third the boy mentioned as Case 1. Symptoms of stone returned in eight months, and the second operation was performed nine months after the first. All three operations had done well.—Dr. PAGE showed two Salivary Calculi removed from Wharton's duct by a free incision. Dr. Page also showed an Urethral Calculus, which had become lodged behind a stricture. The stricture was split up by Holt's dilator, and the stone was then expelled with the urine.—Dr. ARNISON showed two Calculi removed by lithotomy from the same patient, a child aged 3, at an interval of a year. After the first operation, the bladder was carefully examined and found to be empty.—Mr. HOPGOOD showed a recent specimen of Placenta Prævia. The gestation had advanced to the fourth month, when severe flooding came on. The case had done well.—Mr. MORGAN showed a specimen of Encephaloid Disease of the Femur.—Dr. EMBLETON showed several Photographs of Monstrosities.

Exhibition of Patients.—Dr. BYROM BRAMWELL showed a case of Congenital Microphthalmos of the left eye.—Dr. HEATH showed a case of Hypertrophy of the Tongue.

Papers.—Dr. EMBLETON read the notes of a case of Empyema treated by a free incision under antiseptic precautions. The patient, a boy aged 16, recovered well.—Dr. MURPHY read the notes of two cases of Chlorodyne-poisoning.—Dr. D. DRUMMOND read the notes of a very interesting case of Paralysis of the Pharynx occurring in a child aged fourteen months, and suggested that the paralysis was due either to lead-poisoning or to diphtheria. The child was in the habit of sucking a leaden bottle, and there was a history of ulcerated sore-throat.—Dr. BYROM BRAMWELL continued his paper on Intracranial Tumours, relating three additional cases.

SELECTIONS FROM JOURNALS.

MEDICINE.

SMOKERS' GASTRALGIA.—M. Révillont reports in the *Gazette des Hôpitaux* two cases of gastralgia attributed to the use of tobacco. The first case occurred in a man aged 52, in M. Vulpian's wards. He had always been moderate in everything except the use of tobacco, had never undergone any privation, had always been able to choose his food, and had been careful in his diet. On six different occasions, he had been seized with extremely acute attacks of pain in the stomach, not extending to the back, and coming on more or less quickly after every meal, bringing on also vomiting of the food. In the intervals of these attacks, of which the average duration was about six weeks, his health seemed tolerably good, with the exception of some vertigo, dazzling of the sight, and weakness of the legs. These troubles were more marked when the patient felt better and smoked than when, suffering with gastric troubles, he had no appetite for anything and temporarily left off tobacco. M. Révillont also reports a case in which a gentleman in good circumstances, following an excellent hygienic system, found his digestive functions gradually failing, whilst his strength diminished. Later on, he was attacked with vertigo, staggering whilst walking, and spasms and prickings in the limbs. After every meal, severe pain was felt in the epigastric region; the face was pale, the speech gasping, the heart-beats uncertain, and the body generally discoloured. This patient smoked from twelve to fifteen cigars daily. Under advice, he reduced this number to two, and immediately a considerable improvement took place. He again took to excessive smoking; but, as the original symptoms returned, he was again obliged to abstain from tobacco. Under medical advice, he washed the tobacco of which he made his cigarettes in a coffee-percolator, by first throwing on it ammoniacal water, then repeated baths of hot water. The nicotine was thus partly dissolved out of, or mechanically removed by, the warm water. The tobacco, when washed, was spread out in the sun to dry on paper, and thus modified satisfied the patient, who from that time was not troubled with dyspepsia or vertigo.

LESION OF THE PANCREAS IN CERTAIN FORMS OF DIABETES.—At a recent meeting of the Paris Academy of Medicine, M. Lancereaux showed some pathological specimens of lesion of the pancreas in patients who had died of diabetes, and gave the history of the cases. He said that the cases and the specimens showed that diabetes mellitus is, at least in some cases, accompanied by a serious change in the pancreas. A similar change has been met with in many other cases of diabetes; and in these cases, as in those noted by M. Lancereaux, the

disease, of which the course has been comparatively rapid, has shown itself by excessive appetite and thirst, great emaciation, profuse glycosuria—in a word, by all the characteristics of diuretic wasting. On the other hand, animals the pancreas of which is extirpated or destroyed become voracious, are rapidly emaciated, and succumb very quickly. Taking, therefore, into consideration the special characters of diabetes in cases of disease of the pancreas, and the phenomena in animals following the destruction of this organ, M. Lancereaux thinks it may fairly be concluded that there exists a causal relation between serious changes in the pancreas and the diabetes mellitus in question. This form of diabetes is distinguished by the comparatively sudden appearance of emaciation, with polydipsia and excessive appetite, and peculiar characteristics of the alvine excreta. The prognosis of this form of diabetes is very unfavourable. The indications of treatment consist in prohibiting the use of articles of food which are digested by the pancreatic juice, and nourishing the patient with that class of food which is digested in the stomach.—*La France Médicale*, November 17th.

PARALYSIS OF THE RIGHT SPINAL ACCESSORY NERVE—In a dissertation (Berlin, 1877), B. Holz describes the case of a man who, previously in good health, was suddenly seized, after exposure to cold, with weakness of the right arm. On the same day, he also began to suffer from difficulty in swallowing. The right shoulder was lower than the left, and could be only slightly raised. The right trapezius and sterno-cleido-mastoid muscles felt flabby, although they reacted well to the electric current. The angle of the right scapula lay nearer the spine than that of the left; the upper part of the bone, however, stood further out. The left half of the palate appeared narrower and more arched than the right; the uvula deviated to the right; the left half of the palate alone moved; the right, even during rest, was farther from the pharynx than the left. The speech was not nasal, although there was difficulty in swallowing. The sensibility of the pharynx was normal, as was also the motor power of the right side of the face. The right vocal chord was paralysed; the sensibility of the laryngeal mucous membrane was increased; the voice was not hoarse. The pulse was persistently accelerated, though but slightly. Iodide of potassium and faradisation greatly improved the patient's condition. In Holz's opinion, there was rheumatic paresis of the accessory nerve, the seat of the lesion being in the trunk of the nerve a short distance beyond its exit from the skull.—*Centralblatt für die Medizin. Wissenschaften*.

THERAPEÛTICS.

TREATMENT OF BLENNORRHAGIC EPIDIDYMITIS WITH IODOFORM OINTMENT.—Dr. Alvarez de Palma (Majorca) has treated four cases of epididymitis with iodoform ointment, and from his experience draws the following conclusions. 1. Iodoform calms the pain of blennorrhagic orchitis better than any other application; this result is obtained at the end of one or two hours. 2. Iodoform exerts a very manifest resolvent action, and has the advantage over the usually employed mercurial ointment of causing no trouble when absorbed. 3. The iodoform treatment shortens very appreciably the duration of the orchitis, and prevents any consecutive induration of the organ. 4. It is necessary to employ an ointment containing, according to the intensity of the inflammation, from one to two grammes of iodoform to thirty grammes of lard.—*New York Medical Record*, October 13th, 1877.

TREATMENT OF TETANUS BY CHLORAL-HYDRATE.—Dr. Roberts, in the *American Journal of Medical Sciences*, October 1877, discusses this treatment. He says that, the prognosis of the disease being most unfavourable according to the best authors, "it must be acknowledged that to a remedy under which several successive cases recover there must be accorded a certain modicum of honour". Dr. J. B. Beck has collected thirty-six cases of traumatic tetanus treated essentially by chloral, in which twenty-one recovered. Dr. H. C. Wood has tabulated eighteen additional cases, with nine recoveries. Dr. Macnamara, in the *Practitioner*, November 1872, reports twenty successive cases of (? idiopathic) tetanus in India, of which seventeen recovered, all being treated by large doses (30 to 40 grains) of chloral. Verneuil reports instances of cure where 100 grains, and even 245 grains, were given daily. One patient recovered, having taken six ounces of chloral in thirty days. Dr. Roberts now records nineteen cases of traumatic tetanus treated in four years at the Pennsylvania Hospital, of which only three were treated essentially with chloral, and these three recovered. The others were treated with morphia, atropia, cannabis Indica, calomel, conium, etc. A case is also reported, in the *Boston Medical and Surgical Journal* of October 4th, as having occurred in the practice of Dr. G. W. Gay at the Boston City Hospital. The

patient was a young woman aged 21, who had a cystic tumour of the left cheek treated by excision and slight counterirritation with nitric acid on May 14th. Everything went on well, and the patient was discharged in ten days with the wound nearly healed and the sac obliterated. In less than a fortnight after leaving the hospital, she began to notice a little difficulty in opening her mouth. The stiffness of the jaws gradually increased till June 25th, when she had three spasms in rapid succession, and was readmitted. Her mouth was firmly closed. Sixty grains of chloral were given her in divided doses, and the next morning she could open her mouth three-fourths of an inch. The pupils were widely dilated, and the patient was very drowsy. Half a drachm of the bromide of potassium every three hours was ordered in place of the chloral. At the end of forty-eight hours, she was scarcely able to separate the jaws. Chloral was added to the bromide of potassium in quantities sufficient to keep her drowsy, and was administered for ten days. On being allowed to come from under the influence of the drugs, she had another spasm, the last one of her illness. Chloral was given at intervals in scruple-doses for a week, when all medicines were discontinued. The patient received from forty to one hundred and sixty grains of chloral daily, and towards the last she became very delirious at night. There was no failure of the heart's action at any time. The disease gradually wore away, and in forty days the patient left the hospital, free from pain, able to open her mouth an inch, and to chew soft food.

CONTINUOUS CURRENTS IN THE TREATMENT OF ULCERS, AND PARTICULARLY ATONIC ULCERS.—The following cases are published by M. Staes-Brame in the *Bulletin Médical du Nord*. The first is that of a man aged 30. He had suffered for two years from large atonic ulcers on the legs. M. Staes-Brame had entirely cured one of the ulcers and greatly ameliorated the other by prolonged rest, compression, and tonics. That of the right leg, which formerly measured four inches by three-quarters of an inch, was reduced to a small wound less than two-fifths of an inch in diameter covered by a cicatricial pellicle, when, by some unknown cause, in twenty-four hours the whole of the former surface of the ulcer became denuded and discharged bloody serum. M. Staes-Brame determined to apply the constant current. He covered the wound with a plaque of metal, which he put into communication with the negative electrode, the positive pole being applied to the skin of the thigh. In ten minutes, the wound became pale; the next day, it had diminished by one-half; reapplication of the current for ten minutes, and the following day the cure was complete. The subject of the second observation was a workman who had been burnt on the foot by a quantity of concentrated sulphuric acid. The eschar left a deep ulcer, which defied treatment. M. Staes-Brame tried the continuous current in the same manner as before. After eleven applications of ten minutes each, the wound had completely cicatrised.

REVIEWS AND NOTICES.

LES CAUSES DE LA GRAVELLE ET DE LA PIERRE. Par le Dr. DEBOUT L'ESTRÉES.

DE L'URINE, ET DE SES ALTÉRATIONS PATHOLOGIQUES. Par le Dr. GEORGE HARLEY, F.R.S. Traduit de l'Anglais par le Dr. F. L. HAHN. Paris. 1877.

MEDICAL works issuing from the pens of eminent French physicians and surgeons are, as a rule, well known to the profession on this side of the Channel; and it may be said that the works of Civiale and Leroy d'Etiolles on renal affections are as highly appreciated in Britain as they are in France. But, almost with the exception of these writers, little can be said to have been done by Frenchmen (in proportion to what has been done by Englishmen) since the days of the great Rayet, either in increasing our knowledge of the pathology, or of adding to our store of information in the therapeutics, of urinary affections.

True it is, that France has given to us a host of volumes on the treatment of kidney-disease; but they have emanated from the pens of medical advisers at mineral springs, and can scarcely be said to embody much new scientific matter. The work which we are now about to review is also from the pen of a medical man attached to a mineral spring. It consists of 135 pages, and, without being in the least degree pretentious, gives a very fair *résumé* of the pathology of gravel and stone from a French point of view.

Although we dare not venture to say that it contains anything either very startling or novel, yet its author has made a judicious use of the literature on the subject, and placed the data he has collected before his readers in a pleasing and instructive form.

In speaking of uric acid gravel and calculi, he says that he finds that the majority of cases come from towns; indeed, so large a proportion as 75 per cent. come from towns; and, as is observed elsewhere, by far the majority of the sufferers are men.

In 1,028 cases he met with at Contrexéville, 822 were men, 197 women, and 9 children from one to thirteen years of age. Moreover, while the average age of the females was forty, that of the males he reckoned at fifty years.

The probable cause of the disease he noted in 583 cases, and the result was that in 191 it was hereditary; in 160 the cause was indigestion; in 101, overfeeding; in 95, deficient exercise; in 35, violent moral emotion; and in 1, contusion of the kidneys.

The author is a partisan of Liebig's theory, that an excess of uric acid in the animal economy is due to an insufficient oxidation of the protein elements of the blood; and hot climates, he thinks, favour the oxidation process, and prevent the occurrence of uric acid gravel and calculi.

As regards oxalate of lime, he makes the very just remark that it more often appears in the form of calculi than of gravel, which is exactly the reverse of uric acid. He also mentions that, while uric acid is most common among the inhabitants of towns, oxaluria is most frequently met with in persons living in country districts. The proportion of males affected with the diathesis, too, is in vast excess of females; being, according to him, in the proportion of seven women to forty men.

Oxalate of lime calculi would appear, from his data, to be very common in France. In 1,252 calculi (1,000 analysed by Bouhardt, and 252 by Leroy d'Étiolles), 176 were noted as being composed of pure oxalate of lime, which is a considerable proportion when we recollect that oxalate of lime forms also the nucleus of many other kinds of calculi.

Our author adopts the view that an excess of oxalate of lime in the urinary secretion is due to an arrest in the oxidation of oxalic acid in the system. If properly oxidised, it would be thrown off by the lungs in the shape of carbonic acid. Oxalate of lime is frequently the concomitant of an excess of uric acid in the urine; and he attributes both their origins to much the same series of causes. He seems also to have adopted the idea, first thrown out in Germany, that the moral feelings have a great influence over the body in producing oxaluria; joy diminishing, sorrow increasing, the amount of oxalate of lime deposited in the urine.

As regards the treatment of oxaluria, he recommends the employment of alkaline mineral waters, and especially the calcareous variety, which he deems far preferable to alkaline soda waters. Of course, as might be expected from a man placed in his position, he thinks the waters of Contrexéville undeniably useful ("de l'incontestable utilité").

With reference to phosphatic calculi, the author thinks that they may be said to be due to an excess of elimination over formation; that is to say, while only the normal quantity gets into the body, an abnormal amount is eliminated with the urine, or, as he graphically expresses it, "*excès de dépenses sur les recettes*". One of the most potent causes of phosphatic calculi is the breathing of a vitiated atmosphere; as an example of this, he cites the case of a cook, who, he thinks, got the disease from inhaling carbonic oxide gas from the stove. Pthisis he also notes as an exciting cause, from its effect in inducing what he terms "dénutrition".

Another exciting cause of the formation of phosphatic calculi he assigns to be due to the well known ammoniacal fermentation of urea in the urine before its elimination from the bladder, a theory so well known in England that it need not be here further alluded to. To a fourth cause he alludes, which has been strongly pointed out by the author of the second book at the head of this article (one which mineral water doctors are rarely in the habit of alluding to), namely, the improper use of alkaline mineral waters, more especially, as he says, such as those of Vichy, Vals, and Carlsbad. As these often increase the tendency to stone, it would be well if some of our strong advocates for the use of mineral waters in calculous disorders paid attention to this hint, as it might probably reduce the number of sufferers from calculi in this country.

To aid the passage of small calculi, he advises dilatation of the urethra, especially of the orifice, where, from the normal construction of the part, a stone of some little size often becomes impacted. He also gives drawings of three kinds of urethral pincers that may, with advantage, be employed in extracting stones from the urethra of the male subject—namely, the *curette* of Leroy d'Étiolles, Hunter's pincers, and another which is called the urethral pincers, with a ring.

As regards the second work at the head of our article (Dr. GEORGE HARLEY'S), we need say nothing beyond that it is a very fair translation of the original, and does credit to the publisher for the way in

which the text and the woodcuts are got up. The contents of the book itself are so well known and appreciated by the reading part of the profession, both here and in America (where it was reprinted as soon as it was published in this country), that it would be quite superfluous for us to make any remarks upon it.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By ROBERTS BARTHOLOW, M.A., M.D., Professor of Medicine in the Ohio Medical College, Cincinnati. Pp. 540. New York: Appleton. 1877.

ALTHOUGH many volumes have been written upon the above subjects, the excellent treatise before us really "presents", as the author states, "some new features of importance", and really deserves a special place amongst the best manuals that we have. We say this, not only after reading every page of the book, but after working with it for several months, and testing it by many comparisons of references. It represents extensive reading in American, English, and continental literature, and this not unduly paraded nor drily quoted, but well digested and condensed; it contains also much original work and observation, as we should expect from Dr. BARTHOLOW's reputation in connection with American prize essays on quinine, atropia, bromine, hypodermic medication, etc. At the same time, it is throughout very practical, including in its text an unusual number of useful formulae and ingenious suggestions, some empirical, but all, when possible, referred to physiological and scientific foundations.

As regards classification, many excellent modern text-books are purposely planned without one. Waring is alphabetical; Garrod mainly alphabetical and botanical (after De Candolle); Buchheim and Ringer mainly chemical; Phillips (vol. i) follows natural orders; Gubler, the French codex. The plan devised by Rabuteau we have long thought the best; and it seems to have partly suggested Dr. Bartholow's, which is scarcely an improvement upon it.

He makes four orders: 1. Promoters of constructive metamorphosis; 2. Promoters of destructive metamorphosis; 3. Modifiers of nerve-function (excitators and depressors of cerebral and spinal); 4. Evacuants. These are followed by another division of "topical remedies", antiseptics, counterirritants, etc.*

We concede the merit of simplicity as claimed by our author, and the objections of repetition and confusion are fairly avoided. He does not attempt, after Neligan's failure, to place every drug in all its places; and could doubtless defend his position of phosphorus and arsenic amongst reconstructives (instead of neurotics), and of oxygen and carbonic acid amongst "topical remedies".

A good index is a sufficient guide; but it should be specially good. The present one does not name oxygen at all; nor boric acid; nor several other articles (etc.); though all well treated in the text. Sulphur, which occurs twice, has only its minor reference. *Cimicifuga* might be named also as *actæa*, etc.

The early pages deal succinctly with the *medes by which remedies are introduced into the system*. We note a caution as to the risk of damage to the middle ear from an injudicious nasal douche, minute as to inhalations and injections, and an account of transfusion. Gesellus' views as to the suitability of lamb's blood, and Aveling's instrument, are commended. Dr. Roussel will doubtless meet his mean in the text edition.

The systematic part commences with good chapters on *alimentation*, including analyses of foods and accounts of special diets—Bantingism, dry and milk diet, grape-cure and koumiss, and recipes from egg-nog to nutrient enemata with glycerole of pepsine. A formula for a cold meat essence might usefully be added; for chopped lean meat soaked for three hours in acidified water yields most of its albumen in a soluble form, which mixes well with Burgundy, etc.

Hydrotherapy is well discussed, including water packs, douche, etc.; but more might be said for the Turkish bath, and its value in mental disease especially.

If we are reminded of Rabuteau in the classification, we seem to trace Gubler in the arrangement under each substance—certainly excellent models. We have 1) the English, Latin, French, and German synonyms; 2) a "definition", and a list of preparations; (3) then "antagonists" and "incompatibles"; (4) "synergisms" (Gubler's "syner-

* Dr. Rabuteau's classes are—1. Modifiers of nutrition; 2. Of innervation; 3. Of innervation and muscular power (*myotilité*); 4. Of muscular power; 5. Of secretion and excretion; 6. Eliminants; 7. Topical remedies; 8. Antiseptics. But special ability is shown in the subdivisions of these *etc.*, in Class 1: a. Stimulants of nutrition; of hæmatosis, as oxygen, iron, hypophosphates, coæa; b. Relaxators of nutrition—alcohols, coffees, iodides, arsenicals, alkalis, etc.; c. Reparatifs—*analeptics*, milk, lime phosphate; d. Euphetics—pepsine, hydrochloric acid, etc. (*Éléments de Thérapeutique*, 2nd edition, 1875). We may append Husemann's remark: "Auch die Gruppierung bleibt immer, wie das System, ein Kind ihrer Zeit" (*Handbuch*, 1874).

giques" and "auxiliaires"); (5) "physiological effects"; (6) "therapy"; and, at the close, exact references to original sources that have been consulted.

The specialty of the book lies mainly in these latter sections. They include little or no history or theory or quotation, but an interesting and practical *précis*, mainly of modern work and personal experience. They are not cast in one mould, nor do the observations follow a definite order (*e.g.*, of systems, nervous, circulatory, etc.) Brevity and perhaps interest are gained by this; but the longer articles (*e.g.*, mercury) are not free from some confusion. In the therapeutical sections, fresh subjects are indicated by italics only.

Hypodermic medication receives ample illustration; and Dr. Bartholow claims priority in the use of *deep injections* (p. 323). Thus, in chronic neuralgia, he injects from five to fifteen minims of pure chloroform deeply into the affected part, causing pain and swelling, but often curing. He claims, too, the prevention of unpleasant cerebral effects from opium by potassic bromide; and, whilst acknowledging fully Dr. Fraser's researches on physostigma (1869), quotes his own experiments of 1867, which first illustrated the antagonism between that drug and atropia; and reminds us that he was the first to indicate the value of atropia in the night-sweats of phthisis. (He suggests one-sixtieth of a grain, but we have found half that quantity sufficient.)

Some of the therapeutical dicta should, we think, be qualified. Few can concede that alum is the most effective agent for the cure of colica pictorum. The experience which finds hydrocele and liver-hydatis *invariably* cured by galvano-puncture must be unique. To say that exophthalmic goitre is cured by galvanisation of the sympathetic, vagus, eyes, and thyroid, implies the completion of observations as yet little more than commenced; and that "ether-spray alone suffices to effect a cure in chorea" has never been verified within our practice or observation, both fairly large as to this point.

The author's plan of citing authorities at the end of each section (as in the *Nouveau Dictionnaire de Médecine*) is very good. One must not expect to find the older writers; but the list of good modern names in treatises, monographs, and periodicals is remarkably full. If criticism were directed at all in this direction, one might note, though with every allowance, omissions sometimes of references to names quoted in the text (*e.g.*, Höhler and Schimf, under Phosphorus); or omissions of some recognised monographs, as Fleming on *Aconite*, or the older Groenfeld, who fought so well for cantharides and its antidote camphor; or the use of past, instead of present and amended, editions (*e.g.*, Gubler, 1868, instead of 1874; Trousseau, 1868; Ringer, third edition, etc.)

We proceed to note, in the order of the volume, some details calculated to prove of interest. Under pepsine, Scheffer's process and Beale's only are accepted; Morson's and Bullock's, the *essens* of O. Liebreich, and the diastase preparations of Chassaing, do not seem sufficiently appreciated in the United States. Routh fairly deserves mention for success in treating malignant uterine growths by pepsine. We have seen good cases. A formula with lactic acid (*glyc. pepsine* ʒij; *acidi lactici* ʒiv) is commended in the dyspepsia of infants, and in the slow irritative dyspepsia of adults. As to the use of the acid in diabetes, the originator of this (Cantani) is not quoted. Dr. B. W. Foster's cases of improvement are referred to, but not his observations as to the production of rheumatism by the acid. These are very clear, but were verified only in certain diabetics.

Oils and fats are grouped together. Cod-liver oil is commended in fibroid lung and chronic tuberculosis, not in caseous pneumonia or acute phthisis; the same remark is made as to hypophosphites. In atheroma it is commended. Good formulae are given for its administration: *e.g.*, that of Parese, a mixture with charcoal and coffee digested and filtered; also with chloroform, with eucalyptus, and with spirits of lavender and brandy, or saponified with lime as by Van der Court.

The list of iron preparations includes Monsell's solution of sub-sulphate (noted for its astringency without causticity), iron "alum", lactate, oxalate and malate, a syrup with manganese, etc.; but we should have been glad to see Rabuteau's protochloride, with some estimate of its value, and of that of newer preparations—the dialysed, the colloid, etc., and the granular effervescent forms. Creuse's chloride and the pyrophosphate are recommended. A novel combination for constitutional syphilis is iodoform ʒj; hydrargyri chloridi corrosivi gr. j; ferri redacti ʒj. Fiant pilule xx. Tincture of the chloride of iron is considered most serviceable in the prophylaxis and treatment of acute rheumatism when occurring in the pale, delicate, and cachectic; but its value in erysipelas and diphtheria is questioned. It can act only as a tonic, not as a specific.

"When a course of arsenic is begun, large doses should be prescribed, and the quantity regularly reduced; thus chronic poisoning is

avoided." It may be so, but only at the risk of acute poisoning. We cannot think the direction safe, knowing from experience that one minim of liquor arsenicalis will cause in some intense general lichen, in others choleraic diarrhoea. The "synergists" of arsenic are set down as all substances which promote constructive metamorphosis; but we should add antimony, quinine, ergot, bromides. In the text, antimony is widely separated from arsenic as an agent *increasing waste*, and the excretion of carbonic acid and urea. Ackerman came to this conclusion; but we cannot consider it yet proved. Arsenic cannot be said to produce a true psoriasis, nor is it quite correct that "the more chronic the malady the more suitable the drug is".

The statement that arsenic causes *albuminuria* in prolonged doses rests, we believe, upon only two cases (Dr. W. Mitchell), and cannot be stated in general terms. The value of the medicine is fully recognised by Dr. Bartholow in irritative dyspepsia, vomiting, diarrhoea, amenorrhoea, cerebral congestion, and chronic arthritis. Its use is said to hinder a bromic eruption.

A notice of aromatic bitters includes *serpentaria*, Virginian prune, eucalyptus, hydrastis, and the cinchonas. As regards the use of the wild cherry in heart-disease, its peculiar combination of a sedative (prussic acid), with aromatic tonic principles, indicate it in irritable conditions of the heart as well as in phthisis and bronchitis (Clifford Allbutt). *Eucalyptus* stimulates the secretions and quickens the circulation at the same time that it lowers tension. It is recommended in debility, gastric and bronchial, renal and vesical catarrh, in hysteria, and climacteric flatulence, etc. *Hydrastis* possesses similar properties, with some of those of quinine in addition. It is valuable in different forms of catarrh, and of ulceration and congestion of mucous membranes, in pharyngitis and coriza, gastric and intestinal catarrh, anal fissure, leucorrhoea, gonorrhoea, etc.; and it is only second to quinine in intermittents. We hope to see these two remedies in our own *Pharmacopœia*.

Concerning *quinine*, Dr. Bartholow concludes that it lessens the excretion of uric acid, but not that of urea. It diffuses rapidly, but is eliminated slowly, and its maximum effect is obtained in about five hours; hence he advises a full dose (ten grains) at that period of time before a paroxysm, and also during the sweating stage. Its value in neuralgia he restricts to anæmic cases.

The sulphites he does not credit with any value in septic diseases; but we think that sulphurous acid, from the cases of Hjaltelin, Polli, A. W. Foot, and others, has a fairly established virtue in small-pox and typhoid fever.

It is said that in empyema undiluted tincture of iodine may be injected without risk. No limit of quantity is mentioned, but we have reason to know that consequent iodism may be very serious in character. We can agree, however, with the strength of one to fifteen, though that is not generally adopted.

Iodo-tannin is a saturated solution of tannin in tincture of iodine, or may be prepared by dissolving one drachm of iodine with one ounce of tannic acid in one pint of water; filtering and evaporating to four ounces, or extemporaneously with mixture of galls and of iodine. These are very useful in chronic uterine inflammation. A decolorised tincture of iodine may be prepared with hyposulphite of sodium and spirits of ammonia.

Of *gold*, the chloride is a local caustic and an irritant poison. Small doses of the double chloride with soda are recommended in nervous and irritative dyspepsia, chronic syphilis, amenorrhoea, sterility, and in cases opposite to those benefited by bromides, including cerebral anæmia. Dr. Bartholow specially values them in chronic Bright's disease and in melancholia.

In the account of *copper poisoning*, a purplish line along the gums is still described in accordance probably with some doubtful cases of Sir D. Corrigan. A bluish or greenish line on the teeth would be a more accurate description according to Clapton, Bailly, and others, who are worthy of reference on this matter (*Clinical Society's Transactions*, vol. iii, and *Union Médicale*, 1874).

In the group of substances containing tannic acid, we have geranium and rubus, hamamelis and castanea; but without much information. *Stillingia*, *sanguinaria*, and *xanthoxylum* are classed with our *guaiacum* and *colchicum*. The former is a valuable "alterative", and markedly stimulates the secretions; it is recommended in constipation and in early cirrhosis, in scrofula, and chronic syphilis.*

Electricity is well and fully treated; strychnia and ergot also, with special chapters on their hypodermic use. One-fortieth of a grain is the suggested dose of the former, without reference to Barwell's larger doses. Ergot is commended in varicocele, and in "enlargement

* The specially American remedies are now more accessible to us than formerly. Messrs. Ferris showed at Manchester an excellent case of the "extracts", which are prepared with glycerine and spirits, and are more concentrated than our tinctures.

of the dorsal vein of the penis" "it may cause tonic contraction of the sphincter vesicæ".

Amongst contraindications for *chloroform*, thoracic effusions should be included. The risks of *incomplete* anaesthesia are recognised, and Nélaton's treatment by inversion recommended. Chloral can only relieve pain "by suspension of cerebral function", i. e., in dangerous doses. As an anodyne, therefore, it should be prescribed with morphia. "Equal parts of chloral and camphor triturated together form a clear solution often of great service locally in neuralgia." Hypodermic morphia enables us to dispense with some chloroform, and is therefore advisable as a preliminary to inhalation. The observations of Scanzoni and Loomis, as to morphia injections controlling *uræmic convulsions*, are supported. The effects of morphia are said to be heightened by conia; and the manner in which they are modified and partly antagonised by atropia is fully discussed. Not more than three doses of one-twentieth of a grain, at intervals of fifteen minutes, are advised as antidotal.

Gelsemium is placed between conium and arnica. It is recommended in meningitis, pneumonia, dysmenorrhœa, neuralgia, etc.

Under *carbolic acid*, we have an account of the successful "parenchymatous or deep-seated injection" of a two per cent. solution in erysipelas, pleuropneumonia, and intermittents, as well as in lupus, synovitis, etc.

Acupuncture and aquapuncture and "Baunscheidtismus" (with many needles) meet with notice.

Finally, we would remark that verbal and typographical faults are few, nor are Americanisms noticeable; "marvelous" we observed, and "latter" misplaced for "former" (p. 259), and "ill-continued" for "ill-conditioned"? (p. 157); and we fancy that "variolus-like" is scarcely correct, and that "opinions have been emitted" has a curious sound.

But now we think enough has been said to discharge the duty of an impartial and appreciative critic, to illustrate our introductory praise of the book, and to make our readers welcome it as a really valuable addition to modern literature.

SOME COMPLICATIONS OF EPILEPSY AND HYSTERO-EPILEPSY. By Dr. EMILIE BOVILL. Paris: 1877.

WE congratulate Dr. EMILIE BOVILL on having produced a succinct and very interesting monograph, calling attention to some of the complications of epilepsy and hystero-epilepsy. A large collection of observations by various authors is well arranged, attention is carefully directed to the points taught by each case, and conclusions are fairly drawn from the clinical and physiological facts. The concomitants of epilepsy here dwelt upon are phenomena of the congestive order, such as alterations in the character and amount of the urine, congestions, and ecchymoses of the skin and other parts, elevation of the temperature, etc.

The first chapter is a *résumé* of the observations of various authors of the secondary congestions following organic lesions of the brain or spinal cord, resulting from traumatic or morbid lesions, produced experimentally or secondarily to convulsive attacks. It is well known that polyuria, glycosuria, and albuminuria of a temporary character may follow cerebral lesions; but there are differences of opinion as to the mechanism by which this is brought about. In proof that in many cases it is produced by a vaso-motor disturbance, the author cites well observed instances in which localised congestions or ecchymoses have been found in the skin and in the internal organs after death, at the same time laying much stress on the congested state of the optic papilla during epileptic fits, as observed by Dr. Hughlings Jackson and other physicians.

The view that these congestions and ecchymoses are usually produced by asphyxia resulting from the tonic spasm of the respiratory muscles during the fit, is combated on the ground that in some of the cases quoted congestion of the ear, nose, and other parts preceded the fit, and, therefore, could not be necessarily due to muscular spasm. M. Vulpian likewise admits the important part which the vaso-motor nerves play in the production of congestive phenomena in connection with epilepsy. If the possibility of a congestion of organs be admitted as a part of the essential phenomena of epilepsy, it is easy to see how an alteration in the urine may result, when we consider the effects of physiological irritation of various parts of the medulla oblongata in producing polyuria, albuminuria, and glycosuria. As to the causation of the high temperature sometimes met with during convulsive epileptic attacks, two views are current, tonic muscular spasm is usually considered to be the cause, but some physiologists consider it as a purely vaso-motor phenomenon, and to this view Dr. Bovill inclines. Arguments in favour of the vaso-motor theory are that violent muscular exertion cannot elevate the temperature of the body more than .5 deg.

cent. to .4 deg. cent. (1.8 deg. to 2.2 deg. Fahr.); whereas in epileptic fits it may rise to 40 deg. cent. (104 deg. Fahr.); further, although in hystero-epilepsy there is much muscular spasm, the temperature does not rise above 38 deg. cent. (100.4 deg. Fahr.). We doubt ourselves if any form of hysterical muscular contraction represents as great an expenditure of force as the prolonged general tonic spasm of epilepsy. In further support of the theory advanced, Dr. Bovill refers to the constant dilatation of the pupils and acceleration of the pulse during the attacks, also strongly insisting on the analogy of those functional conditions with similar results proceeding from known organic lesions of the nervous centres.

NOTES ON BOOKS.

THE volumes of ZIEMSEN'S *Cyclopædia of Medicine* continue to appear with commendable promptitude. Volume xvi, which reached us lately, contains a series of treatises on Diseases of the Locomotive Apparatus and General Anomalies of Nutrition, by Dr. H. Senator of Berlin, Professor P. Seitz of Giessen, Professor H. Immermann of Basel, Dr. Birch-Hirschfeld of Dresden; translated by Dr. E. Buchanan Baxter of London, Dr. John Todhunter of Dublin, Dr. Godfrey Argner and Dr. Frank B. Foster of New York, and Dr. Henry P. Bowditch of Boston. This volume fully maintains the deservedly high reputation which has been acquired by its predecessors. The publishers inform us that in the progress of the work it has been necessary to make some addition to the number of volumes. Looking to the completeness and value of the monographs, and the extent of subjects treated, this may readily be understood; and the subscribers will readily acquiesce in modifications dictated by scientific considerations and wholly in the interest of the completeness of the *Cyclopædia*.

Iconographie Photographique. La Salpêtrière (Service de M. Charcot). Par BOURNEVILLE et REGNARD.—The service of La Salpêtrière is extremely rich in eccentric and strongly marked types of nervous disease, especially of hysteria and hystero-epilepsy. Cases of this kind, which are all of a chronic and troublesome character, and require to be received in asylums, where they can be retained under observation for years, do not always receive the accurate scientific attention which they have had at the hands of M. Charcot. M. Bourneville, now the able editor of the *Progrès Médical*, was for some years *interne* in the service of the Salpêtrière, and has since continued to watch the wards with unabated interest. In these photographs are to be found the reliable and permanent records of some cases of singular interest, especially of those in which the attitudes adopted during hystero-epileptic attacks are most striking, and have a certain historical and religious as well as scientific interest. Among them are cases of "cataleptic crucifixion", such as those to which a peculiar religious signification has been given by the cases of Louise Lateau and others. The whole series of plates thus far published, illustrating various phases of hystero-epilepsy, are singularly interesting, and will certainly be welcomed by neurologists as a valuable contribution to the phases of disease very liable to misinterpretation, and which can only occasionally be thoroughly studied. Each part contains four photographs, and is published at three francs, at the offices of the *Progrès Médical*, 6, Rue des Écoles, Paris.

New London Flora, by E. DE CRESPIGNY, M.D. (Hardwicke and Boyce, 1877) is an extremely handy little guide for young botanists to the flora of the home counties. It is evidently the result of many years of botanical field-work; it can be carried easily in the pocket, and gives at a glance for each locality a view of the plants to be looked for. It extends to districts within easy reach of London, and is a very valuable companion for botanical excursions for young metropolitan botanists. The section which relates to cryptogamic plants is not so well done as that of the flowering plants; but, taken as a whole, the book is one which is highly creditable to Dr. De Crespigny, and will be very useful to the class whom it addresses.

Fistula in Ano, a Double Case, one treated by Knife, and the other by the Elastic Ligature, by C. F. MAUNDER, is the title of a pamphlet consisting of a report of a case of a length equivalent to less than a page of this JOURNAL, reprinted from the *Clinical Society's Transactions* for 1875. Prefixed to it is a list of a dozen "Contributions to Surgery by the Author", the second item of which runs thus:

"TUMOUR OF LARGE PORTIONS OF LOWER JAW REMOVED WITHOUT EXTERNAL WOUND. FIVE WOODCUTS. 2s."

[The practice of our art will have one horror less for a patient who can be assured that no unsightly scar will disfigure his face.] The "pamphlet" is priced at one shilling.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 5TH, 1878.

HELMHOLTZ AND VIRCHOW ON MEDICAL
RESEARCH.*

A NOTICE of the opinions lately expressed on some important questions, both of the past and present, by two of the most distinguished scientific men in Germany cannot fail, we think, to interest the readers of the BRITISH MEDICAL JOURNAL. Professor Helmholtz has recently published his address on "Thinking in Medicine", delivered at the anniversary of the establishment of the Military Medical School in Berlin; and Professor Virchow has also, by issuing it in a separate form, given a wider circulation to his speech "On the Freedom of Science in Modern States", made in reply to Professor Haeckel, at the Munich meeting of German naturalists and physicians.

Although best known to us as a natural philosopher, Helmholtz originally studied medicine, and was for some time Professor of Pathology at Königsberg; and he gracefully acknowledges his own indebtedness to his early pursuits, as a preparation for the work of his later years. His essay is a vigorous denunciation of *a priori* conclusions, and an enforcement of the rule that doctrines must stand upon their tested and proved merits. This is maintained from a survey of the history of medicine, from the days of Hippocrates downwards. The fundamental error of the ancients was, he says, that they pursued a false ideal of scientific study, owing to their overestimate of the deductive method. The bad effects of this told with especial force on the progress of medicine. The lofty standard of Hippocrates was gradually lowered; a vague psychology took the place of observation; theories were formed irrespective of the opposition of Nature; the more rigid the system, the fewer became the proceedings of medical art; and with the lapse of centuries, the more the schools found themselves threatened by the advance of real knowledge, so much the more did they rely upon the authority of the ancients, and so much the more intolerant did they become to innovation. Thus it was that Vesalius was summoned before the theological faculty of Salamanca; that Servetus and his book were burned at Geneva; and that the Paris faculty forbade the teaching in their lecture-rooms of Harvey's discovery of the circulation. And so one system rose after another, each, perhaps, possessing some element of truth, but faulty from its exclusiveness; for, from the false logic in vogue, it was believed that upon one theory a complete body of doctrine could be founded. At one time, the humoralist pathology prevailed; at another, the solidist.

But coming to a more recent period, what was the state of medicine at the close of the first quarter of the present century? To the vitalist physician of that day, it did not seem that the important part of the processes taking place in the human body was the result of natural powers, acting from necessity and law. This was deemed of secondary moment, and hardly worth a careful study. Of this, Helmholtz gives some curious instances. It was the time when auscultation and percussion of the organs in the chest was being introduced into the clinical wards of the Berlin Hospital, but they were decried as coarse mechanical modes of investigation which a man of penetration did

not require, and which also degraded the patient by treating him as a machine. Even counting the pulse by the aid of a seconds-watch was regarded by some old gentlemen as not in good taste. As regards the ophthalmoscope, a very distinguished surgeon refused to employ it, saying that it was dangerous to allow bright light to fall upon a diseased eye; and another declared that the mirror might be useful for surgeons with bad eyes, but that he had good sight and did not require it. A distinguished professor of physiology of that day had a discussion with his colleague, the professor of natural philosophy, on the formation of images in the eye, and was invited by him to witness an experiment. He rudely declined the offer, saying that "a physiologist had nothing to do with experiments". At present, it appears hardly credible that such opinions could have been entertained at so recent a period, but marvellous indeed has been the progress of medical science during the last forty years. In Germany, an enthusiastic impulse to sound work was given by the example and teaching of John Müller, the physiologist, who, although theoretically a vitalist, was essentially and firmly a natural philosopher. To him, all opinions were but hypotheses which must be brought to the test of facts and decided by them alone. His spirit strongly animated his pupils, among whom may be numbered many well-known scientific men of the present day.

Again and again, does Helmholtz warn us against being seduced into mere speculation, unproved and unconfirmed, the literature of which he characterises as worthless for the interests of science. But, whilst condemning the making of empty hypotheses, he guards himself against the supposition that he wishes to depreciate genuine original thought; it is the pretension of the sciolist which is so offensive to him. For the finder of superficial resemblances, which are at once proclaimed as discoveries, with jealous maintenance of the rights of priority, he has no feeling but contempt. The medical inquirer, who has to do with the weal-or-woe-bringing powers of nature, has the duty, under heavy responsibility, of seeking the truth, irrespective of consequences; he should be able to foretell the result of any given proceeding. But to gain this power, there is no other method than by careful and repeated observations, by experiment and induction, to search for laws; and when found, further study is required to ascertain under what circumstances and within what limits they operate. This is an unceasing labour.

For metaphysical systems, also, Helmholtz has no love, believing that they hold the same relation to true philosophy which astrology held to astronomy. He even goes so far as to say that every metaphysical inference is either a fallacy or a disguised empirical conclusion. And in confirmation of his estimate, he quotes Socrates and Kant, who each declared all propounded systems to be empty and deceptive.

We have said sufficient to show that the whole address is a protest against premature conclusions and precipitate generalisations; and the lesson may be useful to us in this country. It is to be feared that much of our work is incomplete and will prove unstable. How many incorrect observations and unsound inferences have we not to deplore! How much more valuable would many of our medical works have been had they, prior to publication, received the testing and proving which Helmholtz so strongly advocates!

Professor Virchow's speech will be read with pleasure by those who are familiar with German, and who watch with attention the changes which science and its exposition are undergoing. It is a model of clear and cogent reasoning, clothed in bright and sparkling language. As is known to the readers of his "History of Creation", Professor Haeckel of Jena is one of the most devoted followers of Darwin. At the recent congress at Munich, he urged the propriety of the teaching in schools, as an established doctrine, of his theory of descent and development. We give a short summary of the answer which his argument called forth.

Virchow commences by contrasting the liberty of speech at present enjoyed in Germany with the restrictions on its freedom half a century

* *Das Denken in der Medicin.* Rede gehalten, u.s.w., von Dr. H. Helmholtz. Berlin: 1877.—*Die Freiheit der Wissenschaft im modernen Staat.* Rede gehalten, u.s.w., von Rudolf Virchow. Berlin: 1877.

ago; but not feeling assured as to the permanence of the boon, he enforces the need of caution, moderation, and a certain self-restraint in the expression of opinion, so as to avoid offence. He thinks that the line between the merely speculative region of science and actually acquired territory should be clearly indicated. For firmly established scientific truth, we may fairly ask its full acceptance by the public. However opposed to previous notions, and whatever difficulties may attend its promulgation, when we are fully convinced of the truth of a doctrine, we must not hesitate to communicate it to the world. And here, parenthetically, he energetically defends scientific men against the charge sometimes brought against them of half-knowledge. How can their knowledge be otherwise than imperfect? The field of science is so vast that a cultivator can occupy but a very small part. What we should aim at, is to be clear as to the principles of science and thoroughly acquainted with our deficiencies. The slow and oscillating advance of positive knowledge is well illustrated by the history of the belief that diseases depend upon a *contagium animatum*. Although it arose in the sixteenth century, it was not until the nineteenth that any actual confirmation was brought forward; and whilst it has been proved as regards some diseases, and is probable as regards others, caution requires us to exercise reserve in its complete acceptance.

Professor Virchow then addresses himself to the question of development, and strongly lays down the rule that propositions must be limited to the subjects respecting which they have been substantiated. He fully admits the seductive character of the theory which embraces the whole of living forms, from the lowest protista up to man, and links them with the inorganic world. It responds to that spirit of generalisation which has existed from the earliest antiquity. It is easy to say that a combination of carbon, hydrogen, oxygen, and nitrogen (the firm of Carbon and Co. Virchow facetiously names it), endowed with a peculiar influence, creates a form-unit or plastid; and also that the spirit which animates this is the result of the sum of the powers which the chemical atoms possess. This may be so; but before it can be taught as doctrine, a long course of careful investigation is needed; and it must be emphatically stated, that all actual knowledge respecting the processes of life is opposed to any such supposition. Proof is wanted that inorganic matter has ever developed into organic; and as to the connection of the two worlds, we must simply acknowledge that, in fact, we know nothing; and there is no middle course between admitting the existence of equivocal generation and that of a Creator. Thus, as nothing has more hindered the progress of natural science, in the estimation of the world, than premature synthesis, it is especially desirable that we resist the temptation to put prominently forward mere speculation.

Our space will not allow us to follow Dr. Virchow in his parallel between theological and scientific teaching, but we give an outline of it. In each, the same elements exist; in each, we have a stream of dogma as well as of subjective and objective doctrine. Our grand aim should be to diminish the first and strengthen the last—that which deals with realities and facts. In medicine, the merely subjective part is still unduly cultivated; so much so, that probably one-half of our medical literature might be suppressed, without prejudice to our real knowledge.

The argument upon development, and the relation of man to other animals, is carried into palæontology, and the conclusion is gained, that every step in prehistoric anthropology leads us further from proof of the doctrine of descent. There is no fossil type of a lower human grade. The grand lesson which is inculcated is this: in all that is delivered to the public, whether by writing or speaking, double care should be taken to mark clearly the distinction between what is objectively true, and what is merely an inference or a conclusion from analogy. If knowledge be power, it is that of facts, not problem or speculation. As writers and teachers, we misuse our power, and jeopardise its permanence, unless we keep upon this unassailable ground.

Our readers cannot fail to be struck by the identity of spirit per-

vading the two discourses which we have brought under their notice. We may augur well for the progress of science, both medical and general, when its cultivators are thus animated.

POST MORTEM EXAMINATIONS FOR ACCIDENT INSURANCE COMPANIES.

SCARCELY a week passes in which we have not to record some irregularity in reference to *post mortem* examinations for medico-legal purposes. At one time, a coroner, uncertain about the necessity for holding an inquest in a particular case, invites a medical man to make a *post mortem* examination, without sending the usual warrant or order, as directed by the Medical Witnesses' Act. As nothing was found in the dead body to account for death from causes other than natural, a report was sent to this effect. The coroner declined holding an inquest; and, as no inquest was held, he refused to pay the usual fee. Here the services of a medical man were utilised by a coroner to enable him to determine whether the case was such as to require a formal inquest or not.

On another occasion, a coroner gave a general order to a medical man to make *post mortem* examinations in his district without waiting for the warrant required by the Act. He thus delegated to another a power which the law has conferred on him alone, of determining in what cases a *post mortem* examination should be made and an inquest held. This is really placing members of the profession in a very invidious position, as it is well known that a fee of two guineas is allowed for each *post mortem* examination, and it might be uncharitably suggested that medical men would thus be disposed to exercise this power in cases in which neither a *post mortem* examination nor an inquest was really required. We have had occasion to comment on a case of this kind lately, in which, on account of the irregularity, the magistrates disallowed the usual fee.

If we notice this case again, it is chiefly in consequence of the strange defence of this illegal act set up by the coroner. He states that, "since the magistrates had refused to allow the coroner's officer his travelling expenses, that functionary had to communicate with the coroner by post: consequently, in the case of death from volatile poison, all traces of it would be lost by the time a warrant arrived in that manner". Volatile poisons are not such a frequent cause of sudden death as to justify this conduct; and, when death has been thus caused, there will be no fear of the evidence being lost, even when communications in the district could only take place by post. The coroner is not justified by the Act in issuing such a general order; and a medical man should decline to accept it, as it not only throws on him an undue responsibility, but it exposes him to a charge of looking after his own pecuniary interest.

In a third case, which occurred during the last month, we find that a medical man, interested for an accident insurance company, anticipated an inquest, and performed a *post mortem* examination on the body of the deceased without the permission of the relatives or the authority of the coroner! The deceased was a moulder, and there was evidence that he had sustained some injury at his work on October 2nd. He continued to sink until December 13th, when he died from the consequences of the injury. His life was insured for one thousand pounds in an accident insurance company. The company's surgeon, probably with a view of procuring evidence that the man had died from some natural cause, did not wait for the coroner's inquest or a warrant for making a *post mortem* examination, which would most likely have been handed to another medical man not acting for the company. The coroner very properly had another examination of the body made for the inquest; and upon this evidence the jury returned a verdict of "Accidental death", with the request that a copy of the evidence and verdict should be forwarded to the Home Secretary, together with remarks to the effect that the mutilation of the body before they had seen it was a most improper proceeding, and one likely to be detrimental to the interests of justice when done by an insurance surgeon.

or any interested person. Insurance surgeons should beware of imitating this conduct. It is not only an indecent proceeding to make a *post mortem* examination of a body without the consent of the relatives of the deceased, but, if the coroner have already issued his precept for an inquest, it might subject the offender against decency to a committal for contempt of the coroner's court.

The facts on which we have here commented show that it is time some steps were taken, by a new enactment, to render such proceedings as these impossible.

THE WATER-SUPPLY OF MANCHESTER.

It is probably now unnecessary to enter upon an argument, in order to prove that it is undesirable needlessly to alter the natural condition of any part of the Lake District by the construction of extensive engineering works. On the other hand, general statements have been put forth which have produced an impression on the minds of many that, if access to the valley of Thirlmere be now denied to the corporation of Manchester, it will be impossible to provide for a large population the supply of water which is essential to their health and comfort.

It is therefore desirable to examine these general statements by the light of information derived from sources which cannot be disputed.

In the first place, as to the assertions themselves, Mr. Bateman, in his official reports, has informed his employers that the exhaustion of all nearer resources makes it needful to have recourse to some distant place for supplies. The sense in which he uses these words may be judged of by what is added; namely, that, under present circumstances, no source of supply which will not yield more than five or six millions of gallons per day would be worth considering: a quantity, nevertheless, equal to the total consumption for domestic and sanitary purposes in the city of Manchester, according to statements put forth on authority by the *Manchester Courier*.

Mr. Grave does not deny the existence of collecting grounds still unoccupied, but wishes to leave them to the other towns of Lancashire.

Then, as to the proportion between probable requirements and available supplies, we will quote from Mr. Bateman's reports, statements on authority issued through the Manchester papers, the report of the Royal Commission on Water-Supply, 1868, and the census returns of 1871.

We are informed, through the local papers (October 30th), that the corporation is now under statutory obligations to supply a district comprising an area of eighty-four square miles, with a population of 800,000, and that they do not desire to extend this area. The quantity of water now distributed is put down at 17,000,000 gallons daily; but, as the same figures were given for 1874, we will call it 18,000,000 gallons. This will give a supply of $22\frac{1}{2}$ gallons per head to the 800,000. The population referred to may be divided into the inhabitants of Manchester, those of Salford, and those of the outlying townships. An examination of the last census returns shows that, if the rate of increase which prevailed in these several populations respectively from 1861 to 1871 be continued until 1897—twenty years hence—the number will stand at 1,125,000.

How are these people to be supplied? Mr. Bateman tells us that works existing or now in course of construction will supply 25,000,000 gallons daily. Then we find, from the report of the Royal Commission, that water obtained from deep wells sunk in the new red sandstone is in many respects, and for many purposes, to be preferred to any which can be got from surface-drainage. Almost the whole of Lancashire, and especially the neighbourhood of Manchester, is situated on this formation, and, from four wells very imperfectly sunk therein near Liverpool, 7,000,000 gallons per day are obtained. It would be very singular if, within an area of eighty-four square miles round Manchester, four wells equally productive cannot be sunk. This would

raise the supply to 32,000,000 gallons daily, and afford $28\frac{1}{2}$ gallons per head to the supposed population of 1897, instead of $22\frac{1}{2}$ gallons per head, the present quantity, of which the corporation has with good reason always boasted as liberal and unstinted.

The wants of the county of Lancaster are often put forward as a justification of the present application, and therefore it may be well to examine this question as closely as possible. The population of the whole county, including Liverpool, is something under 3,000,000. This is a large number; but the natural resources of the county are large also. The rainfall is much greater than that which prevails in most other parts of the country. The prevailing substratum of new red sandstone affords an unusually productive and valuable source of supply; and few counties of England possess within their own limits, or immediately contiguous, so large an extent of moorland-surface which is all available for collection, the only difficulty being the expense of constructing reservoirs in some localities. Under these circumstances, we find that one municipal body, nearly at the extreme south-east of the county, having already secured a supply of 25,000,000 gallons daily from sources entirely without the county limits (for such is the fact as respects the Longendale supplies), now seeks powers to construct works in Cumberland, a county separated from them by the whole length of Lancashire and thirty miles of Westmorland, and thus obtain the possession and control of a supply amounting to 75,000,000 gallons daily: a quantity fully equal in itself to the wants of the whole county, even if its natural resources were not greater than those of the Arabian Desert.

To infer from the above data that the corporation of Manchester can plead no pressing needs in justification of their demands, is surely not an unreasonable conclusion. Anyhow, there is time enough for a deliberate inquiry into all the important questions involved.

THE publication of the *Monthly Microscopical Journal* is, we hear, in future to be discontinued.

THE *British and Foreign Medico-Chirurgical Review* has also, we regret to say, become extinct, its tardy quarterly appearance being probably fatal to its interests.

THE *Quarterly Journal of Anatomy and Physiology* will henceforth, we hear, be altered in character, as Dr. Michael Foster and Dr. Rutherford, two of its editors, propose to issue a *Journal of Physiology* in a separate form.

THE monthly *London Medical Record* is to be permanently enlarged, in order to give adequately increased space to systematic abstracts of the immense and growing mass of foreign medical literature.

THE *Glasgow Medical Journal* is to be published in future in the monthly shape, under the editorship of Dr. Coats.

THE *Birmingham and Midland Counties Medical Review* has been entrusted to the able charge of Dr. Saundby as editor.

THE first number of *Brain*, a quarterly journal of neural pathology, edited by Drs. Bucknill, Crichton Browne, Hughlings Jackson, and Ferrier, will appear on April 1st.

THE *Australian Practitioner*, a new quarterly journal of the medical sciences, reaches us from Melbourne. It promises to be the most creditable medical journal which has yet been issued in the Australian colonies.

WE much regret to record the death of Dr. R. Payne Cotton, in the prime of life, from dilatation of the heart. Dr. Cotton's contributions to the clinical study of chest-diseases have been of much practical interest.

THE Association medallists will dine with the Committee of Council and their friends at the Grosvenor Gallery Restaurant on Wednesday next, January 9th.

THE NEW SYDENHAM SOCIETY.

AFTER many delays, we are glad to hear that the first part of the Society's revised edition of Mayne's *Lexicon* is likely soon to appear. Mr. Henry Power and Dr. Sedgwick are its joint editors. It will, we believe, be much enlarged and wholly remodelled.

MEDICAL SOCIETY OF LONDON.

ON Monday next, the first of the Lettsomian Lectures at the Medical Society of London will be delivered by Mr. Francis Mason, Surgeon to St. Thomas's Hospital. The subject will be Diseases of the Face. On Monday, January 14th, Dr. Foulis of Glasgow will read a paper on Excision of the Larynx, and will show the patient upon whom he has lately performed the operation. The artificial larynx manufactured to replace the natural one will be exhibited, together with the various reeds which produce the voice. By means of a König's revolving mirror, the sound-waves will be demonstrated.

A DOCTOR'S WINDFALL.

THE Aberlour succession case, of which we gave an outline a few months ago, came on for trial in the Edinburgh Court of Session last week, and was finally closed by compromise. The pursuer, Mrs. Yeatman, *née* Temple (who jilted her friend Miss Macpherson Grant, to whom she was solemnly pledged to live single until death should them part), agreed to accept £10,000, and withdraw all claims henceforth and for ever. Miss Grant, never forgiving the defection, revoked the will leaving everything to her friend, and shortly afterwards died intestate. This settlement of the will in dispute brings about a remarkable change in the fortunes of a medical practitioner in the village of Rhynie, Aberdeenshire, who suddenly rises from obscurity and a humble practice to take up, by right of succession, the responsibilities and position of a Highland laird. Dr. Proctor, first cousin of deceased, and heir at law, is now at liberty to transport his wife and eight children from Aberdeenshire across his own broad acres in the neighbouring county of Banffshire, to enter the lordly halls of Aberlour House as master. Twenty-two years ago, the change of position was quite as singular for the last proprietor, who was the only child of an equally obscure medical practitioner in a Scotch village, and was left the estate by her uncle, Mr. Grant, a rich West Indian planter. The grounds of Aberlour House are guarded on east and west by picturesque lodges, beyond which stretch miles of beautifully kept carriage drives and avenues. The river Spey, with many a glorious salmon pool, bounds the property on the north; and behind the house, which stands on elevated ground, and ascending further still, you suddenly emerge upon a glittering mass of highly cultivated garden. It stands, with its miniature crystal palace, like an oasis in the surrounding moorland, from which it has been reclaimed. Instead, however, of making a state entry on this beautiful estate, we understand it is Dr. Proctor's intention simply to remove his door-plate from the village of Rhynie to the town of Aberdeen, there to continue the profession he enjoys. Besides the windfall of landed property to the heir at law, four poor relations come in, as next of kin, to £35,000 each in cash, after all expenses are paid.

LIME-JUICE AND SCURVY.

THE *Army and Navy Gazette* of December 15th contains some remarks on this subject, which one would have imagined could hardly have been written after the accumulation of evidence brought out by the Arctic inquiry. On the strength of a statement that there have been lately five cases of scurvy under treatment at the Seamen's Hospital at Greenwich, all from ships where outbreaks took place in spite of an ample supply of lime-juice, the writer says: "Disguise the matter as we may, there is no question of doubt that we have not in lime-juice the true preventative for scurvy." He farther states that it

is to steam, and not to lime-juice, that we are indebted for the diminution in scurvy that has taken place of late years. He then cites Surgeon-Major Oliver's opinion that it is the protein compounds that are the true antiscorbutics, and demands that experiments shall be made upon two sets of scorbutic patients, one to be treated with lime-juice, and the other with "one fresh raw egg three times daily, beaten up with half a pint of new milk with a little sugar; and let it be seen" (he adds) "which of the two divisions of patients will first improve and recover under this treatment". On the above statements, we may remark that it has hardly ever occurred that cases of scurvy alleged to have arisen in spite of distribution of lime-juice have stood the test of rigid inquiry. An attempt was made during the late Arctic investigation to prove that scurvy was beginning on board the ships before the sledge-crews started; but it was clearly shown that it occurred only in one or two men, who did not take their lime-juice and shirked their vegetables. As regards the statement that it is to steam, and not to lime-juice, that our recent immunity from scurvy at sea is due, we would simply ask him to look back to the history of the Royal Navy. Was it lime-juice or steam that in the short space of a few years banished a scourge that was destroying one man in seven so late as 1780? In 1805, scurvy had practically disappeared; but steam had not yet made its appearance. As regards Surgeon-Major Oliver's opinions about the efficacy of protein compounds, this is merely the theory of Sir R. Christison revived, although it was completely refuted by the late Dr. Parkes thirty years ago. Were it true, scurvy ought never to appear on a liberal meat-diet; but nevertheless it does. On the other hand, no amount of deprivation of albuminates will induce scurvy, if the diet have consisted of potatoes or green vegetables. Dr. Oliver's view so far differs from Sir R. Christison's, that he attaches particular value to fresh vegetable protein, whereas Sir R. Christison refers chiefly to animal albuminates. With regard to the experiment which the writer suggests, we would refer him to the very able pamphlet recently published by Dr. Ralfe of the Seamen's Hospital, where the question is treated in a philosophical spirit. He will there see that an experiment of the sort has actually been made, although not carried out quite so far. The result, however, showed that improvement did not take place until a true antiscorbutic was given, although a liberal diet with plenty of protein was allowed; the urine retaining its scorbutic characters until a nutriment containing the vegetable acids was administered. This outcry on the part of some persons against lime-juice is a little like the fanatical opposition to vaccination. The master-remedy has done its work, and has practically banished a foul and loathsome disease from among us; and now people begin to imagine that the remedy is useless, because it has done its work so well. It is like the rustic, who considered the moon much more valuable than the sun, because it shone at night, when it was dark; whereas the sun shines in the daylight, when he is not needed. Although we do not know everything about scurvy, yet all the evidence is overwhelmingly in favour of its being caused by the absence of fresh vegetable food; and, of all the constituents of that kind of food, the salts of the vegetable acids alone appear to be the efficacious agents. In the absence, then, of fresh vegetables, lime-juice is resorted to as the best and most easily managed substitute, and the test of experience has amply justified the trust reposed in it.

THE HEREDITARINESS OF MADNESS.

THE current of hereditary morbid tendencies presents various aspects in different families. There is the broad stream, which carries with it the taints of gout, consumption, criminality, as well as of insanity; each of these maladies being developed in different consanguine relations, in accordance with their moral and physical constitution, their habits and surrounding circumstances. There is the more limited transmission of the factors or influences, whatever these may be, which invariably culminate in certain forms of alienation or nervous diseases, but in no others; and, lastly, the heritage is limited to some particular species of mental disturbance—to suicidal tendency, for example. It

would be rash and unphilosophical to conclude either that suicide was frequently the result of hereditary vitiation; that it was a sign of moral perversion at all; or that it was other than the act of a distempered or agitated, but not necessarily of a diseased, mind. In glancing over the sad genealogical descents collected by Esquirol, Brierre de Boismont, and Moreau, there constantly recur instances where whole families devote themselves to self-destruction, nearly at the same age, and apparently without any more appreciable incentive than *ennui*, disgust at life, or intolerance of incidents which would be regarded by healthier natures as insignificant and trifling. In like manner, such tragedies may be found closing an useful and prosperous career in several generations. In the endeavour to discover the cause of such conduct, inconsistent in many cases with the character and interests and habits of the victim, it is natural to adopt the nearest and readiest solution, especially when it seems sufficient to explain what would otherwise remain inexplicable; but that such a step must frequently lead astray cannot be doubted, when it is borne in mind that the laws of hereditary disease, even the fact and nature of such a taint, still remain in great doubt and obscurity; and that in the history of every individual there are thousands of physical affections, perverted sentiments, and wayward fancies and impulses, which are equally potent in bringing about self-murder, and even in overriding all other proclivities, whether these lead to hope and health or to trial and anxiety. Another element plays an important, though less conspicuous, part in leading to such catastrophes. We refer to the incitation, not to the blind impulse which precipitates various persons, strangers to each other, from the Monument or the Vendôme Column; but to that feeling which actuates members of the same profession, social group, or family, to resort to an act or a series of acts which have been perpetrated by those whom they love and admire, or upon whom they depend, and with whose opinions, dispositions, and course they have previously placed themselves, or been unconsciously placed, in harmony. These observations have been suggested by the death of the younger Prevost Paradol. This boy may have suffered from some constitutional type; but his age—seventeen—is as rarely influenced by transmitted taints as by grief, depression, or despair. In the absence of more reliable evidence, and in the knowledge that he must have been long separated from all direct paternal influences, and that the political or patriotic disappointment which hurried his father away from the contemplation of his country's misfortunes could scarcely reach the stripling, we are inclined to believe that some unknown influence—it might be the crisis of puberty—directed his thoughts to his father's last act; and that the similarity or identity of their inner nature suggested emancipation by following his example.

INSANITY OF MURAD V.

In the *Allgemeine Zeitschrift für Psychiatric* (xxxiv Band, I Heft), there is a long inquiry into the nature of the illness of the Sultan Murad V, of which an account is given in Dr. Maudsley's *Journal of Psychological Medicine*. It will be remembered that, during August of 1876, Dr. Leidesdorf of Vienna, was sent for, to be consulted as to the mental condition of the Sultan, and as everything must come to the public now-a-days, it is supposed that the different newspaper articles quoted contain the result of the observations of that learned physician. Apparently, insanity is hereditary in the house of Osman, as indeed it is in that of most European reigning families. Sultan Ibrahim was a maniac; Sultan Mahmud, a drunkard; Abd-ul Medjid, the father of Murad, died from the results of his excesses in *vino et venere*; and his uncle, Sultan Abd-ul Aziz, brought Turkey into its unfortunate condition by his indolence and his senseless extravagancies. Murad himself, a man of thirty-six years of age, of originally good constitution, was imprisoned by his uncle, and thought his life in great danger. In order to escape from the painful consciousness of his position, he was in the habit of indulging in spirituous liquors. Suddenly called by the deposition of Abd-ul Aziz to preside over the destinies of Turkey, at a most unhappy period of her history, he was deeply affected by

the violent death of his predecessor, and the frightful murder of his two ministers, Hussein Avni and Raschid Pacha, by the Circassian Hassan. These distressing events, acting on an exhausted constitution, caused continued sleeplessness, and finally plunged him into a deep melancholy. He told Dr. Leidesdorf that he had a feeling of constriction about the chest. "I live," he said, "two lives, one known to me, and clear to my comprehension, the other contained within it, obscure and incomprehensible. On my ascension to the throne, I saw everything full of flowers; now, the floor of my chamber, when I look at it, seems to be sown with bayonets." Dr. Leidesdorf thought that Murad might recover, if properly treated, in three months, a prognosis which was not well received by those who wished to dethrone him. He was said to be a man of a kindly heart, and more likely to be a good ruler than his successor, who only cared for himself. It is reported in the newspapers that he has now recovered; but, as he is still in a species of confinement, this cannot be exactly known.

A NEAPOLITAN HOSPITAL.

AN International Hospital has been established at Naples, at which are received patients of different classes at charges suitable to their conditions. There are three classes of accommodation, in the first of which separate rooms are provided, every expense included, at 7s. 6d. a day; those of the second class are received in common rooms at 4s. 6d. a day; and those in the general ward at 1s. 10d. a day. Nor are our seafaring and often suffering countrymen neglected, for every vessel paying a subscription of 7s. 6d. or 3s. 9d., has the right of sending any of its sick crew to the hospital at the rate of a fraction under 1s. 6d. a day each. The Consuls of the Netherlands, Switzerland, Russia, and England, in Naples, are on the Committee; also a French, German, and an English resident.

THE PUBLIC HEALTH.

DURING the week ended Saturday, December 29th, 4,608 births and 3,925 deaths were registered in London and twenty-two other large towns of the United Kingdom. The annual death rate was 22 per 1,000 in Edinburgh, 23 in Glasgow, and 27 in Dublin. The annual rates of mortality per 1,000 last week, in the twenty English towns, ranged in order from the lowest, were as follow: Brighton, 18; Newcastle, 19; Bradford, 20; Leicester, 20; Hull, 21; Sheffield, 22; Salford, 22; Bristol, 23; Birmingham, 24; Portsmouth, 25; Leeds, 25; Nottingham, 25; Oldham, 26; Wolverhampton, 26; London, 26; Manchester, 29; Norwich, 29; Liverpool, 29; Sunderland, 33; and Plymouth, 33. Whooping-cough caused an excessive zymotic rate in Plymouth and Birmingham, and scarlet fever showed fatal prevalence in Sheffield. In London, 1,831 births and 1,757 deaths were registered. The annual death-rate from all causes was 25.9. The 1,757 deaths included 29 from small-pox, 109 from measles, 31 from scarlet fever, 12 from diphtheria, 82 from whooping-cough, 36 from different forms of fever, and 12 from diarrhoea; thus to the seven principal diseases of the zymotic class 311 deaths were referred, against 248 and 301 in the two preceding weeks. The 109 fatal cases of measles showed a further increase upon the numbers in recent weeks, and exceeded the corrected weekly average by 59. The 82 deaths from whooping-cough showed a considerable further increase upon the numbers in recent weeks, and included 38 in South London. The deaths referred to fever, which had been 26 and 41 in the two preceding weeks, were 36 last week, and were 4 below the corrected average; 7 were fatal cases of typhus, 23 of enteric or typhoid, and 6 of simple fever. The Metropolitan Asylum and London Fever Hospitals contained 157 fever (typhus and enteric) patients on Saturday last, against 173, 168, and 156 at the end of the three preceding weeks. The deaths from small-pox, which had been 31 in each of the two previous weeks, were 29 last week; of which 11 were certified as unvaccinated and 5 as vaccinated, while in 13 cases the medical certificates gave no information as to vaccination. The number of small-pox patients in the Metro-

politan Asylum Hospitals, which in the first week in October had declined to 137, was 309 on Saturday last; 83 new cases were admitted during the week, against 79, 85, and 84 in the three previous weeks. Thirteen deaths were referred to childbirth and puerperal fever. The deaths referred to diseases of the respiratory organs declined to 467 last week, and were 4 below the corrected weekly average; 310 resulted from bronchitis and 115 from pneumonia. Different forms of violence caused 50 deaths. In Greater London, 2,271 births and 2,014 deaths were registered, equal to annual rates of 27.1 and 24.1 per 1,000 of the population. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 12.2 hours, the sun being above the horizon during 54.3 hours; the recorded duration of sunshine was, therefore, equal to 22 per cent. of its possible duration.

THE FRENCH SOCIETY OF HYGIENE.

A RECENTLY published pamphlet by Dr. de Pietra Santa states that the French Society of Hygiene consists of three classes of members: 1, titular, who pay twelve *francs* a year; 2, honorary, those who shall greatly assist in the work, or whose patronage would be useful; 3, foreign associates. Its objects are: 1, to give explanations in public of the great questions in hygiene; 2, to discuss at meetings matters relating to the science; 3, to award prizes for essays; 4, to publish papers; 5, to provide laboratories for analyses, etc.; 6, to form a library on sanitary subjects; 7, to make a collection of instruments, machinery, and models, bearing on hygiene. The chief part of the pamphlet is taken up with an address by Dr. de Pietra Santa, in which he reproduces Dr. Guy's definition of hygiene, and draws therefrom the deduction that it is better to prevent than to cure. He then referred to the work done by the Society; to the various sanitary associations in London, and especially to the National Health Society; and notices the laws of Holland relating to infectious diseases, which require the medical man to give notice to the sanitary inspector of every case he may be called on to attend, so that a board may be affixed to the house with the words "infectious disease" written upon it. He also especially discusses a lecture of Mr. Ernest Hart on the Sanitary Directions contained in the Laws of Moses. The address is largely made up of a critical *résumé* of sanitary work carried on in England and elsewhere.

THE ACTION OF CURARA.

A CORRESPONDENT forwards us the following report of the action of curara, employed in two cases in which it was desired by their owner that two animals should be destroyed by an easy death. Sir William Jenner observed to the Home Secretary, when the Act for controlling experiments on living animals was under discussion, that, if a man chose to drown a dozen kittens or dogs just because he wanted to get rid of them, no one could have anything to say to him; but, if he made the phenomena of death under such circumstances the subject of scientific investigation, with the view of deriving any beneficial knowledge which might be obtainable from the investigation, or of the action of poisons ultimately producing death, he would be liable to prosecution. The author of the following notes, in forwarding them to us, unconsciously illustrates this observation by writing at the same time: "I think it will be well not to mention my name in publication, lest undue advantage be taken thereof."

1. Six minims of a solution of curara in water (one grain to twelve minims), equal to half a grain, obtained of Messrs. Corby and Co., Holborn, were injected beneath the skin of a healthy kitten, three months of age. After ten minutes had elapsed, a weakness of the hind legs was remarked; in half a minute or so more, a decided stagger in the gait. The animal then lay down on its chest, shortly afterwards turned on its left side, and there were slight convulsive movements of the upper and lower extremities. Respirations were 40 in the minute. These soon ceased, but the heart's pulsations were easily felt, 120 in the minute. The pulsations became more feeble, and, in seventeen minutes and a half from the time of injection, had ceased altogether. The muscles were flaccid, the pupils dilated. The tongue was in apposition to the roof of the mouth. A very small quantity of urine was

voided. *Post mortem appearances*.—Rigor mortis was strongly developed in twelve hours. The thorax was flattened. The posterior part of the right lung was congested. The other parts of the lungs were scarlet. The right side of the heart (both cavities) was full of dark fluid blood. The cardiac veins were filled. The left side was in systole; both cavities were empty. The abdominal veins were all filled. The intestines were natural. The kidneys and spleen appeared normal.

2. Twelve minims of the same solution, equal to one grain, were injected beneath the skin of a healthy cat, between two and three years of age, at 5.10½ P.M. At 5.15, a weakness of both extremities was noted. This increased; the animal uttered a feeble cry or two. At 5.16½, she lay with her head between her paws, like a hare in form. Respirations 22. There were slight convulsive movements of the body; the tail moved from side to side. At 5.18, respiration stopped. The heart's pulsations fell, 168 in the minute. At 5.20, the pulsations were 126, more feeble; they became intermittent. The animal passed urine. At 5.22, the pulsations were 84. At 5.23, the heart's action ceased. The pupils were widely dilated. The tongue was apposed to the roof of the mouth, with the tip between the teeth. The *post mortem appearances* were exactly the same as in the former case, with the exception of the lungs being very much more congested, and dark on both sides.

MEDICAL ORGANISATION IN PARIS.

IN a note on the Organisation of Public Assistance in Paris (published as a separate pamphlet in French), written partly to report to the French Society of Hygiene the results of a visit to the Leamington congress, M. Clement Couly speaks in high terms not only of the work carried out by the Sanitary Institute, but also of that performed by the Royal Humane Society; and refers warmly to the amount of good effected in England by individual workers, as compared with centralisation in France. He then notices similar action taken in Amsterdam and Madrid, and gives an account of the provisions for relief of the wounded and assistance to the drowning in Paris, which are afforded under the control of the municipality and with the aid of the Préfecture of Police. M. Couly states that between May 1st, 1875, and May 1st, 1876, thirty-seven persons were taken out of the Seine to one of the six tents (*pavillons*) belonging to the municipality, and thirty-two were restored to life. He also notices the public night medical service, consisting of 532 doctors of medicine, 32 officers of health, and 99 midwives, the number of whom is said to increase almost daily.

ACTION OF ANTISEPTICS.

IN a brochure entitled *La Septicémie Expérimentale* (Paris, Adrien Delahaye & Cie., 1877), Dr. J. V. Laborde publishes the results of a series of experiments on the preventative and curative action of reputed antiseptics, that especially deserve attention at the present time. In order to produce a septicæmia that should be independent of secondary changes produced by the injection of septogenic material into the subcutaneous connective tissue, he selected the method of arterial communication of Alphonse Guérin. A dog having been made septicæmic by the direct introduction of septic blood into a vein, the femoral artery is laid bare and its central end is placed in direct communication with the separated distal end of the femoral artery of a healthy dog. The second dog which receives the septicæmic blood in this manner becomes itself septicæmic. By successive "generations" produced by this operative procedure, a blood is obtained containing the septicæmic poison in a high degree of intensity. In regard to the presence of organisms in this moribgenic fluid, Dr. Laborde remarks that "the blood of a dog infected by arterial communication has never, when attentively examined at different periods of the disease, exhibited the presence in appreciable quantity of microcytes—bacteria, vibrios, granular matter, etc.—not even in cases in which the blood primarily inoculated contained microzoa in more or less large numbers; so that we find ourselves in presence of a disease which can be transmitted indefinitely without the intervention of inferior organisms". In contradiction to the statements of Binz, the author found that quinine, even when injected in the highest doses compatible with life, neither acted as a pre-

ventative to the development of the disease, nor arrested it when it was produced. Similar negative results were found with chromic acid, carbolic acid, bichromate of potash, and permanganate of potash.

SCOTLAND.

THERE was no death from fever, diphtheria, small-pox, or scarlatina in Edinburgh last week. The only deaths reported from measles occurred on the south side of the town.

SANITARY IMPROVEMENTS AT INNERLEITHEN.

ON Monday last, the inhabitants of Innerleithen held holiday in honour of the completion of a scheme of sanitary improvements which has just been accomplished. The undertaking in question, which embraces the supply of the town with water, and the introduction of an efficient system of drainage, has been carried out since May last. For water-supply, the inhabitants have depended hitherto solely on pump-wells, the water in which, however, had become so contaminated by organic matter as to be pronounced unfit for domestic use. The present supply is taken from the Bold Burn, a clear stream at some distance from the town. Piping has been laid down for about seven miles. As no storage for compensation purposes is required, the whole flow of water from the gathering-ground, which is calculated at half a million gallons a day, can be made available, if necessary, for the requirements of the town. This, however, is greatly more than is at present required. For drainage purposes, the town occupies an exceptionally favourable position, all the inclination being in one direction. The outfall will be into the tail-race of a mill-lade, into which, in summer, most of the water of the Leven finds its way. Due advantage is taken of the gravelly nature of the soil for filtration purposes; so that the discharge into the tail-race will be in a comparatively pure state. At every junction of the drainage-pipes, and at the end of each branch main, a man-hole is constructed, having one of Baldwin Latham's ventilators, with charcoal basket for filtering the gases before they escape into the open air. The flushing of the sewers will be carried out by means of branch-pipes from the water main led into the manholes, which are filled with sluice valves. The arrangement secures not only that the sewers shall be copiously flushed, but that at the same time any sediment gathering in the water main will be discharged. A large company assembled to see the opening of the new works.

INFECTION IN THE LAUNDRY.

AT Greenock, on Saturday, a woman was fined ten shillings, with the alternative of five days' imprisonment, for having sent to be washed, in a public washing-house, blankets infected with disease. Three persons were admonished for not having reported to the Sanitary Authority the presence of scarlet fever and measles in their houses. These were the first cases of the kind which have been brought under the new Greenock Police Act. How often do not well-to-do persons, in all parts of Great Britain, pursue with impunity the same reckless and dangerous course.

COMFORT FOR ADULTERATORS.

SEVERAL milk adulteration cases, which had been postponed pending the decision of the Court of Session in a case of which we gave the particulars a fortnight ago, were to have been brought before the Sheriff of Glasgow last week by the Sanitary Inspector. Owing to the recent decision of the Court of Session, the Sanitary Inspector withdrew the charges. Thus the Adulteration Act has become in Scotland a dead letter, as far as food is concerned which is not contaminated by any substance actually injurious to health. Milk and similar substances may be diluted with any quantity of water, and cream with any quantity of skimmed milk, to any degree of tenuity, and yet the Sanitary Inspector has, say the judges, no power to prosecute. A private individual may get damages, in that he did not get the article for which he paid; and we know how few private individuals care to go to the trouble and expense of prosecuting anybody; but the public prosecutor has no such

power. We only want a lenient view, as to what may be considered injurious to health, to make the law absolutely, or nearly absolutely, useless. Can it be proved, for instance, that alum in bread, unless in very large quantity, is injurious to health, or that adding salt to beer is likely to be to the buyer's prejudice? If not, then farewell to pure bread and unadulterated beer.

IRELAND.

THE Duke of Connaught has forwarded a cheque for £100 to the Mayor of Cork, to be distributed amongst the local charities of that town.

BELFAST HOSPITAL SUNDAY.

ON the 30th ult., being the last Sunday in the year, collections took place in twenty-seven churches in Belfast for this charitable purpose. In January, collections will also be made in other churches for the same object. The funds obtained at the various places of worship will be handed over to the Belfast Royal Hospital, the only general hospital in the town.

CHARGE AGAINST A MEDICAL PRACTITIONER.

A PROSECUTION is at present pending against Dr. O'Hare, residing at Castle Street, Belfast, on the charge of forging a writ, in order to intimidate a patient to pay an account for medical attendance. Bail has been refused, the charge being a very serious one.

HOSPITAL FOR SICK CHILDREN, BELFAST.

THIS hospital having been found too limited to afford sufficient accommodation for the number of applicants for admission, a new building is in course of erection, and, to supplement the funds, a bazaar was held on the 20th ult. in the Ulster Hall, Belfast. We are glad to state that the bazaar has realised the handsome sum of £1,500, not including donations, which amounted to £200 more.

DISPENSARY APPOINTMENTS.

AT a meeting of the Dispensary Committee of the Clonbrock District of the Mountbellew Union, held on the 27th ult., Dr. Richard O'Reilly, resident medical officer of the Limerick Union, was unanimously elected medical officer. The emoluments of the post are £135 a year, with registration and vaccination fees. Dr. Ambrose was elected, last week, medical officer of the Ahascragh Dispensary District of the Ballinasloe Union at a salary of £50 *per annum*.

CLINICAL INSTRUCTION AT THE BELFAST WORKHOUSE HOSPITAL.

AT a meeting of the Belfast Board of Guardians held last week, a discussion took place in reference to this matter. It seems that the authorities of the Queen's College were anxious that the medical students should have the advantage of the clinical instruction which the hospital and infirmary of the workhouse afforded; and, at an interview, some time since, between them and the guardians, it was arranged that the latter should give every facility as far as they could in accordance with the proper discipline of the house. It was also agreed that Drs. Smyth and McConnell should have the same status as clinical instructors as the medical officers of the Belfast Royal Hospital. The question of remuneration, however, upset the whole arrangements; for, as the fees of the students were divided equally among the medical officers of the Royal Hospital, and as they did not wish to curtail their emoluments by transferring a portion to Dr. Smyth and his colleague, it was suggested that an increase of fees should take place, so that the amount per share might remain as formerly; but the College authorities made objection to this procedure, and so the matter remained as before. The subject was now brought forward for discussion, and it was agreed by the guardians that copies of the rules adopted by the Board as to the admission of medical students to the Union Hospital for clinical instruction should be forwarded to the Chief Secretary for Ireland, requesting him to cause an inquiry to be made why the opportunity afforded the students had not been embraced.

THE GAZETTE HEBDOMADAIRE ON THE BRITISH MEDICAL JOURNAL.

THE *Gazette Hebdomadaire de Médecine et de Chirurgie*, in a recent number, gives a brief sketch of the history of the British Medical Association, in which it does us the honour, in describing the BRITISH MEDICAL JOURNAL with some detail, to speak of it as the most important scientific journal in the whole world ("le journal scientifique le plus important du monde entier"). Coming from a medical periodical which has itself for many years stood at the head of French medical journalism, and is distinguished for the seriousness of its scientific work and the deliberate importance of its criticism, we cannot but highly appreciate so extremely flattering a judgment from so important and well skilled a critic.

REFORM OF THE CORONERS' COURT.

MR. W. H. MICHAEL sends us the following memorandum on the office of coroner, as part of a complete scheme of local government.

a. Creation of a Ministry of Health and Justice (central authority).
b. The Minister of Health and Justice to have a seat in the Cabinet.
c. Division of the country into districts. Each district to have one local authority for all purposes of local government, with all necessary powers of rating, etc.

d. Constitution of county authorities, as Boards of Finance, for joint works, and for carrying on county asylums, etc.; also as a Board of Appeal on questions arising between district authorities or their constituents, with an ultimate appeal to the central authority. These boards to be representative in character; one-half the members to be the chairmen of the various local authorities within the county; the remaining half to be chosen by the magistrates in Quarter Sessions assembled, and to consist of persons representing large ratepaying interests. Election to be annual.

e. Organisation of a Public Medicine Department by the State (State Medicine) on similar lines to those regulating the Army and Navy Medical Services, with similar grades of officers—Inspectors-General to assist medical officers of health; appointments to districts as to regiments or ships, etc.

1. Coroners to be appointed and paid by County Board.
2. To be persons having had the advantage of legal training.
3. Juries to consist of not less than twelve persons; the verdict of the majority to be taken.

4. Inquests to be held *super visum corporis*, for the purpose of inquiry into the cause of death; also as to shipwrecks and fires in all cases; also treasure trove, etc.

5. Coroners to have no power of issuing warrants of committal to prison. No prisoner to be tried on the coroner's inquisition. Facts to be inquired into as affecting persons charged with homicide before magistrates, and depositions returned into court. Juries to determine the cause of death only, without determining between the crimes of murder, manslaughter, etc.

6. Coroner's inquisition to be certified under seal to the Public Prosecutor. One or more Public Prosecutors to be appointed by the central authority for each county.

7. *Post mortem* examinations, when directed by the coroner, to be after hearing the evidence in all cases of medical attendant: to be evidence to be forwarded to medical officer of health, whose duty it would be to conduct the *post mortem* examination; to attend the inquest; to make a report, if necessary, requiring further information from the medical attendant, and stating whether it was necessary to have any, and what, chemical analysis performed. Coroner to direct analysis. Such analysis to be performed by the public analyst attached to each local district. (Appointment of local public analysts to be made by district local authorities.)

DR. R. T. WRIGHT, Coroner of Shropshire (Bradford North District) writes:

Permit me to mention the opinions which I have formed as the result of nearly twelve years' experience of medico-legal cases in England, in Scotland, and in India, where the civil surgeon of a district (equivalent to medical officer of an English county) is obliged *ex officio* to perform many of the functions discharged by a coroner at home.

I fear we must separate what is desirable from what is practicable,

as the question of expense forbids us to hope for the establishment of any court so complete and elaborate as was recommended at the Coroners' Conference, and by some of your esteemed correspondents.

Legal or Medical Coroners.—Will any one conversant with medico-legal cases deny that in eighty per cent. of sudden deaths, with or without inquests, medical knowledge is of more importance to the coroner than legal? If he do, I beg respectfully to refer him to superintendents of police, both in England and India, who will, I believe, confirm my opinion. Why have a coroner useful only in one-fifth of the cases?

Appointment.—Whether legal or medical, the coroner should be appointed and paid by the Crown, the responsible advisers of which could be trusted to select only a man of special attainments, who should hold office during good behaviour, but with a pension after certain service, and who should have charge of a district large enough to give him ample experience and to fully occupy his time, to the exclusion of other than public duties. He must be a man of common sense, so that no scandals may occur like that which shocked society on the death of Sir Charles Lyell. No inquest or *post mortem* examination should be made unnecessarily, and a monthly return of all inquests and sudden deaths should be made to the Medical Officer of the Privy Council, who should have censorial and disciplinary powers over all coroners. Civil Surgeons make such a return to the Surgeon-General of the Indian Medical Department, and the plan works well. In Scotland, the Procurator-Fiscal makes an inquiry into sudden deaths, which is kept private or made public at his discretion, and it is highly desirable to give the English coroner the same power, as no one will say it is abused in Scotland.

Court.—The procedure is so simple that any surgeon of intelligence who has seen a few inquests can hold the court, and conform to the law, if he only studies Sir John Jervis on *Coroners* and Sir James Fitz-James Stephen on the *Law of Evidence*. The coroner is a judge of a court of record, and it is absurd to say a surgeon or physician who has read these books cannot preside in a coroner's court because he does not understand evidence, for he has only to report to superior courts whether any one is to blame, or not, in cases of sudden death. All sudden deaths should be reported to the coroner and included in his return to Government whether he considers an inquest necessary or not.

Referees.—A coroner is allowed to consult a referee in cases requiring technical knowledge, as deaths from accidents in mines, in ships, or on railways; why should he not be allowed to consult experts in law,* chemistry, medicine, surgery, pathology, etc., on exactly the same footing? In India, each Local Government has an officer called the "Chemical Examiner to Government"; and an idea may be formed of the amount of work this gentleman performs when it is mentioned that he has about two cases every day, on a yearly average, to analyse and report upon. His written report is considered as evidence in a court of law, and he is summoned to give evidence in person only in a few important cases.

On the staff of the Medical Officer of the Privy Council there should be a number of well-trained analysts, one to each district, the area of which should be determined by Government, and all the coroners of the district, circle, or circumscription (or whatever you call it), should be compelled to consult him whenever the local practitioner so advised. It is absurd and ill-natured to ignore the local practitioner, as his evidence is generally of more value than that of all the other witnesses, and the coroner should be compelled to summon him. Magistrates object on the ground of expense, but magistrates should not be allowed any voice in the matter, as they are not qualified by their education to form an opinion on medico-legal questions.

Since the Penge case, *post mortem* appearances are in bad odour, and it will be probably generally allowed that ordinary practitioners unconnected with hospitals have not sufficient experience in such phenomena. As they practise midwifery, it is not desirable that they should make *post mortem* examinations, but this duty might very properly be done by the district medical officer of health (who is debarred from practice), and his pay should be raised on account of this addition to his work; but he should make the examination in the presence of the local practitioner who knew the deceased.

The Jury.—The jury was originally appointed to identify the body of the deceased, and to assist the coroner by their local knowledge to find out if any one were to blame or not for the death. I see no good reason for limiting the number to twelve jurors. By the present law, more than twelve are summoned, in order that twelve may agree

* Why should not a coroner be at liberty to take the opinion of an expert in law? At assizes, the judges often confer with each other on knotty points; at the same time, they are assisted by the arguments of counsel and references to statutes and law books. Would judges like to hold assizes without barristers to plead before them? yet barrister is only another name for the expert in law, whose services I claim for the coroner.

in their verdict; if they do not, they are adjourned, without food, drink, or fire, till next day; and if, still, twelve out of the fifteen or twenty cannot agree, the inquest may be adjourned till the next assizes, when they can have the assistance of a judge to aid them in coming to a decision. This is good sense.

Rank.—Your correspondents rightly urge that a coroner should be a magistrate. At present, he is only a subordinate judge of court of record, and the office is sought by medical men and lawyers to aid them in becoming known; but now-a-days, when so much technical knowledge is required, coroners should be medical men of special qualifications, and when appointed should be made magistrates *ex officio*, sitting on the Bench with other magistrates whenever they choose, having exactly the same rank. They should be appointed by the Crown, as no other authority can be trusted to make a proper selection. The present mode of election by the freeholders is absurd and most expensive. No coroner should be put to a farthing's expense for his appointment, which should be simply notified in the *Gazette*.

At present, a coroner must be a *freeholder*. This was a necessity in bygone ages, but is now an absurdity.

A very short Act of Parliament could brush away all anachronisms, and give a coroner as much power and rank as may be required to make him an useful and respected officer of State.

MR. H. M. CHAMPNEYS of Penge writes:

I think it most important and necessary that to every coroner's district should be appointed a public medical officer, who should be present at every *post mortem* examination, and that he should also when requisite make an analysis. It would, therefore, be necessary to appoint a highly qualified gentleman for this office, whose remuneration should be such as would preclude any necessity for private practice, though he would be a very valuable auxiliary in special consultations. In every case, the medical man in attendance should be present. The present system does not work satisfactorily. I will mention two cases which have occurred to myself.

I was called to see a child said to have been overlaid; it had been dead some two hours. I refused to give a certificate. The police informed the coroner, who sent word that I was to make a *post mortem* examination if I thought one necessary. I, in company with two friends, made one, and found a "fractured skull and extravasation on the brain". An inquest was held; I was not called; and the verdict, I afterwards ascertained, was "Death from natural causes".

Some months since, I was called at 5 A.M. to see a domestic servant. She had been dead three hours. She had not been well the previous evening, but had done her work, went out to see her mother, and to the chemist's, from whom she obtained some medicine, a dose of which she took on going to bed at 10 P.M. I refused a certificate. The police, as before, acquainted the coroner, who sent me a similar verbal message as in the former case. I was to make a *post mortem* examination if I thought it necessary. I declined to do so without an order. The mistress obtained the services of the district medical officer's assistant, who made a *post mortem* examination, at which, though invited, I declined to be present. In his opinion, there was sufficient "inflammation of 'one lung' to account for death"; and he gave a certificate. No analysis was made. I think, in this case, there ought to have been an inquest.

Dr. Charles Grabham, himself a coroner, says, in the *JOURNAL* of December 15th: "If Mr. Carttar's plan of ordering *post mortem* examinations, and then deciding himself as to the propriety" (it should be, I think, necessity) "of holding an inquest, were permitted, it would save much trouble and expense to the county, but I think it requires a medical coroner to decide this important question." I think differently. The coroner would simply, in this case, be acting on his view of the report or statement of the gentleman making the necropsy; and there must frequently be present many reasons why the whole circumstances of the case should be laid before the jury, and it is probable that a scandal would sometimes arise from a *post mortem* examination being made and no inquiry following. The expense ought not to be a question in these cases.

MR. J. HIGHAM HILL writes:

I have, during the last ten years, as Resident Medical Officer at the Royal Free Hospital and at St. Pancras Workhouse, personally attended and given medical evidence at more than six hundred inquests, and have been present at considerably more than double that number. My opinion is that the present machinery would, with some slight improvements, when duly and properly exercised, be ample to meet all reasonable and just requirements. It is highly desirable that the coroner should be a member of the medical profession and a gentleman of good professional and social position. In by far the majority of

cases, an inquest is altogether a medical inquiry as to the cause of death; and in any case tried before a coroner's court, the legal points are so limited and plain, that I believe that any well-informed and properly trained medical man who has obtained the position of coroner can direct the jury as well and ably as the occasion requires, besides being able to assist and direct them from a medical point of view. I have known many instances where the latter qualification has clearly been of great value.

With regard to the mode of election of coroners, I think that the candidate for the office should be nominated by a county or borough magistrate, and that the electors should be the freeholders on the franchise lists. The election of by far the majority of coroners has, for nearly a thousand years, been entrusted to the people, whose deaths, lives, and interests, it must be his chief duty to watch over and guard; and I do not think it ought to be placed in the hands of some State official to dispose of as he may think fit.

In reference to the question of having special officers appointed to make *post mortem* examinations, such a procedure would, in my opinion, be a most unwarrantable attack upon the honour, intelligence, and independence of the profession at large, and ought to be strenuously resisted. It would materially increase the expenses in most cases, as the expert would be required to give evidence upon the *post mortem* examination and the medical attendant upon the *ante mortem* symptoms, etc. I have witnessed a very large number of practitioners perform *post mortem* examinations, and from what I have seen and heard, I am of opinion that, as a rule, to which there are few exceptions, the medical men of the present day are quite equal in manual dexterity and pathological knowledge to the requirements of the subject, having due regard to law, public safety, and reason. I think, however, that the coroner should have the power in any case of death under direct or implied suspicion of foul play to call in, if he deem it necessary, and pay some recognised and appointed expert in pathological knowledge, such as the pathologist to a hospital, to aid the medical man in charge of the case, and they should report to the coroner as to the advisability or otherwise of submitting certain portions of the body to a duly appointed analytical chemist for analysis, which report the coroner should be empowered to act upon at once.

I am of opinion that in many cases a more full and strictly conducted preliminary investigation of the circumstances attending the death ought to be made by a competent and trustworthy officer; and after that, should an inquest be deemed necessary, one should be held in due form, a *post mortem* examination being made and the results properly recorded, whenever requisite to enable the actual cause of death to be clearly and definitely ascertained, if possible. In many instances, at present, the jury assemble at very considerable inconvenience to themselves to ascertain the cause of death of a person, and to return a true verdict thereon, and, for want of a *post mortem* examination, a very imperfect, and probably untruthful, verdict is returned; the sole result being that an expensive legal farce has been performed, and some such verdict as "Found dead in the waters of the Regent's Canal" returned—the mere statement of a fact which was well known before the Court assembled. I need scarcely say that the actual cause of death in such a case may have been a very different one from drowning; but, for want of a *post mortem* examination the case remains shrouded in mystery, and an easy mode of disposing of a dead body is published.

CHRISTMAS IN THE LONDON HOSPITALS.

THE recent festive season has been regularly observed by the patients in the Metropolitan Hospitals. The men, women, and children have all been regaled in a manner suited to their various tastes; and, where possible, the strictness of hospital regulations has been relaxed for the time being. We are enabled to furnish the following details respecting the doings at some of the hospitals.

CHARING CROSS HOSPITAL.

AT Charing Cross Hospital, on Christmas Day, the patients were allowed to regale themselves with a liberal dinner of roast beef and plum-pudding, where the medical orders did not forbid the same; and we may rest assured that, if error there were, it was on the side of too much indulgence towards the patients. The wards were not decorated to any extent, in deference to the wishes of the sisters in charge, who feared that the work necessary for such decorations would lead to disfigurement of the walls of the wards, which, since the reopening of the hospital, have been admired by all visitors. A very beautiful Christmas-tree was, however, to be found in the children's wards, and was

very prettily got up with all kinds of articles likely to please the inmates of the wards, which are amongst the most tasteful in the hospital. Numerous visitors attended and distributed the riches of the Christmas-tree to the children. The men were allowed to smoke in the evening; and it is satisfactory to think that no one has been the worse for the relaxation from hospital discipline. On Thursday next, the operating theatre will be turned to other than its usual purposes. We understand that a magic-lantern and like pieces of amusement will entertain the patients.

GUY'S HOSPITAL.

Christmas at Guy's Hospital was of the usual festive character. The inmates were regaled with an ample allowance of roast beef and plum pudding, to which the majority did ample justice; and an important adjunct to the meal, in the shape of dessert, with pipes and tobacco for the male wards, and toys and bonbons for the children, was liberally contributed by the students. All the wards were gaily decorated with holly and flowers, natural and artificial, according to the bent of their respective sisters, who were ably seconded in their efforts by the dressers and resident staff, who had spared no pains to make their work effective. A large body of ladies and gentlemen visited the wards at dinnertime to express sympathy with the patients, and to wish them, with the compliments of the season, a speedy return to health, and at the same time, to admire the flowers and devices, which all agreed were unusually attractive. On account of their novelty, the arrangements in the clinical and Luke wards are worthy of special notice. In the former, apart from the ordinary decorations, an energetic clinical assistant surpassed all previous ingenuity by extemporising a primeval forest over the central fireplace, while the latter was emblazoned with some excellent and appropriate cartoons combining the *genius loci* with the amenities of Christmas-time. One of these, the work of a former house-surgeon, is likely to attract more general and lasting attention, not only on account of its intrinsic excellence as a work of art, but as a practical commentary on the topics of the day, as exemplified by the lady-doctor mania. The picture is entitled "Guy's in 1877", and represents the operating-theatre crowded with golden-haired graduates, viewing, with evident satisfaction, the operation of the day, which the notice-board informs us is excision of the heart, male. After a brilliant performance, the organ is being held up by the lady operator in conscious triumph that she has surpassed her male predecessors, while the offices of sisters and nurses have descended to bearded members of the latter sex, with whom, by the way, another notice informs us, "the students are requested not to flirt". In the background, battling with the billows, are some excellent representations of the present esteemed surgical staff, hopelessly cast adrift from their moorings on the great ocean of the future. The picture, we believe, is a present from the artist to his old teacher, Mr. Cooper Forster, and is well worthy of a visit from all old Guy's men. The festivities passed off pleasantly; and next day, the patients professed themselves to be all the better for the temporary indulgence.

KING'S COLLEGE HOSPITAL.

The festivities were on a small scale. On both Christmas Day and New Year's Day the male patients were supplied with tobacco and whisky, and the female with sherry. The "sisters" visited the wards in the afternoon and sang carols. In the evening the residents went into them and sang songs, joining in with the patients. It is intended to have a Christmas-tree for the children about the 14th of the month.

ST. MARY'S HOSPITAL.

On December 27th, the annual Christmas entertainment was given to the patients. The arrangements had been so carefully made by Miss Williams and Mr. Juler, that it was impossible that they could result in aught but success. House-surgeons, sisters, and nurses had been for many days preparing a gigantic Christmas-tree, which was illuminated in the board room at about 6 P.M. The boughs were so richly laden with the fruit of the work of thoughtful friends that, bending under their joyous burden, they nearly upset the equilibrium of the tot blazing tapers; and it seemed as if the tree itself could only consummate its happiness in a gorgeous conflagration. One of the hand fire-engines, however, with which the hospital has been lately provided, was close at hand, but its services, which might probably have cast a damp over the whole assembly, not being required, it eventually retired to its corner in sulky silence. The great feature of the day was the able impersonation of Old Father Christmas by Mr. Thomas Norris, of The Lodge. He was so active in his distribution of toys, and other and equally useful presents; so ready to the call of the many anxious little voices, that it is no wonder that he was unrecognised by his oldest friends. After the tree had been dismantled (in considerably less time

than it took to dress it) a concert and readings were given by various friends. Perhaps this part of the entertainment might have been more appreciated (if that were possible) if the music had been a little lighter and more cheerful; so also with some of the readings. Hospital patients cannot keep their attention long fixed, nor care to have it drawn to pictures of sadness. When the patients had left for the wards a dance, in which the resident officers, sisters, nurses, and visitors joined, brought a most successful evening to a close.

WESTMINSTER HOSPITAL.

The wards were decorated much as usual; but being just out of the builder's hands, they looked prettier and brighter than usual. The patients were regaled with the ordinary Christmas fare.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE SALFORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.

We have received the annual report of the above-named Hospital. It describes its career as "a glorious success", and adds, "for the fiftieth time, the Institution appeals for more annual subscriptions. Let this year be in truth a jubilee!" But those who take a large view of medical charity, and who can look beyond the interests of any particular hospital or dispensary, will not find much cause for jubilation in this report. To tell us how the number of patients has gradually increased from sixty a week to more than two hundred a week, is a proof of success which will satisfy only those who know nothing about the subject. The report goes on to say: "During the past year, the circumstances of every individual recommended for admission to the benefits of the charity have been carefully inquired into by a trained visitor; and the Board can with confidence state that the whole of the seven thousand and seventy-three out and home-patients who have received medical or surgical treatment were fit and proper objects of charity and unable to help themselves." This is all very well. But, as our readers are aware, there is in Manchester and Salford a Provident Dispensaries' Association, which is desirous of co-operating with all the medical charities, and is willing to investigate their cases for them, with the view of bringing the whole system of medical relief into harmony with the improved condition of the working classes at the present day. From this Association the Salford and Pendleton Hospital stands aloof. We cannot but think that its investigations would be more thoroughly and more economically carried out if it were to co-operate with the Association; and it would then help, and not hinder, the important experiment in medical relief which is now being made in Manchester.

SHILLING DISPENSARIES.

EVERY good thing is liable to spurious imitations. The provident dispensaries which are now being multiplied all over the country, to the advantage both of the poor and the medical profession, are being followed by a plentiful crop of "shilling dispensaries". The latest example of this class of dispensaries to which our attention has been drawn, is at Dorchester. From a recent number of the *Dorset County Chronicle*, we learn that "Mr. E. J. Day, surgeon, has opened an institution of this useful and commendable character at his residence on Fordington Green". The third rule states that, "by paying 1s. when patients attend the first time in each week, advice will be given, and one, two, or three bottles of medicine, as the case may require, provided the three visits are within the seven consecutive days". The fourth rule informs us that "all pills will be coated, in order to render them perfectly tasteless". The eighth rule states that "maternity cases are attended in Dorchester and Fordington for 7s. 6d.". The tenth rule says: "The fee for removal of a tooth is 1s.; but, on payment of 2s. 6d., it will be extracted without pain by means of laughing gas (nitrous oxide)." The fewer that we have of these "useful and commendable" institutions the better. They are sure to degrade the medical profession, and to pauperise the patients. We wonder that Mr. E. J. Day is not afraid that all the old women in Dorchester who attend midwifery cases will rise up against him for infringing their prerogative.

BEQUESTS.—Mrs. Julia Ann Dobie, late of Houghton Place, Annet-hill Square, who died on September 14th last, has left £300 each to the Hospital for the Paralysed and Epileptic, the Victor Hospital for Children, the Royal Free Hospital, University College Hospital, and the Seaside Convalescent Hospital.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:
NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 9th day of January next, at Two o'clock in the afternoon.

FRANCIS FOWKE,
General Secretary.

36, Great Queen Street, London, W.C., December 22nd, 1877.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Examination Hall of the Queen's College, on Thursday, January 10th, 1878. The Chair will be taken by the President, SAMPSON GAMGEE, Esq., at Three o'clock P.M.

Mr. Gamgee will exhibit a new form of Sayre's Apparatus for the Treatment of Spinal Disease.

The following papers are promised.

1. Dr. A. H. Carter : On the Determination of Sugar in Urine.
2. Dr. Foster : On Sudden Death in Diabetes Mellitus.

JAMES SAWYER, M.D., }
EDWARD MALINS, M.D., } *Hon. Secretaries.*

Birmingham, January 2nd, 1878.

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the Branch will be held at the York House, Bath, on Wednesday evening, January 30th, at a quarter past Seven o'clock: H. MARSHALL, M.D., President.

The evening will be devoted to the discussion of Hospitalism, which will be opened by R. W. Tibbits, M.B.

R. S. FOWLER, }
E. C. BOARD, } *Honorary Secretaries.*

Bath, December 31st, 1877.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT
MEETING.

THE second ordinary meeting was held at the library of the County Hospital, Canterbury, on Thursday, November 22nd, at three o'clock. There were present, Mr. RIGDEN in the Chair, and nineteen members.

Resignation of Honorary Secretary.—Mr. THURSTON, the Honorary Secretary, tendered his resignation, and stated that pressure of work, caused by increasing practice and the lamented death of his partner, compelled him reluctantly to take this step.

Mr. REID proposed the following resolution, which was seconded and carried unanimously: "This meeting, on behalf of the East Kent District of the South-Eastern Branch of the British Medical Association, while expressing deep regret at the circumstances which have compelled Mr. Thurston, though greater demand on his valuable time, to resign the secretaryship of the district, desire to tender him the cordial thanks of the members for the kind, zealous, and business-like manner in which he has uniformly carried out the duties of the office, and also for the material improvement he has effected in the character and strength of the meetings."

Election of Secretary.—Mr. W. Knight Treves of Margate was elected to succeed Mr. Thurston.

Papers.—Mr. T. WHITEHEAD REID read a case of Poisoning by Vew-Leaves (reported in the JOURNAL for September 29th, at p. 442).

Mr. TYSON read a case of Poisoning by Phosphorus.

Mr. RIGDEN read a report of two hundred Forceps Cases which had occurred in his practice during the last eighteen years.

Interesting discussions followed each of these papers, in which Dr. Loché, Dr. Parsons, Dr. Lewis, Dr. Bowles, Mr. Garraway, Mr. Hlayward, Mr. Thurston, and other members, took part.

The Next Meeting will take place at Dover; Dr. Robinson in the Chair.

Dinner was served at the Fleur-de-lys Hotel.

DR. EDWARD JONES of Caerffynnon, Dolgelly, qualified as a magis:rate for the county of Merioneth on the 1st instant.

CORRESPONDENCE.

A LOST MEDICAL SCHOOL.

SIR,—Two Commissions are now sitting, whose duty it is to make better provision for teaching and research in the Universities of Oxford and Cambridge. No one who looks back into the old history of those Universities can doubt that there exists in both Universities a great need for very considerable changes in respect to both teaching and research, and especially in the department of medical teaching and biological research.

In the middle of the seventeenth century, the most important advances in medical knowledge were made in Oxford at the hands of members of the University, who became the founders or early promoters of the Royal Society. It was there that Willis, as Professor of Anatomy, worked out his anatomy of the brain, having as his assistant and demonstrator the young mathematician Christopher Wren, who subsequently became the architect of St. Paul's Cathedral. Wren drew the plates of Willis's work: he was the first to perform a series of important experiments on living animals by injection of fluids into the veins, on which ultimately was based the practice of transfusion. These experiments were done in Oxford.

The close association of the study of medicine with Oxford will be at once recalled to mind, without entering into archæological details, by mentioning the name of Radcliffe, the great physician who founded the Infirmary, who was physician to three sovereigns, and by whose benefaction the Radcliffe Library and the Radcliffe Travelling Fellowships were established. The Regius Chair of Medicine in the University dates from the reign of Henry the Eighth, who was its founder; and to this a Chair of Clinical Medicine was subsequently added. The illustrious Harvey was warden of Merton College, and much of his work was done at Oxford.

It would be idle now, in the present state of the decadence of medical study and biological research at Oxford, to think of finding parallels in University position for such men as Radcliffe and Harvey. As a medical school, Oxford has, within the last twenty-five years, ceased to exist; and it is important, therefore, at this juncture, to notice the steps by which it has been crushed into nothingness, and to protest against the studied neglect by which the Oxford Medical School has been wiped out. There exist now neither lectures on medicine, anatomy, or physiology, properly so-called, or in any sense which can affect the progress of medical science. Prior to the appointment of the present Regius Professor of Medicine, who must be held responsible to the profession for the degradation of the Oxford School, and for the conversion of his office into a sinecure, there were still a few medical students lingering in Oxford. Dr. Acland must be held responsible for having extinguished the genus, of which there no longer remains even a typical specimen to set alongside of the dodo in the Ashmolean Museum. There are no lectures to fatigue the energies of the Regius Professor; and, notwithstanding the delusive notices which from time to time appear in the *University Gazette*, there is no attempt to fulfil the duties of the Regius Professorship of Medicine otherwise than by pocketing its stipend. If the Regius Professor, in the terms of these notices, ever really attends at the Museum to meet the ghosts of the imaginary medical students whom he solemnly cites in print to confer with him on their studies, it would be interesting to know in what soliloquies he indulges, or by what arguments he justifies a course which has led to vacuity and annihilation where once medicine flourished and science found its home.

The Chair of Physiology, founded by the late Commissioners of 1854, has been equally diverted from the service of medical science and of physiology proper. Founded on the remains of the old Chair of Human Anatomy, the present holder, Professor Rolleston, occupies himself and his pupils with any variety of collateral subject, provided that it has no relation to human anatomy and physiology, and cannot

possibly be pressed into the service of medicine. Saxon interments, early ceramic ware, and prehistoric pigs monopolise the attention of the successor of Willis; and it is not surprising that medical students do not consider their wants to be provided for by teaching of this kind.

The examinations of the very few persons who, having studied medicine elsewhere, present themselves for the Oxford degree, are conducted by heavily paid non-resident examiners, a large proportion of whom are not members of the University. It is not in this way that the University of Oxford can fulfil its obligations as an Alma Mater of the highest historic fame and of great accumulated wealth; nor can it regard without shame its Medical Faculty, which has now become a mere simulacrum and the derision of Europe.

The Radcliffe Infirmary, with its two hundred beds, is unused for medical instruction; and the clinical conferences, which are announced with the same pomp in the *University Gazette* as the professorial lectures, are as much an empty sham as they are.

At a recent date, the Medical Faculty of the University of Oxford preserved a nominal existence; and in the *University Gazette* we read—Medical Faculty: Regius Professor, H. W. Acland (no lectures); Clinical Professor, H. W. Acland (no lectures). This, however, probably exposed too plainly the peculiar manner in which Dr. Acland understands his duty to the profession and in which he administers his historic office. The Faculty has, therefore, been removed from even nominal existence, and this professorship appears now only under the head of Physical Science and Mathematics, to which latter department it is probably considered more properly to belong, as having only an abstract existence. The Professorship of Physiology and Anatomy is scheduled under the same heading, the contempt of its incumbent for medicine being thus officially proclaimed.

Under these circumstances, it will be seen that there is a very urgent need for very active proceedings on the part of the Commissioners to restore medical teaching and biological research to their proper place in the University of Oxford. The medical profession has a large and direct interest in helping to procure this restoration. The severance of medical study from this great University is a direct loss to medicine and an injury to the profession, which it places almost outside of academic influences at these great centres. It is no less an injury to the Universities. The examples of Edinburgh and Trinity College, Dublin, show how much an University has to gain, as well as to give, by fully carrying out the recognised functions of an University in respect to these higher studies. The meanest of the German Universities does not neglect its duty in this respect as do the two premier Universities of England. It ought not much longer to be tolerated that Oxford and Cambridge should be monopolised in merely pedagogic and clerical interests, and abandon their obligations to the vast national interests which are involved in the academic training of men for the great professions, such as that of medicine.

It might be expected that the General Medical Council of Education for Great Britain would, on this important occasion and in this vital matter, take some earnest step in support of the large measure of reform which is needed to restore the efficiency of medical teaching at Oxford. But, as its President is the Regius Professor who declines to class himself under the Faculty of Medicine, and as the Oxford medical representative at the Council is the gentleman who teaches anatomy and physiology by exhumation and ceramic research, it would probably be more than Quixotic to expect any useful action to be taken by that body.

Professor Acland may be able to explain what are his views as to the extinction of medical teaching in his University, and Professor Rolleston may have unascertained opinions as to the most efficient teaching of anatomy and physiology; if so, it would be consolatory, at least, to be informed of their springs of action. At present, it is difficult, while mourning over the memories of the school which they have extinguished, not to hold them distinctly and personally responsible for something like treason to the Faculty which they represent, and the profession in virtue of whose titles they hold their positions.—I am, sir, yours faithfully,

A MEMBER OF CONVOCATION.

HARVEY AND HIS CONTEMPORARIES.

SIR,—In connexion with the controversy regarding Harvey's claims to be regarded as the discoverer of the circulation of the blood and of the functions of the heart, it is interesting to meet with any evidence that indicates the state of knowledge on these subjects among his contemporaries, notably among Italians, who are asserted by some to have received the true doctrine from Cesaipino, Servetus, and others, before Harvey taught the results of his researches. Some MSS. have recently been discovered in Hamburg bearing upon the history of medicine in the first half of the seventeenth century, from which Dr. W. Sieveking of that town has been kind enough to send me extracts. One of these is taken from a letter written by Petrus Castellus, Professor of Anatomy and Botany (a combination which appears to have prevailed at that time) at Messina in 1636, to Schlegel, who occupied a prominent position at Hamburg, and had a large personal acquaintance with the scientific press of Holland, England, France, and Italy, of his day.

The extract which follows may fairly be adduced as a further proof that the Italians were not acquainted with the true doctrine of the circulation of the blood before Harvey appeared; and that, if they adopted the term, it was only to meet the requirements of a vague hypothesis. After stating his general adhesion to the views propounded by Hippocrates, with the qualification that he entertains certain opinions not commonly accepted, Professor Castellus goes on to say: "I mean, God willing, to show clearly that Galen was ignorant of the true nature of fevers. But what Harvey has written concerning the circulation of the blood is unknown to me. Neither his book nor his doctrine has reached me yet, so that I cannot understand what circulation he means. I am satisfied that Hippocrates teaches a circle and flow of the blood, which, never resting, and of necessity always moving, if it move, will move not only by a tremulous movement, but in a current, *i.e.*, from place to place; but, as there is no ultimate goal towards which it tends, and where it may attain rest, and the movement is uninterrupted, it follows of necessity that the blood has a circular movement, otherwise it could not go on for ever. Besides, his worship appears, like Harvey, to assign this circulation of the blood as a cause of febrile periods. Nor do I deny that remedies applied to the wrist may sometimes stop a fever, for I have repeatedly seen it. But, in discussing the effect of opiates in my *Antidotarium*" (probably the title of a book), "I have said, as Hippocrates does, that narcotics put an end to fever by inducing quiet in the blood, and that they check the movements of the spirits, or, as it were, congeal them. Possibly Harvey has termed this movement of the spirits the circulation of the blood. Most willingly would I read his works, as his views are unknown to me; but new books rarely find their way to these remote regions."

It is scarcely to be assumed that Castellus had not in 1636 seen the works of Cesaipino, which were published at Venice in 1593; and, had he in them discovered anything approaching to the Harveian doctrine of the circulation, he could not have failed to allude to it in writing to a man who had lived for some time in familiar intercourse with the great students of Italy, and was known as the main advocate and supporter of Harvey's views on the continent.

My correspondent also speaks of the discovery of the MS. sketch of an autobiography of Schlegel, whose admirable exposition of Harvey's views in a small volume entitled *De Sanguinis Motu Commentotio* (Hamburg, 1650) deserves to be better known than it is. The approaching tercentenary anniversary of Harvey's birth renders every authentic contemporary reference to him of special interest; I venture, therefore, to add a translation of a short extract, in which Schlegel speaks of his visit to England.

"I was detained in France by storms, and by the illness of my companion Ering, for ten days; I then crossed the sea in safety, and satisfied my desire to behold the royal town, the essence of all England. I spent four months there without any great advance in my studies, as I devoted myself chiefly to the work of acquiring the English language. I had the opportunity of seeing and making the acquaintance of the following celebrated men. One was *Theodore de Mayerne*,* the chief physician of the King of England, a man not less successful in curing disease than he was celebrated throughout England and France by his vast erudition, whose learned manuscripts are enviously handled by the literati of Europe—works which everybody is asking for, and the world wishes to see published. I have also been on intimate terms with *William Harvey*, physician to the king, who, in his published booklet on the circulation of the blood, was the first to display the true course of the beneficent liquid by his ingenious dis-

* Schlegel calls him Theodosius Mayer Turquetus; and Dr. Munk informs me that "Turquet" was regarded by some as a nickname, though he does not endorse this view.

covery, and thus smoothed the most thorny controversies of our art and the harsh difficulties of the ancients. I have hitherto fought tooth and nail for Harvey's views, have publicly taught them to the students of the schools of France and Italy, and have unfolded this most true and essential doctrine by many demonstrations to medical men."

It is proposed to celebrate Harvey's birth in 1878. I venture to suggest that no better monument could be placed to his memory than the publication of the work which was the first to do him full justice, and which materially aided in making his views known throughout the world. I allude to Schlegel's *Commentatio*, which is admirably written, and shows a perfect appreciation of the revolution in our physiological knowledge which Harvey's discovery was destined to effect.

—I am yours, etc.,
London, December 1877.

EDWARD H. SIEVEKING, M.D.

THE OUT-PATIENT DEPARTMENT OF HOSPITALS.

SIR,—I have read with pleasure, in the JOURNAL of December 15th, an article by Mr. Furneaux Jordan on Hospital Administration, in which he does me the honour to refer to some opinions which I have expressed on the subject of the out-patient department. As I hope shortly, with the aid of the British Medical Association, to bring this matter more into the arena of public discussion, I should be much obliged to you if you would allow me to state concisely and exactly what my views are. In the first place, allow me to say that they apply only to London, and are based on the fact that the metropolis has been consolidated by Mr. Gathorne Hardy's Act into an area under the Local Government Board, who are empowered and directed to found in all parts of it out-patient dispensaries for such sick persons as are unable to pay for medical attendance such a small sum as would entitle them to the membership of a provident dispensary. These Poor-law dispensaries have been founded in all parts of London at the cost of the ratepayers, and are, I believe, admirably organised and superintended by the medical inspectors of the Board. But I believe they are by no means overfull of patients, the old prejudice against Poor-law medical relief being (as Dr. Rogers has often pointed out) still strong among the poor. Nor can we wonder that such a prejudice should long survive when we remember that the state of things which was brought to an end, in a great measure, by your own personal exertions, in company with the late lamented Dr. Anstie. However, it is no longer deserved, and I think I am justified in saying that, in London, no poor person need apply for out-patient medical relief as a matter of charity; for, if he be too poor to subscribe to a dispensary, he can have medical relief of the most efficient nature from the Poor-law dispensaries. Turning to another aspect of the question, I think no one would seriously deny that (speaking still of London only) a great deal of our out-patient relief is superfluous, and a great deal is not efficient. I do not speak so much of the cases of well-to-do persons who are believed to attend out-patient departments. There is no doubt that there is a certain proportion of such persons at special institutions; but such special institutions are often hardly public hospitals in any genuine sense, and we need not here inquire whether all the patients are really gratuitous. There is obviously no public reason why they should be so. But I refer more to the crowd of utterly trivial and routine cases which load our out-patient rooms. We are told that the reason why hundreds of patients are admitted every day at some of these institutions is in order that, out of this mass of chaff, a few grains of wheat may be winnowed; that a few interesting or important cases may be selected for treatment as in-patients. But is this necessary, and is it really done? Mr. Jordan has well pointed out its admitted evil effect in completely destroying the ample field of clinical instruction which the out-patient room ought to afford, but which it now cannot possibly afford, unless the physician or surgeon neglects his primary duty, that of attending to his patients, for what is, after all, as far as the hospital is concerned, only a secondary object: the instruction of the students. I know that some out-patient officers have imparted most admirable clinical instruction to their classes; but it has always, I believe, been done by transferring the great bulk of the routine work to assistants.

Now, the plan I advocate aims at remedying these evils by substituting a small number of well selected cases for a crowd of cases not selected at all; at least, if selected, selected only with reference to their pecuniary condition: quite a subordinate consideration in this matter. I contend that there are no more worthy recipients of hospital relief than the poorer members of the middle classes, but then with the proviso that their medical condition is such as cannot easily be relieved otherwise. I would make the hospital, both in its in- and out-patient department, a consulting institution for those who cannot pay consultation fees exactly as the medical staff are consultants

for those who can; and I would admit no one to the out-patient department (except street-accidents and such like emergencies) but those sent up by some medical authority. I would limit the number of the cases, and would introduce some regulations (which could be easily devised) by which order and despatch in seeing the patients should be secured. There would then be ample leisure for medical and surgical teaching, and a constant supply of material. The absurdity and cruelty of keeping a poor patient waiting for four or six hours, and then scratching a "P" on his paper and serving him out a bottle of useless physic, would be at an end; and it might even be possible to engraft on the out-patient department visits at the patients' own homes, and that instruction in home practice which our present race of students so greatly need. I am quite aware that, as Mr. Jordan too truly says, this suggestion cannot be at once brought into practice, and I agree with him that, for any out-patient reform, the co-operation of the out-patient medical officers is essential. But I believe that it is equally essential to make the general public see that the present system wants reforming, and that, in London at least, all pretence of necessity for the large out-patient departments which are still kept up at our great hospitals has been taken away by the institution of the Poor-law dispensaries. Our London hospitals are great schools of medicine, and many of our out-patient officers are among the best clinical teachers of the day. It is cruel to waste the energies of such men on the caricature both of charity and of medical practice too frequently exhibited in our out-patient rooms.

In fine, sir, my main object in taking up this question is to make the out-patient department a more efficient field for clinical instruction, and I wish to make the public understand that this is as much a public as a professional object. It is too much the habit of laymen to regard the medical school as a "doctor's business", and to direct the whole of their attention to charity. The fact is, that the teaching functions of our great hospitals are quite as much matters of public importance as their purely charitable functions, though the latter are, of course, and must always be, the primary object of the governors; and I am sure no intelligent lay governor could attend the practice of a crowded out-patient room without seeing the waste of teaching power that goes on there, and recognising it as a loss equally to the hospital and the public.

The same principles will apply generally to country hospitals and to those which have no medical school; at least so far as this: that no person ought to be admitted who is not in real want of a consulting opinion, and that every person ought to have a fair share of time and attention given him; but the exact application of the general principles must vary with the arrangements made for providing the poor with out-patient relief gratuitously and by clubs, provident dispensaries, or similar societies.—I am, sir, yours, etc.,

T. HOLMES.

18, Great Cumberland Place, December 19th, 1877.

PHYSICIANS' FEES.

SIR,—If any, what kind, and how much, of evidence more is needed to prove the inconsistent variety of modes of practice followed, and opinions held, by the Fellows of the Royal College of Physicians of London, than that shown in the three letters contained in the last two numbers of the JOURNAL? Their authors claim to be "consulting physicians". What is a consulting physician? One who consults with another practitioner of medicine, or one whom anyone consults? Fellows of the College of Physicians of London do both. For fees? Yes. Of what amount? One takes it upon him to see a patient three times for a guinea; another twice for that sum; all for that sum; a sovereign sometimes, it would appear. What kind of cases? Professor Erasmus Wilson is a surgeon; Dr. Tilbury Fox, I believe, is a F.R.C.P. These two have their *specialty* on man's outside; they see women and children also. Mr. Spencer Wells is a surgeon; Dr. — is a physician. These have their *specialty*, in a way, inside; and both are operators. I cannot call the last an operating or consulting surgeon; for he is an operating physician. I take it that—to use that high sounding title—gynaecological physicians and Fellows would not claim rights of practice as surgeons because they turn their attention to women's ills.

Would the operating physician and Fellow of the London College of Physicians excise a tumour from parts external? I think it possible he would, if the terror of outside surgeons and doctors were not within his view. *Honorarium?* No; or honour, one would think, would hold him to a fee hallowed by tradition, as well as to the cherished power (and shall I say pride?) of shutting out the power of recovery of fees.

Does the College of Physicians of London fulfil its mission in hold-

ing to the exclusiveness it professes whilst such *licence* is rampant in it? I trow not. Would an acknowledged *liberty* not be better for the College, the profession, and the world? The world will ever look for the best at the lowest rate, and the highest in rank will not seldom be found the meanest, the most exacting.

Let the College, sir, begin to live again. Let it look back in its records at what Dr. C. J. B. Williams and a few others tried to infuse into its "dry bones" a few years ago. Let it open its gates wide, that the so-called general practitioner may come into its councils openly; for well, and in all truth, can he say to the College, "Of such are some of you".

* Is the exclusive, the disdainful, the "mulcting" spirit evidenced in the Ex-Censor's letter to be prized? His views are those of a small selfishness, not of a healthy catholicity that would give place, and pelf, and power alone to those of power inherent, and whose work had proved them worthy of all. I should not be surprised if the ex-censor takes guinea fees. Why should all who have held office in the College not ever take less than two guineas? This would seem a step, if taken, in the right direction. The juniors might then begin to live and breathe more freely, and a chance be given them, like the cream, of rising to the top, of being the cream of the profession, highly paid and placed and prized, ere the days come to them when "the keepers of the house shall tremble, and the strong men shall bow themselves".

—Yours obediently,

M.D.

January 1st, 1878.

THE ORGANISATION OF CHARITY IN HOSPITALS.

VI.

SIR,—In my last letter, I enumerated at some length the principal measures which had been taken during the last seven years by the advocates of hospital out-patient reform, making some reference also to their more important utterances both in the press and at public meetings. Some length of time, however, elapsed between the writing of my letter and its appearance in your columns. It may, therefore, be well for me briefly to chronicle two events which occurred during the interval. I refer to the meeting held in the rooms of the Medical Society (relating to which a leader appeared in your issue of August 4th), and to papers on Out-patient Reform and Provident Dispensaries read to the Public Medicine Section of the annual meeting of the British Medical Association by Mr. Nelson Hardy and Dr. Henry Monckton respectively. The outcome of these meetings was that, at Chandos Street, Mr. Timothy Holmes consented to become Chairman of a permanent Committee whose duty it should be to perfect the system of provident dispensaries, and their co-operation with and affiliation to the hospitals; while the result of the discussion in the Section was, that the Association was recommended to give to a specially appointed Committee full power to promote such changes as might appear necessary, and to investigate and report upon the present system of provident dispensaries in Manchester. I am not aware whether any plan of co-operation between these two Committees has been initiated; but, if not, some such combination will no doubt be at least considered when the season of more active work returns.

I purpose now, if you will permit me, to furnish an account (for which, I regret to say, materials are far from abundant) of the chief reforms that, as a result of prolonged agitation, have been undertaken by the metropolitan and by a few of the provincial hospitals.

In the year 1873, the subject had already, for a period of three years, been receiving considerable attention; and in that year the Committee of the Hospital Out-patient Reform Association had transmitted to fifteen general and to thirty-three special hospitals recommendations for reform, accompanied, as the report stated, by letters addressed to the secretaries of those institutions, asking them to bring the proposed alterations under the notice of their respective governing bodies, and to favour the Committee with their reply. The results of this measure, as indicated by the answers received, were as follows. Eighteen of the institutions made no reply whatever; six simply acknowledged the receipt of the communication; four (University College, the London, the Royal Free, and the East London Hospital for Children) stated that "the matter had been referred to a committee for consideration"; five (Guy's, the Charing Cross, the Royal Infirmary for Women and Children, and two ophthalmic hospitals) stated that "they did not consider any of the proposals of the Association were applicable to their case". One hospital (the Great Northern) stated that "proceedings were in progress which would, it was believed, harmonise with the objects of the Association"; and one (the Westminster) informed the Committee that the authorities there were quite willing to act, provided that others did the same. Of the remaining thirteen, by which alone specific replies were sent to the recommenda-

tions forwarded by the Association, only nine were able to state that they had already put in force the second suggestion; namely, "that a lay officer be instructed to see that the charity be not abused by persons coming who are able to pay".

This *résumé* of the attitude taken by the governing bodies of the London hospitals towards reforms at once so important and so urgently needed is not, to say the least of it, encouraging; and the subsequent history of the agitation can scarcely be said to be more so. Sir Charles Trevelyan, in his paper on Metropolitan Medical Relief, read at the rooms of the Society of Arts last April, has indeed stated that "the special hospitals have to a great extent acted upon the recommendation of Sir William Fergusson's Subcommittee 'that all patients who can afford it should contribute to the support of the hospital'; and that, "while these hospitals are entirely free to the necessitous poor, a large proportion of them receive, in some form or other, payments from patients who, although they cannot afford the usual professional fees, are above the necessity of purely gratuitous aid". Although, however, this is unquestionably a step in the right direction, as special hospitals are too frequently resorted to without compunction by a class even better able to afford payment for medical attendance than are the more well-to-do patients at the general hospitals, yet, in the absence of any adequate investigating machinery, or any co-operation, for purposes of investigation, with the local Committee of the Charity Organisation Society, it is to be feared that there can be very little just discrimination between those who can and those who cannot afford to pay; and that the reform is, in most instances, very far from thorough, either as to the adequacy of the payments made, the number of those patients required to make them, or the influence of the plan in creating provident habits.

As to the general hospitals, the number of their out-patients is far greater; and, though a few have made improvements and taken measures which, under the circumstances, cannot be too highly praised, there are, it is to be feared, scarcely any in which the reforms can be said to be complete; while those which are pre-eminently the largest, the oldest, and the wealthiest (including St. Bartholomew's, Guy's, and St. Thomas's, with their yearly total of two hundred and seventy-four thousand out-patients), have resisted every appeal, and have refused to make the smallest attempts at reformation.

I believe that the following brief catalogue will be found to include all the hospitals which have consented to consider the question, and will also give a fair idea of the result in the case of each; but, if the information I have been able to obtain from direct correspondence with the hospital authorities and from other sources should, by its publication in your columns, elicit evidence of improvements which have escaped my notice, I shall feel glad to have been the cause of their being more widely known.

The Great Northern Hospital, which at one time attained an unenviable notoriety by giving preference to those patients who could pay a fee of half-a-crown, has set itself to the work of reform with exceptional earnestness. For a time, the out-patient department of this hospital was totally closed—partly, it is said, on account of the abuses observed in its administration; and in December 1875, after it had been reopened, there was read at the Council of the Charity Organisation Society a letter from the Hon. R. Capel (the honorary secretary of the hospital), expressing his strong opinion that a provident dispensary should be attached to every such institution, and that even the dispensaries themselves should take precautions to exclude from the privileges of membership persons able to pay in the ordinary way for advice. Mr. Capel expressed some doubt of the advisability of any entirely gratuitous medical relief at hospitals, and explained that the Great Northern was probably the only hospital in London that had upon its staff an officer whose sole duty it was to register the out-patients, to inquire into their circumstances, and to report regularly to the Executive Committee. In his speech this spring at the house of the Society of Arts, Mr. Capel gave further particulars with reference to the plan adopted; and from his statement, as well as from information supplied by the Secretary of the Great Northern Hospital, it appears that the method pursued is as follows. The names of out-patients having been registered, certain questions as to earnings, social status, number of children, etc., are put to them, and relief is generally given on the occasion of the first application. The officer then visits the homes of a certain percentage of the applicants, and verifies their statements; and the cases are accepted or rejected according to a certain scale of wages. I may here remark, however, that the experience of the Charity Organisation Society in investigating some nineteen thousand cases *per annum* goes far to show that inquiries confined to domiciliary visits do not elicit full and exact information as to the earnings of families.

With reference to the Children's Hospital, Great Ormond Street, I

believe that a final scheme is still under consideration; but, as I have stated elsewhere, the plan pursued at this institution is to relieve all applicants at their first visit, and afterwards to refer them to one of the forty offices established by the Charity Organisation Society in the various Poor-law divisions of the metropolis. Inquiries of a very thorough character are then made with reference to earnings; and, in the absence of special circumstances, all applicants earning more than thirty shillings per week, or receiving Poor-law relief, are excluded. By this system, which has been in operation for some two years, the annual number of out-patients has been reduced from thirteen thousand to nine thousand; while in only 34 per cent. of the cases investigated did the patients find themselves in a position to make a second application. These facts, it may be observed, contrast somewhat remarkably with Mr. Capel's statement that, since the adoption of the plan in force at the Great Northern Hospital, "the number of out-patients has been but very little diminished".

For the Royal Free Hospital, similar inquiries were conducted by the Charity Organisation Society; but, as far as I have been able to ascertain (although the investigation of 641 cases showed only 36 per cent. to be suitable objects of medical charity), no steps towards reform were taken, or are in contemplation.

In the district of St. George's, Hanover Square, the local committee of the Charity Organisation Society has, from time to time, urged upon the authorities of the well-known institution at Hyde Park Corner the importance of out-patient reform; but the only result, as far as I am aware, has been that a very few suspicious cases are referred for investigation to the committee; while the number of out-patients has been limited, and all of them are subjected to some questioning by the secretary or his assistant.

A similar plan has been pursued in St. Mary's Hospital, Paddington, excepting that in the place of the personal interrogation of the patients by a paid officer, there is a weekly examination of the books by a small committee. An investigation of the circumstances of 26 out-patients at this hospital showed (says an article in the *British and Foreign Medico-Chirurgical Review*, January 1875), that only seven applicants were proper objects of charity.

In three of the hospitals that I have mentioned (the Great Northern, St. George's, and St. Mary's) no further reforms are, I understand, in contemplation; and the results of inquiry have even, it would appear, tended to confirm the authorities in their opinion that the extent of the abuses in question has been exaggerated.

At the Charing Cross Hospital, the subject was referred to the medical committee, who reported that the evil was not as grave as had been supposed. It was not, therefore, proposed to alter the existing system, in which there appears to be no other check than the discretion of the person bestowing the letter. The Council admit, however, in their "Notice to Subscribers", that "they had reason to fear that many persons apply for and receive relief who are not proper objects for public charity".

At the London Hospital, in 1874, governors and subscribers were requested to sign a statement, justifying the recommendation of the person applying for medical relief. The tickets also were furnished with a notice, cautioning applicants that their circumstances might, if it appeared necessary, be inquired into.

At the Westminster Hospital, the subject was at any rate very fully considered. Subcommittees were successively appointed, whose reports were far from harmonious; but the chief final results were registration, stricter observance of the hours of admission, and a discretionary power vested in the medical officers.

King's College Hospital has also, I am told, appointed a "Registrar"; but I have been unable to ascertain that any other steps have been taken, excepting that a few cases are occasionally sent to the Charity Organisation Society for investigation. It is right, however, to add, on the authority of Sir Charles Trevelyan, that the number of out-patients, although it has not been subjected to any fixed limit, diminished, under the influence of this revision, from 33,866 cases in 1873 to 21,347 in 1876.

The Royal South London Ophthalmic Hospital has made arrangements with the Charity Organisation Society for conducting investigations, similar to those undertaken for the Children's Hospital by the same body; but I am not aware to what extent the plan has been carried into effect.

Another reform, which is well worthy of mention, has been undertaken by the authorities of the Royal Infirmary for Women and Children. A few months since, when this institution was reopened after enlargement, it became the rule that one penny per week should be paid by each out-patient, and sixpence per week by the parents of each in-patient child; and the sums so collected last year amounted to £120.

The Jewish Board of Guardians, it should here be noted, have in this

matter shown their usual readiness to adopt enlightened views of philanthropy, and, so long ago as 1873, had effected a very thorough reform in their administration of medical charity. Finding, after an experiment of three months, that no hardship had been experienced in consequence of the entire suspension of medical out-relief, and being fully alive to the very serious abuses which had accompanied the former mode of its administration, the Board discontinued it *sine die*, continuing, however, in serious cases of illness, to afford medical attendance at the homes of the patients.

Turning to the provinces, we find that reforms, at least as well worthy of record as are those promoted by metropolitan charities, have been carried out with success in several of the largest country towns, but in concluding a letter, already, I fear, too long, I must content myself with a very brief mention of a few of the more important, reserving for another occasion the specially successful and interesting experiment which has been tried in the City of Manchester.

In Birmingham, dissatisfaction with the evils of the old systems of indiscriminate relief and governors' tickets led, in 1873, to an investigation of a number of Queen's Hospital cases by the agents of the local Charity Organisation Society. In 1874, a subcommittee presented a report on the whole subject, pointing out, as the chief evils of the then existing system, the admission, both as "emergencies" and by subscribers' tickets, of in-patients well able to contribute towards their own maintenance; the abuse of the out-patient department; the indiscriminate distribution of the tickets; their transference, and even in some cases their sale; the triviality of many of the ailments; the discouragement to provident habits; and, lastly, the utter uselessness of this kind of relief to the very poor, unless it be accompanied by a sufficient supply of nourishment. In 1875, therefore, the patronage system was abolished as regards ordinary subscribers, while it was resolved that "governors" also should be requested to surrender their privileges.

The Hambrook Village Hospital and the Stapleton Dispensary (referred to in a letter from Dr. Davey, reprinted in your column towards the end of 1873) afford instances of institutions which, though scarcely provident in the strict sense of the word, have yet contrived to mitigate the worst evils of the purely eleemosynary system, by requiring weekly payments from their patients.

A reference, however brief, should also be made to the Royal Albert Hospital, Devonport; the out-patient department of which institution has, for some years, been carried on upon the provident principle. It appears that, in 1874, the contributions from members amounted to £509, and those received from other sources to £86; while the medical officers received in the same period £256.

Considering, retrospectively, the whole subject, and comparing these few and too often meagre reforms with the abuses and evils they are intended to combat, I cannot refrain from again expressing a fear that the governing bodies of the hospitals will be exceedingly slow to make any important changes until the subscribers, who form their constituency, can themselves be induced to bring to bear upon them a really effective amount of pressure.

The Provident Dispensary system has taken healthy root in London, and, if only it had room for its growth, might, there and elsewhere, supersede the necessity for any extensive plan of gratuitous medical relief. At present, however, it is overshadowed and dwarfed by the overgrown eleemosynary systems of the hospitals, the Poor-law dispensaries and the free dispensaries, and, until the ground can be cleared, has no chance of healthy development; indeed, the fact that it has not already succumbed in so hard a struggle for existence, affords very encouraging proof of its inherent vitality and vigour. Medical charity, in the meantime, while hindering the growth of medical providence, is itself overweighted by the out-patient system; and only when the various hospitals will voluntarily free themselves from this incubus can they devote their powers, effectively and without drawback, to the noble work of healing and of training healers.

I am, sir, yours obediently,

A MEMBER OF THE CHARITY ORGANISATION SOCIETY.

GREENOCK.—The death-rate for November was 22 per 1,000 *per annum*, 15 per cent. of which was caused by zymotic diseases, and 27 per cent. by pulmonary affections. There was an unusually large mortality from diphtheria, and several deaths from typhoid fever, some of which were caused by infection caught in Paisley. Dr. Wallace observes that the number of cases reported is much in excess of the average in former months, as "nineteen cases of infectious disease were reported by householders in terms of the new Police Act". This is certainly an encouragement for those who believe that there would be but little difficulty in getting householders to report to the sanitary authority the existence of infectious disease in their houses.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

NATURAL SCIENCES TRIPOS.—The following are the questions in Human Anatomy which were set in the recent examination for the Natural Sciences Tripos at Cambridge. The examination extended over five days.

Describe the temporo-maxillary joint in man and the movements which take place in it. How does it differ from the corresponding joint in the lion? Describe the ilio-cæcal valve in man, and its mode of action. What special purposes does it serve at this part of the alimentary canal? Give an account of the development and descent of the testicle. With what parts in the female do its parts severally correspond? What are the peculiar features of the dorsal part of the spinal column in man (the features in which it differs from the cervical and lumbar parts), and what are the purposes served by those peculiarities? Give the structure and development of the choroid and of the choroidal epithelium in the human eye. Describe the pectoralis major muscle in man, including the disposition of its fibres. What is its action? What relation has the clavicle to its action, and what is its action in animals, as the horse, to which there is no clavicle? Describe briefly the muscles on the anterior or extensor aspect of the leg and foot, and compare them severally with the muscles on the extensor aspect of the forearm and hand. Describe the arch of the aorta in man. What circumstances account for the special liability of this part to overdistension? How is the occipital bone connected with the several surrounding bones? How is it developed? and what reasons are there for regarding it to be serially homologous with the vertebrae or not? What are the differences observable by the naked eye in the mucous membrane of the several parts of the alimentary canal, below the pharynx, of man? How do you associate those differences with the functions of the parts? What changes take place in the human brain after birth? Can any reason be assigned for its large size in proportion to other parts of the body at birth? How are the several teeth of the second dentition in man developed? How do they differ from the teeth of the orang? and what relation have those differences to the configuration of the maxillæ? Through what parts of the bone has the section in specimen M been made? Name the four canals painted red and yellow, and traversed by the two bristles. Which of the vertebrae is N? What are O and P? Give the mechanism of pronation and supination of the leg, naming the muscles concerned in it. Compare it with pronation and supination of the forearm. What is the course of the left vagus nerve, and what are its branches? Account developmentally for the peculiarity in the course of its recurrent branch (the inferior laryngeal). Give the anatomy, with the connections and development, of the fornx in the human brain. State the distribution of the nerves to the several muscles in the human arm, forearm, and hand. What relation has the plan of distribution to the grouping of the muscles in harmoniously acting sets? Point out any exceptions to such relation. Describe the membrana tympani in man, and its structure. What are the provisions for regulating its tension, and for maintaining the moisture requisite for its suppleness?—*Practical Work*: Make a dissection of the part before you. Write a description of it, and make any comments upon the disposition of the parts that may occur to you.—There was also an examination *visu voce*.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

THE PROPER TREATMENT OF APOPLEXY.

SURELY bumbledom is drifting to the bad, or such a case as that recorded in the *Western Mail* of December 17th as occurring at a recent meeting of the Bridgend and Cowbridge Board of Guardians could not have taken place. It would appear that Dr. Bates (who passed his examination thirty-four years ago, is a L.R.C.P., and holds the appointment of district medical officer in the above-named union), was called, in his private capacity as a general practitioner, to attend a man of the name of Guildford, who, it would appear, subsequently died of apoplexy, and who, it was alleged, had not been properly treated by Dr. Bates. This imputation originated with the assistant (whether qualified or not does not appear) of a Mr. Phillips, a general practitioner at Cowbridge, and was brought before the Board by the Chairman at the instance of a Mr. Stacey, who is probably *ex officio*, a member, judging from the fact that it was his first appearance at a Board meeting, and from the pretentious address accorded him in the journal from which we quote. For some time, against the evident feeling of the Board, who clearly sympathised with their medical officer, the Chairman struggled to commit the Guardians to going into the case. In this course, he was backed most strenuously by Mr. Stacey, who, whilst deprecating any personal feeling against Dr. Bates, urged that "he was of opinion that a certain amount of neglect had been shown by the doctor. The question was not one mode of practice as against another; but he would ask them which was the proper treatment of a patient in apoplexy, to do anything or to do nothing?" The Chairman hereupon observed that the Board had not decided whether they would hear the case or not; whereupon the doughty Mr. Stacey said, "I will move that Dr. Bates is not a fit person, if you like"; to which Dr. Bates rejoined that he would grant that "if the charge were true, he was not fit to be their medical officer, but he would have the matter ventilated to the utmost". Ultimately, after a lengthened wrangle, it

was decided, on the advice of the Clerk, that the matter was one which did not come legally under the cognisance of the Board, Mr. Stacey returning again and again to the charge; and, whilst reiterating that he had no desire to injure Dr. Bates, doing his utmost to damage his reputation in every way.

Though it was manifest that Dr. Bates had the support of the majority of the Guardians present, yet we feel he is entitled to the sympathy of his professional brethren in this unworthy attempt to blast his character; and we trust that an opportunity will be afforded him of bringing his would-be defamers to book.

It is time that "outsiders", as Mr. Stacey styled himself, and, for the matter of that, insiders too—who, we assume, are the elected Guardians—should be taught that their position does not warrant them in assailing the reputation of a medical gentleman who may have the doubtful fortune of being one of their medical officers; and we take leave of this subject by quoting the advice of several of the Board, that they hoped the Doctor would "*pitch into*" his traducers, though, of course, only in a strictly legal way.

POST MORTEM EXAMINATIONS IN WORKHOUSES.

THE following copy of a letter from the Local Government Board has been forwarded to us for publication.

"Local Government Board, Whitehall, S.W.,

"January 1st, 1878.

"SIR,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 14th November last, in which, on behalf of the Council of the Poor-law Medical Officers' Association, you bring under their consideration the question of allowing the medical officers of workhouses to make *post mortem* examinations of the bodies of paupers who die in workhouses.

"I am directed to state that the Board have communicated with their medical officer, and have carefully reconsidered the subject, and they see no reason to alter the views which have already on former occasions been expressed by them upon it. The Board are of opinion that a *post mortem* examination should not be made of the body of a workhouse inmate, except by the direction of a coroner when holding an inquest, or the direction of the Board of Guardians for any especial, urgent, and particular reason which they may deem of sufficient importance to render such an examination necessary, or at the request of the relatives of the deceased.

"The Board also direct me to state that they think that a Board of Guardians would hardly be justified in directing in any particular case that a *post mortem* examination should take place, if the nearest relative of the deceased objected clearly and decidedly to that course.

"The Board, under these circumstances, are not prepared to take the proceedings suggested by the Poor-law Medical Officers' Association, or to issue any minute or regulation on the subject.—I am, sir, your obedient servant,

H. OWEN, junior, Assistant Secretary."

"J. W. Barnes, Esq., Honorary Secretary,

"Medical Officers' Association, 3, Bolt Court, Fleet Street, E.C.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ST. GEORGE'S, HANOVER SQUARE.—Dr. Corfield estimated the population at 90,833 persons; and, as the number of births registered was 2,174, and of deaths (corrected) 1,657, the birth-rate would be 23.88 and the death-rate 18.2 per 1,000 population, which are lower than usual. The death-rate of this parish is generally rather considerably below that of all London, as it has the largest proportion of servants to population (about 10 per cent.) of any of the metropolitan parishes. The variations in the death-rates of the subdistricts depend to a great extent on this cause, as in Mayfair it was only 13.06, in Hanover Square 17.97, and in Belgravia 19.46 per 1,000. The death-rate of children under one year was 15.09 per cent. of the registered births, and of persons of all ages from the seven chief zymotic diseases 9.3 per cent. of the total deaths. There were only 2 deaths from small-pox, besides those in hospitals, not returned; but 45 from pertussis, and 47 from diarrhoea. There is not any table of deaths from other diseases, as Dr. Corfield was not supplied with copies of the registrars' returns by his vestry. Dr. Corfield remarks that he received information of 2 only out of the 22 deaths from scarlet fever, and 1 out of the 33 deaths from fever, "showing again the absolute necessity of being provided with the returns of deaths from infectious diseases". The nuisance returns are for the year ending March 31st, 1877, and contain the following singular item: "Inspection of houses after small-pox, 102." How is this to be made to agree with the 2 deaths from small-pox in the district, and 25 cases removed to hospitals? The number of nuisances removed was only 69, against 311

complaints, of which, however, 95 are returned as groundless; so that, unless the 148 houses disinfected after infectious diseases are included in the complaints, there must have been a large number unaccounted for. The slaughter-houses, cowsheds, and bakehouses were regularly inspected and kept in a cleanly state. The non-supply of copies of the district registrars' returns to the medical officer, and the small number of nuisances removed, indicate supineness on the part of the vestry in sanitary matters.

EVESHAM.—Diarrhoea was prevalent in this urban sanitary district during the quarter ending September 30th, which is attributed to the feeding of young infants with potatoes and other unfit food. An outbreak of scarlatina is also reported upon, thirty-eight cases having occurred and three deaths. The disease spread rapidly amongst the inmates of some small cottages, in consequence of the impossibility of isolating the patients, as there is no hospital for such diseases, and the healthy children visited the sick. The annual death-rate was 17.1 per 1,000 living.

WHITECHAPEL.—In Mr. Liddle's last quarterly report, he refers especially to the schemes which he has brought before the Metropolitan Board of Works under the Artisans' Dwellings Act, and gives the details of the last, which includes houses largely occupied by Jews. Mr. Dyte states that, although the mortality is not so great in that as in other districts, yet the sickness-rate is high, because the Jewish race is naturally long-lived, and the dietary and other sanitary arrangements prescribed by their religion enable its members to battle for a considerable time against adverse hygienic influences. As Dr. Dyte is Medical Officer to the Board of Guardians for the relief of the parish poor, his opinion is entitled to considerable weight. Mr. Liddle also pointed out in former reports that the Jews did not suffer from cholera during either of the epidemics that so severely scourged the other poorer parts of his district. As regards the overcrowding likely to result in other parts through the pulling down of the houses, Mr. Liddle says that he does not think any material inconvenience will be suffered by the poor, as the progress of the pulling down will be slow; and he has seen a large number of houses demolished at other times, when the London Docks were made, without causing distress to those who were displaced. He also refers to the payments by the Bolton Corporation for information as to the existence of cases of infectious diseases, and asks why other local sanitary authorities cannot do the same. There were 609 births and 448 deaths of inhabitants during the quarter.

BRISTOL.—There were 958 deaths registered during the quarter ending September 29th, giving an annual death-rate of 21.2 per 1,000. Of these, 276 were of infants under one year old, or 28.8 per cent. of the total mortality, and 15.8 per cent. of the births. The birth-rate was 34.4 per 1,000. The chief causes of the deaths of infants were measles, whooping-cough, and diarrhoea. There were 22 deaths returned from typhoid; but Mr. Davies, the medical officer of health, says he believes some of these were cases of irritative fever. There were 174 cases of "maculated typhus", of which 88 were removed to the Bristol Union Workhouse, where seven attendants on the sick and two inmates were attacked. Mr. Davies approves of their removal; but is it not a great risk to introduce so many cases of typhus into a workhouse? There were 36 deaths out of the 174 cases. He believes that complete isolation of the patient, and disinfection of all infected rooms and clothing, will invariably stamp it out. It appears from the report that Bristol suffered severely in 1864-6, and slightly in 1872 and 1873, through the introduction of the disease in the latter year by an Irish tramp.

FEVER IN THE CHESTERFIELD DISTRICT.—The Local Government Board have written to the Rural Sanitary Authority of Chesterfield, in consequence of the recent prevalence of fever within their district, regretting that, notwithstanding the correspondence which took place last year on the subject of fever outbreaks, no infirmary accommodation has yet been provided for infectious and contagious diseases; and pointing out that if the authority had been able to isolate the earlier cases, they might have prevented the further extension of the disease. They conclude by expressing a hope that the matter will receive the immediate attention of the authority.

PUBLIC HEALTH MEDICAL APPOINTMENTS.

*MASON, Samuel Butler, L.R.C.P., appointed Medical Officer of Health for Pontypool, Monmouthshire, *vice* J. Williams, M.D., resigned.
WALKER, William, M.R.C.S., appointed Medical Officer of Health to the Kirkleatham Local Board.

LAWS, CUSTOMS, AND POPULATION.

AN address by Dr. Maurin (*Rapport des Lois et des Mœurs avec la Population*), which was delivered before the French Society of Hygiene in 1877, treats of the evils which have caused the diminution in the natural increase of the French population, and commences with a quotation from J. J. Rousseau, "that the most infallible sign of a flourishing country is the unlimited multiplication of its inhabitants". After enunciating certain truisms as to the effect on a population of its rapid increase, and the contrary, Dr. Maurin expresses his belief that the present outlook for France is sombre, as, although its inhabitants occupy the first place amongst European nations for length of life after twenty years of age, yet it only ranks eleventh as regards marriages, and takes the lowest position as to fecundity. He then asks, "Why should these things be? and what is the influence which the laws, manners, and customs of the country exercise on the progress of the population?" He attributes this longevity after twenty years of age to the fine climate, and consequent ease with which the necessities of life are procured, and to other circumstances which result from the conquests of 1789, the removal of privileges, and the parceling out and division of property.

In considering the causes of the diminished frequency of marriages, in consequence of which France will take two hundred years to double her population against sixty years by Prussia, Russia, and England, and thus be eventually reduced to a second-rate nation, he points out that the large number of unmarried arise from the 100,000 clergy; "18,000 and 90,000" residents in convents, and the large number of domestics and insufficiently paid Government *employés*, making an aggregate of 2,150,000 subjects who are prevented from marrying, at any rate early in life. In addition to these, military service enforces celibacy until thirty years of age on 650,000 men; so that the Government should take some measures to counteract this evil. Dr. Maurin proposes that preference should be given to those applicants for employment under Government who are married and have families, and that some arrangement should be made for the early marriages, at any rate, of some of the soldiers, as, since the increase in the conscription, and consequent late marriages, the number of children in a family throughout the country has been reduced from 4 to 3, and the birth-rate to only 2.68 per 100 of population against 3.68 in England. In support of this, he notices the desire of young married people for a family, and the dislike which those who marry when above thirty years of age have to a large family. He says that rich men over thirty desire but an heir, so that in the richest *arrondissement* of Paris there are only on an average two children in a family, whilst in the poorest there are four. "In the provinces, the farmers, the middle classes, the fund- and land-owners limit voluntarily the number of their children, in order to give rich dowers, and assure themselves of ease in their old age." He remarks, in regard to this, that a restriction of births is to be condemned, because it is opposed to morality, policy, patriotism, the happiness of the family, and the health of the parents. He believes that this evil would be partly remedied by the parents having the power to will their property as in England, instead of its being divided amongst the children in accordance with the present law. He refers to the nervous affections, chronic congestive diseases, dissensions between parents, the keeping of "false homes", and adulteries, to which this system of abstinence leads.

In the second division of his subject, he alludes to the extravagance in dress and luxury by both parents, the desire amongst all classes to eclipse their neighbours, which leads to excessive sums being spent in outside show, and consequent reduction of home expenditure; also to the injurious effects of early smoking, as well as to the excesses and debaucheries of early life, which exhaust the man before he becomes a husband. He says that young women are brought up in such a way that they are unfit for being the wives of honest workmen, and, for want of a marriage portion or a sufficient sum to gratify their desires, adopt, as a last resource, the prostitution of their persons. He also points out in strong terms the injury done to the morals of the young by the licentious romances which are freely published.

One of the almost necessary results of this state of things is that still-born children have increased from three to six per cent. of the total births; because, in the first place, abortion is more frequent, and in the second, that the services of a *sage-femme* is resorted to, who is very unsuccessful in her treatment. Indeed, Dr. Maurin does not hesitate to say that murder often lies hidden under their services, otherwise one death in every four births attended by them, against one in twenty by doctors, could not occur; and he considers that no declaration as to a still-born should be made by any one but a physician. His description of an accouchement under these circumstances is most graphic. As a remedy for this evil, he recommends departmental establishments for

the reception of the newly born, by which he believes that France would gain 30,000 citizens a year, especially as in great cities about fifty per cent. of the children are sent out to nurse, and a large number die for want of supervision of the nurses. He also strongly advises that mothers and those in charge of children should be taught the value of hygiene, and that as many *crèches* as possible should be established. The injury to health caused by the employment of children between six and eight years of age is dwelt upon, as well as the vices developed in young men who emigrate from the country into large cities.

The length to which this notice has already extended prevents us from making many remarks; but we would observe that the population of England and Wales doubled itself in seventy, instead of sixty years as stated, and that the birth-rate assigned to England—viz., 3.68 per 100 population, is somewhat too high. The address, if widely distributed, is likely to be useful, not only in France, but, if translated, in this country also, as it is to be feared that luxury and display are causing here, although to a comparatively small extent, some of the evils discussed by Dr. Maurin.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 20th, 1877.

Ashworth, John Wallwork, Heaton Manor, Stockport
Cawley, Thomas, Glenely, South Australia
Clowes, Joseph Smith, Metropolitan Free Hospital
Gaze, William Henry, Thames Ditton
Hetherington, George Haynes, Female Lock Hospital
Meacham, John James, Harpurhey, Manchester
Reid, William Gladstone, Grove Road, Acton
Wartenberg, Victor Adolph, Lytham, Lancashire

The following gentlemen also on the same day passed their primary professional examination.

Burnie, William Gilchrist, St. Bartholomew's Hospital
Costerton, Donald Sinclair, Westminster Hospital
Culling, William Robert, Charing Cross Hospital
Haycroft, Charles Henry, Guy's Hospital
Hitch, Frederick, Guy's Hospital
Hoskyns, Edward John H., Queen's Hospital, Birmingham
Lambert, John Speare, St. Bartholomew's Hospital
Phillips, Stephen Thomas, Charing Cross Hospital
Priest, James Damer, St. Bartholomew's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

- CENTRAL LONDON SICK ASYLUM DISTRICT**—Assistant Medical Officer. Salary, £100 per annum, with board and residence. Applications to be made on or before the 7th instant.
- ESSEX LUNATIC ASYLUM**—Second Assistant Medical Officer. Applications to be made on or before the 10th instant.
- HAILSHAM UNION**—Medical Officer for the Parish of Heathfield. Salary, £50 per annum, and fees. Applications to be made on or before the 7th instant.
- HANTS COUNTY LUNATIC ASYLUM**—Second Assistant Medical Officer. Salary, £100 per annum, with board, lodging, washing, and attendance. Applications to be made on or before the 9th instant.
- KINGTON RURAL SANITARY AUTHORITY**—Two Medical Officers of Health. Applications to be made on or before the 7th instant.
- NEWCASTLE-UPON-TYNE INFIRMARY**—Senior House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before February 4th.
- NORTHAMPTON GENERAL INFIRMARY**—Physician. Applications to be made on or before the 9th instant.
- SUDBURY UNION**—Medical Officer for No. 1 District. Salary, £55 per annum, and fees. Applications to be made on or before the 10th instant.
- SUNDERLAND and BISHOPWEARMOUTH INFIRMARY**—Senior House-Surgeon. Salary to commence at £80 per annum, with board and residence. Applications to be made on or before the 24th instant.
- WARMINSTER UNION**—Medical Officer for the Longbridge Deverill District. Salary, £80 per annum. Applications to be made on or before the 14th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*BURD, Edward, M.D., appointed Consulting Physician to the Salop County Prison.
*H. Johnson, M.D., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

KILIAN.—On December 30th, 1877, at 49, Harscampstrasse, Aix-la-Chapelle, the wife of *Paul Kilian, M.D., of a daughter.

DEATH.

DAVIES, William Abel, M.R.C.S. Eng., at his residence, Castle House, Llanidloes, aged 45, on December 13th, 1877.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY**..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.
- TUESDAY**..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY**.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
- THURSDAY**... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.
- FRIDAY**..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY**.... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY**—Medical Society of London, 8.30 P.M. Lettsomian Lecture by Francis Mason, F.R.C.S.; subject, "The Surgery of the Face".
- TUESDAY**—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. H. T. Butlin, "On the Microscopic Anatomy of the Smooth Tongue (chronic superficial glossitis)"; Mr. W. Sedgwick, "On Maternal Impressions".
- WEDNESDAY**—Hunterian Society, 7.30 P.M.: Council Meeting. 8 P.M.: Mr. Jacobson, "On Supracondylar Amputation of the Thigh by the method of Stokes".
- FRIDAY**—Clinical Society of London, 8.30 P.M. Annual General Meeting. Dr. Althaus, "A Case of Chorea in the Adult Male, complicated with Epilepsy"; Mr. Howard Marsh, "A Case of Severe Hemorrhage after Operation for Cleft-palate, arrested by plugging the Posterior Palatine Canal"; Mr. Holmes, "Sequel to a Case of Excision of the Os Calcis, reported in vol. viii of the Society's *Transactions*"; also, "A Case of Excision of the Lower Part of the Rectum".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

EXCISION OF THE ANKLE.

MR. JOHN CROFT writes, stating that, in our report of the meeting of the Clinical Society on December 14th, he is reported as having said that he had not made lateral incisions, but had reflected the soft parts from before backwards. He remarks that he stated that he had used lateral incisions in the three cases to which he referred, and that he had not found it necessary, in order to saw off the ends of the tibia and fibula, to thrust them through either inside or outside wound; and that he had sawn them off by means of a narrow-bladed saw worked from before backwards. He is aware that some modern surgeons have successfully practised the operation under discussion by the anterior incision, and he does not doubt that method enables the operator to expose and examine the interior of the joint very thoroughly. By the lateral method, the joint may be exposed sufficiently well, and the objections which attend the anterior incision cannot be raised against the lateral incisions. He does not wish to be represented as speaking in condemnation of a method of operating concerning which he has reason to speak highly.

MR. W. H. PLAISTER.—Your letter has been forwarded to Professor Oscar Liebreich.

A NEW SYSTEM OF MEDICAL BOOK-KEEPING.

SIR,—Will you kindly allow me to correct an error in your review of this publication, which appeared in the *JOURNAL* of the 15th instant? The "chief advantages" of it are, that you only have to enter *once* during a month the name and address of each patient in the day-book; that every necessary entry respecting each patient (except the prescription) appears on one line, for the month, opposite the patient's name; that the ledger may be much smaller than usual, may easily be posted at any time, and may be entirely a private book, if so desired. Yours, etc., Cardiff, December 19th, 1877. ALFRED SHEEN, M.D.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the JOURNAL Office or any stated address other than a Post Office.

A SERIOUS GRIEVANCE.

SIR,—Unfortunately, I inherit a name as honoured by the profession as it is well known to the public. Certain druggists and others extensively advertise and sell remedies under the Government stamp, purporting to be made from my late father's prescriptions. As long as the diseases thus announced as cured by the "infallible" remedy are respectable, it is bad enough; but when they descend to lower depths, the association of one's name with them becomes a positive nuisance. I would ask through your columns the advice of any of your readers in this matter. Lawyers seem unable to say whether I have power to stop the traffic, as all turns, in their opinion, upon whose is the property of the prescription. I myself doubt if such a narrow ground for action need be taken: at any rate, it appears to me that the question lies in part in the legality or the reverse of the druggist to make public use of a formula privately at one time submitted to him for preparation: at least, may he not be called upon to show that what he professes to be from a certain physician's prescription is really so, and not evolved from his own brain? Still, assuming that the drugs are really compounded from copies of original prescriptions in the druggist's hands, has he any right publicly to advertise and sell them under the Government stamp, attaching to them the name of the prescriber, together with some fanciful title, and to ascribe to them properties that they do not possess, but that will make them the more attractive to the public? To give greater colour to his imposture, one advertising quack heads his column of advertisements with the crest and motto of the physician upon whose name and reputation he trades. When I am able to prove that such proceedings are doing me harm in my own practice, I presume I should have a hold upon the advertiser in a court of law; but where the annoyance goes no further than having the name one bears attached to compounds which, being guaranteed to cure everything, and being further sold as patent medicines, are by the public not to be distinguished from quack drugs, can nothing be done to prevent it? Twice I have stopped the advertising of drugs by threats of legal proceedings; but whether I could have pushed matters to extremes, I do not know. An all but similar question which I now submit to your readers was tried some time ago in the United States; and if I am correctly informed, it was there ruled that the druggist had no power whatever to employ prescriptions given to him to make up for any other purpose. Is this so in England? Even if there be no law that limits the use a druggist may put a prescription to, can no restraint be put upon a proceeding as nauseous to those unprofessional members of the late prescriber's family as it is likely to be injurious to your obedient servant?
London, December 24th, 1877. M.B., F.R.C.S.E.

ATHETOSIS.

A CONSTANT READER will find a description of athetosis in an article by Dr. W. A. Hammond in the *New York Medical Record* of July 15th, 1873; and in an abstract of the article in the *London Medical Record* for October 8th, 1873. The word is derived from *ἄθετος*, irregular or unarranged; and is applied to a diseased condition characterised by involuntary movements.

FRACTURE OF FEMUR: TREATMENT.

SIR,—Mr. H. B. Norman, in a paper read before the members of the South-East Hants District of the Southern Branch, questions the superiority of either Hodge's splint, or the inclined plane with pulleys and splints, over the old long splint and perineal band. Never having used a perineal band, I cannot speak of it from experience; but I have heard no good of it, so have shunned its use. I should like to hear of its comforts or the opposite from some who have had it applied. The pre-eminence claimed, and I think justly, for Hodge's splint, or the inclined plane and pulley treatment, is the greater comfort and comparative ease with which the patient can attend to the wants of nature, with as good results to the limb. That "in the early part of the treatment the perineal band should be daily tightened whilst extension is made from the ankle, must be a discomfort and tend to disturb the patient"; at the same time, the skin over the tuber ischii and groin has to suffer for this daily extension. Dupuytren says: "In many cases, when extension is attempted, the irritated muscles are found more than a match for several assistants." Now, with weights and pulleys, and the bed tilted five inches at the foot, so that the body may act as counter-extension, the patient may be left, the weights doing their work quietly and continuously (morphia or opium being given the first night), the surgeon ascertaining by measurement when sufficient extension is applied, which can be regulated to half a pound. When the length of the limb satisfies, the straps around the short splints may be tightened, and the weight sufficient for retention found out. All this may be done without disturbing the limb. That the apparatus is more difficult to extemporise I do not allow. A reel and wire for pulley, sand or stones in the absence of legal weights, some thin wood or pasteboard for splints, and a bandage or two, are all that is wanted. Billets of wood or books may be used to raise the foot of the bed. Manual strength will not be wanted. It is admitted that by slight omissions, "inadequate protection to the groin, and insufficient padding to the ankle, sloughing occurs and treatment has to be abandoned." Cotton-wool will "lump"; and what can be found soft enough to place against the tender skin of the groin and perineum to stand the accessory extension without endangering these structures or causing discomfort to the patient? In eight cases under my notice, treated with weight and pulley, no discomfort was remarked on, and all did well. One was an ununited compound fracture of twenty-five weeks' standing; the wounds had healed at the end of seven weeks; the long splint had been applied twice, and there were three inches and a half of shortening. This patient was sent out with a firm limb, of one inch and a quarter shortening, and has since gone to sea. All the patients at the end of a month (average) had a Bavarian splint applied, and were allowed to get up. The average shortening was half an inch.

The cases I have seen treated with Hodge's splint looked wonderfully comfortable, and the degree of mobility allowed the patient was astonishing; but the good results, as attested by Mr. Farrant Fry, show that no harm takes place.—I am, yours, etc.,
LATE HOUSE-SURGEON.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ACUTE LARYNGO-TRACHEITIS (CROUP) TREATED BY APPLICATION OF ICED WATER.

SIR,—Being of opinion that the term "croup", as pointed out by Dr. George Johnson and others (*Gide BRITISH MEDICAL JOURNAL* of September 18th, 1875, p. 355), is unsuitable as applied to a form of disease, I prefer to record particulars of this case under a term which I believe more correctly defines the pathological condition. The treatment adopted is that recommended by Professor Porter of Dublin, which to thoughtful minds cognisant of the true state of matters, the "bugbear" of infantile disorders will be found, I believe, to possess such an amount of rationality as to supersede all other remedies, such as the administration of medicine or the resort to tracheotomy. I may say that I adopted this line of treatment from my own deductions; but on looking up records of "croup", I find that the gentleman mentioned has forestalled me in recommending it, so I can merely recite this case as corroborative, in a marked and satisfactory manner, of its beneficial effects.

On Friday, December 14th, I was called upon to visit a boy eight years of age suffering from "croup", or, to adopt our nomenclature, "acute laryngo-tracheitis, with 'croupous' respiration". He had been at school the day before, though slightly ailing, but had gradually become worse. I had come provided with an emetic mixture of sulphate of zinc and ipecacuanha wine. This was administered twice, at intervals of ten minutes, until vomiting was produced. A bladder had been provided, and, being conveniently filled with ice-cold water, was applied to the throat and upper part of the chest, kept in position well under the chin—the child, of course, being in the prone posture. The child, who naturally objected at first to the cold, became quieter, and in a short time fell apparently into a doze. The respiration, which had been harsh and crowing, gradually became less so; the cough lost somewhat its singing sound; and the skin, which had been hot and dry, became cool and moist. I stayed for two hours in the house, and when I left, I gave instructions that a large warm poultice was to be applied for an hour in place of the bladder, and then the iced water to be again reapplied, alternating so each hour until my return. In about ten hours I came back and found everything progressing favourably. The child is now well; and I believe the result might have been very different, at any rate, the chances of recovery much diminished, had that treatment not been adopted.

In conclusion, I may perhaps be permitted to express an opinion as regards the relations between croup and diphtheria, in view of the fact of a committee having been appointed by one of our leading societies so long ago as 1875 "to examine into the relations existing between the diseases commonly known respectively as 'membranous croup' and 'diphtheria'". I am inclined to the opinion that the former may be accurately defined as simple acute inflammation of the larynx and trachea (laryngo-tracheitis), terminating in the usual products of inflammation, a mucopurulent secretion—in some cases, possibly a fibrinous exudation; whilst the latter partakes more of the nature of a specific inflammation of the mucous membrane, not confined to the laryngo-tracheal or respiratory track.—I am, sir, your obedient servant,
J. MAUNSELL, M.D.

Sheffield Road, Barnsley, Yorkshire, December 17th, 1877.

INDIAN GUIDE WANTED.

SIR,—In reply to Mr. Lennox Browne's inquiry in your *JOURNAL* of December 22nd, I would suggest his perusal of a small volume entitled the *European in India*. I think it would fulfil all his requirements. I do not know the publisher, but think I paid about five or six shillings for the copy I had.—Yours, etc.,
Soverby Bridge, December 24th, 1877. JAMES ELLIOTT.

* Surgeon-General Francis, M.B. (Sutton), has, we are informed, in course of preparation a Guide which is intended to supply the want to which Mr. Lennox Browne has drawn attention.

MALPOSITION OF THE TESTIS.

The descent of the testis has always been looked on as an interesting phenomenon. At the seventh month of fetal life this organ passes into the internal inguinal ring, and at the eighth month it is found in the scrotum. In this descent, there seems little reason to doubt but that the gubernaculum plays an important part, and any deviation from the natural position of the testicle will probably depend on some structural abnormality or premature change in this areolo-muscular substance. This is a malformation which occurs perhaps more frequently than is generally supposed; for as it does not prevent procreation, either nothing is said about it or it may altogether be overlooked. Several interesting cases have lately been recorded in the *BRITISH MEDICAL JOURNAL*. In one of these, both testes were absent; whilst in the other three, a hernial protrusion was present in each. From this coincidence, it might be concluded that a hernial protrusion always occurs; but I may perhaps be allowed to state that I have examined three individuals having a malposition of testis, without finding a hernia to exist in any.—G. R. GILRUTH, Edinburgh.

APPLICATION OF FLUID CAUSTICS.

SIR,—Permit me, through your *JOURNAL*, to suggest the following mode of applying nitric acid, or any other fluid matter, to wounds from dog-bites, etc. Procure a glass tube (the sizes Nos. 7 or 8, of common wire-gauze, will do), tapering at one end. On introducing this tube into a volume of liquid, the liquid will ascend in the tube as high as the body of the liquid; when, by placing the finger on the upper end and closing it hermetically, it may be conveyed and introduced to the bottom of the wound. By blowing down the tube immediately before, and while withdrawing it, the fluid should reach every part of the wound. A syringe might do. Probably the tube ought not to be too sharply pointed.—I am, sir, yours faithfully,
Neath, December 8th, 1877. JOHN RUSSELL.

CAUSTICO DI LONDRA.

IN reply to the inquiry of Dr. Ruata of Padua (*BRITISH MEDICAL JOURNAL*, December 22nd, 1877), Messrs. Bullock and Co. of Hanover Street send the following note:—"Pasta Londinensis (London Paste), Dr. Mackenzie's. R. Caustic soda, unslacked lime, of each equal parts; reduce to a fine powder in a warm mortar, and mix intimately. Keep in well closed bottles, and when required for use, take as much as is sufficient, and make into a paste with water.—Use: Recommended for destroying enlarged tonsils or the elongated uvula, where treatment with guillotine or scissors is objected to.—Note: This preparation resembles the Vienna paste, but is preferable, in consequence of its being less liable to spread beyond the limits of application. Soda being used instead of potash, and water in place of alcohol, the preparation is much less painful."—*Throat Hospital Pharmacopæia*, edited by Dr. Morell Mackenzie.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

QUININE IN CATARRH.

E. W. writes to ask whether the virtue of quinine as a preventive of ordinary catarrh is generally known, or whether he must regard himself as exceptionally constituted; and remarks that, though enjoying good health, he was always susceptible to colds, and never got through a winter without several, while since he has taken a small daily dose of quinine (one grain) he has been virtually free, though sometimes exposing himself to risks that would previously have been highly imprudent.

THE CATERRHAM ASYLUM.

DR. ADAM (Caterham).—We should be very glad to comply, if possible, with our correspondent's wish; but to publish the documents submitted on both sides would involve a very considerable expenditure of space, and of course we could not publish the documents on one side without publishing those on the other; and to this, we fear, there would be no end. We have carefully considered the statements submitted by Dr. Adam and Dr. Cortis on the one hand, and Dr. Rogers and his friends on the other hand, and have expressed briefly our conclusions, derived from the perusal of those documents. Even if no Government inquiry be held, what has happened, with our comments thereon, will probably not be without salutary influence both on local boards of guardians and the authorities of metropolitan district asylums, for we are inclined to think that there is room for amendment on both sides. The patient in question should have been sent ten days earlier, and the medical officer of the Caterham Asylum must learn that the character of other professional men must not be assailed to further the administrative views of any public body.

UNSEAWORTHY SEAMEN.

SIR,—As the agitation concerning the unseaworthiness of ships seems to have proved beneficial to sailors in general, it may not be out of place in these columns to say a few words on the subject of the unseaworthiness of seamen as regards venereal diseases. As the condition in which a great many sailors proceed to sea may not be generally known to your readers, I should like to state a few facts as having come under my own observation within the last few months at the Liverpool Dispensary for Seamen. Out of a large number of sailors who apply there for treatment, I am sorry to say that a great many proceed to sea in a shocking state of disease. To give an idea, I quote the following facts as having occurred within the last month.

Case I applied for advice on November 24th, suffering from acute phimosi, purulent discharge underneath the prepuce, and indurated glands of both groins. This man proceeded to sea on November 28th.

Case II applied for advice on November 27th, suffering from six ulcers of the corona glandis. He also proceeded to sea on November 28th. (Cases I and II were shipmates.)

Case III applied for advice on December 1st, suffering from a well marked indurated sore, of the size of a sixpenny-piece, situated on the under surface of the prepuce, having all the appearance of the "parchment induration" described by Ricord, accompanied by indurated glands in the left groin. This case only remained under treatment until December 13th, as he went to sea on the following day. This was very mortifying to me, as the disease was beginning to yield to treatment.

Case IV applied for advice on December 4th, suffering from a copious papular syphilitic eruption and sore throat. On the following day he also sailed.

I may mention that these four sailors' ships were unprovided with a surgeon. I could give numerous instances of seamen who have gone to sea suffering from acute gonorrhoea and buboes (and my colleague Mr. Frederick Lowndes informs me that similar cases under similar circumstances have come under his observation also), but the foregoing cases suffice in a measure to show that the present condition of our seafaring population is in a very unsatisfactory state as regards venereal diseases.—I am, sir, yours obediently,

A. BERNARD, M.B.

Liverpool, December 15th, 1877.

PETRARCH ON MEDICAL PRACTICE.

PETRARCH, who is reputed to have been accustomed to seasonal venesection, is known to have had a violent feud with the physicians of his time; not, as he protested, against physicians as a body, but against pretenders. His antipathy seems to have arisen in this way, as he himself relates in a letter to Francesco da Siena, a famous physician (*Sent.*, L. xv, Ep. iii). The Pope Clement VI being taken ill, Petrarch sent to him, to warn him against physicians; not against the whole body, but against many, and reminded him of the man who had caused to be inscribed on his sepulchre "La multitude de' medici mi ha ucciso" (I have been killed by the multitude of physicians); and he then recommended the Pope to have not even two, but only one physician, who should not merely be eloquent, but learned and wise. The messenger not having made himself intelligible, the Pope begged Petrarch to send him the message in writing; which order was obeyed. The physician of the Pope, who saw this letter, was indignant, and made a bitter reply; hence the feud. In a letter to Boccaccio (*Sent.*, L. v, Ep. iv), in which he describes the vanities and pomps with which the physicians of the age appeared in public: in purple garments, precious rings, and gilt spurs; he says jocularly that very little fails them to arrive at the solemn honours of a triumph; though it is true there are not many among them who can boast of having killed their five thousand men, the number necessary for a triumph; but what they lack as to quantity is made up in quality. Since the one slew their enemies, the others their fellow-citizens; the one slew armed men, the others those in civil garments. Then proceeding to ridicule what he calls their impostures, he states that he had himself heard of three celebrated physicians of his time, one of whom confessed sincerely, that if a hundred or a thousand men of the same age and complexion were taken with the same disease, and one-half were entrusted to the physicians of his time and the other half were left to themselves, more of these last would recover than of the first. Another, who was interrogated by him as to how it was he did not use the same regimen that he prescribed to other people, replied that if the living of a physician were similar to his counsel or his counsel to his living, he would lose either his health or his money. And lastly, the third, who had acquired great celebrity, being asked why he did not follow medicine, answered that he was not so wicked as to delude people with so deceptive an art. He relates in the same letter of an old physician of Valesia, who was summoned to Milan by Galeazzo Visconti, to cure him of the gout, with the promise of three thousand five hundred golden crowns, the expenses of the journey, and a magnificent reception. "The same day on which he arrived, I was dining with Galeazzo, when a courier came beforehand to announce his arrival. Galeazzo was rejoiced to the utmost, and commanded that he should be met, and received, as was the custom, with rejoicings and pomp. They sent out a *cortège*, servants,

and horses, and a charger, upon which he was to mount, as tried by myself on other occasions, whither than snow, swifter than the winds, tamer than a lamb, and freer than a mountain. On this the German Galen entered Milan amidst a great concourse of people, who looked on with wonder, and hoped now to see the dead arise. Already the messenger whom he had sent beforehand had, on the authority of the physician, ordered to have ready fresh eggs and I know not what other things, as was usual, to make a beverage for the sick man. At hearing this all were struck with wonder, and some thought he was a divinity; but I was grieved to observe the rashness of the man who, for such a patient, whom he had never seen, should thus prescribe remedies for his case. Having in the meantime set out for Pavia, I know not what he did or ordered on the following days. But I know that Galeazzo immediately began to get worse than usual, and not long afterwards the physician, having not only lost all hope to cure him, but even the impudence to promise it, said that by art he could not do what he had promised; but that instead it was necessary that he should consult certain books of magic that he called sacred; since in these rested the last hopes of cure. He set to work to search, I know not in what part, and perhaps he did not know himself; but the hopes of all, and especially of Galeazzo, at once vanished. Thus that great fame, those strange expectations, that purient desire to find a cure, is departed to end in magic." In a letter to Pandolfo Malatesta, dated May 8th, 1370 (*Sent.*, L. xiii, Ep. viii), Petrarch says: "I have been attacked by a violent fever, to which I am now accustomed. The physicians arrived by command of the master (Francesco da Carrara) as if they were friends. After having for long, according to custom, debated among themselves, they decided at last that I should die in the middle of the night, and night had already commenced. You see what little of life remained to me, if what these Hippocratici dreamed were true. But I am constantly getting more confirmed in the opinion which I had formed of them. They said that the only remedy to extend my life a little longer was to bind myself with certain strings so as to prevent sleep, and by that means my life might be extended to the morning. This was too great a price for so small a benefit, while it was certain that to thus deprive me of sleep would be equivalent to killing me. These directions were not followed out; for I have always begged of my friends and commanded my servants that they should not do anything that was ordered by the physicians; but, if they must do something, they should do the complete contrary. Thus I passed the night in a profound sleep, similar, as says Virgil, to a composed death. What then? I, who ought to have died in the middle of the night, when the physicians paid their visit in the morning, perhaps to assist at my funeral, found me writing." They were astonished to see me, and could only say that I was a wonderful man."

MEDICAL ASSISTANTS.

SIR,—Will you kindly allow me a corner of your valuable JOURNAL regarding the duties involved in medical assistances? Is it customary for medical assistants to act the part of slaves' assistant in addition to their professional duties? Is the honorary appointment of door-porter attached to all assistances? and does this appointment serve as an introduction to patients, by showing the assistant's ability and importance? Does time for study mean perpetual motion in door-keeping—viz., motion in proportion to the extent of the practice? Is door-keeping to an assistant a torture or pleasure? Is it recognised as part of the curriculum at the College? or do the patients consider it a gentlemanly occupation? Why do the majority of assistants who hold this extra appointment take all available opportunities of outside amusement in preference to the inside torture of studying from Nature the mechanism of the muscles in motion? Is the comfort of an assistant ever studied? or has inside comfort any control over an assistant's (often unnecessary) outside wanderings and its consequences? Is door-keeping a sufficient inducement for an assistant to spend his leisure time within? If seclusion from servile work in the absence of professional duties be a comfort to a principal, would it be injurious to an assistant? Will some victim be good enough to give a novice a little information concerning the art of surgery, door-keeping, or any other unprofessional or degrading torture to which assistants are subject? Hoping I have not encroached too much upon your limited space,—I am, yours, etc.,

December 1877.

JANITOR.

AMATEUR PRESCRIBING.

A LAUGHABLE instance of the curious ideas that haunt the minds of the clever amateur physicians one constantly meets with is related in *Belgarhia* by Mark Twain. He declares that a skipper in the North Pacific has lost faith in his medicine-chest, and complains as follows: "There is something rotten about this medicine-chest business. One of my men was sick—nothing much the matter. I looked into the book; it said, 'Give him a teaspoonful of No. 15.' I went to the medicine-chest, and I see I was out of No. 15. I judged I'd get up a combination somehow that would fill the bill; so I hove into the fellow half a teaspoonful of No. 8 and half a teaspoonful of No. 7, and I'll be hanged if it didn't kill him in fifteen minutes. There's something wrong about this medicine-chest system that's too many for me!"

INFLUENCE OF MARRIAGE ON EPILEPTICS.

SIR,—I can call to mind the cases of two men who were under my care about two years ago, who had been the subjects of fits at intervals for some years, who had recovered to a very great extent, and in both cases were anxious to marry. I was asked, What would be the effect of marriage on their condition? and I had to confess that I could not advise them with any certainty. One of these men married at once, and I saw him as late as four or five months ago, when he told me that he had never been better in his life, and had "no fit since marriage". The other man was more cautious; and, having satisfied himself that conjugal duties were not injurious to his health, married, and has retained his health, without there having been any relapse quite recently.—Yours faithfully,

Charlton, Kent, December 16th, 1877.

HERBERT L. BERNAYS.

MR. A. C. TUCKER's letter has been referred to the General Manager.

DIVISION OF LABOUR IN SCIENCE.

ST. GEORGE MIVART remarks on this subject: "The principle of the division of labour renders necessary the application of one man's almost entire energy to a more and more restricted field of scientific labour. Only intellectual giants can now hope for eminence in widely remote areas of study and research. To take an example from one science, men have not only almost ceased to be general zoologists, and become ornithologists, entomologists, etc., as the case may be, but we hear now of lives being devoted to the study of small sections of natural orders, and that this naturalist is a *Carabidist* (that is, devoted to that family of beetles termed *Carabidae*), and that a *Cucurbitonist* (devoted to the long-nosed beetles termed *Cucurbitonidae*), while a German naturalist has even published a quarto volume, with large plates and numerous tables, the whole being devoted to the anatomy of the lower part of the hindmost bone of the skull of the carp!"

MR. ALFRED WM. MOORE should apply to a chemical source for the information which he seeks.

MEDICAL REGISTRATION IN GREAT BRITAIN.

It would appear from a recent legal interpretation of the letter of the Medical Act regarding medical registration in Great Britain, that the system is by no means perfect. In a recent case of flagrant quackery, based upon a bogus American diploma, it was impossible to convict the defendant, because it was not distinctly stated in the wording of the Act that any one whose name did not appear on the *Medical Register* was not legally qualified to practise medicine or surgery. The requisite amendment is now strongly urged, upon the plea that the public have a right to be protected from fraud. The object of the Medical Act was principally to create this *Register* of well qualified practitioners, thereby offering to the public a ready means of discrimination between those who had undergone a regular course of instruction and those who, without any real ground, passed themselves off as qualified medical men. The Medical Council is the court of arbitration, and has certain discretionary powers, which do not, however, extend to the acceptance of colonial degrees. To the proposed amendment, it is suggested that cognisance be taken of such degrees, with a view of showing fair play to all well educated foreigners who may wish to settle in Great Britain. This is a liberality of opinion in keeping with the spirit of the age, and should be emulated by all civilised countries. Thus far, thanks to the bogus diploma traffic in this and other American cities, the very name of the American medical diploma is associated in the English courts with the worst of frauds.—*New York Medical Record*.

AN INDIAN QUACK PILL.

A CORRESPONDENT has sent us a copy of a handbill which was given to him some time ago in Bombay. It is headed "Bapoorow Raghonath Nagpoorker's Pure Drug made Tonic Pills. Do not dissolve if boiled in milk or water for a number of days". The bill states that "These pills are prepared from a mixture of various drugs. Their curative effects are various and wonderful. They purify and produce blood, increase strength, promote digestion and circulation of the blood, improve the appetite, speedily restore health, render the complexion florid, and keep the mind always cheerful. They are also a powerful and speedy remedy against Liver-complaint, Rheumatism, Giddiness, Headache, Shivering of the hands and the body, weakness of the joints, spitting of blood, consumption, General debility, impaired nutrition, female complaints and the diseases of children. Women in confinement" (*i.e.*, the Zenana) "using these Pills are protected from Rheumatism, and are freed from Menstrua or (Fleur Albis). To newly delivered women these Pills are very useful. . . . If either men or children are affected with Dismisio seminis these Pills cure it without fail", etc. The pills are to be used for forty days according to the following directions. "Every day the Pill with the silken covering should be boiled in Milk with a little quantity of almond kernels, till half the quantity of the Milk is boiled away. The Milk is then ready for use. The Pill should be taken out of the Milk, washed in cold water, exposed to the air till it dries and assumes its original hardness, and then securely kept for future use. The Milk thus prepared is to be drunk after supper, but about an hour before going to bed. A little sugar may be added to the milk at the time of drinking it." The pills are sold in three varieties, at prices of five, ten, and twenty rupees each; and are also lent on trust for a fortnight at fixed rates. Several testimonials, of the usual character, are appended: they are signed by a "Chemical Analyser", a native Government Magistrate, an officer of the Government Telegraph Department, a Railway Guard, and other persons. One Native Gentleman furnishes the following specimen of literature. "Certified that I sincerely and faithfully acknowledge that on the time of the examination of the effects of medicine what Mr. Bapoorow has given me in the way of a globe covering with a silken cloth and ordered to drink it in milk, has given me much good, and I hope that every one who wished to buy can trust on my writing. I am, here, Zahoorul Hug, Medical Officer."

URINARY TEST-TUBE.

SIR,—Dr. Batten's invention of an urinary test-case, to which practical effect has been given by Messrs. Salt of Birmingham, is at once elegant and ingenious. The want of a testing apparatus, easily and safely portable, has long been experienced, and Dr. Batten has, to a great extent, supplied this want. It has struck me that its efficiency might be much increased by the addition to the case of a small spirit-lamp. Dr. Batten mentions in his letter of October 18th, that a candle or ordinary lamp may be employed in heating the tube containing the urine, care being taken that it is inserted in the blue flame. Now, it is not always that a blue flame can be discerned on a candle, and with the utmost care the test-glass is apt to be blackened. I suggested the above addition to Messrs. Salt, who kindly adopted it, and have manufactured for me a case with this improvement. The only objection that could be urged to this addition is a small increase in the length of the case, necessitating its being carried in the inside pocket of the coat instead of that of the waistcoat. I think the advantage of the combination with the test-apparatus of a smokeless lamp more than commensurate with the questionable inconvenience of a transfer from the smaller pocket to the larger.—I am, sir, yours, etc.,
Maldon, Dec. 11th, 1877. GEO. PARKER MAY, M.D.

AN ADVERTISEMENT.

THE *Auckland Times* of December 14th has the following singular advertisement:—"Dr. Arnold (for many years assistant with the late Dr. Canney) having removed to 13, Low Tenders, takes this opportunity to state that he will give advice free every morning (Sundays excepted) from nine to ten o'clock to the poorer classes in the town, and on Thursdays and Saturdays from 2 to 5 p.m. to country people. Those in the town who are unable to attend the surgery through illness will be visited free of charge. Medicines and surgical appliances, where required, will be supplied at the lowest possible charges."

A NEW TREATMENT OF CANCER.

SIR,—The enclosed advertisement I have cut from a local religious periodical. The advertiser's name appears in the *Medical Register*. Surely this new method of treating "cancer and tumours" ought to be known.—Yours, etc.,
109, Bury New Road, Bolton, Dec. 13th, 1877. J. JOHNSTON, M.D.
"Cancer and Tumours Cured by an entirely new and Painless Process, without the knife. Totally different to any treatment at present adopted. Pamphlet 12 stamps. Particulars, stamped envelope. Edwin W. Alabone, M.D., M.R.C.S. Eng., Lynton House, Mildmay Road, London, N., Physician to the Home for Reclaimed Females, the Clapton Orphan Asylum, etc. Under this treatment, many cases pronounced hopeless have recovered."

PROFESSIONAL INCOMES IN AMERICA.

To pass the examination required to enter the army or navy demands a very thorough professional, and also an extended general, education; and yet the salaries of medical officers are hardly adequate to support a very economical family in a manner corresponding to the social position of a professional man. Outside of the army, in the rural districts and country towns, it is a decidedly desirable practice that yields three thousand dollars a year in actual money; and, so far as our observation goes,

it must be a very exceptional country locality where a physician can collect over five thousand a year. The work such a practice entails will task him to the uttermost. In cities, it is of course otherwise. There are physicians in all our large cities who take in ten thousand and fifteen thousand dollars a year: we could name a few in this city and New York who are popularly credited with practices returning twenty-five thousand to thirty thousand dollars a year. One year with another, there are exceedingly few in the United States who exceed this. Some eminent surgeons may possibly do so, but they could be counted on the fingers of one hand. But these are the rare prizes. The vast majority of city practitioners fare no better than those in the country; and it, as a rule, requires much longer to get to the point where they "make a living", because living is costlier and competition closer. Many physicians have some outside business in which they are interested; others have a patrimony which helps them out. Without these resources they would starve.—*Philadelphia Medical and Surgical Journal*.

AN APPEAL.

MR. SCARNELL wishes gratefully to acknowledge the receipt of the following amounts sent in answer to his appeal, which appeared in last week's JOURNAL: A Friend, £5; A Friend (of Birkenhead), £2; Dr. Ranking, £1; W. D., £1; Anonymous, 10s.; Dr. Cassell, 5s.; B., 5s.—1, Frederick Place, Penton Place, S.E.

SIR,—Permit me to express a hope that Mr. Howard Marsh will publish in book-form his admirable Lectures on Hip-Disease in Children.—Yours, etc.,
Cashel, Ireland. THOMAS LAFFAN.

A STUDENT.—The recommendation that candidates for diplomas should be required to produce evidence of having attended class-examinations from time to time, does not appear in the present code of recommendations of the General Medical Council. We believe, however, that the omission does not arise from any change of opinion on the part of the Council as to the value of such examinations, but from the matter being one of detail belonging to the regulations of the examining boards.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. W. S. Savory, London; Dr. G. M. Humphry, Cambridge; Dr. J. Burdon Sanderson, London; Dr. Thomas Keith, Edinburgh; Dr. A. W. Edis, London; Dr. W. Fairlie Clarke, Southborough; Dr. J. Milner Fothergill, London; Dr. Joseph Coats, Glasgow; Mr. Howard Marsh, London; Dr. Joseph Bell, Edinburgh; Dr. J. W. Moore, Dublin; Mr. Wanklyn, London; Dr. Falconer, Bath; Mr. Walter Rivington, London; Dr. Saundby, Birmingham; Mr. R. S. Fowler, Bath; Mr. G. Eastes, London; Mr. E. C. Board, Clifton; M.R.C.S. Eng.; An Associate; Dr. Warner, London; Mr. J. W. Black, Edinburgh; Mr. S. W. Hope, Petworth; Messrs. Bullock and Co., London; The Secretary of the Pathological Society of London; The Secretary of the Clinical Society of London; Dr. Russell, Birmingham; Mr. F. Wallace, London; Mr. T. Holmes, London; W. C., Shrewsbury; Mr. J. Page, London; Mr. H. M. Champneys, Penge; Mr. Wright, South Croydon; Mr. T. W. Reid, Canterbury; Dr. A. Sheen, Cardiff; Dr. W. V. Lush, Weymouth; Dr. P. Bindley, Birmingham; Our Dublin Correspondent; Mr. R. W. Soper, Dartmouth; Mr. N. Dobson, Clifton; Mr. J. A. Langdon, Philippopolis; Dr. J. G. Sinclair Coghill, Ventnor; Dr. F. H. Daly, Dalston; X.; Dr. E. Burd, Shrewsbury; Mr. W. H. Allison, Scarborough; The Secretary of the Hunterian Society; Mr. W. K. Treves, Margate; The Secretary of the Medical Society of London; Mr. Alfred Wm. Moore, London; Dr. A. S. Taylor, London; Mr. Warren Tay, London; The Secretary of Apothecaries' Hall; Messrs. J. Hewlett and Son, London; Mr. R. H. Coombs, Bedford; Mr. S. B. Mason, Pontypool; Dr. Fancourt Barnes, London; The Registrar-General of England; Mr. H. Habgood, Eastbourne; Mr. James Hardie, Alloa; Mr. J. P. Benton, London; The Registrar-General of Ireland; Dr. Mackey, Birmingham; M.D.; Our Edinburgh Correspondent; Dr. Joseph Rogers, London; Dr. Decaisne, Paris; Dr. Adam, Caterham; The Secretary of the Royal Medical and Chirurgical Society; Dr. Martin, Berlin; Dr. Henry Burden, Belfast; Dr. James Sawyer, Birmingham; Dr. G. M. Bacon, Fulbourn; Mr. F. Mason, London; Dr. W. B. Carpenter, London; Mr. A. C. Tucker, London; Dr. Laffan, Cashel; Dr. C. R. Francis, Sutton; Mr. A. Ford, Harrogate; Mr. J. Hutchinson, London; Mr. G. W. Bond, Sheldon; Mr. Balmanno Squire, London; Mr. Snell, Sheffield; Dr. E. Malins, Birmingham; etc.

BOOKS, ETC., RECEIVED.

A New System of Medicine, entitled *Recognisance Medicine, or the State of the Sick*. By Bholanath Bose, M.D. London: J. and A. Churchill. 1877.
Principles of Rational Therapeutics. By Bholanath Bose, M.D. London: J. and A. Churchill. 1877.

LECTURES ON THE INFECTIVE PROCESSES OF DISEASE.

Delivered in the Theatre of the University of London.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,

Professor of Physiology in University College; and Superintendent of the Brown Institution.

LECTURE III.—*Pathology of Septicæmia.*

AFTER describing the phenomena of septicæmia, so as to enable you to have before you a sufficiently well defined picture, first, of the effects which show themselves in animals in consequence of a dose of septic poison, and, secondly, of the corresponding symptoms in man, I proceeded to discuss the pathological questions relating to the septicæmic state under two heads; viz.: 1. The efficient cause of septicæmia—the septic poison; and 2. The nature of the pathological process. In the last lecture, I concluded what I had to say to you on the first of these subjects; viz., the genesis of the septic poison, and the important part taken by bacteria in its production. I have now to ask your attention to the nature and effects of the changes which it produces in the circulating blood.

In order that we may be in a position to enter on the study of this question advantageously, let me recall your attention to the main features of septicæmia in animals and in man, as I described them in previous lectures. We saw that it is characterised by (1) the loss of muscular strength, particularly of the heart and respiratory muscles; (2) by the marked tendency which exists to the development in various internal viscera, but more especially in the lungs and in those which send their blood to the portal vein, of a congestion, which has as its concomitant results capillary stasis and hæmorrhage and diffused infiltration of the affected tissues; and finally (3), by brain-disorder and fever.

The most important matter for consideration is that of the relation between the altered condition of the blood and the other phenomena. If, as has been suggested, the alteration of the blood-corpuscles be the primary fact, how does this change in their condition produce the other disorders? May it not be that some of these disorders are due to the immediate action of the poison on the nervous system, or on the tissues generally? I shall endeavour to show that, so far as concerns all those phenomena which belong to the circulatory system, we have good reason for attributing them to the pernicious influence exercised by the poison on the blood-corpuscles; for, in studying experimentally the pathological disturbances produced by agents which can act only in this way—i. e., by disintegrating the blood-corpuscles—we find that the morbid changes produced by them in the organs of circulation entirely resemble those of septicæmia. I found this statement on certain important observations which have been made very recently by Dr. Köhler,* at the suggestion of Professor A. Schmidt of Dorpat, whose name is well known to us all in connection with his investigations as to the coagulation of the blood. Let me first relate to you the facts as they stand. What has been observed is as follows. If, in a dog, a couple ounces of blood be taken from the femoral artery and allowed to coagulate, and, after the lapse of twenty minutes or so, the clot be broken up and kneaded with the fingers, and the carefully strained blood be reintroduced into the femoral artery of the opposite side, so as to mix very thoroughly with the blood-stream before it reaches the heart, it is found that this apparently harmless procedure is attended with the gravest consequences. In ten minutes, or even in a shorter time, after the injection, the animal is collapsed, as if poisoned; the pupil is dilated; even reflex action is much diminished; the heart beats irregularly, but strongly; and the respiration is difficult. These more violent symptoms pass off; but soon alvine disorders resembling those which I described to you in my first lecture present themselves. First, normal defæcations are passed with more or less tenesmus; then follow liquid, mucous, and sanguinolent evacuations in rapid succession; the discharges become more and more bloody; and the animal, if not killed, dies in a state of complete prostration. If the examination of the body be made immediately after death, so as to avoid *post*

mortem changes, appearances present themselves which any person acquainted with the signs of septicæmia would at once mistake for them. Let us suppose the animal to have been killed, and the body opened while the heart was still pulsating. The right ventricle is charged with fluid blood; it may, however, contain coagula, formed, of course, during life. The left ventricle exhibits the characteristic spots of ecchymosis on its internal surface. On opening the abdominal cavity, it is seen that the portal vein and all its tributaries are full of dark fluid blood; the liver is congested, and the mucous membrane of the gall-bladder beset with minute ecchymoses. The mucous membrane of the stomach is also congested and beset with ecchymoses, but otherwise little altered; so that its condition contrasts markedly with that of the duodenum, which, just as in septicæmia, is the seat of intense congestion. The liquid contained in the duodenum consists of blood-stained mucus more or less mixed with bile. Numerous shreds, of various sizes, of shed epithelium float in it, easily distinguished by their yellowish tinge. On microscopical examination, the liquid is found to consist of young cells, coloured corpuscles in great numbers, shreds of epithelium, and abundant masses of bacteria. The mucous surface is of intense dark red. On microscopical examination, it is seen that the villi are the chief seat of the capillary extravasation. The capillaries of the villi are choked with coloured corpuscles closely packed against each other. They sometimes exhibit extravasations, but not as a rule. The mesenteric glands are intensely congested and soaked with sanguinolent liquid. In the large intestine, the changes are much less marked, though any fecal matter contained in the bowel is of a pitchy blackness. Finally, the blood does not coagulate; but there are no signs of solution of the coloured corpuscles; i. e., the liquid part of the blood is not ruby-coloured, as it is in real septicæmia—an important difference between this result and that of septicæmia, the meaning of which will be more apparent as we proceed.

If anyone here present happened to attend the meeting of the Pathological Society in 1872 (*Pathological Society's Transactions*, vol. xliii, p. 303), at which Dr. Klein and I exhibited to the Society the effects of the injection into the peritoneum or into the circulation of a very small quantity of peritoneal infective exudation-liquid, they will at once recognise the striking resemblance of the lesions of which I have now given a sketch with those then described. They resemble no less closely, as I have said, the infusion into the circulating blood of the virulent products of bacteria. In a word, the phenomena you have before you are those of intense septic toxicæmia; but (and it is to this fact that I would specially ask attention) they are produced, not by the introduction of any substance or contagium of extrinsic origin, but simply by the presence in the animal of the products of the disintegration I was going to say, but I must not anticipate—the products of the coagulation and exposure of its own blood. You have before you, in fact, an animal poisoned with its own blood.

To explain this action, I must ask your attention for a short time to some purely physiological considerations, which, however, if well founded, are of unquestionable pathological value and importance. Every bit of knowledge that helps the physician or surgeon to understand how it is that the hidden and intrinsic processes of disease go on, whether started by a morbidic zyme from outside or not, is of value. Hence it is that an experiment like the one I have related to you, in which we are able to trace such a process, possesses a very great interest.

Every student is familiar with the inconvenient words fibrinogen and fibrinoplastin, by which Professor Schmidt of Dorpat has designated what he calls the fibrin factors, and is able to tell you that they are so designated because together they are supposed, according to what he pleases to call the newest views, to make fibrin. Your student would further tell you, if asked, that there is no fibrin in the circulating blood, that the fibrin of the clot is represented by the fibrinoplastin and fibrinogen of the liquor sanguinis; but that, somehow or other, although both of these factors are present, no coagulation occurs so long as the blood is contained in the vascular system; so that the immediate cause of the coagulation of the blood appears to be the withdrawal from it of the influence naturally exercised upon it by the living vessels.

The mode of the influence of the living artery or vein on its contents was, until lately, a mystery, to the solution of which the only clue was suggested by the observation that, in certain cases in which, notwithstanding that both "factors" were present, and that the liquid was no longer in the body, coagulation failed to take place or was unduly delayed, the desired result appeared to be brought about in some way or other with the aid of colourless blood-corpuscles. The only way in which this could be explained was by supposing that the corpuscles must contain some *tertium quid*, which, perhaps by a ferment-like action, determined, in the fibrin-producing constituents of the plasma,

* *Ueber Trombose und Transfusion, Eiter und septische Infection und deren Beziehung zum Fibrinferment.* By Dr. Armin Köhler. Dorpat: 1877.

those molecular changes of which coagulation is the visible sign.* Natural and simple as the suggestion seems, it was some time before it took more distinct form, and still longer before the agency of the colourless corpuscles in coagulation was established on the sure basis of experiment. Obviously, if the agent in coagulation be housed in the corpuscles, it must follow that, in order to its being free to act, at all events a certain number of them must be disintegrated. That such is really the case, we have now good reason for believing; but it has taken a long time and much laborious research to prove it. Let me now bring some of these reasons under your notice. I have to prove to you, first, that certain of the blood-corpuscles disintegrate from the moment that they leave the blood-stream; and, secondly, that if they are removed from the blood before this process commences, the concomitant process of coagulation is arrested.

The fact that the colourless corpuscles break up in the process of coagulation can be made matter of direct observation in any liquid in which they can be observed alone, that is, without the coloured blood-discs. The liquid which has been used for the purpose by Professor Alexander Schmidt is the separated liquor sanguinis or plasma of the horse.† It may be well that I should state how this is obtained. As every one knows, blood does not coagulate at the temperature of freezing. If you allow blood from a vein or artery to fall into a tall jar, in which it is rapidly cooled, and surround the jar by ice, the blood does not coagulate, and what is observed is that the corpuscles fall to the bottom, so that, in the course of an hour or two, you have the column of blood divided into two parts, of which the upper consists of liquor sanguinis alone. As the subsidence of the coloured blood-discs begins very soon after the blood is drawn, it is possible to collect colourless plasma from the top stratum almost immediately with the aid of a pipette. If this liquid be examined without delay, it is found to contain scarcely any blood-discs, but any number of colourless corpuscles; and, if the observation be continued, it is seen that a certain number of these leucocytes rapidly undergo disintegration. In this process of disintegration, the corpuscle breaks up to granules, which hold together for a time in the liquid, but eventually dissolve and disappear. That the disintegration is intimately connected with the process of coagulation, Professor Schmidt infers from the fact that the first formed filaments of fibrin can be plainly seen to originate from the heaps of granular debris which the corpuscles leave behind them.‡

I need scarcely say that the fact of the participation of the colourless corpuscles in the act of coagulation could not be accepted on the ground of microscopical observation alone, however careful or minute. In order to arrive at certainty on the subject, it is necessary to adopt such a mode of investigation as will bring the matter to the test of crucial experiment. It must be shown, not merely that when the corpuscles are withdrawn coagulation is arrested, but also that if, after such withdrawal and suspension of coagulation, they or their contents are restored to the plasma, the power of coagulation, before absent or diminished, is restored. The proof of the first of these statements has been rendered possible by the discovery that in plasma the leucocytes, though quite incapable, on account of their extreme lability, of being stopped by any filter at the ordinary temperature, acquire at the temperature of freezing such firmness and consistence that they are held back by the ordinary method of filtration. This being the case, it is a comparatively simple matter to obtain uncoagulated plasma as nearly as possible in the same condition as that in which it actually circulates, free from leucocytes, provided that the physiologist can work at a low temperature. The filtrate so obtained is absolutely transparent, and is, as nearly as may be, deprived of its power of coagulating; for when brought into an ordinary room, and subjected to a temperature of 60 or 70 deg. Fahr., it remains fluid for several hours.

The second fact, namely, the restoration of the power of coagulation by the subsequent addition to the liquid of the constituent of which it has been deprived, may also be demonstrated by the same method of

filtration. The colourless corpuscles are, as I have described, collected on a paper filter. In order to obtain them free from adherent plasma, they must be washed with ice-cold water. If, then, the filter be washed a second time with water rendered slightly alkaline by sodic carbonate, a solution passes through, which, when added to the decorporated plasma, again restores to it its original coagulability (Schmidt, *Die Lehre*, etc., p. 47).

It has further been established by A. Schmidt that all spontaneously coagulable fluids contain, in addition to what he calls the *substratum* for coagulation (viz., the fibrin factors), a body which is endowed with the properties of a ferment, by which is meant a substance which by contact excites chemical action without itself taking part in it. The function or endowment of the blood-ferment, as it is called, is to excite the molecular changes which result in coagulation, without itself taking any part in the formation of the resulting fibrin.

The blood-ferment is obtained from freshly coagulated blood by a method which resembles that by which, as I explained in my last lecture, I obtained my septic extract from putrid infusions; viz., by first subjecting the blood to the prolonged action of strong alcohol, and then extracting the precipitate with distilled water. The solution of the precipitate, which as so prepared has no toxic properties, exhibits a very remarkable power of exciting coagulation in coagulable liquids in which the process was previously delayed or restrained. If, for example, you receive blood into a vessel containing already a strong solution of Epsom salt, and allow the blood and solution to mix, you obtain a liquid which does not coagulate. If, after allowing the corpuscles to subside, you decant off the supernatant liquid, you have, of course, the plasma of the blood diluted with water holding magnesian sulphate in solution. If now you dilute this plasma sufficiently with water, it coagulates, because, as has long been known, the inhibitory power of the sulphate is neutralised by dilution. But, if, in adding the water, you stop short of this degree of dilution, you readily obtain a liquid which although, so to speak, on the point of coagulation, yet does not coagulate. Such a liquid is well adapted to exhibit the influence of any such body as we suppose the ferment to be. It is evident that it contains the substratum for coagulation; for it consists of liquor sanguinis and magnesian sulphate. Yet it does not coagulate until the required filip is given to it by the addition of the ferment.

These facts admit of no explanation excepting the one given to them by general consent, namely, that, in addition to the substratum, the action of a ferment is necessary for coagulation, and, this having been admitted, the explanation at once suggests itself to the mind that it is in the leucocytes that the ferment is produced, and that this is one reason why they must be disintegrated, in order that coagulation should take place. The filtration experiment affords evidence that this explanation is correct; for it is found that, whereas plasma which contains its leucocytes is as rich in fibrin as the corresponding quantity of blood, plasma which has been deprived of them contains no ferment whatever. But we have already had the proof before us that this is not the only way in which they contribute to the formation of fibrin; for it has been shown that their absence not only prevents coagulation, but that the quantity of fibrin formed is proportionate to the number of corpuscles present. Hence they are not merely exciters of coagulation, but also furnish part of the material out of which fibrin is built up (*loc. cit.*, p. 51).

These considerations, relating to the participation of the leucocytes of the blood in the act of coagulation, readily afford us a way to understand the fact from which we started; viz., that blood which has been allowed to coagulate and then strained off from the clot and re-injected acts as a poison. Why does it do so? Obviously, because it contains disintegrated leucocytes, and thereby determines to a greater or less extent intravascular coagulation. Intravascular coagulation as a mode of rapid death is familiar to every one: a clot in the right ventricle, extending into the pulmonary artery; arrest of the circulation in the lungs; life extinguished by a process in which the phenomena of collapse are mixed with those of asphyxia. In some of the experiments on the reinjection of cruor, this effect was observed. The animal died collapsed and half asphyxiated, and, on opening the thorax immediately, it was found that the still beating heart contained a firm clot, which extended into the pulmonary artery. But, in those cases of longer duration in which the *post mortem* appearances corresponded so very closely with those of septicæmia, coagulation had indeed taken place, but the obstruction was not in the great vessels, but in the smallest arterioles. The contrast between the two kinds of coagulation was striking enough, the one inducing a systemic, the other a local effect; the one affecting the circulation close to the heart, the other near to the capillaries.

It will be remembered that the cruor was infused into the arterial

* For the facts known in 1873, as to the influence of the colourless blood-corpuscles on coagulation, see the article on the Blood in the *Handbook for the Physiological Laboratory*, p. 173.

† Professor A. Schmidt has lately published a complete summary of his sixteen years' labours in the investigation of the coagulation of the blood, under the following title: *Die Lehre von der fermentativen Gerinnungs-Erscheinungen in der eiuissartigen thierischer Körperflüssigkeiten*. Dorpat: 1876.

‡ A similar process may be readily studied in the coagulation of blister-fluid, a drop of which may for this purpose be subjected to observation in a "moist chamber" on the "warm stage" of the microscope. Pericardial fluid, collected from the body of a horse or ox just slaughtered, can be used for the same purpose. Schmidt's microscopical observations relating to the coagulation of plasma are to be found in detail in a paper published in *Pflüger's Archiv* in 1875, p. 560, entitled "Ueber die Beziehung der Faserstoffgerinnung zu den körperlichen Elementen des Blutes." He concludes, from elaborate observations, that those of the colourless corpuscles which, on account of their containing coloured granules, may be regarded as transitional (*rother Körnerkugeln*), take a much more active part than the rest in the fibrin-producing disintegration.

blood-stream of a limb, and not into a vein; consequently it had to pass through the capillary system of the limb, and so become intimately mixed with the circulating blood, before it arrived at the heart. It is this fact which affords the key to the understanding of the result. The tendency to coagulation developed itself slowly, and affected the whole mass of the blood, its effect being to increase the viscosity, and not to produce clots. It was only in a few cases that visible plugs could be distinguished even in very small arteries; but the change in the properties of the blood showed itself in the production of stasis in those parts of the circulation in which stasis is most apt to be produced.

That the organs which send their blood to the portal vein were specially distinguished admits of a probable physiological explanation. In those parts, the difference between the arterial and venous pressures is less than anywhere else in the circulation, excepting in the lungs. But it may be asked, admitting that the circulation of cruor produces embolism of capillary arteries, and that this is, on the whole, more likely to occur in the abdominal organs than elsewhere, how does this explain the localisation of the congestion of the mucous membrane in the duodenum and jejunum? For the answer to this question I need only refer to the facts relating to capillary embolism, of which I gave you an account here two years ago. We then saw that, whenever a terminal artery is obstructed (*i.e.*, an artery which is so exclusively distributed to a particular territory, that that territory receives no blood from any other source), the result is, that the capillaries become choked with blood; and that, by the exudation of the liquor sanguinis of the stagnant blood into the adjoining tissues, the relative number of corpuscles increases, so that in the end you have the capillaries completely plugged with coloured blood-discs, just as they are in the capillary stasis of inflammation. Hence the fact that, both in septic gastro-enteritis and in that produced by the injection of cruor, the villi are the special seat of the injection may be readily understood; for it is obvious that the artery of a villus must necessarily be terminal. If it be choked, the capillaries of the villus will fill with blood as completely as those of the frog's tongue after obstruction or ligature of its principal arteries.

The value and significance of the experimental results we have been considering appears to me to lie in this: not that an analogy is established between septicæmia and the effects of corpuscular disintegration, but that they afford evidence that the particular symptoms produced are not specific, *i.e.*, are not dependent on any specific attraction between, *e.g.*, the mucous membrane of the duodenum and the septic virus, but on a physiological process for which all the conditions exist inside the organism. Thus, by simplifying the problem of the pathological nature of the conditions, we resolve the question of its action into a question of the disintegration of the colourless blood-corpuscles.

The analogy which we have now seen to exist between septic intoxication and the effect of the reinjection of cruor, however remarkable it may be, must not mislead us to the conclusion that the two processes are identical; that is, to the inference that the whole effect of the septic poison is due to the premature disintegration of leucocytes. The symptoms which seem to me to stand apart from the rest in this respect are those which relate to the nervous system, and the pyrexia. As regards the former, their mode of production must for the present remain an open question. There are clinical facts relating to the subject, but they are not sufficiently definite to be dwelt on here. As regards the pyrexia, I think it very unlikely that it is produced by the disintegration of the leucocytes. It seems to me much more probable that the damage done by the septic poison has a wider range, and affects all the more unstable forms of protoplasm, that is, all the more active structures of the body; and that, in accordance with the view of fever which I submitted to you in my lectures here four years ago, the pyrexia which it produces is the expression of that general damage.

[To be continued.]

STOMATOPLASTY.—In a case of cicatricial contraction of the jaws, in which the mucous membrane of the cheek as far as the masseter, and the gums, were extensively destroyed, Dr. Gussenbauer replaced the mucous membrane by a pedunculated horizontal flap cut from the skin of the cheek, and turned so that the epidermic surface looked towards the interior of the mouth. At a second operation, the bridge of tissue connecting this flap with the exterior was divided, and fastened to the anterior part of the mouth. Finally, the defect in the exterior of the cheek was repaired by skin taken from the submaxillary region in the neck. The result of the operation was the restoration of the normal movements of the jaw. The case may be regarded as a typical one of the contractions which result from ulcerative stomatitis, noma, and injuries.—*Archiv für Klinische Chirurgie*, Band xxi; and *Centralblatt für die Med. Wiss.*, Dec. 29.

A CASE OF RUPTURE OF THE INTERNAL AND MIDDLE COATS OF THE POPLITEAL ARTERY, AND COMPLETE RUPTURE OF THE POPLITEAL VEIN, FOR WHICH PRIMARY AMPUTATION OF THE THIGH WAS SUCCESSFULLY PERFORMED: WITH REMARKS.

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THE comparative rarity of partial rupture of the popliteal artery will, I hope, impart sufficient interest to the following case to justify me in bringing it under the notice of the British Medical Association. The particulars of the case are these.

James Collins, aged 19, a muscular well built young man, of fair complexion, was sitting on the front seat of an omnibus; the retiring angles of his knees were in close correspondence with the projecting edge of the seat. A runaway horse and cart came rushing up and dashed into the omnibus. The cart was a railway cart with a high curved cover, and one corner of this cover struck against the patient's left knee and drove it backwards, so that the recess of the popliteal space must have come violently into contact with the edge of the seat. The patient was admitted into the London Hospital on Friday, May 8th, 1874, at 7.30 P.M., shortly after the accident. The left knee showed signs of severe contusion; but, on examination, Mr. Bowkett, the house-surgeon, did not detect any abnormal mobility. There was no evidence of a dislocation. There was not much effusion into the cavity of the joint, and the patient could bend it with only a slight amount of pain. The right knee was bruised. By 9 P.M., the swelling had greatly increased, and the patient complained of partial loss of sensation below the middle of the leg. On measurement, the circumference of the left limb, three inches above the upper border of the patella, was found to be seventeen inches, whilst that of the other side was only thirteen inches. At 11 A.M., the next morning, he was seen by myself. Great swelling existed above and below the left knee for some distance. The knee-joint was distended. The limb was perceptibly cooler than its fellow. The posterior tibial artery at the ankle yielded the faintest possible thrill, so faint, indeed, that most of those who examined the case could not perceive it. On auscultating the limb over the course of the popliteal artery, I detected a peculiar low clicking sound, much resembling the ticking of a watch under a pillow. The diagnosis formed was probable rupture of the popliteal artery and vein, either partial or complete. There was too much swelling to determine the existence of any accompanying fracture. It was decided to send for the friends, and to recommend amputation in the course of the afternoon. At 3.30 P.M., the patient was seen also by my colleague Mr. Hutchinson, who concurred in the diagnosis, and strongly advised the patient, who seemed at first unwilling to consent, to submit to the loss of his limb. By this time, the swelling had invaded the thigh and the leg farther, both upwards and downwards, and the foot was assuming a mottled aspect. The consent of the patient and his friends having been obtained, I amputated the thigh at the lower third, adopting a modification of Teale's method, which I have practised for some years. The anterior flap was rounded at the angles and cut rather shorter, whilst the posterior flap was cut rather longer, than the corresponding flaps in Teale's amputation. The greater portion of the anterior flap consisted of skin and fascia only. On completing the removal of the limb, we found that the areolar tissue underneath the skin of the posterior flap was infiltrated with dark blood for some distance, and, as it seemed possible that the part had been bruised and might slough, it was thought advisable, as a precautionary measure, to take away an inch more of the femur, so as to obviate all chance of subsequent protrusion. Accordingly, the periosteum was stripped up for an inch and the bone sawn off. Subsequently, however, not the slightest sloughing action took place, the blood previously effused undergoing absorption. Four or five ligatures were required; the flaps were brought together with wire sutures, simple dressing was applied, and the patient was sent to bed.

The progress of the case was scarcely interrupted by any unfavourable symptom. Both the temperature and pulse had a high range for a few days, as might have been expected, the former reaching 102 deg. and 103 deg., the latter 120; but, within a week, the temperature was at 99 deg. and the pulse 100. By the 18th, the flaps had united by first intention, except at the lowest part; and, by the 25th, the ecchymosed portions had regained the aspect of health. In the middle of June, the patient was going about on crutches, and, in another month, he was sent to the seaside, his stump being entirely healed. On his

return, he was ordered an artificial leg, the stump bearing pressure well.

Examination of the limb showed blood extensively infiltrated beneath the skin and in the planes of areolar tissue. The popliteal space was filled with dark blood, and dark blood flowed from the knee-joint through an opening in the posterior ligament, which had been slightly torn. The plantaris muscle was torn from its attachment to the femur. At the lower limit of the popliteal space, the popliteal vein was found completely severed, whilst the wall of the artery adjacent to the ruptured vein was evidently thinned. On laying open the artery, the inner and middle coats were seen to be separated from the external for half an inch and turned downwards towards the foot. The impulse of the current of blood against the loose flap had doubtless caused the clicking sound heard with the stethoscope. A further dissection of the parts was made by Mr. Clippingdale. He found that the internal popliteal and posterior tibial nerves were surrounded by dark coagulated blood, which had compressed them and reached nearly to the ankle-joint. On opening the knee-joint on the anterior aspect, he observed that the ligamentum mucosum had been torn through, and that the anterior crucial ligament was injured. A small quantity of dark blood still remained in the cavity of the joint. The external semilunar cartilage was partially displaced.

The external condyle was nearly separated from the rest of the femur by a deep fissure extending along its internal and anterior surfaces, whilst a small triangular piece of bone was loose and projected into the joint. A fissure, commencing behind the external tuberosity of the tibia, ran forwards across the articular surface down the front of the head to the upper end of the tubercle, where it bifurcated the inner branch, terminating on the inner side of the tubercle, whilst the outer branch ran down to the outer side of the tubercle, and, after dividing to enclose a triangular piece of bone, continued its course down the inner surface of the tibia for a distance of four inches. The fibula and the patella were uninjured. The fractures of the femur and tibia were effected by the corner of the railway-van, and at the same time as the rupture of the vessels; but they had no causative connection with the vascular lesions; they were simply a comparatively unimportant accompaniment of the ruptures.

REMARKS.—Rupture of the popliteal artery is, I believe, generally associated with displacement of the tibia at the knee-joint, and involves usually all the coats of the vessel. Such cases have hitherto of necessity required amputation; and the only question which arises in reference to the operation is, whether it is better to perform it at once as soon as the lesion is diagnosed, or to wait until gangrene has commenced. I think that the opinion of most surgeons would be strongly in favour of early amputation, whereby the patient would be saved from all risk of his blood becoming contaminated by the products of the decomposition of his tissues. More especially would this consideration weigh with a surgeon not yet converted to the antiseptic system, and attached to a metropolitan hospital where pyæmia is prevalent and mars the success of operations, however well conceived and executed they may be. In a primary amputation, the surgeon obtains healthy or nearly healthy flaps; in a secondary amputation, after gangrene has commenced and is spreading, he may have to cut through tissues infiltrated with inflammatory exudation.

In reference, however, to the actual results of cases, I am not in possession of sufficient data to determine the point. That secondary amputation may be attended with a very satisfactory result is shown by several reported cases. A case is related by Mr. Jackman in the fourth volume of the *St. Bartholomew's Hospital Reports*. The patient was a healthy farmer fifty-six years of age. He was superintending his men, who were removing some large stumps of old trees. The men had placed a chain round one tree, and, while the patient was standing with his back to them, the horses employed made a sudden plunge forward, which tightened the chain with a jerk and caused it to catch him just under the knee and throw him down with great force. Gangrene set in ten days after the accident, and amputation was performed above the knee four days later. The popliteal artery was torn across, but its ends were surrounded by a tumour about the size of a pigeon's egg, which had the appearance of a false aneurism. Both ends of the artery were closed. The state of the popliteal vein is not described.

Again, in the fifth volume of the *St. Bartholomew's Hospital Reports*, Mr. George Lowe has recorded two cases of complete dislocation of the tibia forwards at the knee-joint, with rupture of the popliteal vessels. The first patient was a fine healthy collier thirty-six years of age. Amputation was performed in the upper third of the thigh six days after the accident, when gangrene supervened. Both the popliteal artery and vein were found completely torn across. The patient made a good recovery. In the second case, amputation was performed in the

upper third of the thigh on the third day after the accident. The popliteal vessels were completely torn across. The patient was a comparatively feeble man thirty-two years of age, but he recovered well. The success of these three cases may be partly ascribed to the fact that the operations were performed in the country, and the success of two out of the three may be also ascribed to the healthy condition of the patients. It is worthy of note, however, that, in Mr. Lowe's cases, the accession of gangrene compelled amputation in the upper third of the thigh, whereas primary amputation could be performed, I should think, in most cases in the lower third. This difference tells considerably in favour of amputation before the occurrence of gangrene.

As a general rule, I think it may be stated that, in cases caused by contusion or dislocation, the popliteal artery can scarcely be torn across, either partially or completely, without corresponding injury to the popliteal vein. This complication must necessarily exalt the gravity of the case. Apart from additional interference with the circulation caused by interruption to the current of blood, the accompanying extravasation would be increased, and the probability of a circumscribed false aneurism forming and limiting the effusion would be considerably lessened.

In the case which I have related, the lower part of the thigh, the popliteal space, and the upper part of the leg were infiltrated with blood, and the knee-joint was distended, the foot was cold and becoming mottled, and yet the effused blood was derived wholly from the ruptured popliteal vein.

Rupture of the inner coats of a large artery is a lesion probably of unfrequent occurrence, and, although I have not had time to search in the various medical periodicals for cases, I believe that comparatively few have been placed on record. It is a lesion, however, which might readily be overlooked or mistaken for embolism. Where, for instance, the internal and middle coats of an artery are turned down and block up the artery, pulsation will be traceable as far as the obstruction, whilst the distal portion of the artery will be pulseless, at least as far as the first large branch, and the limb below, especially if the lower extremity be the seat of the lesion, will be colder than its fellow, just as in the case of an embolic block in the artery. Mr. Pick states that there is a specimen of partial rupture of the left axillary artery in the St. George's Hospital Museum, showing the two inner coats turned down, and involving the vessel in the third part of its course. It was taken from a man who died of an injury to the head. During life, pulsation could be traced to the lower part of the axilla. This is evidently the same case as that related by Mr. Holmes in his text-book of the *Principles and Practice of Surgery*. Mr. Holmes states that "the symptoms of the injury were so clearly marked that it was easy to diagnose both the nature and the precise seat of the lesion". The superficial situation of the artery at the injured spot rendered it obvious that the torn coats had been pushed into the tube of the vessel by the blood, so as to close it, and the condition of the artery was exactly verified by *post mortem* examination. A second specimen in St. George's Hospital Museum shows a laceration of the internal and middle coats of the femoral artery. A third case has been related by Mr. Pick in the seventeenth volume of the *Transactions* of the Pathological Society. The patient, twenty-five years of age, received a violent blow from a crowbar on the front of the right thigh, the effect of which seems to have been to cause a partial rupture of the popliteal artery. He experienced a sudden and intense pain at the back of the knee-joint, lasting some minutes and causing him to feel very faint. The pain passed off, and he resumed his work as a navigator, continuing at it for a week, in spite of pain and swelling of the limb. After walking several miles on the sixth day after the injury, he experienced pain so severe, and so much swelling, that he had to be conveyed home and confined to bed. Five weeks later, he was admitted into St. George's Hospital in a state of collapse and with enormous swelling of the left leg. Amputation of the thigh was performed. The patient rallied, but died of pyæmia on the nineteenth day after operation. The popliteal artery was found torn across, but not completely, a strip of the anterior wall still uniting the two ends. The vein was not injured, but its walls were thickened.

Partial rupture of a large artery may lay the foundation for an aneurism, either circumscribed or diffused. Mr. Pick has related, in the sixth volume of the *St. George's Hospital Reports*, a case of the kind. A policeman, thirty-one years of age, strained his left thigh. Five months afterwards, he was obliged to give up duty and go into the hospital, a pulsating swelling having appeared on the inner side of the thigh. Digital compression was tried, but proved inefficacious, and the swelling of the limb increased so much, that gangrene supervened and necessitated amputation at the hip-joint, from which the patient succumbed. The aneurismal sac was situated at the junction of the

femoral and popliteal arteries, and seemed to be largely formed of the external coat of the vessel. I have also placed on record a case of traumatic axillary aneurism, in which it was an open question whether a complete or partial rupture of a segment of the arterial circumference was the primary lesion. The patient was seventy years of age. Four days before admission, he had fallen out of a cart and displaced his left humerus at the shoulder-joint. Two days after the accident, the dislocation was reduced by a practitioner by extension with the foot in the axilla. On admission, there was considerable, but not excessive, swelling of the shoulder-joint, without pulsation in the swelling. The pulse beat naturally at the wrist. A small hard lump, about the size of a pigeon's egg, could be felt at the base of the axilla, over the site of the axillary vein, and not receiving impulse from the axillary artery. Under these circumstances, more fully detailed elsewhere, I diagnosed an effusion of blood into the axilla and shoulder-joint, stating my belief that the blood came, not from a ruptured axillary artery, but either from smaller vessels or from the vein. Strict rest, with bandages only, was enjoined to promote absorption. A month later, when the patient was not under my charge, aneurismal symptoms appeared, pulsation and *bruit* being both perceptible, and the pulse at the wrist became feeble. Various suggestions as to treatment were made, the most prominent being ligature of the subclavian artery; but the patient declined operative interference. Ultimately, ulceration of the skin took place, hemorrhage occurred, the axilla was laid open, and the injured vessel was secured at the seat of lesion. A transverse aperture was found in the third part of the course of the axillary artery, occupying about a third of the circumference of the artery. In view of the uncertainty as to the source of the effusion of blood in this case, and the advanced age of the patient, which rendered any operative interference at any stage of his case wellnigh hopeless, there can be no doubt as to the propriety of the treatment recommended in the first instance by myself. I am pleased to have the opportunity of quoting a published opinion of my colleague Mr. Maunder in reference to this subject. In his Lettsomian Lectures (*vide Lancet*, February 27th, 1875, page 295, Case 24), Mr. Maunder speaks strongly against the application of a ligature to the subclavian artery, and states that either of the two other means of treatment at our disposal, amputation at the shoulder-joint and laying open the axilla, would in all probability have terminated fatally. This opinion effectually disposes of the suggestions made at the time that ligature of the subclavian artery ought to have been performed, and that it would have been better to operate at an early period in the history of the case.

A point of considerable interest arising out of this case is the possibility of locating the seat of injury in some of the cases of ruptured axillary artery. It is evident that, if the third part of the artery be involved, and if this can be rendered probable, the severe procedure of laying open the whole anterior wall of the axilla might be avoided. A careful exposure of the third part of the artery would then be sufficient, combined with a simultaneous removal of the clots in the axilla. The introduction of the finger would probably enable the surgeon to trace the vessel and find out where pulsation ceased or became less marked even in a case which he had not previously seen. If, however, the case had come under his observation early, and there existed, as in my own case, a small hard circumscribed lump over the third part of the course of the vessel, the diagnosis would be rendered more probable. At all events, a more prolonged search for the seat of injury should be made whenever such a course is practicable, without danger of serious hemorrhage continuing during the exploration.

Next, I would strongly recommend the application of the stethoscope over the site of an artery which there is any reason to think is ruptured either partially or completely. There is good reason to believe that, by means of auscultation, partial and complete ruptures may be diagnosed in some cases shortly after the injury, and when pulsation cannot be perceived. Mr. Holmes states that he has never seen any case where pulsation was present in the extravasated blood in connection with a complete subcutaneous laceration of an artery; but he says that, in some cases, a *bruit* can be heard (*Surgery: its Principles and Practice*, page 78).

Lastly, in these days of antiseptic surgery, when knee-joints can be laid open and fingered with impunity, when the surgeon is freed from all anxiety as to the results of operations, when exposed blood-clots cease to break down and decompose, but become organised in the open wound under the charm of carbolic acid and the antiseptic dressing, it may fairly be asked whether, in such cases as that which I have related, amputation should not be set aside until the wounded vessels have been sought for and tied in the popliteal space. Some of the extravasated blood could be removed by the operator and the rest be allowed to become either organised or absorbed; and, if the knee-joint

had been opened by the accident, the triumph of antiseptic surgery would be all the greater. The only possible question would be, whether the circulation in the member could be carried on sufficiently to prevent the occurrence of gangrene. If this question should be capable of receiving an affirmative reply, no excuse would be left for the mutilation hitherto regarded by septic surgery as indispensable to save the life of the patient.

THE BEARING OF EXPERIMENTAL EVIDENCE UPON THE GERM-THEORY OF DISEASE.

By H. CHARLTON BASTIAN, M.D., F.R.S., F.L.S.,

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THOUGH it may be conceded that with our present state of knowledge an affirmative decision in regard to the absolute proof of the present occurrence of archebiosis may be still withheld, there is, I think, no similar warrant for suspense of judgment in regard to the germ-theory of disease, or, as it is also called, the doctrine of *contagium vivum*. Existing evidence seems to me abundantly sufficient for the rejection of this doctrine as untrue.*

My urine and potash experiments will go far to illustrate this difference in the weight of the evidence in regard to the two questions.

A "sterilised" fluid—that is, one which left to itself would always remain pure—may be caused to ferment by the addition of a certain proportion of liquor potassæ devoid of all living things, especially if the influence of the potash be favoured by certain accessory physical conditions. This fact is admitted by M. Pasteur himself. During the fermentation thus initiated, a matter (ferment) appears and increases, which is capable of spreading a similar process far and wide in suitable media.

But, on the strength of the analogy upon which the germ-theorists rely, we may find in such an experiment a warrant for the belief that in a healthy person, free from the contagium of typhoid fever or any other of its class, certain kinds of ingesta (solids or fluids), wholly free from all specific poison, may, with or without the favouring influence of other altered conditions, give rise to an independent zymotic process. And during the process thus initiated, a matter (contagium) appears and increases in certain of the fluids or tissues of the body, which is capable of spreading a similar disease far and wide amongst receptive members of the community.

Can the germless liquor potassæ, *plus* the favouring conditions (the principal of which is a certain high temperature), be regarded as the "cause" of the fermentation? The answer does not admit of doubt; the effect in question would not have taken place without their influence. The old logical formula in regard to the word, *cessante causâ cessat et effectus*, completely justifies this point of view, and so also does the definition of Sir John Herschel. A "cause," said this philosopher, is "an assemblage of phenomena which occurring, some other phenomenon invariably commences or has its origin."

But there is a point of view which must not be lost sight of. It is of considerable importance, and has of late been dwelt upon by G. H. Lewes with his usual force and clearness. He says: "The fact, that it is a convenience to select some one element out of the group, either for its conspicuousness, its novelty, or its interest, and that we call it the cause of the change, throwing all the other elements into the background of conditions, must not make us overlook the fact that this cause—this selected condition—is only effective in coalescence with the others. Every condition is causal; the effect is but the sum of the conditions."

This brings us to the only point of doubt which can possibly exist in regard to the interpretation of my experiment. It is, whether our

* Since this paper was read, the doctrine has again been proclaimed—and never with more force and ability—by Dr. William Roberts (*BRITISH MEDICAL JOURNAL*, August 11th, 1877). Its essential points may be stated in the words of its latest exponent. He says: "I have already directed your attention to the analogy between the action of an organised ferment and a contagious fever. The analogy is probably real, in so far, at least, that it leads us to the inference that contagium, like a ferment, is something that is alive. . . . If, then, the doctrine of a *contagium vivum* be true, we are almost forced to the conclusion that contagium consists (at least in the immense majority of cases) of an independent organism or parasite; and it is in this sense alone that I shall consider the doctrine. . . . it is more than probable, looking to the general analogy between them, that all infective diseases conform in some fashion to one fundamental type. If septic bacteria are the cause of septicæmia, if the spirilla are the cause of relapsing fever, if the *Bacillus anthracis* be the cause of splenic fever, the inference is almost irresistible that other analogous organisms are the cause of other infective inflammations and other specific fevers."—Sept. 1877.

† *Problems of Life and Mind*, vol. ii, p. 390.

most prominent causal element, the liquor potassæ, exercises its influence (a) partly upon the fluid and partly upon certain otherwise dead or impotent germs still lurking within the vessel, or (b) simply upon the mere chemical constituents of the fluid medium, but in such a way as actually to engender minute particles of living matter which thereafter appear as ferment-organisms.

If a practically dead germ can by any treatment be revived, it may take its place as one of the causal conditions leading to fermentation; hence it is that a certain reserve may still be maintained as regards the absolute proof of the possibility of a germless origin of common fermentations, and the almost simultaneous occurrence of a new birth of living units (Archebiosis).

But all similar grounds for reserve are absent—are non-existent, in fact—in regard to the bearing of this experiment upon the possibility of an occasional independent origin for zymotic disease, whether or not such disease is characterised by the appearance within the body of any distinctive living organisms.*

This I will now endeavour to demonstrate.

It is the process of fermentation which is supposed to be in part analogous to the zymotic disease. It is true that a contagious something becomes engendered during fermentation and during zymosis, by means of which the process or the disease may be spread abroad. But there are important differences in regard to the possible independent origin of the two processes which have hitherto been only too much neglected. The treatment of this subject has often been much too superficial. In order to produce a kind of pictorial effect which may easily captivate the imagination, difficulties are often ignored, and many new, modifying, or antagonistic points of view have even of late been treated as though they were non-existent.

A few words will suffice to make plain some of the differences between the respective conditions which would be operative in the germless origin of fermentation on the one hand, and in the *de novo* origin of a contagious disease on the other. And in so doing I shall be able, I think, at the same time, to show how much simpler it would be to bring about an independent zymosis than an independent fermentation—that is, if we are to rely on the analogy upon which the germ-theorists base their arguments.

During the great majority of fermentations, living organisms make their appearance and rapidly multiply. These living organisms have been proved to be common producers of chemical principles, some of which are soluble ferments, others (like pyrogen) are poisons which may be almost as deadly as that of a serpent, whilst others still are inert and appear as mere pigment granules. It is proved that some of these chemical principles act as true ferments.† It is thought, and it is probable, that the organisms themselves—altogether apart from their media and what else they may contain—may be capable of doing the same. Still this has not yet been definitely proved; so that the action of soluble chemical ferments is at present almost better substantiated than that of the living organisms by which they may have been formed. By means of boiling alcohol and other agents, these bodies can be isolated and freed from living impurity. It is, however, much more difficult entirely to separate minute living organisms from their media,‡ and consequently more difficult to be perfectly certain in regard to their potencies. It is, however, on account of the derivation of the chemical ferments from the living units, and because of the presence of these latter bodies in all fermenting mixtures, that their own agency is still regarded by many as essential to the initiation of ordinary fermentations. But, as I have already indicated, we much need further information as to the precise mode in which fermentation is initiated and carried on by soluble ferments like that which M. Musculus discovered in and separated from urine. If they (all or any of them) are capable of setting up fermentations in germless fluids, in the course of which organisms appear, such phenomena would most effectually disprove an exclusive germ-theory.

Turning now to the process of zymosis, we find the available generative conditions altogether different. Here we have to do not with fluids only, but with tissues and organs composed of living elements characterised by all kinds and degrees of activity. Some of them produce the various soluble ferments of the body, some may produce poisons, and others habitually lead to the formation of pigment-granules—vital acts severally similar in kind to those which the common fer-

ment-organisms are known to manifest. Tissue-elements without number having such and multitudes of other properties are therefore ever present, capable, under certain influences, of being more or less easily diverted into unhealthy modes of action, so that many of them may become true living ferments in the modern sense of that term,* and, therefore, possible producers of chemical ferments (contagia) capable of initiating some or the whole of the series of changes by which they were themselves produced, in other suitable sites.

The essential difference between the two problems thus becomes plain. The only point which my experiment leaves in the least doubtful in regard to the causal conditions initiating fermentation is, whether any latent, powerless, and, as it were, dead organised ferment may still, in spite of the usual evidence to the contrary, lurk in the seemingly "sterilised" fluid. This, however, is the very point about which there is no shadow of doubt in regard to zymosis. Possible ferments without number are, by necessity, present in the form of tissue-elements. So that if we are to be guided by the analogy upon which all germ-theorists so strongly rely, the independent generation of a zymotic process should, for the reason above specified, be incomparably more easy to be brought about than fermentation in a germless fluid. In regard to the independent origin of a zymosis, the all-important point is, not whether latent ferments exist, but whether any causes, or sets of unhygienic conditions, can rouse or modify, in certain special modes, the activity of any of these myriads of potential ferments of which the human organism is so largely composed. And if, as some germ-theorists would have us believe, impotent germs of common ferment-organisms, incapable of exclusion, are also widely disseminated throughout the body, these, if they are such unavoidable elements, could (in regard to the etiology of disease) only be looked upon as components of the body, ranking side by side with the tissue-elements themselves.

Thus such organised ferments or germs as are possibly absent from the "sterilised" experimental fluids are confessedly present by myriads in persons who may be sickening under the influence of various unhygienic conditions or non-specific states of the system; and the only point which is regarded as doubtful in connection with the *de novo* origin of a zymosis, is what analogy might lead us to affirm as completely proved by my experiments, viz., that certain conditions, or states of system, may be capable of rousing some of such ferments into a specific kind of activity, wholly apart from the influence of any specific contagia coming from without.†

Even if independent ferment-organisms of common or special kinds do make their appearance during any process of zymosis originated in the manner above suggested, they would, from the point of view of the etiology of disease, be just as much consequences of the morbid influences, as proliferation of tissue-elements is a consequence of the direct application of acetic acid or any other irritant.

But here, in order to make this point of view more plain, a short digression is necessary.

The intracellular fermentation in vegetal tissues supplies us with a kind of link between the ordinary processes of fermentation and the zymotic processes of animals. MM. Lechartier and Bellamy, as well as Pasteur and others, have now clearly shown that in vegetal tissues placed under certain abnormal or unhealthy conditions, fermentative

* How legitimate this statement is may be seen from what M. Pasteur himself says. These are his most mature views: "I have been gradually led to look upon fermentation as a necessary consequence of the manifestation of life, when that life takes place without the direct combustion due to free oxygen. . . . We may partially see, as a consequence of this theory, that every being, every organ, every cell which lives or continues its life without making use of atmospheric air, or which uses it in a manner insufficient for the whole of the phenomena of its own nutrition, must possess the characteristics of a ferment with regard to the substance which is the source of its total or complementary heat."—*Compt. Rend.*, 1872, t. lxxv. p. 784.

† A very interesting address by Dr. B. W. Richardson, F.R.S., has been lately published (*Nature*, October 4th, 1877), entitled "A Theory as to the Natural or Glandular Origin of the Contagious Diseases". In it the author advances many strong arguments against the germ-theory; he also propounds some interesting speculations as to the mode of origin and action of the chemical principles, or poisons, which constitute, as he believes, the "contagia" of the communicable diseases. Some such views make a very fitting supplement to the doctrines which I have been here attempting to establish in regard to these diseases; only we must, as Dr. Richardson observes, seek gradually to put well proven facts in the places now occupied by mere speculations. In regard to the practical aspects of the two opposite doctrines, Dr. Richardson makes some very pertinent observations. "If the *contagium vivum* view be true," he says: "if the air around us is charged with invisible germs, which come from whence we know not, which have unlimited power to fertilise, which need never cease to fertilise and multiply, what hope is there for the skill of man to overcome these hidden foes? Why on some occasion may not a plague spread over the whole world, and destroy its life universally? Whilst, on the other hand, if the opposition notion be true, we have complete mastery over the diffusion of the poisons of all the communicable diseases. We have but to keep steadily in view that the producing and the reproducing power is in the affected body; and we can, even with our present knowledge, all but completely limit the action to the propagating power of that body—its power, I mean, of secretion and diffusion of secretion."—October 6th, 1877.

* The rule is, that organisms are present in fermentations, whilst they are, so far as we know, quite exceptional in zymotic diseases.

† Pasteur, *Compt. Rend.*, July 3rd, 1876, p. 4.

‡ The more efficient means of filtering organisms from their media, which we now possess, by means of porous earthenware, ought to be useful in this direction. Such organisms and their germs might be subsequently washed with several distilled waters, just as a chemist would wash a delicate precipitate. It would be strange indeed if this very mild usage interfered with the properties of organisms which at other times are credited with such remarkable powers of endurance.

2. Facts of this second order have been thoroughly established by the important researches of Professor Burdon Sanderson. He says: "If a few drops of previously boiled and cooled dilute solution of ammonia are injected underneath the skin of a guinea-pig, a diffuse inflammation is produced, the exudation liquid of which is found after twenty-four hours to be charged with bacteria." "Other chemical agents," he adds, "will lead to the same results, and always under conditions which preclude the possibility of the introduction of any infecting matter from without."

Elsewhere,[†] the same investigator refers to experiments which were made about the same time in order to throw light upon the cause of the appearance of bacteria in certain peritoneal exudations, and to ascertain whether or not their presence was to be considered as "a mere result of the intensity of the peritonitis". He says: "To determine this, experiments were made during the following month (May 1871), which consisted in inducing intense peritonitis by the injection, not of exudation liquids, but of chemical irritants, particularly dilute ammonia and concentrated solution of iodine in hydriodic acid. As regards the ammonia, precautions were taken to guard against contamination by boiling and cooling the liquids, as well as the implements to be used, immediately before injection. In the case of the iodine solution, this was, of course, unnecessary. In every instance, it was found that the exudation liquids, collected from twenty-four to forty-eight hours after injection, were charged with bacteria, whence it appeared probable that the existence of these organisms was dependent, not on the nature of the exciting liquid by which the inflammation was induced, but on the intensity of the inflammation itself."

From the various evidence, more or less fully referred to in the present section, it seems to me legitimate to conclude:

First, that, if we are to be guided by the analogy now dwelt upon as existing between fermentation and zymosis, it would be perfectly certain that the latter process can originate *de novo*—that is, under the influence of certain general or special conditions, and where specific contagia of any kind are at first absent, though they subsequently appear as results or concomitant products. So that an exclusive theory of "contagion", as the only present cause of communicable diseases, is not supported by experimental evidence.

Secondly, that some contagia are mere not-living chemical principles, though others may be living units.

Thirdly, that, even in the latter case, if the primary contagions action be really due to the living units and not to the media in which they are found, such primary action is probably dependent rather upon the chemical changes or "contact actions" which they are capable of setting up than upon their mere growth and vegetative multiplication.

Fourthly, that, where we have to do with a true living contagium (whether pus-corpuscle or ferment-organism), the primary changes which it incites are probably of a nature to engender (either in the fluids or from the tissue elements of the part) bodies similar to itself, so that the infected part speedily swarms therewith. When pus from a certain focus of inflammation comes into contact with a healthy conjunctiva, and therein excites a contagions form of inflammation, no one adopts the absurd notion that all the pus-corpuscles in this second inflammatory focus are the lineal descendants of those which acted as the contagium; and the mode of action may be altogether similar when matter containing bacilli, by coming into contact with a wounded surface, gives rise to splenic fever and the appearance of such organisms all through the body. The old notion about the excessive self-multiplication of the original contagium is probably altogether erroneous.

Thus, all the distinctive positions of those who advocate a belief in the so-called "germ-theory of disease", or rely upon the exclusive doctrine of a "contagium vivum", seem to be absolutely broken down and refuted. We may give that attention to the appearance and development of independent organisms in association with morbid processes which the importance of their presence demands, but we must regard them as concomitant products, and not at all, or except to an extremely limited extent, as causes of those local and general diseases with which they are inseparably linked.

dantly distributed, similar to those which Messrs. Cunningham and Lewis have figured. Some were bacilli, and some were more like what Cunningham distinguishes as vibrios. They were not so abundant as to be always found without careful examination; and, on the other hand, in the diseased splenic tissue there were a multitude of small acicular crystals, which an inexperienced observer might mistake for motionless organisms. In the lower healthy portion of the spleen no organisms were found.

* *Transactions of the Pathological Society*, 1872, pp. 306-308.

† *Reports of the Medical Officer of the Privy Council*, etc., new series, No. vi, 1875, p. 57.

ON REDUPLICATION OF THE FIRST SOUND OF THE HEART.

By PHILIP BINDLEY, M.B.Lond.,

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IN commenting on reduplication and accentuation of the sounds of the heart, it is necessary, in order that all ambiguity may be avoided, to state at the onset what is considered to be the mechanism of the sounds. Here, however, it is not proposed to enter upon the controversy, but merely to specify that in the following observations the first sound is considered to be caused by tension of the auriculo-ventricular valves, and the second by tension of the semilunar valves.

The fact that a doubling of the first sound of the heart sometimes occurred was known to the older authors; but, in his Lumleian lectures, the late Dr. Sibson propounded a theory, that this reduplication is due to an asynchronous action of the ventricles; and Dr. George Johnson, in the Lumleian lectures for the year 1877, propounds another theory, that it is due to an audible contraction of a dilated and hypertrophied auricle. The condition in which this phenomenon is most frequently observed to exist is an abnormal degree of arterial tension, which is a constant accompaniment of Bright's disease. Briefly, Dr. Sibson's theory is this. In consequence of the greater tension of the arteries, the left ventricle, meeting with an increased resistance, acts more tardily than the right; hence, a doubling of the first sound. Generally, there is no doubling of the second sound; and this is a difficulty which at first sight appears to stand in the way of accepting the theory of asynchronism. Dr. Sibson met this difficulty by the following explanation. The greater tension, both relative and absolute, of the aorta, causes it to recoil more rapidly than the pulmonary artery and make up in speed what it has lost in time, the two arteries thus delivering their backstroke at the same instant.

Dr. Johnson considers that this explanation raises a more formidable difficulty; for, if "the greater tension of the aorta, in the cases of renal disease under consideration, enable it to overtake the earlier but less rapidly and forcibly contracting pulmonary artery, it seems obvious that, in the normal condition, when the aorta and the pulmonary artery commence their elastic contractions at the same instant, the much greater tension of the aorta, with its thicker and stronger walls, should react upon and close its valves before those of the more feebly contracting pulmonary artery are closed, and the result would be reduplication of the second sound as a constant and normal condition".

And again, Dr. Johnson says, in reference to cases of emphysema: "In these cases, the increased tension of the pulmonary artery consequent on the obstruction in the lungs can never equal the normal tension of the aorta. However great may be the hypertrophy of the right ventricle in cases of emphysema, the thickness of its wall is never equal to that of the left ventricle. If, then, in accordance with Dr. Sibson's theory of asynchronous ventricular contraction, the right ventricle, in consequence of increased tension in the pulmonary artery, complete its contraction later than the left, and thus cause the doubling of the first sound, the closing of the pulmonary valves must inevitably be effected later than that of the aortic, and the second sound must also be doubled. The reverse, however, is the case. The second sound is single in these cases of emphysema, while the first is distinctly reduplicated."

It is difficult to see the point of Dr. Johnson's criticism. In normal conditions, the pulmonary artery is quite as capable of receiving and reacting against the stroke of the right ventricle as the aorta is against the stroke of the left ventricle. To deny this, amounts to the same thing as saying that a certain degree of elasticity reacting against a given pressure is not exactly equivalent to a greater degree of elasticity reacting against a proportionately greater pressure. It may require a cable to lift a ton, but a thread will lift a pound. The resilience of the pulmonary artery is the exact equivalent in force to the resistance offered by the smaller vessels in the lung, and the thickness and strength of its coats are adequate to the tension to which they are subjected. If, at any time, this natural relation between power and resistance become altered from any cause, then the rapidity of recoil must necessarily be altered too. For instance, if the *vis à fronte* in the lungs be heightened or diminished, then the pulmonary artery will be correspondingly more tense or less tense, and react more speedily or less speedily, in the same manner as a spring tightly or slightly wound.

In mitral regurgitation, the blood returning from the lungs meets with an already full auricle, and pulmonary congestion results; the arteries do not discharge their blood with the usual facility, the pulmonary artery becomes distended and its tension at the same time in-

My attention was first called to them by Dr. Wade, and I am indebted to him for kindly allowing me to make reference to them here. A number of these cases were treated by Dr. Wade with weak alkaline solutions, as recommended by him in a recent number of the *Practitioner* (April 1877). The rapid improvement was very remarkable; but what I wish especially to refer to is the changes that took place in the circulatory system. The arterial tension soon diminished, and the reduplication gradually became less, until at last a stage was reached when it required some care to determine positively whether or not it was present at all. If the auricular contraction were the cause of this reduplicate sound in these cases, then it is necessary to suppose that, as the arterial tension passed off, the auricular systole was followed more and more quickly by that of the ventricle, till at length the time between the two systoles was reduced to nothing. But it is known that the one occurs about one-tenth of a second before the other in a heart beating sixty to the minute.

CHEIRO-POMPHOLYX.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the London Hospital, etc.

I HAD certainly hoped that all personal discussion between Dr. Tilbury Fox and myself as to "priority of observation" was long ago at an end. The facts were very fully put before the profession, and might well have been left to its decision. After the expiration of a year, however, the subject is reopened, and Mr. Tweedy has been induced to forward to the *JOURNAL* his record of a conversation with me which occurred as long ago as 1873. The publication of statements made in conversation is always of questionable propriety, and especially so when the interval is long. Memories are treacherous; and, where the parties concerned differ, it is impossible to decide. Now, although I do not dispute Mr. Tweedy's verbal accuracy, my memory as regards the general bearing of what passed on that occasion is different from his. His letter appears to me to imply (although in this I may be mistaken) that at the date referred to I asked him about the disease in question, it being at the time comparatively new to me. The conversation took place at my desk at the Moorfields Ophthalmic Hospital. I cannot be quite certain, but I believe that a case which was present suggested it. I described to Mr. Tweedy, as I had done a hundred times before to others, the peculiar disease which I then named "relapsing bullous eruption on the hands", and for which I then proposed that of cheiro-pompholyx. I was just as familiar with the features of that disease then as I am now; and, if I asked Mr. Tweedy, as he says I did, if he knew it, the question was not put in the search of information respecting it. Mr. Tweedy suggested to me that it was the same disease which Dr. Tilbury Fox called dysidrosis; and, after a remark or two as to the etymology of that word, I said that my malady had nothing whatever to do with sweating. Mr. Tweedy said nothing in defence of the dysidrosis theory. On the contrary, I quite understood that he did not support it; and there, so far as Mr. Tweedy and myself were concerned, the matter ended. I subsequently, as I have previously stated, received a courteous letter from Dr. Fox, inviting me to read his writings on dysidrosis. This, I regret to say, I never did.

Let me just add that it was the theory involved in the name dysidrosis which prevented me from ever realising the possibility that Dr. Fox had really described the same malady which had so much interested me. I felt so confident that my "relapsing bullous eruption on the hands" had nothing to do with impeded sweating, and that so definite and wide a term as "dysidrosis" must comprise much more than this curiously local malady, that I never gave the subject the attention which it ought to have claimed. May I suggest, further, that this constitutes a strong objection to the use of the term? I have no desire to pre-judge the question as to the anatomical site of the fluid in the sago-grain. It is possible, after all, that that fluid is sweat. We must wait for evidence. But meanwhile it is not, I submit, convenient to designate the disease as if its nature were established, nor to use a term which is etymologically applicable to much more in exclusive reference to one local and clinically very peculiar form. If future investigation should show that in cheiro-pompholyx the initial lesion is, as Dr. Fox and Mr. Tweedy think, a distended sudoriparous duct, still it will remain only one variety of dysidrosis. Names based upon a single physiological hypothesis are seldom appropriate to maladies which present us with a complex group of clinical peculiarities. When it is wished to recognise such groups of symptoms by a name, it seems to me much better to use one which is comparatively meaningless. As such, I still prefer the one which I proposed; and, as a further reason for continuing to

use it, may state that I still agree with Dr. Robinson of New York, Dr. Thin, and others, in believing that cheiro-pompholyx has nothing to do with dysidrosis.

It appears to me that, since the publication of Dr. Robinson's able paper, the proof of the matter is not difficult to come at. If Dr. Fox can demonstrate that there is a bullous eruption on the hands, the fluid of which, in the earliest stage, is acid and does not coagulate, many of us will believe that *dysidrosis extremitatum* is a reality.

OBSTETRIC MEMORANDA.

CONGENITAL UMBILICAL HERNIA.

I ATTENDED Mrs. McK., aged 44, in her eleventh confinement, on November 9th, 1875, when she was delivered of a small female child. It appeared to be healthy and otherwise well formed, with the exception of a small conical hernial projection into the umbilical cord. The convolutions of the bowel could be distinctly seen through the cord. The child died on the sixth day, from what I considered to be peritonitis. Whilst Mrs. McK. was sitting before the fire shortly prior to the birth of the child, the waters suddenly escaped, and she remarked to me on my arrival as to their great quantity.

This deformity is one which we should expect to be of comparative frequency, when we consider the development of the foetus from an embryological point of view. I think this will be borne out by notices of cases in the various authorities on deformities. Vrolik has an illustration of this deformity in his beautiful Atlas (*Tabula ad illustrandam Embryogenesis*), and A. Förster, in his short but complete work (*Die Missbildungen der Menschen*), has two diagrams. J. F. Meckel (*Handbuch der pathologischen Anatomie*) describes a number of cases, in some of which the liver, stomach, and part of the intestines were contained in the hernial sac.

According to M. Vrolik (*Cyclopædia of Anatomy*), this deformity is caused by an arrest of development at that stage in which a part of the viscera is contained in the sheath of the umbilical cord. He also states that the viscera lying in it are always in an imperfect condition. He mentions that there were only four cases in which the life of the malformed child lasted for any time after birth, in the case of Van der Voort for eight, and in that of Ribko for twelve months.

According to some authorities, excess of the liquor amnii is a cause of deformity; but whether it be or not, it is impossible to judge from one case. Its *modus operandi* may be conceived from its pressing on the abdominal walls, and thereby protruding the viscera. It will likewise be seen that the mother was a multipara, and, according to J. G. St. Hilaire (*Histoire des Anomalies*, tome iii), deformities occur more frequently in them than in primiparae; and, in my own short experience, 90 per cent. have been in multiparae, the other 10 per cent. occurring in the somewhat exceptional case of an unmarried primipara.

WILLIAM SNEDDON, M.D., Beith, N.B.

SUDDEN DEATH THREE WEEKS AFTER DELIVERY FROM THROMBOSIS OF PELVIC VEINS, WITH EMBOLISM AND OBSTRUCTION OF PULMONARY VESSELS.

S. W., AGED 27, a fair somewhat delicate woman, living about two miles from my residence, was delivered of her third child on November 24th. The labour was natural and the placenta readily detached. She progressed satisfactorily, and was seen up to the tenth day. On December 19th, between 9 and 10 A.M., I was summoned in haste to see her; but on arrival found her dead. On inquiry, it appeared that, on December 16th, she had complained of pains, supposed to be rheumatic, in the joints, especially the left hip and in the legs; she was said to have been feverish and to have sweated a good deal. She then had cough and shortness of breath. On the morning of her death, on coming downstairs, she was seized with sudden and intense dyspnoea, complained of pain in the region of the heart, and shortly expired.

I made a *post mortem* examination on the 21st, and found both lungs, especially the upper lobes, much congested, with here and there extravasations of dark coagulated blood in their substance. The left lung was bound down by old adhesions. The branches of the pulmonary artery were filled with reddish-brown friable coagulum. In the right ventricle was a cylindrical partly decolorised firm yet friable clot. The veins of the broad ligament, on the left side, and the trunks of the internal and common iliac veins of the same side, were filled with a coagulum of similar character. In the trunk of the right ovarian vein, just before its junction with the inferior vena cava, was a coagulum of the same character as those before mentioned. The vena

cava itself was empty. There were no signs of inflammatory action about the pelvis. The walls of the uterus were flabby, and its cavity was lined by a red shreddy flocculent membrane.

HERBERT J. ILOTT, M.B., M.R.C.S.E., Bromley, Kent.

SPONTANEOUS EXPULSION.

ON November 30th, 1877, I was called to Mrs. W., aged 23, primipara. On examination, the os was fully dilated, the membranes ruptured, the shoulder presenting. The child was dead, the pelvis roomy, and the shoulder well down. I resolved to leave the case to Nature. The forearm soon appeared at the vulva, the head rested on the pubes, the dorsum of the child over the sacrum. The shoulder steadily descended. The left side of the thorax sank lower and lower in the hollow of the sacrum, and kept pace with the descent of the head, which was doubled on the thorax, so that the right cheek lay over the right subclavicular region. The pressure thus caused drove in the thorax and flattened the cheek. Yielding to the pains, the occiput anteriorly, and the lower part of the left side of the thorax posteriorly, were extruded coincidentally at the vulva. Two or three more pains sufficed to complete the delivery of the trunk. The child weighed only five pounds. Labour had commenced at 4 A.M. I first saw the patient at 12.30 P.M., and the delivery was terminated at 3 P.M. The child-bed was normal. The perinæum was uninjured. This seems to be an example of what is known as *expulsio corpore conduplicato*.

ALEX. FORD, Harrogate.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS.

December 27th, 1877.—*Tumour in the Popliteal Space*.—The patient was a boy aged 14, and was admitted on December 15th with a swelling under his left knee. The joint had, five years since, become bent, and was blistered by a surgeon; but the patient never was in any hospital before, and could not give a more complete history of his illness. —Mr. MORRANT BAKER found a large fluctuating swelling in the outer part of the popliteal space. The tendon of the biceps was spread over its posterior aspect, and it could be made, by pressure, to project considerably to the outer side of that tendon. No pulsation could be felt, but obscure fluctuation could be detected. The growth of the tumour had been slow. Mr. Baker believed it to contain fluid, and to be either a bursal tumour or a chronic abscess. Should it increase, he proposed to puncture it with antiseptic precautions, since, of course, the growth might communicate with the joint. —Mr. SAVORY stated that *primâ facie* evidence was in favour of the swelling being bursal; but bursal enlargements are rare in the popliteal space, except in connection with the semi-membranosus, nor was this tumour made tense, in the characteristic manner of distended bursæ, when the biceps was set into action. It was either an abscess or a fatty tumour, and an exploratory puncture was necessary. —Mr. THOMAS SMITH also recommended puncture, since the swelling was hard to diagnose. He believed it to be either a fatty or a fibro-cellular tumour.

Abscess in Abdominal Walls.—Mr. BAKER brought forward a male infant, fifteen months old, that had been ailing for three weeks. Four days ago, the mother noticed a swelling in its abdomen. It was situated in the right hypochondrium, and fluctuated on pressure. Mr. Baker believed the swelling to be an abscess. The child was examined under chloroform, and all the staff agreed with Mr. Baker's opinion, which proved to be correct, as the tumour was punctured and a quantity of pus escaped.

Malignant Disease of the Upper Jaw.—Mr. SMITH introduced, for consultation, a man aged 46 with advanced malignant disease of the left superior maxilla. Several teeth had come away, and a probe introduced into their sockets passed into a soft mass. The patient was in good health; none of the lymphatics below the chin were enlarged. He had a wife and several children dependent on him. As most of the surgeons present were in favour of immediate removal of the upper jaw-bone, Mr. Smith determined upon operating very shortly.

January 3rd, 1878.—*Tumour of the Scapula*.—Mr. MARSH introduced, for consultation, a man aged 41. This patient had suffered for

about nine months from severe pain about the back and shoulders, most intense over the lower part of the right scapula, where, about the time that the painful symptoms commenced, he discovered a tumefaction. This Mr. Marsh now found to be a prominent swelling, very tender to the touch, and neither hard nor distinctly fluctuating on pressure. It clearly protruded backwards from the infraspinous fossa; but it likewise appeared to extend to the lower part of the subscapular fossa; the lower part of the scapula was pushed outwards away from the ribs. There were no enlarged glands in the axilla. The patient had suffered from a sore on his penis a year ago, followed by sore-throat and eruption. Mr. Marsh proposed to make an incision into the swelling, which was probably either a subperiosteal abscess or a softening gumma. Such a proceeding would at least relieve the pain and help to reveal the true nature of the disease. The surgical staff mostly agreed with Mr. Marsh's opinion.

Chronic Disease of the Knee-Joint.—Mr. SAVORY exhibited in Kenton Ward a tall robust man, aged 27, with advanced disease of the knee-joint, partial dislocation of the tibia backwards, but no sinuses or reddening of the integument. The knee had been injured four years previously by a fall from a locomotive engine. It had been, the patient asserted, always more or less "bad" ever since; but he never had been an in-patient at any hospital till a few weeks ago, when he came under Mr. Savory's care. For the first time the affected limb was rested on a splint, the knee was blistered; but no permanent benefit had resulted from that treatment. Whilst Mr. Savory was detailing the above facts, the patient recognised Mr. Willett, and stated that he had been under that gentleman's care, since the accident to his knee-joint, in the out-patient department of the hospital; and remembered that Mr. Willett had detected a loose cartilage within the joint. Mr. Savory determined either to amputate the limb or excise the joint, and was personally in favour of amputation. —Mr. THOMAS SMITH recommended that a search should first be made for the alleged loose cartilage under Lister's carbolic spray. —Mr. WILLETT and Mr. LANGTON were of the same opinion. —Mr. MARSH felt certain that the joint was irremediably spoiled, whether there were or were not a loose cartilage within it. Any proceeding short of amputation would involve an useless and unnecessary risk of the patient's life. —Mr. SAVORY, though still in favour of amputation, determined on a preliminary exploration of the joint. He did not intend to make the incision under carbolic spray, since, in these cases of advanced disease of large joints, he had never seen any additional advantage in that precaution.

NOTES ON BOOKS.

Letts's Diaries and Almanacs.—We have received several of Messrs. Letts's very useful diaries and almanacs; and, in a long list of various kinds, particularly notice their Medical Diary, which will be found a very handy pocket reference, containing carefully compiled information for the especial use of the profession, and prepared for noting obstetric engagements, vaccinations, addresses of assistants, thermometrical and other fluctuations, and for keeping cash accounts. It is got up in several sizes and styles, varying in price from 14s. 6d. to 24s. 6d.

DR. THUDICHUM's tractate *On Polypus in the Nose and other Affections of the Nasal Cavity, their Successful Treatment by the Electro-caustic and other New Methods* (London: Longmans) is an extremely able and careful description of an undoubtedly successful proceeding, into which he has introduced many important practical improvements. The removal of polypus according to the old-fashioned methods was a dirty, incomplete, painful proceeding; it has here received the finishing touches which render it precise, complete, and almost painless.

WE cannot praise too highly the *Royal London Ophthalmic Hospital Reports*, of which part ii, vol. ix, now appears, edited by Mr. J. Hutchinson. Highly accomplished in all the departments of surgery, in none is Mr. Jonathan Hutchinson more at home than in ophthalmology; and in Mr. Nettleship he has an able disciple and colleague. It is not to the credit of our leading ophthalmic practitioners that so much of the burden of scientific ophthalmic progress in this country is laid upon the shoulders of Mr. Hutchinson: in editing and producing this journal, Mr. Hutchinson adds, however, to the many debts under which he has laid scientific surgery in this country. The contributions to this number are mainly from members of the staff of the London Hospital, whom Mr. Hutchinson has inspired with something of his own spirit of laborious study and careful research.

DR. WYNTER BLYTH's paper on the *Prevention of Rabies in Dogs* (Congdon and Board: Exeter) did excellent service in forming a correct public opinion when it appeared in the pages of a contemporary, and we are glad now to see it reprinted.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 12TH, 1878.

RELATIONS TO LIFE OF THE DISTRESS AT MERTHYR TYDFIL.

OUR readers will doubtless have been startled by the descriptions of the distress among the iron-making and coal-getting population of the town of Merthyr Tydfil. How far the present extreme suffering may have been due to mistakes in the discussion and decision of questions relating to capital and labour, it is not our province to inquire; but, seeing the statements in the public papers, and noting the report of the health-officer of the district, it may be profitable to inquire what unfavourable influences the distress may have had upon the health of the people.

It will be necessary to regard this inquiry in two aspects: the *steps* which have brought the working people of the district into so low a state of poverty and distress; and the *causes* which have conducted to the mitigation of the evils which usually follow in the train of poverty.

Prominently, these were the causes which have reduced these hard-working and thrifty people to poverty. A plethora of capital sought a means of revenue; the means in this district was the sinking for coal; coal was obtained in quantities far beyond the need of consumers; for a time, a brief time, there was an increase in the demand; but very soon the market was glutted, and, the need ceasing, labour, too highly paid for during the panic, became a drug. As with coal, so with iron. The demand for rails in America, with guarantees from "bogus" companies, gave an enormous impulse to the manufacture. Iron ore was sought for in Cumberland, Cleveland, Northampton, Bilbao, and Tharsis; furnaces were built, the ore smelted, the iron produced, and the rails rolled. But dollars were not forthcoming to pay for them; the making of rails was arrested; paper companies failed; and the iron-workers and labourers were unemployed.

Thus it has resulted, from an abuse of trade, that masters and men have been deprived, the one of the means of continuing the struggle for trade, the other of the use of those thews and sinews which they have ready for labour.

This diminution of the demand for work has been going on for three years; and the result has been the gradual but continuous diminution of the means for purchasing food. Gradually, but continuously, these men, ready to labour, have been reduced from full rations to half-rations, from half to quarter, from quarter to none. The statements published in the *Daily News* of Tuesday, January 8th, will show how the working men and their families have been reduced to the "lowest ebb of poverty and distress".

But how has this continuous lessening of the food supply hitherto acted upon the health of the people? The reports of the health-officer for 1875 and 1876, and the abstract of his statement for 1877, enable us to answer the question. In the report for 1875, it is shown that the annual death-rate, which in 1845-55 was 35.5, was reduced to 21. In 1876, it was 19; in 1877, 20 per 1,000. Thus the poverty of the people, gradually increasing, did not affect their health unfavourably.

Passing to the mortality due to special ailments, it is shown that the rates of mortality due to phthisis was reduced from 38 $\frac{2}{3}$ to 29; enteric fever, from 21 $\frac{1}{3}$ to 5 $\frac{3}{4}$; diarrhoea, from 8 $\frac{1}{2}$ to 1 $\frac{3}{4}$ per 10,000 of the

people. Typhus had been wholly absent from the town since the previous period of poverty in 1867.

To what is this immunity from diseases, which might be expected to spring up with poverty, to be attributed? The health-officer's reports supply the ready answers. The Local Board of Health, in twenty-five years, at a cost of a quarter of a million of money, have provided a regular system of scavenging, a perfect system of drainage and sewerage, and an unlimited supply of pure water.

The men of Merthyr have found that the provision of pure air and pure water has resulted in producing a state of health that has hitherto resisted the depressing and debilitating influences of poverty. But how long can they resist those influences? Weakened by the want of a sufficiency of food; tried by the rigour of the climate in which they reside; hopeless as to the future; the stoutest hearts must fail—their weakened health must give way.

Mr. T. J. Dyke, the able Health-Officer of Merthyr Tydfil, to whom the whole population has long felt its deep debt of gratitude, in his epitome of the statistics for 1877, has called the attention of the authorities to the necessary sequence of this continued lowering of the vital powers, and the huddling together in the miserable dwellings, graphically described by the Rector of Merthyr. These must inevitably lead to the induction of that malady, famine-fever, which, in former times of destitution, so painfully affected the inhabitants of this stricken town.

Liberal and generous as the public have been, and are yet likely to be, to the sufferers, it is, we believe, nevertheless incumbent on the local authorities to find means (even though they should be costly and unprofitable) of occupation for the able-bodied; and thus afford food for the hungry, and the means of living for the sick.

PHYSICIANS, PRACTITIONERS, PATIENTS, AND FEES.

THE question of medical fees has been raised in several places during the last few weeks. A spirited article in the *World* charges a large section of well-to-do people with the habitual practice of doing the doctor by claiming his assistance and evading his *honoraria* on all sorts of pleas of professional connections or sympathies, indirect social claims upon the medical profession, and upon the victim in particular; sometimes by sheer impudence and disreputable devices. There is no doubt that the medical profession is more largely than any other victimised by such persons. Very few people consult the lawyer with the deliberate intention of defrauding him of his fees; but it is, as most medical men have painful reason to know, a common practice among those who consult the doctor. *Accipe dum dolet* has long been a professional maxim of much worldly wisdom, and is often recommended to general acceptance. Etiquette has grafted it as an essential part of the relations of the pure physician and surgeon to his patients; and the College of Physicians of London, by prohibiting its Fellows from recovering fees by law, has indirectly intimated how considerable a part of the dignity of the medical profession they consider it to be, that such a rule should be generally adopted. Such artificial distinctions between one grade of medical practitioners and another are, however, not always easy to maintain. In these later days, mixed practice by nominally pure physicians and surgeons, time, the railway and telegraph systems, the growth of wealth, the opening of all the universities to aspirants of every grade, have done much to level class-distinctions; and, when we find in almost every town graduates holding the highest diplomas in medicine fulfilling all the minor functions of general practice amongst the poorer classes, but rising, as their knowledge and capacity entitle them to rise, to the highest exigencies of professional duty, it is obvious that such distinctions become artificial. This artificial character is in some sense aggravated by the fact that, on the other hand, eminent physicians and surgeons in the great centres of population, are habitually consulted by family clients under all circumstances and in every exigency; and that they are, from one point of view,

as much family practitioners as any general practitioner, exercising their own discretion as he does as to consultations in any particular cases, and as to the limits which they choose to impose upon their own sphere of practice. It is of course exceptional to find, as one of our correspondents from an important Northern city describes, a court-surgeon and professor engaged in club practice among the poor; but the imbroglia is still further increased by the fact that there are many physicians who make operative surgery a specialty, and some surgeons whose specialty, as in the case of skin-diseases, is essentially medical; while there are others, such as ophthalmologists, whose specialty avowedly includes both medicine and surgery in principle as well as in practice.

Thus we have found, in the correspondence now continuing in our columns, and in which eminent physicians on the one hand and leading general practitioners on the other have taken part under pseudonyms, that the functions of the two classes are by no means so easily marked off as is sometimes assumed, and that complaints arise on both sides, on very different grounds, as to the scale of fees and methods of payment. On one hand, a great physician complains that patients do not always pay their guineas on the spot; that they run up long accounts, which there is a difficulty in calling in when the sum has risen to an important amount, although it has been by their request, and to their obvious convenience, that such proceeding has been committed. A complaint also arises that the physician or surgeon is expected to spend a considerable amount of time in particular cases on the patient, in consultation sometimes with a general practitioner, and the minimum fee of one guinea is all that is tendered to him. On the other hand, a physician of no less eminence maintains that any man in the position of a Fellow of the College of Physicians, who does not demand his guineas on the spot, deserves to lose them; and a general practitioner of no small repute declares that he considers that the physician's trouble is lessened by the presence of the medical attendant, rather than increased; and that he should receive a smaller rather than a larger fee under the circumstances.

A further feature in the discussion is introduced by the letter addressed to the *Times* by "An Overwrought Patient", who there says:

"I have a bone to pick with my doctor; but I feel some delicacy in speaking to him direct, because he is a very good fellow, and occupies much the same social position as myself. Will you let me ask him, then, through you, why he never condescends to give me any items or dates in his bill, but fleeces me under the simple and comprehensive heading, 'Medical attendance'? If my tailor were to send in his account merely 'To clothes', I should have no scruple in having it out with him, should the amount exceed what I had anticipated; but, for the reasons above, I cannot so treat my doctor, and he has, therefore, an unfair advantage over me. If he would give me some details, were they only dates, he would greatly soothe, yours truly," etc.

In a spirited article in the *Daily Telegraph* of Wednesday, it is pointed out that the gentleman in question might very easily have surmounted his delicacy and asked his attendant for particulars, which would have been furnished; and, indeed, general practitioners who are in the habit of sending accounts of the kind, frequently append a printed notice "particulars furnished if required". Such particulars are, however, rarely necessary, as the tariff of visits is commonly understood from the first between the patient and his attendant, and the fees due are estimated by the number of visits. In this article, our contemporary displays a very warm and generous sympathy with the extremely toilsome, anxious, and responsible duty of the medical man, and the very inadequate remuneration which commonly awaits him. Then there is also raised the larger question of what should be the limit of *honoraria* which medical men have a right to expect. On this head, it observes that

"No sane man expects that Mr. Millais would paint his portrait for four half-crowns, or that Mr. Serjeant Parry would defend him in an action for breach of promise with a brief marked 'one gu.'; and,

although Mr. Thackeray used humorously to complain that an eminent firm of Scotch publishers once offered him the magnificent sum of eight pounds for a life of Queen Anne, he would be a bold bibliophile indeed who proposed to pay George Eliot fifty pounds for a three-volume novel. Apart from the fact that the 'worth of anything is just as much as it will bring', as Butler pointed out long ago, it must be remembered that the fee of the surgeon and the *honorarium* of the physician are due, not only for a special service rendered at a particular time, but for the application to an individual instance of the result arising from long years of study, reflection, and experience. One touch of the surgeon's lancet, or half-a-dozen words from the physician's lips, may thus have the intrinsic value of five, or ten, or it might be of fifty or a hundred guineas. The touch given with assured skill may cut the knot of a problem which has tormented us for years. The words spoken with indisputable authority may be the 'Open sesame' to the long-closed portals of health and vigour; but what do we know about the hours of anxiety and study, the painful labours, the repulsive experiences which the practitioner has gone through? What do we know of the possible poverty, obscurity, and discouragement which he has endured before he became qualified to give that magisterial touch with his instrument, or to pronounce the opinion which, humanly speaking, may well nigh be accepted as the fiat of fate?"

This is powerfully put, and explains to the public apprehension the fallacy of a strict theory of uniform fees in a manner which all can understand. The payment of medical men has, in fact, not progressed with the general rise in modern expenditure and the cost of living in modern society. The general average of payment for services of the general practitioner has, we believe, risen to a higher level during the last twenty years, and is probably still rising, and it is within the power of each man to determine whether the tariff of his visits should be half-a-crown or ten shillings; it is commonly considered, however, that no such discretion rests with the pure physicians and surgeons. Mr. Millais may charge a thousand guineas for a portrait, or a great lawyer may refuse to go into court unless his brief be marked with a minimum of one hundred guineas as a retainer, independently of the court fees at the rate of one hundred guineas a day and extra fees for consultation; a junior of the same professional "hall-mark" at the bar, and bearing the same relation to him as the assistant-physician at a hospital bears to his successful chief, will accept the same brief marked with a retainer of from two to five guineas. The physician, however, of no matter what age, eminence, health, or preoccupation by weight of engagements, is accustomed to receive all comers in his waiting-room at a guinea for each consultation, whether he be in a position comparing with that of the Attorney-General at the bar, or with that of the youngest barrister called; he must receive them, too, in strict chronological order; and it is a subject of complaint, in a recent number of the *Works*, with which many will sympathise, that in the crowded waiting-rooms of highly reputed consultants such order is not always strictly observed.

It is probable that the continued discussion of this subject, in the course of the correspondence now going on in our columns, will throw some further light upon the views generally entertained in the profession on this question. To the great credit of medical men, it may be said that such discussions are always more or less distasteful, and, for our own part, we are never disposed to commence them hastily or to carry them on lightly; but in this instance, and at the present moment, we think the debate may not be useless in contributing, at least, to a clearer understanding of the relations between physicians and general practitioners and their clients. Perhaps it may tend also to improve their relations, and to leave to the physician some larger discretion in fees than is at present accorded. We are disposed to think, for instance, that the question might properly be discussed, whether it is for the benefit of the public itself and of all classes of the profession that physicians should be allowed a much larger power over their tariff and consulting fees in their own consulting rooms than is at present generally conceded; and no doubt, also, general practitioners may have something to say as to their difficulties and limitations.

PLAGUE AND CHOLERA.

PRIVATE information from the Levant had just brought to our knowledge certain facts which give a more serious aspect to the recent prevalence of plague in North-Western Persia, when the telegraph from Alexandria flashed the news of the appearance of cholera at Jeddah, the seaport of Mecca, and in the sacred city of Mohammedanism itself. Europe, then, if the telegraphic information as to cholera be true, is now confronted with a double danger of plague and cholera, and that under circumstances where such measures of international precaution as might be possible can hardly be entertained while the war between Russia and Turkey continues. Russia is too seriously hampered in the present struggle to give such heed as she else might do to the dangers of pestilence threatening her on her Caucasian frontier; Turkey is helpless on her eastern frontier; and her great feudatory Egypt is now so gravely involved in the struggle with Russia, that her efforts to protect herself from the Indian malady must be seriously crippled.

We learn that the outbreak of plague at Resht and in the neighbouring district last year was, perhaps, the most formidable which has occurred of the several reappearances of the disease since 1873. It seems almost incredible, having regard to the sources of information on the subject, some official, which have been available, that now for the first time we should learn this to have been the case. But our information comes from a source in which we have every confidence, and it is to this effect. The Persian returns of the prevalence of the disease in Resht, at all times most questionable, were designedly made to disguise the actual state of affairs. Although a liberal allowance was made in view of this local official peculiarity—in other words, although the official returns were multiplied by from four to six—and the result accepted as a reasonable approach to the actual state of affairs, it is now stated, on good authority, that even the sextuple multiplication fell far short of the actual reality. It is idle quoting figures under such circumstances; but it is now averred that the fatality from plague in Resht last year was greater than that which occurred in Bagdad, with its much larger population, in 1872. If this, as we believe, occurred, the outbreak at Resht shows that the disease is still gathering force, and that Europe must keep on the alert in view of a probable widely diffusive explosion of the malady.

It is of much interest, with reference to the reappearance of plague, to know that in the course of last year the Sali plague appeared in the province of Kumaon, Northern India. We are indebted for this interesting information to the President of the Epidemiological Society, Surgeon-General John Murray, M.D.

We refrain from observation on the reported appearance of cholera in Western Arabia until further and more detailed news is received; but it may be remarked that, in the recently published annual report of the Local Government Board, Mr. Selater-Booth states that that department of the Government had been watching with some anxiety, during 1876-77, threatenings of a wide spread of cholera beyond India, and especially certain extensions beyond the northern frontier.

BIRMINGHAM PROVIDENT DISPENSARY.

A HISTORY of the many good causes which have been ruined or retarded by the perversity or narrow-mindedness of their promoters, would form a large and instructive volume. We see reason to fear that a projected provident dispensary in Birmingham may form another item in the catalogue of such misfortunes. A few weeks ago, we drew attention to the fact that the promoters had failed to take counsel with the two classes chiefly, we may say solely, interested in the success of the scheme; viz., the doctors, and their patients the artisans. Since then, the "Trades Council" of Birmingham appointed a deputation to wait upon the promoters' committee and to explain the views of the artisans upon the subject. We learn now that the deputation was very courteously received, and their explanations attentively listened to. One of the points urged by the deputation was that the working classes ought

to be represented upon the Provisional Committee. To this the Committee replied that "it was itself only provisional"; but, nevertheless, "after the interview, the members of the deputation were added to the Committee": a step strictly in accordance with the powers accorded to the Committee by the town meeting at which it had been appointed. It is superfluous to remark that this is a step which ought to have been taken spontaneously by the Committee at its first meeting; it is, at the same time, satisfactory to learn that the Committee is not impervious to reason, and may be compelled by gentle pressure to do right.

It yet remains for this body to pave a way to a successful issue by consulting the representatives of the medical profession. But as yet, although our former remarks on this point were quoted at length by the leading local paper, the *Birmingham Daily Post*, the organ of the local Liberal party, the Committee has failed to discharge this its primary duty. It is true that, by now taking this step, the Committee would tacitly confess that it had at first been guilty of a blunder in with scantest courtesy, slighting the offers of co-operation which were tendered to it by the Council of the Local Branch of our Association. This blunder has already borne fruits. The Committee has made advances to secure the countenance of the three principal medical charities (the General Hospital, the Queen's Hospital, and the Dispensary), and in each instance without success. Was it likely that the medical officers of these bodies, nearly all of them present or former officers of the Branch, and therefore conversant with the feelings and views of the profession in the district, could sympathise with a body which had so studiously and ostentatiously informed the profession that its advice and opinion were of no account?

We hold, and always have held, that judiciously founded and governed provident dispensaries will advantage both the artisans and the profession, and it is therefore with regret that we see the Birmingham scheme threatened with failure by the faults or omissions of some of its promoters. Is it too late for some of the larger minded of them to rescue it?

HERR RUHMKORFF, whose name is familiarly known in connection with an electric apparatus, died on December 21st, at the age of seventy-five.

DR. LANG of Southport was killed on Saturday by an explosion of gas in his dwelling-house. The explosion, which caused considerable damage to the building, was the result of an attempt to trace a leakage of gas with the aid of a light.

THE *Times* correspondent, writing under Bucharest under date of January 8th, says: The Russian Sick and Wounded Society of London has become, in spite of itself, a Turkish Aid Association for the benefit of the Moslem sufferers from Plevna. Their hospitals at Turn Magurelle and Putine are filled with Turkish wounded, and among the surgeons who assisted in the care of the wounded of Osman Pacha's army after the fall of Plevna, Drs. Maturin and Davis were noted for their labours. Prince Charles of Roumania personally thanked the Society's surgeons for their services to the wounded prisoners.

THE foundation-stone of the Hahnemann Convalescent Home at Bournemouth was laid last week by the Lord Chancellor, who complimented the subscribers on dedicating the building to the name of Hahnemann. He well knew the almost persecution which was waged against Hahnemann during his life, but he survived it; and in the direct benefit which his system had contributed, and in the indirect benefit it had conferred in stimulating the growth of other systems, Hahnemann would be looked upon as one of the greatest benefactors we had ever had. We commend to Lord Cairns, who is probably as ignorant of medical subjects as he is learned in the law, the newly-published homœopathic journal entitled the *Organon*, from which he will learn what the doctrine of Hahnemann really was, and what its teaching and influence are.

A TELEGRAM has been received from Consul Zohrab advising the immediate recall of the English surgeons at Erzeroum. They are subjected, he says, to so many privations and perils from the pestilential condition of the town, that he considers they ought not to be allowed to stay.

ONE of the latest acts of General de la Marmora, whose decease has caused such universal grief throughout Italy, was to apply a large part of his great fortune to endow the hospital of Turin, the rest being applied to relieve the poor of Florence and to subsidise industrial efforts in his native town of Biella.

THE HOSPICE OF ST. GOTHARD.

FROM an official document, we learn that this famous "Traveller's Rest", between October 1st, 1876, and September 30th, 1877, gave shelter to 15,651 travellers, to whom 52,783 rations were gratuitously distributed, as well as a certain quantity of clothing. One hundred and forty-three sick persons were also treated there during more or less lengthened periods. The total expenses amounted to 13,860 francs 45 centimes (about £554); and the receipts to 13,507 francs 75 centimes (about £540), showing a deficit of 342 francs 70 centimes; but the cantonal governments and private individuals will, as they always do, come to the help of this useful institution, which welcomes the indigent of all nations without distinction.

ANTI-VIVISECTION MEETING AT KILBURN.

THE National Association for the Total Suppression of Vivisection held a meeting at Kilburn on the 4th instant. In addition to the usual arguments, one speaker mentioned that a class of students had been invited to observe how a cat could walk a few steps after having its heart cut out. We should like to know where this remarkable experiment was performed. Dr. T. Morton entered his protest against the policy and objects of the Society, and moved as an amendment: "That this meeting, relying on the report of the Royal Commission, and being satisfied with the present law, deprecates further agitation on this question." A few weeks ago, we urged medical men to attend these meetings and to point out, from the text and evidence of the report of the Royal Commission, how misleading are the monstrous falsehoods and fanatical nonsense which are generally put forward. Those who, like Dr. Morton, do so, deserve great credit; for it is no easy matter to stand up, perhaps single-handed, in an assembly of enthusiasts who have been brought together, not to hear reason, but to express a foregone conclusion derived from a long course of exciting calumnies. Still, it is our duty to disseminate correct information on this subject and to enlighten public opinion; for none can understand it in all its bearings so well as medical men, and the discussion has provoked an outburst of virulent nonsense which ought not always to pass uncontradicted.

HARVEIAN SOCIETY OF LONDON.

THE annual meeting of this Society was held on Thursday evening, January 3rd. The rooms have recently been redecorated, and presented a pleasant appearance. The usual Council meeting was held before the *conversazione*, and it was found that the finances of the Society were in a most healthy condition. In the absence of the Ex-President, Mr. Carr Jackson—who retired during the session in consequence of impaired health, but who wrote to say that he is now recovering—the chair was taken by Mr. W. F. Teevan. By the exertions of the secretaries and a committee, the meeting was of a very attractive character. Telephones communicating between different rooms were exhibited in action all the evening, and were surrounded by crowds during the whole time. A volume of photographs of "Bulgarian Atrocities" was lent by Mr. Ernest Hart, and excited much attention. Microscopic objects of great interest were exhibited by Dr. Ferrier, Dr. Mahomed, and Mr. Henry Power. Paintings and other objects of art were shown by Mr. Seymour Haden, Dr. Farquharson, Dr. Cheadle, Dr. Braxton Hicks, Dr. Evershed, and

others. A new feature was added in the form of some first-rate instrumental music. The attendance was much larger than was ever known before, and among the visitors were the President of the Royal College of Physicians, Dr. J. C. Bucknill, Mr. Curling, Dr. Crichton Browne, Dr. Langdon Down, Dr. Lockhart Robertson, Dr. Broadbent, and other prominent members of the profession. The following is a list of the newly-elected officers of the Society. *President*: W. M. Graily Hewitt, M.D. *Vice-Presidents*: W. B. Owen, Esq.; J. Hughlings Jackson, M.D.; John Easton, M.D.; E. Symes Thompson, M.D. *Treasurer*: Henry Power, Esq. *Secretaries*: Henry Sewill, Esq.; J. Milner Fothergill, M.D. *Council*: G. Eastes, M.B.; R. Farquharson, M.D.; A. Meadows, M.D.; P. Boulton, M.D.; S. Felce, Esq.; F. J. Gant, Esq.; G. Field, Esq.; T. C. Jackson, Esq.; W. Cheadle, M.D.; G. G. Bantock, M.D.; N. H. Stevens, Esq.; A. Wiltshire, M.D.

A CENTENARIAN.

DR. E. P. CLARK writes to the *Philadelphia Medical and Surgical Reporter* that Mrs. Elizabeth Allen died in Charleston, Rhode Island, on November 28th, at the age of one hundred and five years and five months. She was born on June 22nd, 1772. Her mind and memory remained undimmed until the last. She remembered the burning of New London by the British in 1781. She also remembered the birth of her brother, which occurred on March 18th, 1772.

ALLEGED FIRING ON WAR HOSPITALS.

INTELLIGENCE having been received from Rustchuk that, notwithstanding the existing agreement to respect hospitals, Russian shells from Giurgevo struck the hospitals at Rustchuk, the English surgeons, at the risk of their lives, conveyed the Turkish wounded to the casemates. In reply, it is alleged that the Russians explain their firing upon the Turkish hospital by a report that upon a shell accidentally falling upon it, three hundred armed Turks rushed out, whereupon they came to the conclusion that the Turks were wrongfully sheltering their barracks under a hospital flag, and so continued their fire upon the building. It is, however, contended that the Russians, at a distance of a couple of miles, could not see whether these two or three hundred poor wretches were or were not armed, and that, admitting their statement to be true, it is explained by the fact that the arms of the wounded are, in the majority of Turkish hospitals, placed near the bed's head, in order that upon recovery, each man may have his own arms, and soldiers finding themselves attacked would naturally catch them up in rushing out.

SYPHILINUM AND PSORINUM.

WE have received No. 1, vol. i, price 4s., of the *Organon*, a quarterly "Anglo-American Journal of Homœopathy" (Liverpool). Homœopathy has died a natural death in the "British Homœopathic Society", where the name only survives, which is now (to quote Dr. Wyld, the Vice-President) rather a Society "only too happy to enrich our therapeutics from every available source"; proving the truth of the saying, "Men are usually better than their creeds". Dr. Wyld adds that "every member of this Society, when on a cold day he warms first his front and then his back at the fireside, so far gives *à priori* and *à posteriori* reasons for not being a homœopathist". Then, "Why—great reason why," cries Dr. Skinner, the senior editor of this new review, "call yourselves the British Homœopathic Society?" And to that question the British homœopathists must find it rather difficult to give a satisfactory reply. Dr. Skinner's "Anglo-American Review" is, however, homœopathy pure and simple. He is at least logical and sincere. He has gone back to the fountain-head, and draws his inspiration from the Hahnemannian *Organon*; and here we find at least the real article. Hahnemann's great pathological discovery was, that where it did not lie at the bottom of the disease, we would find syphilis, and every disease must be cured by its *similimum*, potentiated by dilution; and here we accordingly have a "stupendous cure" of caries of the spine by that "silent but miracle-working dynamis" the nosode *sypillinum*. "Not that *sypillinum* is

homœopathic to all cases of caries; it can only be homœopathic to the variety arising from syphilis, not from psora." *Syphilinum*, like *psorinum*, is, it appears, euphemistically "a diluted and potentised product of disease"; at which, however, it seems, some of the "unco guid" turn up their noses and eyes with horror. The results of a fragmentary proving of *psorinum* is described by Dr. Forster in this journal as follows. "A patient took *psorinum* c. m. (Swan). His throat became covered with spots the size of an ordinary pilule and larger, covered with a cheesy-looking creamy top, a pink circle round the base, and some of them looked as if mortification was setting in; they turned black, but there was no foetor. The throat-symptoms were worse from hawking up, worse from gargling with cold water, and always better from no beer." This is the real article; here runs the fountain (not altogether undefined) of homœopathy as Hahnemann discovered and taught it; and no one who wishes to study homœopathy should fail to take an opportunity of dipping into this psychologically interesting volume. Excellent fooling it might be thought, if it were not strange reality.

SMALL-POX AT HARWICH AND IPSWICH.

WE have gathered, from authoritative sources, full particulars of the outbreak of small-pox at Harwich and Ipswich, which is, not without reason, creating great alarm in those towns. We are informed that the first case occurred in Harwich, on October 9th, and that Mr. Evans, the medical officer of health, reported the case to the public health authorities, and at the same time strongly recommended isolation. That recommendation was unfortunately disregarded until the middle of December, when the authorities saw the necessity of adopting it; but it was not until December 24th, and when upwards of forty cases and some deaths had occurred among a population of between six and seven thousand which overcrowds the town, that the requisite accommodation was found. In the meantime, the disease rapidly spread, more particularly in the narrow courts and alleys, which are so common in old seaport towns, and in the overcrowded houses let out to more than one family. At the end of December, Dr. Blaxhall of the Local Government Board went down, and assisted the sanitary authority by selecting a row of nine empty cottages for use as a temporary hospital. The health committee at once set to work, had openings made in the partitions between the bedrooms of the cottages, and furnished the upper part for the reception of forty patients. The hospital was opened for the reception of patients on January 1st, Mr. Sall being appointed to take medical charge for £150 for three months, Mr. Evans, the medical officer of health, having tendered his resignation, owing to the utter disregard which had been paid to his advice with regard to isolation, which, he reasonably thinks, had it been adopted, would have prevented the spread of the disease at the onset, and believing the course he has taken due to himself and to his professional reputation. Revaccination is being to some extent carried out by the practitioners of Harwich and Dovercourt, but not in the systematic manner it ought to be, under the direction of the sanitary authority. For some years, the provisions of the Vaccination Act have not been efficiently enforced in Harwich, and it is principally owing to this neglect that the present outbreak has taken place. The disease was brought into Ipswich on two or three different occasions; each case, however, was at once removed to the Fever Hospital, and precautions against infection taken, so that no further spread took place in any one instance. The borough of Ipswich has, with commendable spirit, been provided with the means of dealing with infectious disease, for some time possessing a hospital. Nothing more could be desired to prove that it is within the power of the sanitary authorities to prevent any serious spread of disease, than the fact that, on ten different occasions during the year 1877, small-pox has been introduced into Ipswich from London and other places; and, in every case where isolation, revaccination, and disinfection were strictly carried out, the disease was not communicated to a second person. Ten cases removed from ships in Harwich harbour have been under treatment in the

Ipswich Fever Hospital. On December 13th, two cases were reported in deep-sea fishing-smacks belonging to Harwich. They were at once removed to the hospital, a distance of twelve miles, and the smacks were fumigated and kept in quarantine four days. On December 24th, the *Volo* returned with three sickening, who were at once removed to hospital. On December 25th, four more were removed, and on the 29th one was taken into hospital; the three remaining of the crew, whose revaccination had begun to take, escaped. The disease in all these cases was of a very mild and modified type, the marks of the vaccination of childhood being of a very large and distinct nature. Not one of them had been revaccinated. The other ship, the *Alice*, with thirteen hands, which had undergone the same treatment as the *Volo*, returned from sea at the end of fourteen days after the first case had been removed from her, with all hands well, no one else having contracted the disease. The infection was taken on board these boats by one of the apprentices, from each going to his lodgings in Harwich, small-pox being in the house at the time.

DEFORMITIES AND REFORMATORIES.

THE prospects of reformation would be narrowed if it were to be considered only possible for those who are in sound wind and limb. Mr. J. B. Aspinall, Q.C., the Recorder of Liverpool, in ordering a boy to be sent to a reformatory, said it had been stated that the authorities would not admit the lad, as he had lost one of his feet. Their refusal to take boys for whom such places were most necessary, was unreasonable and unkind. If they continued to do so, it would be a strong reason for the Government taking them into their own hands. Children with one eye had been refused, but surely people who received substantial assistance from Government ought to be able to take children who most required the benefits of those institutions. Idiots and lunatics have been found susceptible of moral training, and we do not certainly consider the reformatory authorities entitled to treat persons suffering from minor infirmities as outside the pale of reformation.

M. RASPAIL.

OUR Paris correspondent writes: One of the most remarkable characters of the present century has just departed this life, in the person of François Vincent Raspail, he having nearly completed his eighty-fourth year. The name of Raspail is well known throughout the civilised world as a great political agitator, but perhaps it is as well known in connection with the peculiar system of therapeutics he endeavoured to introduce into popular practice, the basis of which is camphor, which he extolled as a panacea for all diseases. One of his sons, C. Raspail, an "Officier de Santé", keeps an open dispensary, which is well attended, and where camphor in various forms is prescribed for internal and external use.

OUR CANAL POPULATION.

ON the 1st instant, the Act 40 and 41 Vict., c. 60, came into operation, for the passing of which the credit is mainly due to Mr. George Smith; and its object is to remedy the evils exposed by inquiries made existing among our canal population, who hitherto were outside the jurisdiction of any local authority. The Act gives the Local Government Board power to make necessary regulations so that no canal-boat shall be used as a dwelling that has not been registered, the master and owner being each under a penalty of twenty shillings for any breach of this clause; they are also empowered to fix the number, age, and sex of persons to be allowed to dwell in the boat, having regard to space, general healthiness, separation of the sexes, and convenience of the boat. The sanitary inspection and power to prevent the spread of disease to be confided to the authority whose district abuts on the canal on which the boat is accustomed to ply; and the boat is also to be registered within a school district for the purposes of the Elementary Education Act. In the two last matters, the Act is very stringent; and to remove any difficulties that might arise in the education of the children, the Act empowers any owners of canals or canal-boats to establish and maintain schools to educate the children of persons em-

ployed in canal-boats, and also to lodge and maintain them, providing that such maintenance be not gratuitous. The rules for practically working the Act will be laid before Parliament soon after its meeting, and put into full force before the end of the year.

THE HEALTH OF LONDON.

THERE were 2,878 births and 1,892 deaths registered in London last week, the births having exceeded by 172, and the deaths by 135, the average numbers. The annual rate of mortality from all causes was 27 per 1,000, calculated upon the population in the middle of last year, which is estimated at 3,577,304 persons. Last week, 26 persons died from small-pox in London, 16 of the deaths occurring in Metropolitan Asylum Hospitals, and 10 in private dwelling-houses. Of the 26 fatal cases, 13 were certified as unvaccinated, and 7 as vaccinated. The number of patients in the Metropolitan Asylum Hospitals, which had declined to 137 in the beginning of October, afterwards steadily increased to 316 and 309 at the end of the last two weeks of the year, and further rose during last week to 374, the highest number since the middle of August last; 129 new cases were admitted during the week. As the result of an analysis of the waters supplied to the metropolis and some of its suburbs during December, Dr. Frankland reports that the water delivered by the five companies drawing their supply from the Thames was "much polluted by organic matter, some of which was of most objectionable origin"; although the water furnished by four of these five companies had been efficiently filtered, it was in each case "quite unfit for dietetic purposes". The Grand Junction water was slightly turbid, and contained moving organisms. The Lea water, delivered by the New River and East London Companies, had been efficiently filtered, but showed considerable organic pollution, although it was in this respect superior to the Thames water supplied by the other companies. The waters distributed by the Kent and Colne Valley companies and by the Tottenham Local Board, drawn from deep wells in the chalk, was of the usual excellent quality. At the Royal Observatory, Greenwich, last week, the mean temperature was 43.9 deg., and 7.0 deg. above the average in the corresponding week of sixty years. The mean showed a marked excess on each day of the week.

THE WEEKLY RETURNS OF THE REGISTRAR-GENERAL.

THE Registrar-General states that the weekly returns for 1878 will contain, as they did in 1876 and 1877, information relating to twenty-three of the largest cities and towns of the United Kingdom; the aggregate population of these twenty-three towns in the middle of 1878 is estimated at 8,373,953 persons. The returns will also, as heretofore, show weekly vital statistics relating to the London Outer Ring, the population of which, in the middle of this year, is estimated at 872,711 persons. Thus the weekly returns during 1878 will relate to an estimated population of 9,246,664 persons residing within the United Kingdom. The weekly returns will, moreover, through the courtesy of various authorities abroad, contain weekly vital statistics for twenty nine large cities situated in the four quarters of the world, and having a population of about twelve millions and a half of persons. In the middle of this year, it will be seven and a quarter years since the last census enumeration in 1871. The estimated population of each of the English towns, except Nottingham, Salford, and Oldham, for want of a more trustworthy basis, is based upon the observed rate of increase prevailing between recent census enumerations. The estimates for Nottingham, Salford, and Oldham, have, however, been specially revised with the aid of local information as to the rate of increase of inhabited houses, proving to the satisfaction of the Registrar-General that the rates of increase in those boroughs since 1871 have considerably exceeded the rates which prevailed during the preceding ten years. From the beginning of this year, the returns for Nottingham will relate to the new boundaries of that municipal borough, as fixed by the Nottingham Borough Extension Act of last session.

SCOTLAND.

THE managers of the Edinburgh Royal Infirmary report that they expect the new Infirmary will be opened by the end of next year.

DR. GUNN, a medical practitioner of Forres, dropped down suddenly and died in his house, last Saturday evening. The deceased, who was a graduate of Edinburgh University, and was at one time house-surgeon to Gray's Hospital, Elgin, had been in practice in Forres for about ten years, where his ability and kindliness gained him general esteem.

DURING the past year, 86.37 inches of rain fell in the Greenock district, compared with 62.62 inches during 1876. The heaviest rainfall in any single month during 1877 was in November, when 11.38 inches fell. The lowest fall was in September, when 3.01 inches were registered.

THE public health returns for the burgh of Leith, during 1877, show that there has been registered 1,153 deaths during the year, of which 459 were of children under five years of age, and 94 were the result of zymotic diseases. The death-rate for the year was equal to an annual mortality of 22 per 1,000. Typhus fever had been fatal in 10 cases, typhoid in 24, diphtheria in 12, whooping-cough in 34, scarlatina in 7. The number of births during the year was 2,141; 1,102 males and 1,039 females. There were 108 illegitimate births.

THE trustees of the late Mr. Robert Napier of Shandon have allotted the following donations out of the fund left by the testator for charitable purposes: to Glasgow institutions—Royal Infirmary, £500; Western Infirmary, £500; Eye Infirmary, £100; Deaf and Dumb Society, £100; Association for the Relief of Incurables, £100; Convalescent Home, Lenzie, £100; Maternity Hospital, £100; and several others in the same amount, reaching a total of £2,000—and to Dumbarton, for benevolent and charitable purposes, the sum of £1,000.

CONTAMINATED WELLS.

TYPHOID fever has been for some time past prevalent in the neighbourhood of Wester Loan, Milnathort, and several of the cases have proved fatal. The Local Authority has had samples of water from two adjacent wells analysed by Dr. Stevenson Macadam of Edinburgh, the result being that both were found to be highly contaminated with decomposed organic matter. One of the wells has been shut up, and the use of the other discontinued, pending a thorough examination.

MUNIFICENT DONATION.

THE directors of the Western Infirmary, Glasgow, have been informed that, by the will of Mr. John Freeland, who died at Nice on the 25th of last month, a sum of £40,000 has been bequeathed to the institution. Since the opening of the Western Infirmary, a year or two ago, there has been a constant struggle to raise sufficient funds to carry on the institution, and at the present time the income has fallen short of the expenditure by £1,000. By the terms of the deceased gentleman's will, the £40,000 has been left exclusively for building purposes. The necessity, therefore, for increased funds is very great, as a larger number of patients than can be accommodated at present will afterwards have to be treated. Mr. Freeland, who has resided for several years at Nice, on account of his health, was a well-known Glasgow cotton-merchant.

THE SCOTTISH POOR-LAW.

FROM the annual report of the Scottish Board of Supervision for the year 1877, just published, we gather that the number of paupers of all classes, including dependents, in receipt of relief on the 14th of May last year, showed a decrease of 2,018, compared with that day in the preceding year. The total number was 100,640, being in the proportion of 2.8 per cent. of the population. The Board have completed

the arrangements for the distribution of the twenty-ninth Parliamentary grant of £10,000, in aid of medical relief to the poor in Scotland. The whole sum expended on medical relief of the poor in all parishes in Scotland, whether participating in the Government grant or not, was, according to the annual reports of the inspectors, £37,400, which is equal to a little over twopence halfpenny per head of the population in Scotland in 1871. It is noted that, in the county of Caithness, there are two poor-houses, with accommodation for 200 inmates, while the largest number in them during the past five years was 25, and the average 20; but the Board have been unsuccessful in endeavouring to induce the parochial boards to place their arrangements for poor-house accommodation on a more economic footing. In the Parliamentary grant in aid of the cost of maintenance of pauper lunatics, the aggregate amount distributed was £65,470. The Board reports that they have approved of the sites and plans of new hospitals to be erected by the following Local Authorities, viz., site and plans of a common hospital at Wishaw and at Inverness, and site for a hospital at Bothwell.

IRELAND.

THE total proceeds of the bazaar, lately held for the Dublin Orthopaedic Hospital, amounted to £143 6s. 10d.

AT a meeting of the Dundalk Board of Guardians, on last Monday, a superannuation allowance of £50 *per annum* was granted to Dr. Massy, late dispensary medical officer.

DURING the December quarter, there were registered in Dublin 147 deaths from measles, being an increase of 108 over the corresponding quarter of the previous year. In Cork, during the same period, 96 deaths from measles were recorded.

MR. J. F. WOODROFFE having taken a Double-First at the recent examinations in Trinity College, Dublin, for Bachelorship of Medicine and Surgery, has received his degree, in accordance with precedent, free of all the usual charges.

DURING the September quarter, the deaths of twelve persons, stated to have been aged 100 years or upwards, were registered in Ireland. Of these, three were returned at 100 years; one at 101; two at 102; one each at 103 and 104; two at 105; one at 106; and one at 112 years.

HEALTH OF BELFAST.

AT the monthly meeting of the Belfast Town Council, held on the 1st instant, the report of the Sanitary Committee was read, from which it appears that, during the five weeks ending December 27th, the deaths registered showed an increase with the preceding four weeks from typhus and enteric fevers and measles, and a decrease from scarlet fever and diarrhoea.

THE CHARGE AGAINST DR. O'HARE OF BELFAST.

THE hearing of this case, to which we referred last week, was resumed on the 5th instant, and, after some evidence had been given, was adjourned to the 11th instant, for the presence of an officer from the Superior Courts in Dublin. We understand that Dr. O'Hare is a graduate in Medicine of the Queen's University in Ireland, and a member of the College of Surgeons of England.

ST. MARK'S OPHTHALMIC HOSPITAL.

THE bazaar in aid of this hospital is to be held in the Exhibition Palace, Dublin, on January 24th and 25th, under the patronage of Her Grace the Duchess of Marlborough and other influential ladies. It is desired to form a building fund for the erection of separate and isolated wards, for the reception and treatment of infectious and contagious diseases of the eye. Under the existing limited arrangements, such cases, which are a prolific source of blindness in Ireland, have to be

altogether excluded from the hospital. It is to be hoped that the governors of this deserving institution—founded, as our readers are aware, by the late Sir William Wilde—will be liberally supported in their laudable efforts. The architect estimates that the necessary buildings can be completed for a sum of £4,000.

HEALTH OF DUBLIN.

DURING the past month, the mortality in Dublin has been alarmingly high. The Superintendent Medical Officer of Health, Dr. Mapother, reports that for the past few weeks the death-rate has been 29.9 per 1,000 yearly, one-twelfth above the average of the ten previous Decembers. Measles and bronchitis have been the chief cause of this excess; the main promoting causes being, in his opinion, climatic conditions, wretched house accommodation, scanty clothing, insufficient food, and intemperance. Dr. Mapother also gently hints at certain other causes of disease, the remedies for which are within the control of the Public Health Committee of the Corporation, whose officer Dr. Mapother is, but suggests no means of carrying such remedies into execution. From an able report lately issued by the Sanitary Association, it appears that year by year the death-rate of Dublin has been gradually increasing. From an average during the previous ten years of 27.9 per 1,000, it rose in 1877 to an average of 28.6 per 1,000; and from the fifth place in point of mortality, among thirteen large towns, to the second. Notwithstanding, it is to be observed, that in calculating the death-rate for the past year, the deaths of persons admitted into public institutions have been for the first time omitted. In connection with the health of Dublin, it may be noted that measles and small-pox are still prevalent in the city. No fewer than sixteen cases of the latter disease were under treatment in Cork Street Fever Hospital last week. Twenty-three cases were admitted during the month of December. Notwithstanding this prevalence of the disease, there seems to be a remarkable apathy as regards the necessity for vaccination. The Registrar of one of the city dispensary districts reports that, in his district, there are one hundred and fifty-eight children over six months unvaccinated.

CORONERS' INQUESTS IN IRELAND.

AN inquest held in Dublin on the 2nd of January illustrates the unsatisfactory way in which inquests may be conducted, even by the most experienced coroners. Dr. White, city coroner, held an inquest on the body of an artist well known in Dublin. The body, it appears, was found in a tank in the deceased's own house; there were about nine inches of water in the tank, which measured eight feet long, three feet wide, and sixteen inches deep, and was, therefore, a wide and shallow vessel. The body lay with the head downwards in the water. The evidence consisted of a statement by a window-cleaner, who found the body in the position indicated, with the legs stretched out and stiff. Dr. James Brady was the only medical witness examined, and his evidence related solely to what he knew of the previous health of the deceased. The coroner stated the only question was whether death was caused by disease or by accident; it was "quite clear" that it was not suicidal. The coroner also said, "out of respect to the feelings of the relatives, in such cases *post mortem* examinations should, if possible, be avoided, and in this case there would be evidence enough without it". We demur altogether to the statement of the coroner there was absolutely no evidence as to the cause of death; the fact of a body being found in water is no evidence of drowning, yet the jury returned a verdict of "death by accidental drowning". The gentleman may have been murdered and thrown into the tank; or been poisoned by himself or anyone else, and have fallen or been thrown into the water; and, lastly, he may have died suddenly from some obscure chronic disease. We say distinctly that there was no evidence, in the absence of a *post mortem* examination, to justify either the coroner's remarks or the verdict of the jury. We should be very much surprised indeed to hear that the relatives of the deceased objected or would object to a *post mortem* examination, when such was absolutely necessary to clear up the mystery connected with the death of their friend.

WILLIAM STOKES, M.D., F.R.S.

It is with profound regret that we record the death on the 7th instant, in his seventy-fourth year, of this most distinguished ornament of Irish medicine. Since his resignation, in 1875, of the post of Physician to the Meath Hospital—a hospital which, during his fifty years' tenure of that office, he had done much to render famous—he had to a great extent retired from the active duties of his profession. He was sorely tried by a comparative failure of nervous power in his lower limbs, and last November had an attack of apoplexy, which left him hemiplegic. Up to almost the last, however, his vigorous mind retained its wonted clearness and even hilarity. His sun in its setting displayed much of the splendour of its meridian career.

William Stokes was one of a family in whom genius is hereditary. He was the second son of Dr. Whitley Stokes, also a distinguished physician, a Fellow of Trinity College, Dublin, and Professor of Natural History in the University. Whitley Stokes resigned his fellowship in 1830, on being appointed Regius Professor of Physic: an instance, the third only on record, of a medical Fellow having filled this high professional and academic position.

The subject of our memoir was born in 1804, and even in his early years gave evidence of the possession in no small degree of remarkable ability. His medical studies were pursued in the University of Edinburgh, where his thoughts were much influenced by the teaching of "the illustrious Alison," and where he graduated M.D. in 1825, the same year as his distinguished fellow-citizen Sir Dominic Corrigan. The following year (1826), at the early age of twenty-two, Stokes was appointed Physician to the Meath Hospital and County of Dublin Infirmary, having succeeded to his father's place in that institution. Here he had the renowned Graves as a colleague, with whose views as to the urgent necessity of a complete reform in the manner of clinical teaching as then pursued, he fully coincided, and co-operated in the most active way.

Dr. Stokes's literary labours commenced at an early age. In 1825, when but twenty-one, he published in Edinburgh *An Introduction to the Use of the Stethoscope*. This work, a small octavo of two hundred and twenty-six pages, is dedicated to his friend William Cullen, M.D., the well-known Edinburgh lecturer on Anatomy and Physiology. Very soon after his appointment to the Meath Hospital, he contributed several clinical papers and clinical lectures to the periodicals of the day. Some of the latter, forty-four in number, which first appeared in the *London Medical and Surgical Journal* in 1833 and following years, were collected and published at Philadelphia in 1837, under the title of *Lectures on the Theory and Practice of Medicine*. In the same year (1837), he brought out his famous work on the *Diagnosis and Treatment of Diseases of the Chest*, which at once secured for him the reputation of being one of the most scientific and observant practitioners of the day.

The first number of the *Dublin Journal of Medical and Chemical Science* (subsequently the *Dublin Quarterly*, and now the monthly *Dublin Journal of Medical Science*) appeared in March 1832, and was edited by Dr. (now Sir Robert) Kane. "After the appearance of the first two or three numbers, Dr. Kane had associated with him, in his editorial capacity, Drs. Graves and Stokes." Kane resigned his connection with the *Dublin Journal* in 1834, and Graves and Stokes continued as editors up to the year 1842. During this period, several valuable communications appeared from Stokes's pen in the pages of the journal, either as original articles or in the reports of the Pathological Society of Dublin, of which he was Secretary, and which was established by Stokes and his brother-in-law (the late Professor R. W. Smith) in 1838. He also contributed several well-known articles to the *Cyclopædia of Practical Medicine*, as well as numerous papers to the *Dublin Hospital Reports*, *Dublin Hospital Gazette*, and *Transactions of the Association of the King and Queen's College of Physicians in Ireland*.

In 1855, Stokes published his classical *Treatise on the Diseases of the Heart and Aorta*: a work which may be truly said to have in a great measure laid the foundation of the accurate knowledge now possessed of such affections. And so recently as the year 1874 he published a volume of *Lectures on Fever*: a subject upon which he is justly regarded as one of the greatest authorities, and the rational and now generally adopted treatment of which disease he was, with Graves, the first to inculcate.

All of Stokes's writings are original and unique. With marvellous

precision, he avoided to a great degree speculating on those subjects upon which he already saw the that hand of scientific progress was being laid; and so they remain valuable for all time. The hand that touches them will spoil them; it could add nothing to them, and might take much from them. The clinical facts are there, as models of observation and patient research. But it was chiefly as a teacher of medicine at the bedside in the wards of the Meath Hospital—to which famous institution he was, as we have seen, physician for half a century—that he especially shone. Those who had the advantage of being his pupils—and they may be reckoned by hundreds—can best testify as to the valuable nature of the instruction he lucidly imparted to them. It is sufficient for us to say that they tell us his method was admirable; his investigation of a case most thorough and painstaking; his diagnosis searching and accurate; his prognosis—always guarded—at times most wonderful in its exactness; his treatment thoughtfully and skilfully planned, and confidently carried into effect. His great object in teaching medicine was to make his pupils practical men, to stimulate them to original investigation, and to make them feel that he himself was in all cases their fellow-student.

As a hospital physician and teacher, Stokes's most conspicuous characteristics were the profound accuracy and painstakingness of his observations, and the fidelity of his records of disease. Truth and accuracy of detail marked all his clinical work, and stamped an imperishable value on all his published writings. As a teacher, his singular but characteristic grace, his courteous bearing, his philosophic earnestness, his extraordinary attainments, and the felicity of language in which he addressed the students, combined with his serious gravity of manner, were most effective and impressing. He was always proud of the professional success and celebrity of his pupils, and loved to dwell on the essential feature of the clinical teaching in the Meath Hospital, which fostered self-education and self-reliance by making the student responsible for the care of individual patients.

Stokes was one of the first men in this country who gave an impetus, by example and precept, to the study of the all-important and noble subject of the prevention of disease. His labours in this field alone are worthy of the most signal recognition. It was mainly due to his influence, we believe, that the University of Dublin established in 1871 the Diploma in State Medicine for those of its graduates in medicine who make a special study of the extensive range of subjects connected with the science of preventive medicine, and who pass a searching examination therein. This far-seeing step of the Irish University has met with general approbation from scientific men and statesmen; and its example has been followed by the more ancient as well as by the more modern sister universities of Great Britain. The establishment of an intimate connection between the state and the medical profession was an object Dr. Stokes had much at heart. Always most solicitous for the honour and independence of his medical brethren, and, at the same time, a far-sighted and ardent sanitarian, he perceived the advantages to be derived by both bodies from such a desirable union. In the establishment of the Medical Department of the Privy Council and the appointment of a medical member of the Local Government Board, this has to some extent been accomplished. Much, however, yet remains to be done, as is evident from the collapses which are of such constant occurrence in the execution of the sanitary laws.

Dr. Stokes's efforts in the cause of medical education and of medical reform have done much to elevate the status and honour of the profession in this country, but cannot be more than noticed here. He was possessed of high intellectual acquirements, artistic taste, and literary attainments; witness his *Life of Petrie*, his most intimate friend, published in 1868. His social qualities were of the most genial and agreeable nature; his benevolence was unbounded, and his kindness of heart and disposition endeared him to all with whom he came in contact.

Stokes was the recipient of many professional and scientific honours. In 1839, the University of Dublin conferred on him, *honoris causa*, the degree of M.D.; and in the same year he was elected a Fellow of the King and Queen's College of Physicians in Ireland. On three separate occasions, he was chosen President of this ancient corporation; and, while their President, was also the President of the British Medical Association during the year of its memorable meeting in Dublin in 1867. On his father's resignation of office in 1845, Dr. Stokes succeeded him as Regius Professor of Physic in the University of Dublin, and filled this high position with dignity and usefulness up to the time of his death. The Universities of Edinburgh and Cambridge both conferred on him their degree of LL.D., and the University of Oxford that of D.C.L. He was a Fellow of the Royal Society, and in 1874 was elected President of the Royal Irish Academy.

On the formation of the General Medical Council in 1858, he was nomi-

nated by the Crown as its Irish representative member, an office which he only resigned, in consequence of his impaired health, last May. Dr. Stokes was also Physician in Ordinary to the Queen in Ireland, and Consulting Physician to several medical institutions. The last honour he received was probably the more highly valued because unexpected. It was the presentation, through the German ambassador from his Emperor, of the insignia of the Prussian order "Pour la Mérite", to which Stokes was nominated in 1875, along with such other distinguished men as Longfellow, George Bancroft, and Schwann. His numerous friends and admirers also honoured him during his life by the erection of his statue, by Foley, in the hall of the King and Queen's College of Physicians.

Stokes did not obtain any title. He never coveted any; he never sought any. He was a prince from birth of the aristocracy of intellect. His name is crowned with the triple coronet of the gratitude of the poor, for whom he tenderly and piously cared; the confidence of the public, whose approbation he universally secured; and the love and esteem of his profession, whose honour and interests he unflinchingly upheld.

BRITISH MEDICAL ASSOCIATION MEDAL.

THE Association medals, established by vote at the last annual meeting, in virtue of a resolution of the Committee of Council moved by Dr. Sieveking and Mr. Callender, and warmly supported by Dr. De Bartolomé of Sheffield, the President of the Association during the year 1876-77, were on Wednesday handed to the recipients, whose names were then announced, and who had so greatly distinguished themselves by their devotion to duty, under circumstances of no small peril and hardship, on the occasion of the inundation in the mines at Pontypridd. We had the advantage of publishing, from the pen of Mr. H. Naunton Davies, who directed the medical staff, in the JOURNAL of May 12th, a simple and modest recital of the circumstances, which deeply interested the profession, and has left an enduring memory of the courage and noble conduct of himself and his medical companions. The Albert Medal was granted to most of the leaders of this heroic enterprise, but, strangely enough, was withheld from all the medical men concerned. In instituting this special medal of merit, the British Medical Association has expressed its sense of the high claims to gratitude of those gentlemen, and has at the same time established a precedent for the recognition of high merit of the kind, which will have an enduring, and it may be hoped an increasing, value. In thus repairing an omission which it is impossible not to feel, the Association will have made a silent but practical comment on the neglect which it is too often the custom to show towards medical deeds of heroism, while those achieved by other callings are profusely rewarded with public honour. The medals were presented at a dinner given by the Committee of Council, with appropriate addresses by Dr. Wilkinson, the President of the Association, and Dr. Falconer, President of Council; and were acknowledged by the recipients in interesting speeches, of which we hope to be able to present a report.

THE NEW NORTH OF IRELAND BRANCH.

WE learn with great pleasure from Dr. John Moore of Belfast, that the meeting on the 3rd instant for establishing the North of Ireland Branch of the British Medical Association was most successful, and that the Branch was formed under the most favourable auspices and with warm support. The meeting was held in the Lombard Hall, Belfast, Dr. J. K. Maconchy, of the Downpatrick Infirmary, in the chair. A suitable series of by-laws was submitted and passed. Ten members of the profession were elected members of the Association and Branch, and forty-two existing members of the Association joined the Branch. It thus opens with fifty-two members, and others whose applications were received too late are waiting election at the next meeting of the Council. The following officers were appointed for the ensuing year. *President*: James Cuming, M.D., Belfast. *Vice-Presidents*: J. K. Maconchy, M.B., Downpatrick; J. W. T. Smith, M.D., Belfast. *Council*: W. Arnold, L.K.Q.C.P.; F. E. Beck, M.R.C.P.Ed.; J. W. Browne, M.D., Belfast; A. Dunlop, M.D., Holywood; J. Fagan, L.K.Q.C.P., Belfast; H. Frazer, L.K.Q.C.P., Armagh; G. Gray,

M.D., Castlewells; R. Gray, L.K.Q.C.P., Armagh; A. Harkin, M.D., Belfast; A. Kidd, L.K.Q.C.P., Ballymenor; W. A. McKeown, M.D., Belfast; Sir William Miller, M.B., Londonderry; C. D. Purdon, M.B., Belfast; E. Thompson, M.B., Omagh; G. F. Wales, M.D., Belfast. *Secretary and Treasurer*: John Moore, M.D., Belfast. The names of these gentlemen will command the esteem and confidence of the profession in the north of Ireland, and no doubt the numbers of the new Branch will soon be largely increased.

THE PATHOLOGICAL SOCIETY OF LONDON.

THE annual meeting of this Society was held on January 4th, when the report of the Council was read by the Surgical Secretary. It stated that the number of members was now six hundred and one, of whom thirty-two had joined during the past year. Five members had died in 1877, viz., Sir William Fergusson, Dr. Snow Beck, Mr. William Coulson, Dr. Basham, and Mr. William Carr; and eight members had retired. The success attending the setting apart of certain meetings for the discussion of special pathological questions, as that of visceral syphilis, which had been discussed in 1877, was so great that the Council had determined to continue the plan; and the subject chosen for the coming year was that of Diseases of the Lymphatic System, including Lymphadenoma and Leukæmia. The new volume of *Transactions* was also enriched by the communications of Sir W. Gull and Dr. Sutton on Arterio-capillary Fibrosis; of Dr. George Johnson on the Changes in the Blood-Vessels in the Small Red Granular Kidney; of Mr. Godlee on the Organisms characteristic of Vaccinia; of Dr. Braidwood and Mr. Vacher on Vaccinia and Variola; of Dr. Klein on Scarlatina and on Pig-Typhoid; and of Dr. Gowers on Hydrophobia. A committee was appointed to inquire into the infective processes known as Pyæmia, Septicæmia, and allied diseases, and included representatives of each of the large Metropolitan hospitals; of these, a working committee was selected, consisting of Mr. Marcus Beck, Dr. Greenfield, Mr. McCarthy, and Dr. Ralfe. Application was made to the Local Government Board for assistance in an inquiry which might be very important to the welfare of the public. A grant of £350 was at once made, and the Committee had since been actively engaged in pursuing its investigations. A Committee had also been formed to inquire into the structure of the arteries and capillaries in Bright's disease with contracted kidney. As it was composed of Dr. Burdon Sanderson, Dr. Bristowe, Dr. Gowers, Dr. Charles, and Mr. Schäfer, the Council looked forward to a report of considerable value. The Morbid Growths Committee had revised its rules, which were printed in the volume of *Transactions* for 1877. The expense of the *Transactions* had been very large; but the valuable engravings attached to the paper of Sir W. Gull and Dr. Sutton had nearly all been liberally contributed by the authors. The Treasurer's balance-sheet showed a sum of £1,067 15s. 1d. invested in the names of the Trustees, and of £15 17s. 4d. in hand. The greater part of the annual expenditure was for the volume of *Transactions*.

Mr. Wood moved, and Mr. Howse seconded the proposition, that the report be adopted. The motion was carried unanimously. Dr. Tatham proposed a vote of thanks to the retiring officers, which was acknowledged by Dr. Hare. Dr. Hare then in highly eulogistic terms proposed a vote of thanks to the retiring secretary, Mr. Wagstaffe, upon whom the chief work of the Society during the past year had fallen. The proposition was seconded by Mr. J. Wood, and carried with enthusiasm. Mr. Wagstaffe acknowledged the vote.

Dr. Goodhart and Dr. Dowse, being appointed scrutineers of the ballot-box, reported that the officers nominated by the Council had been elected. These were as follows. *President*: Charles Murchison, M.D., LL.D., F.R.S. *Vice-Presidents*: Edward Headlam Greenhow, M.D., F.R.S.; *George Harley, M.D., F.R.S.; Walter Moxon, M.D.; *Hermann Weber, M.D.; Thomas Bryant, Esq.; George W. Callender, F.R.S.; *Thomas William Nunn, Esq.; Thomas Smith, Esq. *Treasurer*: John Whitaker Hulke, F.R.S. *Honorary Secretaries*: R. Douglas Powell, M.D.; *W. Marrant Baker, Esq. *Council*: William Cayley, M.D.; *Sidney Coupland, M.D.; James Frederick Goodhart, M.D.; *William Richard Gowers, M.D.; T. Henry Green, M.D.; William Smith Greenfield, M.D.; Charles Henry Ralfe, M.D.; John Charles Thorowgood, M.D.; Charles Theodore Williams, M.D.; *John Williams, M.D.; William Adams, Esq.; Edward Bellamy, Esq.; Henry Trentham Butlin, Esq.; Rickman John Godlee, Esq.; *Henry Greenway Howse, Esq.; *Jeremiah McCarthy, Esq.; *William Mac Cormac, Esq.; Henry Morris, Esq.; Arthur Treherne Norton, Esq.; *William Warwick Wagstaffe, Esq. The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during the preceding year.

HYDROPHOBIA AND RABIES.

THE Committee recently appointed by the Scientific Grants Committee of the British Medical Association "to organise an inquiry into the Causation, Pathology, and Treatment of Rabies and Hydrophobia", consisting of Mr. Callender, F.R.S., Dr. Burdon Sanderson, F.R.S., Dr. T. Lauder Brunton, F.R.S., Mr. Ernest Hart, and Dr. Gowers, desire to announce that they will feel favoured if any medical gentleman having under his care a case of hydrophobia will kindly communicate with them. In any cases of hydrophobia or of rabies in which a *post mortem* examination is made, they will be glad to receive for investigation the following parts; namely, the spinal cord, medulla oblongata and pons Varolii, a small piece of the cerebellum, corpus striatum, convolutions of the middle third of the brain, one of the salivary glands, the nerves leading to the part bitten, portion of the liver and of the kidneys, and the scar. These should be at once placed in a mixture of equal parts of spirit and water (or, if the organs be at all softened by commencing decomposition, in a mixture of three parts of spirit to two parts of water), and forwarded with as little delay as possible, together with a report of the *post mortem* appearances, to the Office of the British Medical Association, 36, Great Queen Street, London, W.C.

The members of the Committee are also anxious to have the opportunity of visiting cases of hydrophobia under treatment, or of attending any *post mortem* examinations in fatal cases.

At a recent meeting of the magistrates of the county of Cornwall, the chief constable called the attention of the Court to the spread of hydrophobia in this county. Notwithstanding that every precaution has been taken in the districts where it exists to prevent it, he regretted to have to report that one child had died from it, and two other persons had been bitten by a mad dog. One horse, two head of cattle, fifty sheep, seven pigs, five cats, and fifty-three dogs had been killed or died of the disease, and he feared there were still many animals alive in the county that had been bitten by mad dogs. Colonel Tre-mayne desired to obtain some information with reference to the number of unlicensed dogs in the county. He knew there were a great many, but he did not hear of very many prosecutions, and he could not help thinking that if the law were altered, and the police had the power to prosecute, the dog nuisance would be greatly abated. The chief constable replied that the police could only report to the Excise, as they had done in a great number of cases; within the last month, no less than sixty-one such cases were reported at Liskeard alone. Many cases were dropped, and he knew that many were compromised, while others came before the magistrates; but whether they were all reported at Somerset House or not, it was quite impossible for him to say. A motion was passed to the effect that the attention of the authorities at Somerset House should be called to the fact of so many reports having been made without being followed by prosecutions.

An inquest was lately held at Wycombe Marsh, High Wycombe, on the body of a child named F. E. Rumbelow, aged 7. The deceased was bitten by a black and tan terrier dog, and some days later was taken ill at school. A wound on her leg, caused by the bite, was very much inflamed, and her mother applied cold water bandages. On the following morning, the child said the wound was not so painful, but complained of soreness in the throat. She gradually got worse from that time, and died displaying all the symptoms of hydrophobia. The deputy-coroner (Mr. G. A. Charsley) hoped the Chancellor of the Exchequer would take some restrictive steps regarding dogs during next session.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE PLYMOUTH FREE AND PROVIDENT DISPENSARIES.

MR. W. H. ALGER has forwarded to us a copy of a pamphlet on the *Outline of a Scheme for the Amalgamation of the Plymouth Public and Provident Dispensaries*. The Court of the Governors of the Public Dispensary have resolved that "this Court gives power to its Committee to adopt the provident system in connection with this institution". Mr. Alger proposes that effect should be given to this resolution in the following manner. In future, a subscription of one guinea to the Public Dispensary should entitle the subscriber to four recommendation papers. These recommendation papers should be given to applicants for medical advice, not as a title to gratuitous treatment, but, as it were, as payment on their behalf of the sick fines, which—not having previously become members of the provident dispensary—

they would, according to the usual rules of a provident dispensary, be required to pay on admission to its benefits during illness. The subscriber would thus have in his hands the power of absolving from the sick fine those to whom he gave his paper of recommendation. After being admitted in this way, the patient would take his place as an ordinary provident dispensary member, and would pay sixpence, which would thus be considered equivalent to the weekly payment of an ordinary member for six weeks. After six weeks, the patient would be induced, if possible, to continue his weekly or monthly prepayment, and he would not be allowed to have the benefit of medical attendance on any other footing for another six weeks, unless it were found on inquiry that he was a suitable recipient for further gratuitous advice. Mr. Alger points out that "in this way, whilst the provident system would be engrafted upon the Public Dispensary, yet the charity would still be holding out a welcome hand to those poor persons who could not afford to pay for medical assistance; and the investigations which would be made into the merits of each case, whilst weeding out improper persons, would doubtless bring into notice the really necessitous cases, and thus enable the benevolent to render aid to them in other ways". The scheme is a good one, and we shall be glad to hear that it has been adopted.

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the Branch will be held at the York House, Bath, on Wednesday evening, January 30th, at a quarter past Seven o'clock: H. MARSHALL, M.D., President.

The evening will be devoted to the discussion of Hospitalism, which will be opened by R. W. Tibbits, M.B.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, December 31st, 1877.

DUBLIN BRANCH.

THE first annual meeting of this Branch will be held in the Hall of the King and Queen's College of Physicians, Kildare Street, on Wednesday, January 30th, at 4 P.M. The President, Dr. HUDSON, will deliver an address.

The annual dinner of the Branch will also take place at 7 P.M. the same evening in the College.

GEORGE F. DUFFEY, M.D., *Honorary Secretary.*

30, Fitzwilliam Place, Dublin, January 5th, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:
ORDINARY MEETING.

THE third ordinary meeting of the session 1877-8 was held in the Queen's College, Birmingham, on December 13th: present, Mr. SAMPSON GAMGEE, President, in the Chair, and thirty-six members.

New Members.—The following members of the Association were elected members of the Branch: Mr. Bradford, Smethwick; Mr. Farncombe, Mr. Hex, Mr. S. F. Palmer, Mr. Suffield, Mr. H. W. Thomas, and Dr. Vinrace, of Birmingham.

Communications.—The following communications were made.

1. Dr. B. Foster: Obstructive Jaundice and Cancer of Liver.
2. Mr. Lawson Tait: Myxoma Uteri.
3. Dr. Saundby: Intestinal Pathology.

4. Mr. H. L. Browne read a paper on Stricture of the Urethra, showed some new instruments for the treatment of urethral stricture, and exhibited a patient upon whom he had successfully performed the operation of perineal section.

6. Mr. Bartleet read a paper entitled Notes on the Treatment of Wounds. A discussion followed, in which Mr. Gamgee, Dr. Monckton, Mr. Yates, Mr. J. H. Palmer, Mr. H. L. Browne, Mr. J. F. West, and Dr. Taylor shared.

The Annual Meetings of the Association.—Mr. MORGAN (Lichfield) moved: "That it is desirable that a Local Reception Committee be formed in the town where each annual meeting of the Association is to be held, so as to provide, as far as possible, private hospitality for the members." Dr. MONCKTON (Rageley) seconded the motion. After remarks from Dr. Foster, Mr. Watkin Williams, and the President (who suggested that the question be brought before the Committee of Council of the Association by the senior Secretary), Mr. Morgan withdrew his motion.

CORRESPONDENCE.

THE LOST SCHOOL.

STR,—The letter of your correspondent, "A Member of Convocation", invites this further information in reference to the Chair of Clinical Medicine.

The professorship was founded under the will of Lord Lichfield in 1772. The professor is elected by the Convocation of the University. His duties are to visit the patients in the Radcliffe Infirmary daily from November to March, and to read a lecture two days a week. If the professor neglect his attendance, a year's stipend is forfeited to the Infirmary, and £5 is forfeited for each lecture omitted. It does not appear, from the annual reports of the Infirmary, that any forfeits have been received.

The endowment produces £200 a year, and is in the hands of the trustees under Lord Lichfield's will: the Chancellor of the University, the Bishop of the Diocese, and the President of St. John's College.

An application to the Charity Commissioners might perhaps have the effect of hindering the fund from being diverted from the purpose intended by the founder, that of educating pupils for the medical profession.—I am, sir, etc.,
CIVIS.

Oxford, January 8th, 1878.

STR,—The recovery of the lost medical school at Oxford is a fair subject for suggestion and discussion; its speedy consummation we most devoutly desire; but we regret that its consideration should have been made by "A Member of Convocation" an excuse for a tirade against Drs. Acland and Rolleston. We are not concerned to defend sinecures anywhere, however blameless their holders may be; we respect and admire Dr. Acland, and wish we could gainsay the comments of your correspondent upon the false position occupied by him at Oxford. We can only reprobate the adoption of so harsh a tone towards the man to whom is due the chief credit of the new museum at Oxford. Of Professor Rolleston we will say, that his methods are and have been so far in advance of biological teaching elsewhere, that they are now being generally adopted wherever in England biology is taught; that the results of his teaching are excellent; and that to him the University is indebted for much of the impulse that has lately been given to scientific study at Oxford. In the catholicity of his interests, combined with earnestness of purpose and vigour of intellect, he is a shining example to those men of science whose narrow sympathies and lack of literary and general culture have made the name of science stink in the nostrils of many educated people, and have produced a reaction that may be felt from the once popular cry for scientific education. No one conversant with the real state of things can for one moment suppose that the decay of the medical school at Oxford is due to any faults of omission or commission by the professors of Medicine and Anatomy. The causes lie much deeper, and can only be met by measures much more stringent and searching than decrees of Convocation to enforce regular lectures on Medicine and Human Anatomy to empty benches.

There are really two distinct grievances mixed up, and to a certain degree confused, in the letter of last week. The first is that Oxford is not, like Cambridge, the seat of a local or provincial medical school. The second is that so few medical degrees are conferred at Oxford, that the University may virtually be said to do nothing for the education of the medical profession throughout the country.

With regard to the first, those disadvantages which attend all provincial schools would also attend a school at Oxford. The chief of these are a dearth of distinguished teachers, and an alleged absence or insufficient supply of good medical and surgical cases for clinical teaching. There can be no question of the vast superiority of the metropolitan schools in these respects; and it is to an appreciation of this superiority, and not to a contempt for medical studies, as illiberal and empirical, that we must attribute the discouragement offered by the Medical Faculty to the resuscitation of a school at Oxford. We think, however, that this is but a partial statement of the merits and demerits

of such a design. The first two years of a medical student's course are for the most part spent in the study of the scientific basis of medicine and surgery. For this study, Oxford, unlike most provincial towns, offers advantages unequalled, except perhaps at Cambridge. It has museums, dissecting-rooms, laboratories, and a staff of teachers, which in eminence is superior, we venture to think, to that of any other educational body in the kingdom. Nor need hospital work be neglected. At Oxford, as at Cambridge, there are opportunities for clinical work amply sufficient for a student during his first two, if not three, years, when he might prepare himself for the more advanced teaching of the London schools. Six hundred beds are not a necessary condition of good clinical teaching; witness the small but famous hospitals crowded by the genius for teaching of Graves, Niemeyer, Todd, Liston, Jenner, Lister, and Ringer. Good teachers make good cases, and are not made by them, and such teachers ought to be found in Oxford, which claims to be the head-quarters of teaching and learning.

The foundation of a medical school at Oxford will not be enough to attract thither any considerable number of students. Something must be done to reduce the amount of time and money necessary to the attainment of a degree. Let there be but a strong and persistent demand from outside for economy in Oxford, and a supply of that very scarce article will, no doubt, be forthcoming. The success which has attended the institution of unattached students, and the foundation of Keble College, are signs of the times. A more serious obstacle to the success of a medical school lies in the inordinate length of the medical course. A student cannot take a degree in medicine in less than seven years from the date of his matriculation; as a matter of fact, few degrees are taken in less than nine. This protracted course is due to the fact that the University requires a degree in arts to be taken before the commencement of professional studies, basing its regulation upon the theory that a degree in medicine ought to presuppose a liberal education. This is an excellent theory, worthy of respect and imitation elsewhere; but, in its present application, it assumes that medical studies in themselves are incapable of affording a liberal education. It is perhaps true that there is an absence of wider interests, of even a faint tinge of literary culture and of intelligence in its larger sense, among the medical students; that, in most class-rooms, they are taught to observe and remember, but not to think, save superficially. This is a state of things separable from the subject-matter of their education, but inseparable from its present methods. Professional education invariably tends to degenerate into a mere process of information where it is divorced from the more critical spirit and humaner aims of general education. This is the position of the English medical schools, in which they neither influence nor are influenced by those waves of thought which move all other centres of education. All this would be changed by the establishment of a closer connection between them and the English universities. The gain would be a mutual one: Oxford, at any rate, would be all the better for contact with the practical spirit of medicine and surgery. The advantage to medical students of University life, and with it of more refined habits of thought and action, would raise the status and tone of the whole profession. It is its intimate relation with the Universities that in part gives the clerical profession an influence and superiority over our own profession, not social only, but also moral, intellectual, and literary, in spite of the fact that doctors, as a body, are professionally far more learned than clergymen. But the University must acknowledge the dignity of medicine; it must recognise its capability of being made the subject of a liberal education; it must cheerfully accept the position of its teacher, Herbert Spencer, that that education is best which can be made at once a means of cultivation and a source of utility to the individual and the state.

This is not the place to enter upon details; but we appeal to Oxford graduates to meet and consult about the best means of re-establishing a medical school, and to consider, amongst others, the questions of College and University expenses, of an increase in the number of science scholarships and medical Fellowships, of shortening the academical course for a medical degree by a recognition of time spent in medical studies at the University, of lengthening the duration of term-time, which now only lasts six months. In this last point, we see a possible stumbling-block and rock of offence to the University professors; but term-time has been lengthened at Cambridge, and why not at Oxford? The University has relaxed the rigidity of its regulations in favour of selected candidates for the Civil Service of India; why should it not do so for medical and law students? It wants but a Professor Humphry at Oxford, and a medical education there would be a reality, instead of being what it is now, a scandal and disgrace to the University by its absence.—Your obedient servants,

TWO OXFORD GRADUATES IN MEDICINE.

PHYSICIANS' FEES.

SIR,—Having read a letter in the BRITISH MEDICAL JOURNAL of December 22nd, 1877, headed "Physicians' Fees", I beg to offer a few remarks on the subject. I think all will agree with F.R.C.P. that some reform is necessary, and that the question is one of interest both to the members of the profession and to their patients. What appears to me to be required is a thorough and proper understanding between the consultant, the general practitioner, and the public. The public cannot be expected to understand in detail medical ethics; and I fear (judging from the numerous letters in the professional journals) that many of our body are not so well informed in matters of etiquette as they ought to be. We must first ourselves understand before we can hope to teach others. During a period of many years' practice in a suburban district, I have been brought into contact with a large number of persons of different classes, and have generally found my patients anxious "to do what is right", but not always clear in their notions; let, then, the medical man help his patients in these matters. Another point: many practitioners resent the proposal for a consultation, thus driving their patients to seek other advice on the sly; surely this is neither wise on the doctor's part nor fair to the general body of consultants. If the general practitioner understand his case, a consultation can only strengthen his hand; and, if he be in any doubt, he should, in common justice to his patient, seek counsel. Next, as to the consultant; why should he not ask his patient if she or he be under treatment, and, if the reply be in the affirmative, decline to see her or him except in consultation? When the consultant is called to a distance, it must nearly always be in consultation, and, in these cases, the family attendant should take care that the physician receives his proper fee. In cases where the physician visits his patient "by himself" and allows his visits to "run on", I am inclined to think it is frequently his own fault if he lose his fees, as many of these cases would fall more legitimately to the general practitioner, who has the advantage of being able to sue his dishonest patients.—I am, sir, your obedient servant,
GENERAL PRACTITIONER.
London, S.E., December 24th, 1877.

SIR,—Your correspondent F.R.C.P. seems sadly aggrieved at the low remuneration he receives for what is called a "consultation". But does it never strike him that the trouble of undressing and of using the stethoscope, thermometer, and test-tube is less needed there than on other occasions? The general practitioner accompanying the patient (if an enlightened and intelligent man) has almost invariably done all this work beforehand, and put the physician in possession of every symptom of the case, thus rendering the task of the latter so far easier, that he has little left to do, except to confirm or corroborate all that he has been told; and, moreover, is spared the trouble of asking the patient more questions than are absolutely needed.

Why, therefore, a *double fee* should be demanded in such cases, and why such an abuse as that of "consulting fees" was ever instituted, I am utterly at a loss to conceive. Doubtless it is the main cause of widening the gap between physician and general practitioner, and of rendering the latter shy of consulting the former, especially with patients from the country.

The complaints of being mulcted of a shilling out of a guinea, or of receiving ten for twelve guineas, must sink into mere insignificance, if F.R.C.P. considered that his hard working brother the general practitioner has to pay visits at five shillings, three and sixpence, and, to the poorer classes, as low as half-a-crown, and suffers losses by bad debts, which may be reckoned, not by units only, but by tens and often by hundreds.

Trusting these remarks may find a place in your valuable columns, I beg to remain, sir, your obedient servant,

A GENERAL PRACTITIONER.

SIR,—Permit me to offer a few remarks in reply to the grievances complained of by F.R.C.P. This I venture to do, after more than a quarter of a century's experience, the greater part of which was occupied in an extensive London practice.

It is one of the distinguishing features in the etiquette of a consultant that he receives his fee at the time. This is his only means of securing payment, since it is admitted that the public are both "thoughtless and selfish"; besides, it is but fair to the general practitioner that it should be so. My invariable custom has been to secure the fee and hand it over after the consultation. This plan prevents confusion, and gives satisfaction to both consultant and patient. Where there is no consultation, the fee should be regarded as a professional matter of business. The system of which F.R.C.P. speaks, to allow his visits "to

run on", is, to my mind, very objectionable and unfair to the general practitioner; and so is the anomalous practice of taking alternate fees. Discard this system, which is too prevalent, and more intimacy would arise between consultant and non-consultant. This, I think, should be encouraged, since it is productive of good to the patient and is not detrimental to both classes of medical men. The knowledge of these facts may not come before the ordinary practitioner so much as those who conduct a special practice, and who see a large number of patients who have gone the rounds of our leading consultants. Allow me to say a word as to fees. No fee should be under a guinea, except in special cases, and with the family medical attendant, two guineas and upwards.

I am, etc.,

ROBERT CUFFE, Surgeon.

The Villa, Woodhall Spa, January, 1878.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 8TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

ON THE MICROSCOPIC ANATOMY OF CHRONIC INFLAMMATION OF THE SURFACE OF THE TONGUE.

BY HENRY T. BUTLIN, F.R.C.S.

THE object of the author was to give an account of the minute anatomy, hitherto undescribed, of the smooth glossy tongue, called by Dr. Fairlie Clarke "chronic superficial glossitis". The paper was based on the examination of the tongue in three cases in the practice of Sir James Paget, Mr. Thomas Smith, and Mr. Langton. The characters of the disease were described as consisting of thinning of the epidermis, an destruction of the papillae and other appendages; and of thickening an increased vascularity of the corium and submucous tissue, and infiltration with small cells. A comparison was drawn between the characters of this disease and psoriasis or ichthyosis of the tongue. There was apparently no essential difference in the microscopical characters of the two diseases. (The paper was illustrated by drawings.)

Mr. GASKOIN had lately seen a case of lupus affecting the left side of the nose, accompanied with a smooth patch on the same side of the tongue, which appeared to increase in extent *pari passu* with the destruction of the ala nasi.—Dr. THIN thought that the drawings well represented the earlier stages of epithelioma of the tongue. The smooth tongue met with in dysentery much resembled this condition microscopically.—Sir JOSEPH FAYRER referred to the smooth glazed tongue met with in the chronic or hill diarrhoea of India, and indicative of an advanced stage of the disease. The normal condition was sometimes regained; but it was always of serious import.—THE PRESIDENT asked whether the smooth tongue described by Mr. Butlin was to be regarded as a local disease. In the dyspepsia and intestinal diseases of children, the tongue sometimes presented smooth patches. This condition was seldom seen after the age of twelve or fourteen; and it appeared to be connected with the second dentition.—Mr. BUTLIN had never seen a case in which lupus and the smooth tongue occurred together. He had seen a case of smooth tongue in a case of chronic diarrhoea in a woman; but it appeared as if the horny layers had disappeared. The smooth tongue in children was probably of the same character as that met with in diarrhoea and dysentery. He thought that the condition described in his paper was local; the patients had the affection a long time without presenting constitutional symptoms.

MATERNAL IMPRESSIONS. BY WILLIAM SEDGWICK, M.R.C.S.

MR. SEDGWICK said that great care had been taken to avoid, as far as possible, any unnecessary reference to cases which possessed no practical significance, or which, from their doubtful character, would tend to increase scepticism. In reproductive development, women, as a rule, transmitted with more facility than men. The normal influence of the mother on the intellectual development of her offspring had been well and familiarly expressed in the term "mother-wit"; and, in abnormal development, it had been long known that women often served, and to a far greater extent than men, as conductors of an inheritance which they did not share. In like manner, it was now popularly believed that it was the emotional impressions of the mother, and not those of the father, which were imparted to the fetus in the form of "mother's marks". But this assumed limitation of emotional impressions to one sex did not always prevail; for originally either parent

was thought to be capable of imaginatively affecting the offspring at the period of conception, and traces of this form of the belief had been lately found among some of the tribes in Central Africa. There was an essential difference between cases in which some modification of foetal structure had been slowly effected through the influence of the perceptive faculties, and those cases in which emotional impressions had been believed to act on the foetus by causing a supposed sudden arrest in its development. The occasional transmission to offspring of acquired defects of structure could not be logically objected to, since all abnormal modifications of the system must have been acquired before they could have been transmitted. It was no doubt difficult to distinguish between the alleged influence of maternal impressions and that of heredity. The establishment, through hereditary influence, of acquired instincts in the lower animals, as well as the occurrence of hereditary talent in our own race, was apparently due to some modification of structure: and when, in like manner, maternal impressions had been said to react specially, if not exclusively, on the nervous system of the offspring, the effect might, with equal probability, be referred to some modification of structure produced through the medium of the blood. The exaggerated importance which had been assigned to nerve-communication, as the only probable way by which the supposed influence of maternal impressions could be conveyed to the foetus, had no doubt had a tendency, in former years, to retard and obscure the inquiry; and the opinion was expressed that the limitation of the influence of a maternal impression to a corresponding organ or tissue in the foetus, as a consequence of some slight and inappreciable alteration in the blood of the mother being imparted to the local nutrition of her offspring, might physiologically be regarded as more probable than limitation effected by nerve-influence. There was no reliable evidence that a congenital defect had ever been the direct and immediate result of arrested development; whilst the popular belief that a maternal impression could be conveyed to the foetus, and affect it like an electric shock, should be simply dismissed as a popular fallacy. The influence of the impression, at an early period of pregnancy, could only be conveyed to the part through the medium of the blood, or nutrient fluid. Mr. Sedgwick directed attention to the comparative physiology of reproduction in the lower animals; and showed that, when the tendency to an artificially developed excess of structure had, through hereditary influence, been pushed too far, it was apt to be followed by deficiency and arrest, as in the case of some top-knotted varieties of birds. Abnormal increase of structure, without any subsequent arrest, occurred in cases of supernumerary fingers and toes, which had been sometimes referred to the influence of maternal impressions; and there was local increase of the vascular tissue in naevi, and of the hair, if not always of the skin, in those pseudo-mimetic moles which had been said to resemble the rats, mice, and other animals with hairy skins, which had frightened women during pregnancy. It might be expected that a maternal impression, sufficient to produce a physical peculiarity or defect in the foetus through the medium of the blood, would reappear, at least in a modified form, in some of the succeeding offspring; but there was very little evidence of any kind in favour of such an occurrence. Referring to the episode of Jacob's rods, he said that they were apparently employed, not to originate, but simply to aid in the increased production of specially marked offspring. There had been many illustrations of the effect produced by variously coloured objects, on the breeding of sheep and other animals, since patriarchal times. Dr. Alexander Harvey and other observers had collected and published evidence on the subject. The evidence in favour of the influence of maternal impressions did not appear at present either sufficiently relevant or trustworthy.

Mr. DONALD NAPIER showed casts from the mouth of a lady aged 25 or 26, in whom the milk-teeth were still present, none having been shed except two upper incisors. Other members of the family had the same peculiarity. He would not attempt to determine how far in the present case the condition was due to hereditary influence or to a dread of its occurrence on the part of the mother.—Mr. SAVORY said that diseases might be transmitted from the mother to the foetus; but it was more difficult to conceive how an impression on the mind of the mother could produce a corresponding physical defect in the foetus.—Dr. THIN would like to have the alleged cases of maternal impression put to a test. General impressions in such matters were of very little scientific value.—Dr. MATTHEWS DUNCAN said that the subject of maternal impressions was now and then brought before medical societies; but no progress would be made in it until coincidences could be distinguished from consequences.

Favus.—Mr. GASKOIN showed a case of favus in a boy, the child of Polish parents. The disease appeared to be of rare occurrence in London.

PATHOLOGICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 4TH, 1878.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

Bromide of Potassium Eruption.—Dr. CROCKER brought forward a patient presenting an eruption due to the administration of bromide of potassium. An infant, aged eight months, was sent to the Skin Department of University College Hospital on December 22nd for diagnosis. The father died of consumption some months before its birth; the mother was healthy; and the child was well up to the time of vaccination. It was vaccinated in August last, and about the twelfth day a rash appeared all over the body, which, according to the mother's description, consisted of small red spots of the size of a millet-seed, raised above the surface, with whitish watery heads. This died away in a few days, but fresh crops appeared from time to time for about three weeks. After this, the skin remained clear until the present eruption. The child was not, however, quite well; and, after vomiting on November 12th, had convulsions, which continued at intervals until the 19th, and for which one grain of bromide of potassium three times a-day was prescribed, beginning on the 12th, and continuing until the 24th, when the dose was increased to two grains three times a-day, which was taken up to December 13th. From November 19th to 24th, a quarter of a grain of iodide of potassium was given with each dose of bromide. The eruption appeared at the beginning of December on the site of the vaccination, and the medical man attending it described it as, at first sight, like a vaccine vesicle of about the tenth day. When brought to the hospital, the child presented the following appearances. On the site of the vaccination, there was an irregular patch, of the size of a crown-piece, covered with a thick, raised, sienna-coloured scab, irregularly sulcated and split up; on the border were two small pustules, but no surrounding inflammation. On the face there was a patch of the size of a shilling on each cheek; but they had been rubbed, and were discharging. On the buttock and loins were several patches, and some of them showed a central scab on an oval base of the size of a horse-bean. This base was raised about one-sixteenth of an inch above the surrounding skin, was pale red, and appeared to be made up of new tissue. At the end of December, a fresh crop appeared on the arms and face, and then it could be seen (as in a similar case exhibited last year to the Society by Dr. Lees, and published in the current volume of *Transactions*) to commence as a red papule, which soon became an acuminate pustule on a raised, soft, red base, and appeared to be due to an inflammation of the follicles. These pustules were aggregated into patches of variable size, from half-an-inch to two inches in diameter, increasing by the addition of pustules to the circumference; but, as Dr. Lees had observed, as long as the pus remained, the heads of the individual pustules could be discerned. Solitary papules and pustules were also to be seen on the arm and face, and in these the acneiform character of the eruption was apparent; but the abundant cell-formation gave a more pustular condition than is seen in ordinary acne. Subsequently thick crusts (as described above) were formed; but between these two stages was another, when the fleshy-looking tubercles alluded to before were present. There were, therefore, three stages in the eruption: 1. A pustule, or aggregation of pustules, on a soft, raised, and reddened base; 2. Pale-red fleshy-looking tubercles, either round or oval, in size varying from a pea to a bean; 3. Thick dark crusts, tuberculated and split up by deep sulci. The face, arms, loins, and buttocks, but especially the first two, were the parts chiefly affected in this case, which differed thus from that of Dr. Lees, in which the limbs and back were but slightly affected. The fact that the eruption first appeared on the site of the vaccination, and the small dose of the bromide, were points worthy of note.

Dr. BARLOW had seen cases exactly similar to the present, in which bromide of potassium alone had been given. It was an interesting point that the eruption commenced in an old vaccination-mark. He had observed the same in a case of his own, where the eruption first made its appearance on the site of an unhealed blister. This bromide eruption appeared when very small doses of bromide of potassium were given. He thought there was unquestionably a connection between the common acneiform eruption of bromism and the present form, inasmuch as all degrees of variety could be traced between them. Idiosyncrasy played an important part in the development of this extreme form.—The PRESIDENT asked whether the present form of eruption was considered equally common in the adult. He had not himself seen anything approaching to this in the adult. Quite lately, he had seen a young lady who had taken a drachm of bromide of potassium daily for eight years; but she did not suffer from any eruption. So rare were cases like the present, that he questioned whether they were not due to some other cause.—Dr. HARE said that he had never met with the

eruption. If it were a variety of the acne due to bromide, it might be expected to appear at puberty, and yet it did not.—Dr. FREDERICK TAYLOR said that it must not be supposed, from the remarks that had been made, that bromide eruptions were common in children. They certainly were rare.—Dr. CROCKER replied that he had never before seen an eruption like the present, either in the adult or in the child. Its form was, perhaps, due to the greater tendency to pus-formation in the child. With respect to bromide eruptions generally, he had ascertained that even the ordinary acne was exceptional among patients taking the drug at the Epileptic Hospital.

General Hyperostosis, with Osteo-Arthritis of Several Joints.—Mr. HOWSE exhibited a man suffering from these diseases. The patient, aged 37, had been a soldier, who sixteen years ago had received a kick in the left leg, which had invalidated him for six weeks with abscesses. No bone had come away; but the tibia subsequently remained thickened. He then (fourteen years ago) had some venereal trouble—warts on the penis—but no history of true syphilis. In 1873, he had chronic synovitis of the left knee-joint, which subsequently remained stiff. He, however, had since followed his employment of a gas-stoker. Last Easter, the right arm was swollen; and the urine became dark-coloured, more especially in the evening. Being admitted to Guy's Hospital, an osteo-arthritic condition was found to prevail extensively in both knees and in the left elbow, less markedly in the right wrist. Both femora, the left tibia and right fibula, the right radius and ulna, both clavicles, and all the ribs were greatly thickened; the head was massive, and other bones were less affected. The urine was slightly albuminous, was usually clear, and its specific gravity varied between 1020 and 1025. The treatment consisted of iodide of potassium and cinchona. A purpuric eruption of the skin had for many months past frequently recurred. The treatment decreased the size of the joints, but apparently had no such effect on the bones. The iodide being discontinued, the joints increased in size; and were again lessened when the remedy was taken. The biniodide of mercury also appeared to exercise a beneficial effect. Mr. Howse remarked on the possible relationship of this case to those of osteitis deformans described by Sir James Paget. In these cases death had mostly come from some cancerous disease; this man's mother had died of cancer. Sir James Paget had seen this man; and, from the absence of curvature of the bones and from the fact of his improvement under the iodide of potassium, had considered this case to be essentially dissimilar from his cases of osteitis deformans, and had thought the bone-thickening was probably due to some constitutional disease, most likely syphilis. There was, however, no distinct history of syphilis; and Mr. Howse suggested that the case was similar to those described by Sir James Paget, and that the curvature might come on in time, as the patient became older.

Osteitis Deformans.—Mr. HOWSE also showed a specimen of this disease from an old lady, whom he had seen in consultation with Dr. R. Harris of Hackney. The patient, aged 65, had always enjoyed good health until two years ago, when constant pain in the right leg occurred, and the tibia became slightly bent. In September 1875, when seen by Dr. Harris, she had intense pain at the inner side of the head of the tibia, with aching in the shaft of the bone. There was no swelling of the bone anywhere, but the shaft was bent. She could walk without much difficulty. That autumn a small rounded swelling appeared on the inner side of the head of the tibia, firm, but fluctuating, much resembling an enlarged bursa. The pain now diminished, as the swelling increased. A small trocar being introduced, drew off a small quantity of thick serous fluid, at first clear, afterwards blood-stained. Bleeding to the extent of about an ounce occurred during the night from the puncture. The swelling at first became less tense, but in a few days was as large as ever, and larger, and fine blood-vessels ramified over its reddened surface. Mr. Howse, being called to see the case, detected faint pulsation in it. The patient being anaesthetised, the tumour on being opened was found to be a soft mass occupying the centre of the upper epiphysis of the tibia. The limb was consequently amputated through the lower third of the thigh under the carbolic spray. The wound healed primarily. The patient quite recovered, and was able to get up and move about. Five months subsequently, serious lung-symptoms supervened, of which the patient died in a few weeks. An inspection of the body could not be obtained; but the patient doubtless had recurrence of the tumour in the lung. No curvature or thickening of any other bones could be detected. Sir J. Paget had examined this specimen, and thought it belonged to the osteitis deformans group. The tumour in the head of the bone was a large spindle-celled sarcoma. Under the microscope, the Haversian system of the bone resembled sections of cancellous tissue. The walls of the cancelli were thick, and abundantly sprinkled with bone-corpuscles. The cancellous spaces contained a few fat-vesicles, rather more connec-

tive tissue elements than usual, and germinal cells unlike ordinary marrow-cells, but resembling similar elements usually seen in cases of scleriosis of the skin. Amongst these were many groups of yellowish pigment masses, probably derived from extravasation of blood. This condition was possibly allied to the tendency to purpura manifested by Mr. Howse's other patient exhibited earlier in the evening. Mr. Howse remarked that the so-called cancer which had co-existed in so many of Sir J. Paget's cases was probably a form of malignant sarcoma, and ought to be essentially associated with the change which the bone itself had undergone. Bone itself being a form of hardened connective tissue, the thickened softened condition visible in these bones might, as Dr. Goodhart had supposed, be regarded as a form of bone-tumour. On the other hand, under favouring circumstances, an ordinary inflammatory cell might possibly grow up into a regular spindle cell, and form the basis of spindle-celled sarcoma. A man was recently under Mr. Howse's care who had symmetrical tumours on the backs of the forearms. These were both excised. The centre of one, the larger, growth showed definite spindle-celled elements; at the margin, these were less distinct, and formed such an infiltrating mass that it was impossible to remove the whole growth. Nevertheless, under the influence of biniodide of mercury, the whole wound healed, and all trace of the tumour disappeared; and had not recurred. There was no history of syphilis in that patient. This observation might help to connect the views of those who, like Dr. Goodhart, considered the whole bone-thickening due to a species of bone-tumour, and of those who, like Sir J. Paget, thought the bone diseased was a degenerative osteitis, and that the co-existence of the tumour in so many instances was more or less accidental. Mr. Howse was inclined to regard the bone-thickening as due to an "osteitis deformans"; and thought the tumour form of the disease was related to the osteitis as definitely as a persistent chronic eczema of the nipple is related to a carcinoma developing within the mammary gland.

Sarcomatous Tumours in Various Bones associated with Hyperostosis.—Dr. GOODHART brought forward two cases. The first was that of a woman aged 60, under Dr. Wilks's care. There was no family history of cancer, and, till six months before her admission into Guy's Hospital, she had enjoyed good health. She then began to waste, and for three months she had had pains in her back and hips. She was admitted for paraplegia, and died soon afterwards with suppurating kidneys. The *post mortem* examination revealed a large sarcomatous tumour growing from the blade of each ilium; a similar growth about the lower part of the spine, which had encroached upon the spinal canal and caused paraplegia; osteo-arthritic changes about many of the vertebrae; and a skull, the thickness of which reached four-fifths of an inch, the bone being heavy but porous, and at two parts affected with circular patches of new growth. The long bones were not affected. In the second case, the skull was rather thick also; its diploe gone; the bone heavy and yellow looking. The right ilium was dense and heavy; some of the bones showed osteo-arthritic changes; and, in addition, a periosteal sarcoma affected the ilium, spine, ribs, femur, clavicle, mediastinal glands, and both suprarenal capsules. The man, aged 55, was under Dr. Moxon's care at Guy's Hospital. There was no family history of cancer; and he had enjoyed good health—he had had gonorrhoea—till six or seven months before his admission, when he was attacked with pains in various parts. No tumours were felt till a late stage of his illness; and he died ultimately of exhaustion. Dr. Goodhart remarked that the interest of these cases lay in their bearing upon the disease which had lately been described by Sir James Paget as osteitis deformans. They did not, it was true, show a very marked osteitis anywhere, except in the cranium in one; but, nevertheless, they were probably related to such cases, and the very fact that they were prominently tumorous and not hyperostotic allied to their view. Sir James Paget, and with him Mr. BURLIN, considered the disease to be one of chronic inflammation, arriving at this conclusion both from its clinical history and minute anatomy. Sir James Paget, when stating the fact that several of the recorded cases had ultimately developed cancer, did not think that, at present, the evidence was sufficient to warrant anything further than that it might or might not be a coincidence. Now, however, with Sir James Paget's cases, Dr. Cayley's, and the two now brought forward, six out of eight cases had developed some malignant tumour; and this was a proportion so remarkable as to destroy the probability of mere coincidence, and sufficient to link the two conditions closely together. Assuming that they were connected, was Sir James Paget's hypothesis of a chronic inflammation still tenable? It must be admitted that it was. It might be that, as a result of the chronic irritative overgrowth, the feature of malignancy was gradually evolved. Thus, the two might be directly connected; and this was a view quite in accord with the opinion of many at the present time, that malignant growths were local and not constitutional. (Sir

James Paget would probably not admit any such interpretation of the facts.) Dr. Goodhart, however, suggested another explanation of osteitis deformans; that it was a generalised form of tumour of the bones, and not a chronic inflammation. He took this ground for several reasons. First, the formation of the tumour in these cases had not by any means always been in the diseased bones; in one case, it was in the dura mater; in another, in the mediastinum and lungs, etc.: a point altogether against the evolutionary hypothesis of chronic inflammation turning into cancer, and in favour of a tendency on the part of many tissues to overgrow. These two cases also suggested in their subordination of the so-called chronic inflammation to the growth of tumours that the two processes were one and the same, and that what in one case was a chronic process of growth lasting for years might in another be so active as to lead to a spontaneous outburst of growth in many parts with great rapidity, and under such circumstances but very little hyperostosis could of necessity arise. Not only so; other pathological conditions showed very precise analogies to this. Mr. Butlin's case of multiple sarcoma, read at a late meeting of the Society, was in point; the subcutaneous tissue exploded into sarcoma all over that boy's body; or, to take another case, fibrous tumours were found growing all over the skin, or on many of the nerves; and more exact still, perhaps, was the disease called lymphadenoma. The lymphatic tissues and glands slowly hypertrophied in the course of years, very like a chronic inflammation; at other times, they all began to grow suddenly, rapidly, and malignantly; at other times, the slow process turned into the rapid one; so that there did seem to be in several tissues a tendency to go wrong as a whole; and, since in the one case there had never been any objection to regard the process as one of tumour, neither need there be any difficulty with regard to the other. This view, if it were correct, had an interest apart from the particular disease to which it was here applied; and it was quite possible that many growths, which were now said to be secondary and due to infection from some primary focus, were, in reality, spontaneous outbursts in other parts of the body in no way connected with any so-called primary source.

The PRESIDENT said that these cases were of great interest, as bearing on the pathology of the disease described by Sir J. Paget.—Mr. MYERS protested against the assumption frequently made, that, because a man had been a soldier, therefore he must have had syphilis. On the contrary, he believed that amongst men in the army syphilis was less known than amongst men of the same class in civil life. Certainly the worst forms of constitutional syphilis were less frequently seen in military than in civil hospitals.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, DECEMBER 5TH, 1877.

H. D. LITTLEJOHN, M.D., Vice-President, in the Chair.

Excision of the Knee.—Professor SPENCE showed a specimen bearing on excision of the knee-joint. The patient had his knee-joint excised, with an apparently successful result. After he had been out of hospital for some time, he returned with an abscess in the upper part of the popliteal space, from the presence of diseased bone. This was gouged out twice, but, as the boy was losing flesh, he was obliged ultimately to amputate. The specimen showed in front the firm cicatrix and on section the firm bony union of the divided parts, as well as the recurrence of the disease at another point. He also showed the parts removed, in excision of the knee-joint, in the case of a young woman, who, while she had considerable pain, did not suffer from much constitutional disturbance. She was doing well.

Disease of the Femur.—Mr. SPENCE showed a specimen of disease of the trochanter, lower part of the neck of the femur, and digital fossa. The patient came in with a large abscess of the thigh, which had opened about four inches below the great trochanter. This was freely incised and the parts were carefully examined. No evidence of disease could be found, and the joint was freely movable. The patient, however, suffered from pain when the extension-apparatus was removed; and further examination showed existence of disease as above stated, the cartilage of the joint being sound. Mr. Spence excised the joint, and the case was now doing well.

Amputation of Foot for Tumour.—Mr. SPENCE showed preparation of amputation of the foot for tumour, involving the metatarsal bones of the second and third toes. The patient came in a week ago, and stated that a small tumour had existed there for some time, and had been operated on or incised; but that of late it had grown rapidly. The rapidity of its growth, its dark colour, and the emaciation of the patient, pointed to its being malignant; but the existence of the small tumour for some time previously was against this. As little of the foot

could be saved, he amputated by Key's method, disarticulating partially, and then sawing through at the internal cuneiform bone. On examination, there was seen to be softening and opening out of the metatarsal bones. On microscopical examination, Dr. D. J. Hamilton found a hyaline appearance, with stellate cells. A specimen from the interior of the tumour showed broken-down texture, fat, and blood. It, therefore, seemed not so malignant; but it was rare to meet with so much congestion and extravasation in a simple tumour. The pain was due to pressure on nerves, as a cutaneous nerve could be seen running across the growth.

Congenital Malformation of the Leg.—Dr. CRAIG showed a preparation of the right lower extremity of a child, which had died twelve hours after birth. It had several malformations. The fibula did not articulate with the tibia at the knee-joint, and there was talipes varus. The tibia appeared to end two inches below the knee, with a puckered appearance as of a cicatrix. There was thus no bony connection between the knee and ankle-joint. He hoped soon to have the limb dissected, so as to ascertain its exact structure. The limb had been preserved in a solution of chloral, ten grains to the ounce, with the result of being natural in appearance and free from putrefaction.

Addison's Keloid.—Dr. GRAINGER STEWART then showed an interesting example of Addison's keloid, in a female child of about ten years old. It was most marked over the dorsum of the feet, and was also seen in the arms and hands.

Malposition of the Testes.—Mr. ANNANDALE showed a photograph of a rare congenital malposition of the testicle in the perineum, which had been for the first time successfully treated by operation. One or two cases were on record where the attempt had been made to replace the displaced organ, but always without success. He believed his own success to be due to the use of antiseptics, by Lister's method. He made an incision over the displaced testicle and drew it out. The part of the gubernaculum testis, usually attached to the bottom of the scrotum, was in this instance fixed to the ischial tuberosity. He incised the scrotum and placed the testicle there, retaining it by means of a catgut stitch. At the same time, he stitched up the opening in the perineum also with catgut. The result was satisfactory, and the testicle was now in all respects like the one on the opposite side.

Supernumerary Auricle.—Mr. ANNANDALE showed a supernumerary auricle from the side of the neck. The patient had a small pediculated tumour about two inches below the lobe of the ear. At first, it looked like a small fibrous tumour; but, on examining it and making a section, cartilage was found.

Stricture of the Oesophagus.—Dr. P. A. YOUNG read notes of two cases of stricture of the oesophagus, with pathological report by Dr. D. J. Hamilton. One of the cases was a malignant stricture, in which Dr. Young and a surgeon had failed to pass a bougie, though, at the *post mortem* examination, the stricture admitted the forefinger. The other case was one of simple organic stricture. Both had died with symptoms of acute chest-affection at the end.—Dr. LITTLEJOHN asked if any cause could be assigned for the ulcers. In pathological museums, such were due generally to swallowing some impure alkaline solution.

—Dr. SANDERS said that pneumonia was not uncommon. The cause given was the opening into the left bronchus. The pneumonia, however, was in the right lung. In some cases, it seemed to be due to an extension of the inflammation; but in others, the theory of some influence through the vagus was fairly borne out. The cause of such strictures needed investigation. Usually, a caustic solution was accidentally swallowed, and then the stricture was at the upper end. Sometimes, however, it resulted from an overdose of medicine. He remembered a case where stricture followed the swallowing of the whole of a medicine containing an excess of acid, prescribed by a distinguished physician. Stricture at the cardiac orifice would probably not occur, unless the mucous membrane above were affected. Mechanical irritation might lead to chronic inflammation of the submucous coat, and consequent stricture. When the stricture did occur, then the dilatation, hypertrophy, and ulceration ensuing were easily understood.—Mr. SPENCE asked if Dr. Young had tried a medium-sized bougie before attempting a fine one. It was exceedingly rare to meet with simple oesophageal stricture at the cardiac end of the stomach: it was generally due to swallowing acids. In the University Museum, there was a preparation of an oesophagus, where the patient had swallowed sulphuric acid. The mucous membrane above the cardiac orifice was corrugated, and near it it was charred.—Mr. ANNANDALE said that, while Dr. Young and Mr. Chiene had extreme difficulty in passing a small bougie during life, a finger passed in at the *post mortem* examination. This was probably due to spasm; and the question was, whether they could not get the instruments more easily passed in such cases by giving chloroform.—Mr. SPENCE said that chloroform had been given in hysterical cases.—Dr. SINCLAIR had listened with interest, especially to the second case,

as last October he had one similar to it. The patient was a married woman, who stated that she had gone to the Infirmary, where a large œsophagus bougie had been passed, causing her great pain. The diagnosis arrived at was evidently hysterical stricture, as tincture of assafoetida had been prescribed. The patient, however, became emaciated, and died six weeks afterwards from double pneumonia. On *post mortem* examination, a small ulcer was found above the cardiac end of the stomach, but no evidence of malignancy. The difficulty in swallowing was, therefore, entirely due to reflex spasm.—Dr. A. G. MILLER said that, some years ago, he examined several cases of urethral stricture, and found the mucous membrane healthy, but puckered, with the stricture in the submucous tissue. He believed that in many cases the mucous membrane was healthy, but rugous. This was important, as it explained how, by Holt's method, a stricture could be split without bleeding.—Mr. BELL remembered that the late Mr. Edwards had shown to the Society a case where there was a tight stricture above the cardiac orifice and a hernia of the mucous coat through the muscular walls.—Dr. CADELL had removed a piece of bacon from the œsophagus of a woman, who had constriction caused by her swallowing potash when a child.—Dr. GRAINGER STEWART had noticed two results when he was pathologist to the Infirmary. There might be pneumonia near the stricture from extension, or suppurating around it, so that the patient died of pyæmia, with metastatic abscesses on the lungs and elsewhere.—Dr. YOUNG thanked the members. Dr. Sanders had pointed out that the pneumonia was in the opposite lung from the perforation. The perforation, however, was very near the bifurcation of the trachea; and, therefore, matters could pass into the right bronchus. He had used a small stomach-tube first. He would have employed chloroform had he suspected ulceration.

Treatment of Ununited Fracture.—Dr. FINLAY read a paper on the treatment of certain cases of ununited fracture, based on a case in which, much of the tibia having been lost by traumatic necrosis, he had cut out a piece of the fibula; and thus allowed the ends of the tibia to come near and the limb to unite, though shortened.—Mr. SPENCE remarked the case was interesting as to the cause of non-union, viz., loss of part of the tibia, the fibula remaining entire. Still there might be cases of compound comminuted fracture of the tibia, with union, after necrosis. This depended on the nature of the injury. In gunshot and railway and tramway accidents, there was such damage to the periosteum that union was impossible. In one case, where rest for eighteen months had proved ineffectual, he got union by Miller's method. In another case, in 1854, he bent the arm, projected the fragments through an incision, and clipped off the ends. The principle was to fracture and not to dissect, and in this case he had perfect union.—Mr. ANNANDALE said that, in a case of his own, he had wired both radius and ulna, so as to prevent immobility and allow pronation and supination. He would suggest that the leg should still be kept in starch.—Dr. FINLAY thanked the members for their criticisms.

Injury of Head, with Anomalous Symptoms.—Mr. BELL read a report of a case of head-injury, presenting anomalous symptoms. The patient had been injured in a brawl. He was first unconscious, then slowly recovered a measure of intelligence; then, from the fourteenth to the twenty-first day after the injury, he passed into a most alarming state of torpidity, in which he passed urine and fæces in bed, and appeared to be dying. He had partial paralysis of the face, external squint, and certain curious peculiarities in his voice and gesture. The pulse and temperature were low all through; and he eventually recovered.—Dr. CLOUSTON had seen three cases of general paralysis following such injuries.—Mr. SPENCE said there might be slight effusion at the base of the brain.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

DECEMBER 13TH, 1877.

SAMPSON GAMGEE, F.R.S. Edin., President, in the Chair.

Obstructive Jaundice and Cancer of Liver.—Dr. BALTHAZAR FOSTER showed a liver, taken from a patient who had died in the General Hospital. The man had been for years a heavy drinker, and five months before death had, while in Jersey, indulged freely in brandy and rum. This excess was followed by jaundice and an attack of hepatic colic. When the patient was first seen, the liver was enlarged, with well-defined edge, slightly granular to the touch, but free from all tenderness, as it remained throughout. The gall-bladder could be distinctly felt, distended with bile. The case was regarded as enlargement following obstructive jaundice; but this opinion was modified in favour of malignant mischief, on account of the rapid increase in the size of the liver after he had been some time under observation. The man died three months after admission. The liver weighed thirteen

pounds, was smooth on the surface, dark olive-green in colour, with spots of creamy colour, due to cancerous growth. The cancer appeared to have begun in the neighbourhood of the common duct, which was enveloped by a cancerous mass. The orifice of the duct was, however, obliterated by fibrous tissue, and a gall-stone was found obstructing the cystic duct. These conditions explained the sequence of phenomena observed during life, viz., hepatic colic and jaundice, enlarged gall-bladder, not subsequently increasing in size; enlarged liver, smooth and not tender; and later on, as cancer invaded the liver-tissue, rapid enlargement of the viscus. There was no cancer in any other organ. Sections of the liver were shown under the microscope by Dr. Saundby for Dr. Foster.

Myxoma of the Uterus.—Mr. LAWSON TAIT showed a large œdematous myxoma uteri, which he had removed successfully by abdominal section, and which, immediately after removal, weighed a few ounces over twenty pounds. It was the fourth case in which he had operated; two of these had recovered.

Peyer's Patch.—Dr. SAUNDBY showed a specimen of a Peyer's patch, in the stage of early swelling, taken from the body of a child who died of hyperpyrexia within twenty-four hours after the first symptoms of illness appeared. He also exhibited a specimen of acute enteritis from a fatal case of diarrhoea.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

NOVEMBER 29TH, 1877.

G. S. TAYLOR, Esq., President, in the Chair.

Removal of Upper Jaw, without External Incision.—Mr. ARTHUR JACKSON introduced a young woman, from whom he had removed the superior maxilla for myeloid disease. No external incision had been made. He had practised the same method in another case.

Extraction of Cataract by a Shallow Lower Flap.—Mr. SNELL made some brief observations on extraction by this method. The puncture and counter-puncture were made in the sclero-corneal junction, just below the centre of the pupil. The edge of knife was turned directly forwards, and the section completed by cutting outwards; the summit thus lying midway between the pupil and lower border of cornea. Three patients were introduced who had been operated on by this method; two of them in both eyes. Anterior synechia was not thought to be so frequent after the operation as some supposed.

Urinary Test-Case.—Dr. DE BARTOLOMÉ exhibited Dr. Batten's pocket urinary test-case.

Piece of Glass in Bronchus.—Mr. LAVER related the case of a boy who had swallowed a piece of glass. He was under Mr. Jackson's care in the Infirmary. Tracheotomy was performed, but it was found impossible to detect the foreign body. He died about a month subsequently, and, at the *post mortem* examination, the piece of glass was found in the right bronchus.

Dr. DYSON exhibited the morbid specimens from a case of Cirrhosis of Liver, with impacted Gall-stone.

Dr. DREW briefly related a case of Pulmonary Embolism, caused by injury.

Pyæmia.—Mr. JACKSON read a paper on two cases of pyæmia. In one case, there was disease of the metatarsal bones; in the other, of the sacro-iliac joint from recent injury. The cases were interesting in the conspicuous absence of symptoms which are generally considered essential to diagnosis, rather than in the presence of anything unusual. In one case rigors were absent, in the other present; in one case perspirations frequently occurred, in the other entirely absent; in one case also there was no wasting, in the other it was conspicuous. The temperature was normal between the rigors in one, while in the other case it was never under 100 deg. Fahr. In one case there was communication with the external air, in the other no such communication. In the history of both cases, constitutional dyscrasie prominently figured. Mr. Jackson pointed out the important part which dyscrasie played in the etiology of the disease. He insisted also on the frequency of injury to bone as a cause of the disease; and objected to the term pyæmia, as likely to prolong our confused knowledge, if not misdirect future investigation.—An animated discussion ensued, in which several members joined, and, on the motion of Mr. Snell, the debate was adjourned.

DECEMBER 13TH, 1877.

G. S. TAYLOR, Esq., President, in the Chair.

A Case of Scalping.—Dr. KEELING related the notes of the case, and afterwards introduced the patient, a young woman. Her hair had been caught in some revolving machinery, by which she was lifted from the ground and the whole scalp torn off. A number of large pieces of bone

exfoliated, and it did not finally heal until four years after the accident. Photographs of the case were also exhibited.

Removal of Portion of Silver Catheter from Bladder.—The patient was a man aged 75, with prostatic enlargement, and had been accustomed to catheterise himself. Mr. Jackson removed the portion of catheter by the operation for lateral lithotomy. The case, however, terminated fatally, and the piece of catheter extracted was exhibited, measuring about five inches in length.—Remarks were made on the case by Mr. PYE-SMITH, Dr. DE BARTOLOMÉ, Mr. DYSON, and Dr. KEELING.

Deformed Forearm and Hand.—Mr. SNELL exhibited the dissected specimen, from a male subject in the dissecting-room at the Medical School. There were a rudimentary thumb and index finger. The radius passed obliquely across the forearm, did not directly articulate with the carpus, but was separated from it about an inch and connected by a loose capsule. The ulna terminated some little distance above the radius in a hooked extremity.

Calculus Removed from Urethra.—Mr. W. M. JONES exhibited the specimen, and stated that he had removed it from a child by means of a loop of steel piano wire.

Intracapsular Fracture of Neck of Femur.—Mr. RECKLESS showed the specimen, which was from the body of a woman aged 73. Fracture had occurred two months before death. There was no attempt at union.

Imperforate Anus.—The rectum terminated in a *cul-de-sac*. Dr. HARGREAVES exhibited the specimen, and stated that the child lived fourteen days.

Rupture of Uterus in the Third Month of Pregnancy.—Mr. EDWARD SKINNER related the case. The patient was a young woman aged 23. The *post mortem* examination disclosed a rupture of body of uterus at its upper and posterior part; the placenta was protruding, and the foetus was in abdomen. There was no history of a fall or blow, and the rupture was thought to be the result of softening. It was the second pregnancy.—Dr. KEELING remarked on the rarity of rupture at this period of gestation, and on the bearing of this to the softness of the uterine walls.

Adjourned Discussion: Pyæmia.—The debate on Mr. Jackson's paper was resumed by Mr. SNELL, and continued by the PRESIDENT, Mr. JONES, Mr. B. WALKER, Dr. DYSON, and Mr. JAMES. Mr. JACKSON replied.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, DECEMBER 8TH, 1877.

EDWARD HAMILTON, M.D., President, in the Chair.

Dislocation of Spine.—Dr. T. E. LITTLE presented a case of dislocation of the spine, in a young man aged 18, who died eighty-five days after the receipt of the injury. He fell down the hold of a vessel on his back and shoulders. He was able to walk into the hospital with assistance. There was complete motor, and partial sensory, paralysis in the upper extremities; but, in the lower limbs, no lesion of either motion or sensation existed until two months had elapsed. Marked flushing of the face, etc. (vaso-motor paralysis), was observed. On the tenth day complete atrophy of the muscles of both forearms set in, so that Cruveilhier's paralysis and "la main en griffe" became well marked. The skin of the hands and fingers assumed a glazed appearance. Paralysis of the intercostal muscles led to dyspnoea in expiration, inability to expectorate, and finally apnoea and death. The urine had been acid until a week before he died. There was a dislocation of the fifth from the sixth cervical vertebra, the articular processes of the fifth being hitched in front of those of the vertebra below. The spinal canal was narrowed to half its normal lumen. A greyish spot existed in the anterior columns of the cord. There was intermuscular wasting.—Dr. BOOKEY alluded to Dr. McKendrick's observations on colloid degeneration in the spinal cord in cases of trauma.—Dr. W. G. SMITH regarded the case as specially interesting, because it showed that the glossy appearance of the fingers, noted by Sir James Paget in peripheral nerve-lesions, may occur also in central paralysis.—Dr. FINNEV asked whether the external or internal intercostals were the more paralysed.—Dr. LITTLE said both were extremely atrophied.

Saccular Aneurisms (Virchow).—Dr. NIXON showed the brain, lungs, and kidneys of a woman who had died of apoplexy, the result of an extensive meningeal hæmorrhage from a saccular (miliary) aneurism situated on the right middle cerebral artery. The left artery also was the seat of a similar aneurism. The kidneys were intensely congested and the lungs were engorged with blood; this functional hyperæmia being symptomatic of the lesion in the neighbourhood of the aneurism which had ruptured.

Lesions in Morbus Coxæ.—Dr. E. H. BENNETT exhibited the head and

neck of a femur, removed by excision from a boy nine years of age, suffering from morbus coxæ in the stage of suppuration. He also exhibited the innominate bone and femur of the same patient, removed *post mortem* seven months after operation. The operation had been undertaken when abscess had been discharging for some time, and when the rapid progress of hectic fever indicated a speedy end to the case. The viscera were healthy at the time of operation. Marked relief followed the operation, the temperature and other febrile phenomena falling. This improvement was maintained for more than a month, when progressive disease of the pelvis was observed, with a gradual increase of suppuration, and finally the development of hepatic enlargement. The death occurred seven months after the operation. The femur was found healthy, the point of compact tissue which lay against the carious pelvis alone showing any disease. Extensive caries of the innominate, which had not at the time of operation extended outside the acetabulum, affected the dorsum ilii and all the surroundings of the acetabulum. An intrapelvic abscess also existed, springing from the perforated floor of the acetabulum.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 27th, 1877.

Campbell, William Frederick, Chippenham Road, St. Peter's Square
Lloyd, George Jordan, South Wreath, Birmingham
McCarthy, George, Kinmare, Ireland
MacIlhatton, Alexander, Treorky, South Wales

The following gentleman also on the same day passed his primary professional examination.

Dunlop, James Hay, Guy's Hospital

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 3rd, 1878.

Clarke, Thomas Furze, Richmond, Surrey
Dingley, Allen, Arzyle Square, King's Cross
Ellison, Frederick William, Leytonstone
Richardson, Richard Tippetts, Kingston-on-Thames
Thomas, Richard Weddall, York

The following gentlemen also on the same day passed their primary professional examination.

Baber, Henry Aitkeos, Guy's Hospital
Collins, George Duppa, King's College Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

BALROTHERY UNION.—Medical Officer for the Lusk Dispensary District. Salary, £125 a year as Medical Officer, and £20:16:8 as Sanitary Officer, with the usual Registration and Vaccination Fees. Election on the 19th instant.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Assistant-Physician. Applications to be made on or before the 26th instant.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 26th instant.

IPSWICH BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.

KENT COUNTY LUNATIC ASYLUM.—Assistant Medical Officer and Dispenser. Salary, £165 per annum, with furnished apartments, milk, vegetables, washing, and attendance. Applications to be made on or before February 6th.

NEWCASTLE-UPON-TYNE INFIRMARY.—Senior House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before February 4th.

SALFORD and PENDLETON ROYAL HOSPITAL.—House-Surgeon for the Pendleton Branch. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 15th instant.

SUNDERLAND and BISHOPWEARMOUTH INFIRMARY.—Senior House-Surgeon. Salary to commence at £80 per annum, with board and residence. Applications to be made on or before the 23rd instant.

WARMISTON UNION.—Medical Officer for the Longbridge Deverill District. Salary, £30 per annum. Applications to be made on or before the 14th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

ALLAN, James, M.B., appointed Senior House-Surgeon to the Northern Hospital, Liverpool, *vice* A. Craigmile, M.B., resigned.

*CHUBBS, Rowland H., L.R.C.P., appointed Medical Officer in Ordinary to the Bedford General Infirmary, *vice* George Wharton, M.D., Physician to the Infirmary, deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

DEATH.

LANG, John, M.D., of Southport, aged 49, an January 5th.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
THURSDAY...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.
FRIDAY	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.—Medical Society of London, 8.30 P.M. Mr. Wordsworth will bring forward Six Persons having Congenital Displacement of the Crystalline Lens; Dr. Fovell of Glasgow will read a paper on Excision of the Larynx, and exhibit a patient on whom the operation has been performed.
- TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Wagstaffe: Dermoid Cysts along Branchial Fissures. Mr. Dowse: Case of Paralytic Agitans. Dr. Garlick: Diaphragmatic Hernia. Dr. Raffe: 1. Phosphatic Diabetes; 2. Gangrene of Lung with Lead-poisoning; Dr. Greenfield: 1. Aneurysm of Cerebral Arteries; 2. Aneurysm of Brachial Artery from Embolism. Dr. I. Burney Yeo: Rupture of the Aortic Valves. Mr. Bryant: 1. Prostatic Tumours removed during Lithotomy; 2. Impacted Fracture of Shaft of Femur. Mr. Nunn: Sequel to Case of Recurrent Sarcoma. And other Specimens.
- THURSDAY.—Harveian Society of London, 8 P.M. Casual Communications. Dr. Ashburton Thompson, "On the Pulse-rate considered in relation to *Post partum Hemorrhage*".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THE following communications have been handed to the General Manager:—Mr. R. J. Baylon, Cork; Mr. G. H. Larmuth, Salford; Dr. John Easton, London (with enclosure); Mr. Henry Foxton, Bristol; Dr. R. Thorne Thorne, Mr. T. Wallace, Mr. J. G. Braden, Mrs. E. Bogle, and Dr. Frazer.

LIP-READING.

We have had communicated to us, by Staff-Surgeon R. Nelson, R.N., a case illustrative of a method of teaching the deaf and dumb to comprehend the observations made to them by the process known by the name of lip-reading, which has been carried out with great perfection by Mr. Van Praagh at the Jews' Deaf and Dumb Institution, Fitzroy Square. The case was that of a seaman aged 21, who lost the hearing of one ear in 1874, while employed at gunnery drill, and that of the other in 1876, while similarly engaged. In less than three months' time, the sick berth attendant, by simply giving a more decided and slower motion to the lips than in ordinary language, made the patient understand everything he wished to convey to him. Shortly afterwards, some others of the ship's company achieved a like result. The observations of Mr. Nelson lead him to the conclusion that three things are necessary for successfully carrying out this system—namely, light, to enable the pupil to observe every lip-gesture distinctly; proximity of pupil and teacher; and that the pupil must have a full-face view of the teacher.

INDIAN GUIDE.

SIR,—The book called *The European in India; or, Anglo-Indian's Vade Mecum*, by E. C. P. Hull and R. S. Mair, M.D., F.R.C.S.E., is published by Henry S. King and Co., of 35, Cornhill, London. The copy I have cost four rupees four annas in Bombay.—I am, yours, R. J. MAITLAND COPPIN.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the *Post Office* do not allow letters to be addressed to initials and directed to any *Post Office* in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a *Post Office*.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATER IN DECEMBER 1877. The following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen used to Oxidise Organic Matter.	Nitrogen As Nitrates, &c.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic.	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	19.20	0.134	0.120	0.000	0.008	12.6	3.7
West Middlesex ..	19.80	0.083	0.135	0.001	0.008	13.2	4.2
Southwark and Vauxhall	18.70	0.127	0.120	0.001	0.009	12.1	4.2
Chelsea	18.90	0.065	0.120	0.001	0.010	12.6	3.3
Lambeth	20.30	0.083	0.120	0.001	0.009	13.7	3.7
<i>Other Companies.</i>							
Kent	27.90	0.003	0.310	0.000	0.003	18.6	6.0
New River	20.20	0.036	0.150	0.000	0.007	14.3	3.3
East London	14.90	0.036	0.096	0.001	0.007	9.0	3.7

Note.—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Grand Junction.

MEDICAL ETIQUETTE.

SIR.—I have lately purchased a practice in the hamlet of S., separated from a town (T.) by a river (which during the day may be crossed either by ferry or by bridge). The latter way is a mile and a half round (there is also a high toll), and is the only available way at night. I am called up at night to see a patient taken, as I am told, suddenly much worse. The regular attendant (Mr. E.) from the town T. has not seen the patient for three weeks. I see the patient and prescribe a draught, telling them to send for Mr. E. in the morning, which they do. I get no call or thanks from Mr. E. Some time afterwards I am asked to go and see the same patient at 9 P.M., but refuse to go, telling them that if Mr. E. asks me or sends a card I will do so. They send over a messenger, who brings back medicine and a card for Mr. B., if it should be necessary during the night.

Is it the rule for a new settler to call on his neighbouring medical brethren first? It is bad enough to be called up to one's own patients during the night, but to be called up to other people's and get no thanks hardly suits my way of thinking, and my health not at all. If you would give an opinion, you would confer a great benefit on, yours faithfully,

B.

* B. was fairly entitled to thanks from Mr. E. We think his best plan would be to seek an interview with Mr. E., so as to make some amicable arrangement with regard to the visiting of patients at night, in view of the difficulty of transit to which he refers.

SIR.—Mr. Box has, I repeat, brought a criminal charge against me, and has as yet, though challenged, produced no evidence in support. His letter in your last issue differs so materially from his former statement, that I am tempted to offer a few remarks thereon. In the first letter, Mr. Box says, talking of the injury to the ulna, "We were unanimously of opinion that this was not from fracture. It felt like a small node, and seemed probably to have been caused by pressure of the bone against some sharp edge, injuring the periosteum." Now, as Mr. Box is not a legal or editorial character, "We" must apply to all the gentlemen present as holding the opinion expressed in the passage. This week, however, he states the case thus: Decided by all—1. Certain fracture of radius well united. (Who said otherwise?) 2. Ulna not broken opposite radius. (Quite true.) 3. Injury to the ulna not decided on, but pronounced obvious. (The pressure theory Mr. Box's own.)

And now for the strangest part of the story. Mr. Box has had in his possession since the examination of the man at Shrewsbury a certificate, signed by Messrs. Wood and Harris, stating the result of their examination of the arm in question. Why has Mr. Box not mentioned this fact, and forwarded the certificate for publication, instead of giving the opinion of these gentlemen second-hand? Messrs. Wood and Harris are both gentlemen of high standing, and in the absence of the accused party, would only give Mr. Box a certificate well considered, and stating their opinion of the case as they found it. Let Mr. Box forward this certificate, and any other evidence (not second-hand) he can.

I am much obliged to Mr. Box for leaving me to publish his third letter. It appears to me, however, more to prejudice the author than a whole. Hoping Mr. Box will conclude his case, so that I can answer it as a case, I am, sir, yours obediently,

ROBERT BEESFORD.

AN APPEAL.

MR. SCARNELL wishes gratefully to acknowledge the receipt of the following amounts sent in answer to his appeal.

G. R. Burt, Esq., Hainster	£1 1 0
Dr. J. Donaldson	0 5 0
T. Corbett, Esq., Kingston-on-Thames	0 10 6
M. Harris, Esq., Bourne-mouth	1 1 0
"Graduate," Manchester	0 2 6
R. B. Ruddock, Esq., Clifton	5 0 0
An Essex Practitioner	1 0 0
Henry Stear, Esq., Saffron Walden	1 0 0
Dr. Holden, Preston	0 5 0

1, Frederick Place, Penton Place, S.E., January 10th, 1878.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

PUERPERAL SCARLATINA AND PUERPERAL SEPTICÆMIA.

SIR,—The case of puerperal scarlatina recorded by Mr. W. T. Harries is not inopportune just now, when a discussion is going on in your JOURNAL in reference to Dr. Playfair's recent lecture. Upon this case, and upon the entire subject, bear with significance the words I used in 1875 in the Obstetrical Society (*Transactions*, 1875, p. 263): "I am led to these conclusions by a case of autogenetic puerperal poisoning under my care, in which most if not all the symptoms of scarlatina obtained, but which, recognising to be wholly the consequence of a morbid condition of the uterine system and of the lochia, I attacked by imitating the eliminative action of the uterus—viz., grasping the soft, spongy, uncontracted uterus with my hands, compressing it, and expelling some foul clots—and then washing out the womb and vagina by means of Higginson's syringe, Condy's fluid and warm water being used every two hours, till the lochia became quite inodorous. Had I, however, seen the patient for the first time, when those symptoms, apparently scarlatinal, were well developed, I might have erred in supposing I had a case of scarlatina to deal with, have treated it as such, and lost my patient; but being alive to the puerperal facts of the symptoms, I at once proceeded to deal with it as I have described; and the correctness of my diagnosis was evinced by the immediate improvement, commencing as it did from the very time I got rid of the offensive clots and washed away the foul lochia. All the group of evils in this case might be termed scarlet fever; yet all at once beginning to disappear under the cleansing treatment named, showed incontestably that the diagnosis was correct. Moreover, since her recovery I have made inquiries, and found no exposure to scarlatina was known to have occurred, nor did the malady manifest itself either before or since my patient's illness in the town where she lived." Here I would refer to Drs. Seaton and Howie's allusions to typhus and typhoid, being sometimes diagnosed as septicæmia, and would quote my words at the Obstetrical Society: "My mind has been exercised upon what I consider to be a fact—namely, that scarlatina and typhoid may originate in the same way; that is, from the same infecting source or poison; may be, in fact, the same poison developed in different persons, or in the same persons at different times and under different circumstances; the poison at one time determining to, or having an affinity for, the lymphatic and glandular systems, producing what we know as scarlet fever; at another time determining to, or having an affinity for, the intestines, particularly Peyer's patches, occasioning what we term typhoid fever. In this I am borne out by the independent researches of Dr. John Harley and of Dr. Tilt. Bearing in mind the life-symptoms which exist in scarlet fever, puerperal fever, and in typhoid, also the pathological conditions found after death—and how closely all are allied—if not in many instances actually alike, or so much alike as to make men pronounce different diagnoses, we can understand how readily scarlet fever can run into puerperal, and both into typhoid, and how the eminent Dublin physician, Sir Henry Marsh, came to suppose typhoid may originate puerperal fever: and, finally, how puerperal may clothe itself in the garments of scarlet fever, so that, as in Dr. Haine's and my case, the two affections are hardly distinguishable."—I am, etc.,

G. DE GORRUEQUER GRIFFITH, Senior Physician to the Hospital for Women and Children.
January 1878.

HYDROPHOBIA: APPLICATION OF FLUID CAUSTIC.

SIR,—Permit me to state that I have on three occasions during the last few months applied nitric acid to dog bites, by means of an ordinary pipette, which allows easy insertion to the bottom of the wound, and regulation of the quantity of acid used. The result has been satisfactory in each case.—I am, etc.,

Paignton, January 1878.

CHARLES PRIDHAM.

DR. CARLINE (Lincoln).—We believe that the House-Surgeon to a hospital is not entitled to a fee for giving evidence at a coroner's inquest. The question, however, is a strictly legal one, and could be better answered by a lawyer.

INFLUENCE OF MARRIAGE ON EPILEPTICS.

SIR,—Some letters on this subject have lately appeared, but the fate of the children of such marriages has not been noticed. Holding the appointment of medical officer to the Dingle Epileptic Institution, I was induced some years ago to make investigations on this point, and the results I presented in the form of a paper to the Liverpool Medical Institution. Briefly, the results were as follows. Of forty-one patients about whom information was forthcoming, the parents of thirty-two were either alive and in good health, or, if dead, were reported never to have had fits. The parents of six were epileptics; and of the remaining three, drunkards. That is to say, about one in six were the children of epileptics. But of those whose immediate parents were healthy—nine brothers and sisters—two cousins and two aunts were epileptic, thus bringing the hereditary influence more strongly to the front. Among these cases, there were thirteen who had borne children, who numbered together thirty-four. Of these thirty-four children, sixteen are alive and well, eighteen are dead, five being acknowledged as epileptics. From the evident reluctance shown in acknowledging the fact of their children having been epileptic, I have no doubt that the real state of affairs was much worse. Surely, however, there is enough to make a medical man cautious of how he advises marriage among those afflicted with this terrible disease. Indeed, should the legislature not step in to prevent such marriages?—I am, yours,

Liverpool, January 5th, 1878.

W. MACFIE CAMPBELL, M.D.

YOUNG M.D. asks:—Do the families of medical men suffer more from infectious diseases than those of others? He would like to have the opinion of his professional brethren on this point.

MEDICAL OFFICERS OF HEALTH.

SIR,—Please remark on the following. A. was formed into a sanitary district. B., the medical man at A., refused the post of medical officer of health, which was then offered to and accepted by C., a practitioner residing at a distance of five miles from A. In the meantime, another medical man comes to reside in A.; and the term of C.'s appointment having expired, the local board offered the appointment to the local man, on the ground that it is inconvenient to them that their medical officer of health should reside so far away. Is he (the local practitioner) acting unprofessionally in accepting the appointment?—Yours locally,

January 1878.

MEDICAL OFFICER OF A DISTRICT.

In the circumstances stated, supposing they are all fully stated, we can see no impropriety in the local practitioner undertaking the duties of medical officer of health.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

DIPHTHERIA.

SIR,—Dr. Maunsell, in his letter to you in the JOURNAL of the 5th instant, referring to croup and diphtheria, does not say how simple, acute, and specific inflammations are to be distinguished. For my part, I am inclined to think that diphtheria, croup, and acute catarrhal laryngitis may be manifestations of the same blood-poison. Dr. George Johnson considers that croup and diphtheria are the same, and Dr. Reynolds considers croup and laryngitis to be identical; and it is possible that both these authorities may be right; and, if we adopt the axiom that things which are equal to the same are equal to another, the conclusion is obvious. Perhaps each variety might be considered simple when there is no reason to suspect the action of a second blood-poison at the same time; and the converse. The subject is full of interest, and well worth a little discussion; and it is to be hoped that, if the Committee referred to by Dr. Maunsell have not arrived at a conclusion before the next annual meeting, they will at least do something in the way of reporting progress.—I am yours truly,

Southam, January 9th, 1878.

WALTER LATTEY, L.R.C.P. Lond.

Will Dr. Mushet kindly favour the readers of the JOURNAL with the age of the patient suffering from various aneurysms, whose case is so well described by him at page 12 in the JOURNAL of last week?

D. B. BALDING.

OIL OF STAVESACRE IN PSORIASIS.

SIR,—I would wish to state how very efficient I have found the oil of stavesacre to be in cases of psoriasis and ringworm, as recommended by Mr. Balmanno Squire in the JOURNAL some time since. Mixed with olive oil, in the proportion of 1 to 8, and used two or three times as hair-oil, it completely devitalises the parasites and their ova. Two or three applications of the undiluted oil I have found to cure ringworm.—I am, etc.,

WALTER LATTEY.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Brims Grove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Burdon Sanderson, London; Mr. W. S. Savory, London; Dr. Grimshaw, Dublin; Dr. Liveing, London; Mr. H. C. Burdett, Greenwich; Dr. H. Charlton Bastian, London; Mr. W. Donovan, Whitwick; Mr. F. W. Lowndes, Liverpool; Mr. J. G. Braden, Lewes; Dr. R. Thorne Thorne, London; Mr. F. Wallace, London; Dr. R. Maitland Coffin, London; Mr. J. E. Ferguson, Camphagar, India; Dr. Moore, Belfast; R. N.; Dr. Durance, Paris; Dr. Sawyer, Birmingham; Dr. Beresford, Oswestry; Dr. Athill, Dublin; The Secretary of the Manchester Medical Society; Mr. E. Walford, Ramsgate; Mr. G. H. Larmuth, Salford; Dr. A. W. Edis, London; The Secretary of Apothecaries' Hall; M.D.; Mr. Lennox Browne, London; Dr. W. Fairlie Clarke, Southborough; The Secretary of the Medical Society of London; Dr. Thomas Keith, Edinborough; Dr. E. Woakes, London; Dr. G. M. Humphry, Cambridge; The Registrar-General of Ireland; Dr. Mackey, Birmingham; Mr. Jonathan Hutchinson, London; Mr. R. J. Baylon, Cork; Dr. R. Lowther, Cartmel; The Registrar-General of England; Dr. J. Milner Fothergill, London; M.R.C.S. Eng.; Dr. J. W. Moore, Dublin; Mr. G. Eastes, London; Dr. Saundby, Birmingham; Dr. C. Warner, London; Dr. Joseph Bell, Edinburgh; The Secretary of the Harveian Society; Dr. Joseph Coats, Glasgow; Dr. Bradbury, Cambridge; Dr. Joseph Rogers, London; Mr. Wm. Adams, London; Professor Huxley, London; Mr. Power, Dartmoor; Dr. Silver, London; Mr. Henry Sewill, London; Dr. Carline, Lincoln; Dr. Taylor, Anerley; Dr. C. Harrison, Lincoln; Mr. F. W. Lowndes, Liverpool; Dr. W. M. Campbell, Liverpool; Mr. Alban Doran, London; Mr. Thomas Graham, London; Dr. F. H. Daly, Dalston; Mr. G. G. Sparrow, Chichester; Dr. F. C. Cory, Buckhurst Hill; Mr. E. L. Hussey, Oxford; Mr. Monckton, Tunbridge Wells; Dr. P. Bindley, Birmingham; The Secretary of the Pathological Society; Mr. Robert Smith, Sheffield; Our Edinburgh Correspondent; Mr. Charles Pridham, Paignton; Mr. Wagner, London; Mr. Henry Foxton, Bristol; Dr. Louis Henry, Manchester; Our Dublin Correspondent; Mr. Walter Lattey, Southam; W.; Mr. Edwin Morgan, London; Mr. Horace Swete, Worcester; Dr. Frazer, Ventnor; Dr. Brabazon, Bath; Mrs. E. Bogle, London; Our Paris Correspondent; Dr. F. C. Gresham, Bromley; Dr. James W. Browne, Rhyl; Dr. E. H. Lendon, London; Mr. F. Workman, Reading; The Secretary of the Clinical Society; etc.

BOOKS, ETC., RECEIVED.

Transactions of the Clinical Society of London. Vol. x. London: Longman, Green, and Co. 1877.

CLINICAL REMARKS

ON A

CASE OF ANEURISM OF THE DORSAL ARTERY OF THE FOOT.

By WILLIAM S. SAVORY, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

It is not always from great, or from what are sometimes called the best, cases in surgery that most may be learnt. To the patient, momentous issues may be at stake, and yet the duty of the surgeon may be clear and simple, and easily performed; or the case, to the patient, may be a comparatively trivial one, and may admit of remedy in various ways, yet the questions that arise thereon may lead up to some of the most difficult problems of surgery, and tax to the utmost all the ability, knowledge, and skill of the surgeon.

In illustration of this, I ask your attention to-day to a case in which the patient himself certainly regarded his trouble as a trifling one, although in its treatment some of the largest principles of surgery were involved. Let us, if you will, try to make the most of it now, by using it as a text for the discussion of some of them.

A man aged 49, a labourer, in good health, was on the 28th of March last admitted with a simple fracture of both bones in the middle third of the right leg. When the limb was examined, a pulsating tumour was discovered on the dorsum of the right foot, behind the angle between the first and second metatarsal bones, over the cuneiform—obviously an aneurism of the anterior tibial artery at this spot. The tumour was well defined; in size and shape, like the shell of a small limpet; throughout uniform, soft, and compressible. The investing structures were quite natural. All pulsation was controlled by pressure on the artery immediately above, and then the tumour forthwith became flatter and smaller in every way.

The man was fully aware of its existence. His wife said that she had for some years noticed the tumour when she washed his feet. He never thought much about it, but observed that it varied in size. He stated that six months ago it became larger, and then began to throb and became more troublesome, being painful on pressure. As he expressed it, the lump was very much in the way.

Now I need not tell you that this is an extremely rare situation for an aneurism. I never saw one here before, and I can find no record of a similar case.* What was the cause of it?

Aneurisms, you know, may be due either to disease or to injury of the arterial wall. In either case, the tissues are so damaged, or the structure impaired, that the coats no longer afford adequate resistance to the pressure of the blood. The changes in the arterial tunics, which for the most part precede the formation of aneurism, are classed under the head of degeneration; and, although these changes are various in kind and degree, they all tend to a common result: they disqualify the artery, or the portion of it affected, for the part it has to play in the transmission of blood. Injuries, too, are of various kinds, and lead to aneurism in various ways. A wound of an artery, which may be a simple incised one, may heal; but the cicatricial tissue, from its very nature, may afterwards yield into an aneurism; or one or more of the arterial coats may be split, or cracked, or bruised, or otherwise damaged, and so give way before the force to which it is continually exposed. And, of course, injuries of all kinds are likely to tell with tenfold effect upon an artery already the subject of disease.

Now, in this case we failed to detect evidence of arterial disease in any part of the system. Auscultation gave no sign; and, wherever the arteries could be felt, their elasticity was unimpaired. The anterior tibial itself along the dorsum of the foot was quite natural to the touch. I should say it even gave the impression of being a remarkably healthy vessel. It was, perhaps, rather large, but without a trace of rigidity, and the pulsation was in every respect normal. In these circumstances, you see it was very improbable that the artery had been the seat of disease where the aneurism now was. Although I do not suppose observations have been very exact on this point, I think it must be rare that isolated patches of degeneration occur in distant arteries without evidence of disease elsewhere. Again, in extensive disease of the arterial system, which is common in advanced life, we

do not, in point of fact, as one of its effects, see aneurism of the distant arteries. How familiar we are with the evidence from touch of diminution of elasticity or undue rigidity of the walls of the distant arteries; and yet, from experience, we cease to think of the occurrence of aneurism consequent on this. Not that there can be any question of the relation of degeneration of the arteries, or impairment of their properties, to the occurrence of aneurism, as cause and effect; but the form of degeneration—the atheromatous—which usually tends to aneurism, affects, for the most part, the larger vessels; while in the smaller (though not in the smallest) arteries is usually seen that form of degeneration which is called calcareous. For these chief reasons, then, I conclude that the aneurism in the present instance was of traumatic origin. I believe it to have been the result of some injury which the artery had sustained there; not the result of a wound, or of any severe or sudden violence, for there was no evidence of this; but the artery, perhaps from rough pressure, as from a boot, may have been repeatedly bruised, and so gradually weakened. This idea was somewhat strengthened by the fact that at this spot, where the vessel rests on the cuneiform bone, it was rather more prominent than elsewhere. This, I need not say, is merely guesswork; and for the view I will only claim that there is, perhaps, less to be said against it than against any other suggestion.

When we talked of getting rid of what the patient himself called the jumping lump, he accepted the idea as a very pleasant one; and, on the whole, it seemed proper to interfere with it. It was not only a source of continual annoyance and trouble to the man, but it might at any time, either in the natural progress of the disease, or more likely because of injury, have ulcerated and given way, and so have led to severe hæmorrhage and other mischief, which would have called at once for prompt surgical measures in far less favourable circumstances. These considerations, with the probability that the aneurism might be obliterated without great risk of any kind, induced us to advise the man to have it treated. Indeed, the opportunity appeared to be a singularly favourable one. The fracture compelled confinement, and during this period the aneurism might be cured without further loss of time. Two troubles would thus be disposed of at once.

Obviously, various plans of treatment were open to us.

Pressure on the artery above, on the dorsum of the foot, with or without simultaneous pressure on the tumour itself.

The injection into the sac of some substance to coagulate the blood there, preventing at the same time undue extension of the coagulum or blockade of the vessels beyond by firm pressure with a metallic ring around the tumour. This is a plan which I have often adopted in the treatment of nævi.

Acupressure of the dorsal artery.

Ligature of the artery above, or of the artery both above and below; or ligature of the artery above first, and subsequently below if need be; or ligature of the artery both above and below, and then extirpation of the sac.

After duly weighing these several plans, we elected to try, in the first instance, as the simplest and safest, pressure on the artery above and over the tumour; and, that failing, ligature of the dorsal artery above, to be followed, if need be, after an interval, by ligature below.

In the first place, pressure, carefully watched, involved least risk of all; but that it would succeed appeared to be doubtful, because of the character of the aneurism; for, although the pulsation of the tumour was at once completely controlled by pressure upon the artery with the finger alone, yet, from its shape, compressibility, and collapse, it seemed to me to be an instance of true aneurism, as pathologists often use the term, or, as it may be, perhaps, better expressed, of aneurismal dilatation; that is, I believe it to have been an expansion of the entire arterial wall, all the coats having been dilated. I concluded, therefore, that we should hardly get coagulum in the sac from pressure; and that, therefore, pressure would be of only temporary advantage; that dilatation would recur when the blood was allowed to flow again with full force through the sac.

And, next to pressure, it seemed to me that ligature of the artery involved less risk than any of the other steps. I could see no advantage in acupressure over ligature on this score: while the injection into the sac of perchloride of iron, or of anything else, might set up destructive mischief which we could not easily control. Moreover, the ligature above, by permanently reducing the pressure on the sac, would, in all probability, prove an efficient remedy; or, at the worst, by subsequent ligature of the artery beyond, if need be, it could hardly be conceived that the disease would not be efficiently controlled. If that were done, there appeared to be no sufficient reason for interfering any further with the sac itself. We elected, therefore, as aforesaid, to try pressure first, and, that failing, ligature.

* Quite recently, however, another instance has occurred. BRITISH MEDICAL JOURNAL, December 8th, 1877, p. 804: a case of "Spontaneous Aneurism of the Arteria Dorsalis Pedis, under the care of Mr. Adams."

But then came another question, which had to be considered at the time. If the artery were tied, it what place would it be best to apply a ligature? Now, you see this question involved the consideration of one of the most important principles of surgery. I need not tell you that, in tying an artery for the cure of an aneurism in what is now the ordinary way, as in the operation of Hunter, the ligature is placed on the vessel at some distance from the sac; and thus, while the direct current of blood is still cut off from the sac to an extent usually sufficient to cure the disease, the artery itself is injured by the operation at a spot where it is far less likely to be diseased or impaired than close to the aneurism; and hence the chance of its repair is proportionately greater. Now, had I been guided simply by these considerations, I ought to have tied the anterior tibial artery somewhere above the ankle-joint—say in the lower third of the leg; but then there were two important facts in the present case which had to be brought into the question. I have already given reasons for the belief that the aneurism here arose from injury rather than from disease. As I have said, I had every reason to believe that the rest of the artery was fairly healthy. Again, while pressure with the finger afforded proof that pulsation of the sac was controlled by arresting the stream in the artery just above, I could by no means be sure that ligature of the artery some inches higher up would be as efficient or even nearly so; for, as you all know very well, the farther we go from the heart outwards, the more ample is the collateral circulation in relation to the main trunks; and, as a matter of fact, had I tied the artery above the ankle in the leg, I must have had branches of importance between my ligature and the aneurism. Therefore the principles which are usually paramount elsewhere—as, for instance, in popliteal aneurism—were not in force here.

Well, then, fourteen days after admission, we began with compression. Pressure by means of a pad adequately supported, and sufficiently great to arrest its pulsation, was applied to the artery on the dorsum; and pressure tolerably firm, but equable, was applied also over the tumour through a thin layer of cotton-wool. This was kept up for several hours on more than one occasion, but not without discomfort to the patient, which gradually increased, and worried him so much that at length he begged earnestly for some change of plan. Indeed, the integument over the sac had become somewhat congested. Very soon after the pressure was removed, the tumour appeared unchanged, and, as the man expressed it, jumped as much as ever.

On May 1st, the fracture was found to be firmly united; the splints were removed, and the leg supported by a stiff bandage. Then, on the 11th, about a month after the trial of pressure, we tied the dorsal artery with an ordinary silk thread about an inch and a half or two inches above the upper margin of the aneurism. Immediately upon tightening the ligature, there was total arrest of pulsation in the tumour, and the sac became flaccid and soon shrank. All was quiet there for two or three minutes; but then the very feeblest pulsation in the tumour could be both seen and felt. The edges of the wound were brought carefully together by two sutures, and covered with oiled lint; a small pad of cotton-wool was placed over the aneurism, and the whole foot was lightly enveloped in a flannel bandage. It seems to me that the return of this feeble pulsation in the sac so soon after the application of a ligature is an interesting fact. How did the blood find its way to the tumour in sufficient force for this purpose? Was it through the tarsal or even the metatarsal branch which might intervene between the ligature and the tumour; or was it by a regurgitant stream supplied through the external plantar? I cannot be sure; but, as all this pulsation was arrested by slight pressure upon the distal extremity of the tumour, I suspect that the latter was the chief, if not sole, source of it.

But the next day the tumour was quite pulseless, and on the next it had shrunk so much that its prominence was hardly visible. From this time, it gradually subsided. For several days, it could be felt as a small firm nodule, hardly perceptible to sight, but easily defined by touch. The wound went on uninterruptedly well; it closed by direct union, except in its centre, where the double thread passed out. The ligature came away on the nineteenth day, and in two days afterwards the small channel it maintained was closed too. The man left the hospital on June 2nd, three weeks from the operation; and, after a holiday of six weeks at our convalescent home, the tumour was no longer visible, and could hardly be felt.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The fourth meeting of the twenty-second session was held at the Royal Kent Dispensary, Greenwich Road, on Friday, January 4th, at 8 P.M.: W. Johnson Smith, F.R.C.S. (President), in the Chair. Dr. J. Milner Fothergill read a paper on "Some Conditions which Simulate Organic Disease of the Heart".

FOREIGN BODIES IN THE MEATUS.

By H. MACNAUGHTON JONES, M.D., F.R.C.S.I. & Edin.,
Surgeon to the Cork Ophthalmic and Aural Hospital.

FROM time to time, it has occurred to me to see considerable damage done by rash and persistent efforts to extract foreign bodies from the auditory canal. The late Mr. Hinton has used the expression "aural surgery is simply surgical common sense, and needs comparatively little insistence on special points beyond that which a trained surgical instinct would suggest". "Common sense" and "surgical instinct" appear alike to be blunted when, with a remarkable absence of both, persons are yet to be found who can be rash enough to employ clumsy force and ill-contrived instruments in the removal of what often is, even after a prolonged residence, a comparatively harmless tenant from the external meatus. I would say a few words for common sense and surgical instinct, such as anatomical knowledge might suggest to anyone who pauses to reflect on the form and design of the external passage of the human ear. In the *child*, the meatus is remarkably narrow; it is mainly cartilaginous; it is often congenitally contracted; its skin-lining is directly continuous with the membrana tympani, and is intimately connected with the periosteum of the temporal bone; it is close to the dura mater, and closer still when gaps occur in the osseous canal. In the *adult*, the canal is more spiral, the osseous portion is proportionately larger; but the entire passage may be described as a coiled tube, about one inch in length, consisting of two portions, situated almost at an obtuse angle to each other, the junction of the two being marked by a peculiar contraction, any further closure of which, in consequence of inflammation or thickening, completely shuts off the bony internal pouch from the external funnel. Two things are at once evident from these simple considerations of the anatomy of the passage: first, that the direction of any extracting or expelling force must depend on the portion of the canal in which it is applied; secondly, that, having in view secondary consequences, and also the effect which inflammation has in frustrating our effort to remove a foreign body from the passage, we should employ no force which is in the least calculated to excite that inflammation. The greater the swelling of the epidermis with subcutaneous cellular effusion, and it may be perioritis, the greater the jamming the foreign body, whatever it is, gets. If it be hard and angular, this is more likely to occur than if it be smooth and round. If it be pushed into the pouch in front of the membrane, and the latter be contused in attempts to catch it, the more likely are we to have inflammation of the membrane and resulting perforation, with tympanic mischief. If the canal become so swollen that the foreign body cannot be seen, and its removal be still attempted, then the effects of this "groping in the dark" are more disastrous: further inflammatory mischief and tighter jamming. Now, what is it that, in the large proportion of cases, fixes foreign bodies in the ear?—attempts at removal. If the body do not occupy the calibre of the canal, it lies in it, and there is a space for the expelling force to be directed from behind on to it. If it be so large as to fill the entire calibre of the passage, which is rarely the case, it will, previously to being interfered with, in all probability lie loosely in the passage, its further entrance being arrested by the contraction of the wall. In my experience, the most frequent seat of the arrest of a foreign body is at the junction of the cartilaginous and osseous portions of the meatus. It becomes *arrested* here, or is driven beyond against the membrane by extractive efforts. Every touch of an instrument, no matter how gentle, sends it further in: each forcible effort tends to further *impaction*. Of course, there are some bodies so small and so shaped that it is a matter of no difficulty to catch them with a forceps and withdraw them. But I think it may be laid down as an axiom in aural surgery that, in the case of any arrested body in the meatus, where any space exists between the foreign substance and the wall of the meatus, the only agent which should be employed is water. If the body be impacted, or if it completely occlude the canal, much will depend on the nature of the body, its shape, the material of which it is composed, the length of time it is lodged, the presence or absence of inflammation, the kind of instrument at hand. It is my conviction that, in all recent cases, those quickly brought to the surgeon, syringing is the best means to adopt; in all cases where inflammation is not present, no matter how long the body lies lodged, syringing is also the best means; and, in cases where inflammation is present, I prefer, as a rule, to wait, using means to subdue it, with gentle syringing daily; and, if patience only be exercised, success in the end is almost certain. I prefer to make no remark here as to instruments. The instrument suited for one occupant of the canal will be found valueless for another. The shape and the

position of the foreign body are the two things which must be considered in the employment of any instrument. To avoid all force is the rule, never to be violated, let the circumstances of the case be ever so tempting.

I now desire to quote the following few cases out of many constantly occurring to me in hospital and private practice, which bear on the foregoing remarks.

Some years since, a child was brought to me with a shell in the meatus, where it was quite visible. It was one of those small yellow shells common on the beach. The convex surface was directed outwards. It completely filled the meatus, and was jammed in the contracted portion. Many attempts had been made to remove it, but all resulted in driving it further in, and its smooth surface rendered it impossible to catch it. I advised patience and syringing. There were both pain and inflammation when I saw the ear. Some catarrhal discharge subsequently formed. The ear was syringed daily. In about three weeks from the time I saw the case, the unwelcome guest suddenly came out while the ear was being syringed.

A gentleman was tickling his ear with a programme-pencil while at a ball. In doing so, the bone-top of the pencil remained in the ear. He fancied that he afterwards heard it fall out. Feeling, however, uncomfortable the next day, he sought advice, and the practitioner whom he consulted thought he saw the white flat surface of the bone-cap. Several efforts to seize it were made, giving him great pain. On the following day, these were repeated. The passage now became swollen and painful, and another surgeon was consulted, who, without expressing any opinion as to the presence or absence of the foreign body, wisely abstained from all interference, and directed simple washing out of the ear, and leeches to subdue the inflammation. After some days, I saw the patient. I found the passage contracted by the inflammation, so much so that no speculum could be inserted; there were considerable pain and complete deafness. However, with the otoscope and Politzer's bag, I satisfied myself that the probability was against the presence of a foreign body; but there was evidently a considerable perforation of the membrane. With care and treatment, he ultimately recovered, hearing the watch before he left me at twelve inches; but there has remained a permanent perforation in the membrane. This case was all the more serious, as the hearing in the other ear was impaired from childhood.

Some months since, a child was sent to me from the country by two medical gentlemen, with a glass bead in the ear. The bead was blue, diamond-shaped, and was taken from one of those "surprise packages" of sweets which are sold to children. The bead was in for several days, and resisted all attempts at extraction and syringing. The child was very restless, so I put her under the influence of chloroform and tried syringing, but in vain. The smooth, diamond-cut, conical end of the bead was turned out, and it was fixed in the passage. Keeping the child well under chloroform, with Dr. Grattan's assistance, I passed the sharp curved edge of a Critchett's cataract-scoop over the margin of the bead, between it and the wall of the meatus; I then was able to slightly turn it on its own axis. This gave me room to pass a loop of silver wire over the margin of the bead (as originally recommended by Mr. Hutchinson) and obtain a grip of it. But, after two or three efforts, the wire broke each time, and there was not room to pass a stronger wire behind the body. I, however, succeeded in getting a double loop of the thin wire over the edge, and finally brought it away. Some years since, a child was sent to me by Dr. Cummins of Cork with a spherical glass bead in the meatus, which completely filled the calibre of the canal. I thought that forcible syringing might, in this instance, by driving the body further in, do more harm than good; and, as the bead appeared not to be firmly impacted, and was not long in the passage, I thought of Brunel's plan for the coin in his larynx. Accordingly, I turned the child on her side, with the affected ear down, and, with assistance, while in this position, I placed the fleshy part of the thumb of my right hand (the body was in the left ear) over the opposite ear, the fingers being extended on the head, the inner side of the palm of the hand thus came above the auricle, on the temporal and parietal bones; by giving a few sudden jerks to the head in this position with the inner side of the hand, the bead dropped out.

A child was brought to me with a piece of chalk, which she had wedged into the passage. Efforts had been made to extract it. The chalk had been partly broken down with the forceps, and there was no space possibly available to pass any instrument behind the mass. I scraped away with a sharp scoop as much as possible of the chalk from the upper wall of the meatus, washing the debris away with a syringe. I then persevered in properly directed syringing, and the mass came away under chloroform. Lately, I had a very obstinate case. A child with a smooth stone, rather angular in shape, was

brought to the hospital; the stone was inside the contracted portion of the canal. I tried syringing without avail. The stone, though it was not possible to get any extracting instrument between it and the wall of the meatus, was movable. I determined to wait and syringe. The child was troublesome. Several times, I got him under chloroform and examined the stone with a fine probe and good light carefully. I tried to catch it with cobbler's wax, but it would not come. I made an effort to fit the spoon behind it, but failed. It only went further in. Some inflammation setting in in the meatus, and discharge appearing, I desisted from all efforts, and merely had the ear washed out with warm water daily, filling the meatus each time with glycerine. By degrees, the stone worked its way out, until it was about half way through the narrow part of the canal. I was now tempted to try and get a wire behind it; it only pushed the stone back. I, therefore, determined to do nothing but syringe. Some discharge continued. At the end of three weeks, the stone came away. There was slight catarrh of the passage; but the membrane was not affected, and the child recovered with perfect hearing.

Having thus given the brief details of a few obstinate and difficult cases, I will conclude by quoting these remarks of Hinton and Trötsch on this subject. The former says: "I must be pardoned for speaking earnestly on this point. Even to this day, it remains the fact that ears are thus destroyed without shadow of reason or excuse, and not by careless and incompetent persons alone. I believe it may be laid down as a rule that, whenever an instrument will succeed, syringing would also succeed; and that, when proper syringing will not succeed, all instruments are full of danger; if had recourse to before violence has been used, would probably, in all cases, remove the offending body in ample time to prevent mischief." "Injuries", says Trötsch, "are frequently inflicted on the soft parts of the meatus by patients with itching in the ear by means of knitting-needles or sharp metal ear-picks; graver and more serious frequently prove those contused and lacerated wounds of the meatus, inflicted by a professional hand, in attempting the removal of foreign bodies, even in those cases in which most harmless intruders, as morsels of bread and paper, are concerned. On such occasions, the instrumental foreign bodies are generally the chief part of the evil."

UNUNITED FRACTURE OF THE FEMUR CURED BY OPERATION.*

By REGINALD HARRISON, F.R.C.S.Eng.,
Surgeon to the Royal Infirmary, Liverpool.

A CASE of ununited fracture of the femur, which has recently been under treatment in my ward at the Liverpool Royal Infirmary, presents, I think, sufficient features of interest, if not of novelty, as to render it worthy of record here. In bringing this case under notice, I do not claim any originality in treatment; I have merely applied those principles, although perhaps in a somewhat unusual manner, which are generally recognised in the management of this class of cases.

Austin Zinc, a seaman, aged 26, was admitted into the Infirmary, under my care, on July 26th, 1875. From the patient's history, it appears that, on April 18th previously, whilst at sea, he was struck by the sea in a gale and thrown violently against the side of the ship. It was found that he had sustained a fracture of the thigh. The captain of the ship put a long splint on him, and he was treated as well as circumstances would permit. He was subsequently placed on a steamship for conveyance to England, where he had the benefit of the attendance of the surgeon of the ship, who appears to have done the best to obtain union.

On his arrival in England, on July 23rd, it was found that no union whatever had taken place, and he was consequently transferred to the Infirmary at Liverpool for further treatment.

Upon examination, I had no difficulty in finding a fracture of the femur at about the junction of the upper with the middle third. The fracture was oblique, and the ends were widely separated, the upper fragment being readily felt beneath the skin in front, whilst the lower fragment was deeply embedded amongst the hamstring muscles. There were two inches and three-quarters of shortening. There was no union whatever.

The limb was placed on a splint after friction had been employed, and was kept absolutely at rest for some weeks. Other means were resorted to, including the introduction of a tenotomy-knife to the end of the bone, violent percussion, and friction, but all without avail. No

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

union, or even any sign of reparative action, could be excited. The patient became very weary, and begged to have his limb amputated. On January 4th, 1876, with the assistance of my colleague Mr. Banks, I performed the following operation, the patient being placed under the influence of ether. I made an incision on the outer aspect of the thigh, about six inches in length, and sufficient to enable me to reach the fractured ends of the bone. By means of a small saw and a gouge, I completely bared the lateral aspect of both fragments, each of them to the extent of what they overlapped. After the opposing lateral surfaces of this oblique fracture had been most completely bared, I then passed round both fragments a stout piece of ordinary copper bell-wire, and a second piece at an interval of about an inch and a half. Having placed the wires in their proper relative position, I gradually screwed them up until the bones came into a position similar to that of a splice in a fishing-rod. Having thus screwed up the wires, I had the satisfaction of finding that they held the ends of the fracture in close and firm apposition.

To prevent any slipping, I then passed through the bones, midway between the two wires, by means of an Archimedean drill, a drill-head; this had the effect of completely fastening the two opposing portions of the fracture together. The wound was closed by wire sutures, the other end of the drill-head projecting through the wound. The limb was then placed on an outside interrupted splint, and the patient removed to bed.

Bleeding was entirely controlled during the operation by means of an Esmarch's bandage placed round the groin. The operation was followed by some slight febrile reaction; but, considering the severity of the operation, it was remarkable how little the patient suffered. The chief pain was referred to the position of the drill-head, the slightest touching of which occasioned severe and deeply felt pain. On January 8th, the pain referable to this drill-head was so great that I removed it, fearing that it might set up in the bone an undue amount of inflammatory action. The removal of this was followed by complete comfort. The suppuration was not excessive, and, in the course of a few weeks, the wound was completely filled in with healthy granulation. The wound was not dressed antiseptically. On March 8th, as the wires appeared now to be sources of irritation, I determined to remove them. I had the patient placed under ether. I then passed my finger through the mass of granulations down to the wires, and, by means of a curved pair of cutting pliers, severed and withdrew each wire. This was done without difficulty, and I had the satisfaction of feeling that union was complete. The patient was kept in bed till May 4th, when he was allowed to get up, union being perfectly complete. The amount of shortening was not greater than that observed on his admission; viz., very nearly three inches.

The patient was sent to the Convalescent Hospital at Woolton, where some very small fragments of bone were from time to time exfoliated. On July 10th, 1877, the patient called at the Infirmary to see me. His limb was perfectly firm. He informed me that he had been out to Callao as a seaman, and that he was again leaving on the following day for the same place. Except the shortening, which now appeared to give him little inconvenience, the movements and form of the limb were all that could be desired. The case, in fact, turned out as successfully as I could wish.

In commenting upon it, I would first observe that recourse to operation was not had until it was evident that it was useless to expect union from the employment of rest, position, and other means which are found successful in instances where union is merely delayed. In a seaport like Liverpool, cases of delayed union are not uncommon. Sailors and others are often sent for treatment who have been rolling in ships with fractured limbs, sometimes for weeks; in these, rest and proper treatment are speedily followed by firm union.

In this instance, all ordinary means for securing union had failed, and therefore it was necessary to consider carefully what proceeding offered the best chance of success. It was suggested that a portion of the fractured ends be sawn off, and the case treated as one of compound fracture. This plan, however, did not recommend itself to me, inasmuch as, without some means which would secure apposition and immobility of the fractured ends, it was hardly reasonable to expect union to take place.

As it appeared impossible, under any circumstances, to prevent shortening, I thought it better to avail myself of the overlapping of the fragments, and, by baring the sides of them to this extent, in this way to obtain a much larger bony surface from which union might spring than if section of the ends of the bone were done. For the purpose of holding the fragments thus bared together for a time sufficient to allow union to take place, I determined merely to encircle the bones with wire. I was anxious to avoid retaining the wires in the substance of the bone, as I have seen the plan followed by most violent

inflammation, resulting in extensive necrosis, and thus defeating the object in view. I therefore contented myself with wrapping the wire round the bones.

For the purpose of adding to the security of the union thus effected, and guarding against any slipping of the bones by the spasmodic action of the powerful muscles of the thigh, which is not uncommon for the first two or three days after such an operation, I introduced a drill-head, which firmly "nailed" the fragments together. At the end of four days, I removed this without difficulty, as the pain referred to it became intolerable, and I was fearful of setting up an excessive inflammatory action in the bones; besides, by this time, the drill-head had fulfilled the object I had in view in its introduction. The wires were not removed until union was complete, when, for the first time, Nature began to indicate they were no longer necessary. On their removal, the wound healed kindly, and beyond, from time to time, the throwing off of small necrosed portions of bone, no further inconvenience was experienced by the patient.

The degree of shortening was not greater than three inches, and I was surprised to find how little it interfered with the patient's movements.

I shall not trouble you with any further observations on the case. The treatment of so unfortunate an occurrence as an ununited fracture claims from us all, when opportunity offers, contributions to the literature of the subject.

DIABETIC COMA: ACETONÆMIA.*

By BALTHAZAR FOSTER, M.D., F.R.C.P.,

Professor of Medicine in Queen's College; Physician to the General Hospital, Birmingham; Consulting Physician to the West Bromwich Hospital; etc.

THE sudden occurrence of grave symptoms, and death following in a few hours, are startling events in any chronic disease. They are especially startling in a malady like diabetes mellitus, which usually runs a long and comparatively uneventful course. Prout, with his usual keen observation, noted some instances of this sudden ending in diabetes, but has simply referred to them as interesting illustrations of the frail tenure on which the life of a diabetic is held. Later writers have advanced hypothetical notions to account for the phenomena observed in their cases. By some, myself included (*Clinical Medicine*) they have been regarded as uræmic; thickening of the blood to a degree sufficient to render it unfit to circulate, from excessive loss of water, has been suggested by others; the nervous and respiratory systems have been invoked as the centres on which these grave symptoms depend; and, lastly, chemical transformations of the diabetic sugar, leading to the formation of poisonous compounds within the body, have been supposed by some German and Italian authors to be associated with sudden death in diabetes.

There are cases, I have no doubt, to which each of these hypotheses may be justly applied; but my more recent experience strongly inclines me to regard the last mentioned view as the most satisfactory explanation of the hitherto obscure and alarming condition which has been aptly termed diabetic coma. In this communication, I propose to record some cases of this kind, and to inquire how far their clinical aspects support the chemical view.

One morning about twelve months ago, when teaching in the wards, I was called away to see a boy who had been admitted two days before for diabetes. We found the boy in bed, tossing about restlessly, with a very anxious expression of face and slight duskiness of the skin. He had very remarkable dyspnoea. Each inspiration was deep, ample, and chest-filling. Large volumes of air passed in and out of the chest thirty-two times a minute, but seemed to have no power to satisfy the patient's craving for air. On examination, the chest was everywhere resonant, and loud and harsh breathing was heard all over the chest. No odour beyond the ordinary diabetic smell was observed in the boy's breath. The pulse was small and weak, but regular, 136; the tongue was moist, with whitish fur; the temperature in axilla was 97 deg. The boy was somewhat dull mentally, but, when roused, answered correctly. The symptoms had begun the evening before with sickness, which had occurred again early in the morning, and been associated with sharp pain in the epigastric region and rapid breathing. The abdomen

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877; and also before the Birmingham and Midland Counties Branch.

was distended, especially in the epigastric region. When I noted these symptoms, I recognised the beginning of diabetic coma, and expressed to my class the opinion that the case was likely to end fatally in twenty-four hours. An injection to relieve the bowels, which had been confined for two days, an effervescing draught, with half-drachm doses of compound spirits of ammonia every two hours, and brandy in small doses, were ordered. The boy gradually grew worse; the surface grew colder, the face duskier; the rapid breathing lasted for twelve hours, and then grew short and catching; the pulse became feebler and more rapid; the restlessness gave place to coma; the surface became cyanotic; and he died early the next day, less than twenty-four hours after my visit. The urine was passed freely in the bed during the last twenty hours of life.

Now, this boy had been diabetic for more than twelve months, and was admitted to the hospital, not on account of any urgent symptoms, but for the purpose of observing the effect of systematic treatment. On the day of admission, he had come by train ten miles to the hospital, as he was accustomed to do as an out-patient; and, when it was decided that he was to remain as an in-patient, he fretted a good deal, and continued to do so up to the time of the grave symptoms coming on. He was placed on partly restricted diet, and had no medicine, as I wished to estimate the sugar-excretion before beginning specific treatment. He had been passing some 100 to 120 ounces of water daily before admission, with a high specific gravity (1035 to 1038), and containing 2,700 to 3,000 grains of sugar. On the day after admission, the urine fell in quantity and specific gravity (84 ounces, specific gravity 1026), and never rose above 1028 till his death. The sugar was not estimated.

In this boy we had a typical example of the form of sudden death in diabetes, for which we have hitherto lacked any adequate explanation. All who had observed the case, in common with myself, looked forward with great interest to the necropsy, in the hope that it might unravel the mystery.

The *post mortem* examination was made by Dr. Saundby twenty-six hours after death. The brain and membranes were pale and anæmic, and there was no discoverable coarse or microscopic change except hypertrophy of the muscular coat of the arterioles of the pia mater. The lungs and heart were quite healthy; the muscular structure of the heart was pale, but not fatty. The abdomen showed no sign of any inflammatory mischief. The spleen was small and soft. The liver was pale in colour, but normal in structure under the microscope, and weighed 3 lb. 3 oz. A decoction showed the presence of sugar in small quantity. The kidneys were healthy. The stomach showed patchy congestion and catarrh. So far, the search had been fruitless. The blood, however, had not escaped observation. In the brain-sinuses, and throughout the body, it was pale and cream-like. One observer compared it to grumous pus. It was fairly fluid, and did not clot, but, on exposure to the air, became pinker and brighter in colour, assuming a magenta-like tinge. The microscope showed the creamy condition to be due to the presence of a large quantity of molecular matter, which looked like fat, but did not dissolve in ether. There was a small quantity of sugar in the blood.

These appearances were very striking, and pointed to the peculiar blood-change as the one abnormal condition to account for the patient's symptoms. Its nature still remained to be explained. While pondering over this problem, I came on a reference to the ideas of Petters and Kaulich on the development of acetone in the system of diabetics. Acting on this, I at once determined to test the effects of acetone on healthy blood. Dr. Saundby willingly and ably assisted me. We found that, when acetone was added to the blood, it became paler and creamy-looking, presenting the same appearances as the blood of the boy. On exposure to air, the acetone blood assumed after a time the same pinkish red coloration that had been seen in the *post mortem* theatre. Under the microscope, the blood-corpuscles were seen to break down into granular debris, reproducing exactly the state observed in the blood of the patient. Roughly examined, it looked like blood containing a good deal of fat; but neither the artificially acetone blood nor that of the boy owed its appearance to fatty matter. The addition to fresh blood of chloroform, alcohol, or ether, failed to produce similar effects. In these results, then, we had a clue to the explanation of the case. Assuming for a moment that acetone was developed in the boy's system, its destructive effects on the blood would be amply sufficient to account for the great dyspnoea, and the cyanosis, steadily increasing, in spite of the full and frequent inflation of his lungs. The blood-cells were so destroyed that they no longer were able to absorb and fix the oxygen drawn into the air-cells by the vigorous respiratory action of the patient.

The observations made on this subject by others. Petters (*Prager Vierteljahrschr.*, 1857) was the first to show that acetone is developed in the system of diabetics, and Kaulich (*Ibid.*, 1860), in confirming this discovery, endeavoured to sketch clinically the state of acetonæmia. This state, he attempted to show, was not peculiar to diabetes, but was also met with in chronic affections of the stomach and digestive organs, and accounted for the depression of the whole nervous system observed in such cases. Betz (*Memorabil. für pract. Ärzte*, 1861) followed, referring the presence of acetone in the breath to catarrh of the throat, etc.; and, some years later, Cantani (*Il Morgagni*, 1864; *Syd. Soc. Biennial Retrospect*, 1865-66), endeavoured to show that there were several forms of acetonæmia, occurring mainly in conditions of gastric catarrh. Alcoholic and acetic fermentations of grape-sugar, and possibly of other organic matters in the stomach, was assumed by these authors to be the sources of acetone. The following formula represents acetone: C_3H_6O . Since then, Bechamp (*Comptes Rendus*, 1872) has shown that alcoholic and acetic fermentations occur in the stomach under favourable conditions, such as catarrh. Rupstein (*Centralblatt für die Medicinischen Wissenschaften*, 1874) believes that the acetone may also be formed in the blood. It has been found there after death, and has also been obtained from the solid organs of a diabetic dying of coma by Berti (*London Medical Record*, September 1874). Acetone is frequently found in the urine of confirmed diabetes, and is often developed in the urine after it is passed; an important fact to bear in mind in estimating the sugar. I have, however, myself detected it in urine immediately after it was passed. I refer last of all to the important paper of Kussmaul (*Deutsches Archiv für Klin. Med.*, Band xiv, 1874),* who has observed cases of this kind and experimented on animals with acetone. The results of these experiments, which are most interesting, show that acetone is an anæsthetic less potent than ether and chloroform, and acting more like alcohol. It produces great muscular feebleness, quickens the pulse, and causes deep slow breathing, and in large quantities brings on stupefaction. The breath of the animals smelt strongly of acetone. Altogether, the results obtained by Kussmaul's experiments closely resemble the symptoms of diabetic coma. Acetone produces partial anæsthesia, and in large quantities coma. It causes great muscular feebleness generally, but deep and energetic respiratory action. In man, before the coma comes on, there is partial unconsciousness, broken by a happy delirium, in which the patient laughs and jokes when roused, reminding one very much of the effects of alcohol. Summed up, the results so far go to show—

1. That acetone has been found in the breath, urine, blood, etc., of patients who have died of diabetic coma.
2. That grape-sugar may be converted in the stomach by alcoholic and acetic fermentations into acetone.
3. That the changes in the blood observed after death from diabetic coma can be artificially produced by the addition of acetone.
4. That the administration of acetone in large quantities to animals produces similar symptoms to those observed in diabetic coma.

I will now pass on to consider other examples of this interesting affection.

In October last, I was summoned in haste to see a case with Mr. F. Hollinshead of Selly; and, on my arrival, I heard that it was a patient suffering from diabetes who had suddenly got worse, and was rapidly becoming insensible. As we drove to the house, I learned that he had suffered from diabetes some two and a half to three years. He had never lost flesh, but had always been a stout vigorous-looking man, in spite of an excretion of eight quarts of urine daily, of specific gravity 1037. He had been subject to boils, but had usually had no great trouble with them till six months before my visit, when he had suffered from a bad carbuncle on his neck. He recovered from it, however, and regained his usual health, and had been able to perform his daily duties as formerly. About October 10th, signs of another carbuncle showed on the nape; this had increased enormously, and was the beginning of the illness for which I was called to see him. The carbuncle had opened and all had gone on fairly well till forty hours before my visit. His temperature had then risen to 104 deg., and his pulse to 120, while the breathing became a little quick. On the next day, he had a sharp pain in the right hypochondrium, was not sick, but had free eructations of gas, and his breathing quickened somewhat. In the evening (October 24th), he became drowsy and wandered in his talk.

When I saw him on the afternoon of October 25th, I found a man in the prime of life (41) lying in bed on his back, breathing loudly and

* There is also an excellent account of acetonæmia, with reference to most of the papers on the subject, in Lecorché's *Traité du Diabète*. Paris: 1877.

noisily, but with no stertor. Each inspiration was long, deep, and chest-filling, but seemed to have no influence on the air-hunger; for one rapidly succeeded another, reaching fifty to sixty a minute. His countenance was dusky; his expression was anxious, and there was a good deal of jactitation. The pupils were equal and a little dilated; the pulse small, quick, regular, 150. The hands were cool and moist; the skin moist all over, and perspiration acid. The feet were colder than the hands, and both were dusky in colour. When spoken to, the patient answered, but not to the point, and soon wandered off into a happy kind of delirium. When told, he put his tongue out; it was moist and a little furred. On examination, the lungs were found to be resonant all over the chest, and the air entered freely and fully everywhere. There was a systolic aortic murmur, which he had been known to have for some years. The abdomen was rather tympanitic, but not tender. While I was present, frequent eructations of a gas of peculiar odour occurred. The liver was not much enlarged; the spleen appeared natural in size; the bowels had acted well, but the quantity of urine had decreased during the last twenty-eight hours. The temperature in the axilla was 104 deg. Fahr. The patient got out of bed in my presence and passed urine (about a pint); but he was greatly exhausted by the effort; his muscular strength was almost gone, and there was partial anæsthesia of the limbs.

This man's breath had a most peculiar odour, which reminded me strongly of a case seen some years ago. It was strongly impregnated with acetone. I asked one lady who was with the patient, and who had visited him from time to time during the day, if she had applied any vinegar-cloths to the patient's head. I asked this question with a purpose. She answered: "No; but I thought the nurse had; for, when I came in this morning, the room smelled of stale vinegar"; but she added: "The smell comes from his breath." So it was; the room was saturated with this vinegar-like smell, likened very aptly by Mr. Hollinshead to that of stale beer. So strong was it, that it gave all who stopped long in the room headache and slight drowsiness. The smell was unmistakable; every expiration, and every eructation of gas from his stomach, poured forth volumes of acetone, thus freely volatilised, on account of the high temperature of the patient.

Drowsiness and coma gradually superseded the delirium, the patient grew quieter and more comatose, the breathing became less vigorous and more broken, the muscular feebleness and anæsthesia increased, and he died insensible seven hours after my visit. For this end, we were prepared; the case was a hopeless one; acetonæmia killed him, in spite of any remedies we could administer.

The urine had fallen in quantity, as it does in most instances of this kind; the sugar also is usually lessened, from the fact of its conversion in the system into acetone. The urine I obtained had only twenty grains of sugar per ounce, a much less quantity than he had formerly passed most probably, and showed a distinct reaction with the acetone test. The blood of this patient I should have very much liked to examine; but my colleague Mr. Hollinshead was unable to procure any for me, or to obtain a *post mortem* examination. If we had been able to procure a specimen of the blood, we should, I have no doubt, have found the same disorganisation of blood-corpuscles that I have described in the former case. In such a condition, we have an explanation of the coincidence of the deep vigorous breathing and the general cyanosis of the surface: a duskianness worthy of death by asphyxia, associated with full and frequent inflation of the lungs.

The attempt was made in this case to arrest the disorder by remedies. Carbolic acid and sulphurous acids were administered in water as drinks; but the case ended too quickly to be of any value as a test of the treatment.

Must this fatal ending always occur when symptoms of poisoning by acetone once arise in a diabetic patient? I think not. Many milder cases pass unnoticed, and, in many instances, the slighter effects of acetone are put down to temporary brain-disturbance, and no more account is taken of them. In other instances, symptoms less grave than those I have described, but yet sufficiently serious to cause considerable danger to the patient, result from acetonæmia; but the process is arrested either naturally or by treatment, and the life is saved. A very striking example of this kind I saw not long since with Mr. George Jones of this town.

The patient was a gentleman aged 64, who had suffered from diabetes for upwards of two years, but had greatly improved under opium treatment. About a week before I saw him, he had become affected with bronchial and gastric catarrh. The attack had been preceded by a good deal of mental worry, which had lowered his state of health. The chest-troubles had decreased; but his breathing had confined it to rapid, his temperature high (101½ deg. Fahr.), and drowsiness and delirium, with a pulse intermitting every third beat, were the conditions which led to a consultation. I found a strong-looking man

in bed breathing thirty a minute, drowsy and restlessly excited by turns. He wandered at times like a man in drink, and was cheerful and good-humoured in his fancies. The pupils were equal and a little dilated. There were slight dulness and coarse moist sounds at the right lung-base, but the air entered all the rest of the chest freely. There was tenderness over the liver, which was full in size. The abdomen was rather distended by gas; the tongue was moist but loaded; the breath had a faint smell of acetone; the urine, which was not measured for the twenty-four hours, was 1034 specific gravity, contained twenty-five grains of sugar per ounce, and gave a distinct reaction with test for acetone. Suitable remedies were prescribed for the heart and lung-conditions, and, on the third day, when I again saw him, they had greatly improved. The pulse was again regular, 108; the temperature was 99½ deg. Fahr.; the physical signs at the back of the chest were almost gone, but the breathing, though slower, was very deep and almost sighing in its character, and the head-symptoms had decidedly increased. The patient was more frequently unconscious; he could be roused; but, when left alone, he wandered more in his talk, being very restless and excited. This state had lasted twenty-four hours, and was associated with alarming muscular feebleness. He had passed only eighty ounces of urine in the twenty-four hours; it contained thirty-one grains of sugar per ounce, and showed more distinctly than the last the presence of acetone. The breath also was more decidedly impregnated with acetone. The tongue was dry and red. My colleague took, with me, a grave view of the case, and we decided to alter the treatment by giving carbolic acid in a drink, so that the patient could take two grains every hour at first, and then every two hours. We gave opium also in larger doses, as Mr. Jones had convinced himself that it possessed to a high degree in this case the power of checking the formation of sugar. By this, we hoped to lessen the amount of diabetic sugar formed, while by the carbolic acid we trusted to prevent the conversion of the sugar that was formed into acetone. The next day, the patient had improved; the nervous symptoms were all less marked, and, on the second and third days, he had improved still more. After this, he took the opium alone, and, when I saw him on the tenth day, on account of a new complication, in the shape of an aphthous condition of the mouth and pharynx, the symptoms of acetone-poisoning had all passed away; his breath had still a faint odour of it, and the urine gave a slight reaction. After this, he made a good recovery, and, when I last examined his urine, it was free from acetone, and contained only nine grains of sugar per ounce.

The above cases, in addition to others which I have seen, have led me to conclude that we have in the acetonæmia hypothesis the best explanation of diabetic coma. Patients who are seriously diabetic have, in all probability, a small quantity of acetone constantly formed in their economy. It is this which gives the odour to the breath and to the urine. It would appear that, under conditions of nervous depression and exhaustion, and more especially conditions favouring stomach-catarrh, the quantity of acetone formed may rapidly undergo great increase and give rise to the acute symptoms which lead to sudden death; a chronic poisoning, as Kussmaul remarks, suddenly taking on an acute form, like delirium tremens in habitual drinkers. The similarity in the symptoms of some of these cases to the effects of alcohol make it highly probable that alcohol is also formed in the system. I find that Senator, in his valuable treatise on Diabetes in *Ziemssen's Cyclopædia of Practical Medicine*, vol. 16, also holds this opinion.

In the discussion which followed the reading of this paper at Manchester, the difficulty was raised that, in some of these cases, there is no smell of acetone in the breath. This is so. In the first case here recorded, there was no marked odour. This is to be accounted for by the fact that acetone requires a high temperature for free volatilisation. In some experiments recently made, I find that from urine, for example, very little acetone is given off till the temperature reaches 100 deg. Fahr.; but, above this point, it is given off quickly. The cases in which I have observed the smell of acetone most distinctly have been cases with high temperatures, as in the second case in this paper. The temperature of diabetics is not, as a rule, high enough to send it off in any quantity.

Finally, if the explanation of diabetic coma here supported be the true one, we may look forward to more precision in its treatment. Transfusion has failed in this country and abroad; the inhalation of oxygen has been tried in vain; elimination of the poison by ordinary methods can hardly be trusted in these sudden attacks; I therefore used carbolic acid in two cases narrated, in the hope of checking the fermentative process which develops the poison. So far as it goes, the history of one case supports the practice. Salicylic acid and its salts

are remedies also worth trying on this view, and especially thymol, which has been suggested to me by Dr. Burdon Sanderson as a more powerful and pleasant agent of the same class. The remedy will not long be wanting when the morbid process is fully understood.

BATH THERMAL MINERAL WATERS: THEIR USES AND ABUSES.

By A. B. BRABAZON, M.D.,
Physician to Bath Mineral Water Hospital.

NOTWITHSTANDING the title with which I have prefixed the purely practical remarks which I am about to offer to the readers of the JOURNAL, I fear some may consider the subject a dry one.

In many aspects, the subject has been well nigh worn out; and the deservedly highly extolled natural beauties of Bath, its environs, its antiquities and its salubrious climate, its fauna and flora, have all been eloquently described in language which I dare not and could not emulate. The task which I have set before me is one which, both for writer and reader, is bereft of all such charms and devoid of all such interest. My object is purely practical, as will be my observations; and in this sense alone do I venture to place them before my professional brethren, for the following reasons.

1. Because I am not aware of any attempt, founded on statistical information combined with personal experience, to classify, arrange, or tabulate, in any systematic form, the effect of the Bath mineral waters on the patients submitted to treatment therewith, either as regards age or sex, whether in hospital or in private practice.

2. I feel assured that the want of some such information must occasionally, and indeed frequently, be felt by my professional brethren, living, possibly, at a great distance from Bath, when called upon to decide, in any given case, whether the chances of cure or improvement are such as to render it advisable for the patient to undertake, possibly, a long and tedious journey.

3. I know, from personal observation, and I think my colleagues in connection with the Bath Mineral Water Hospital will bear me out in the statement, that the want of some such information is occasionally made painfully apparent in the character of the recommendation of candidates for admission to hospital, which are submitted to the medical staff. Moreover, it is not only in hospital cases that one finds such want of correct ideas as to the therapeutical powers of the waters displayed, but also, and probably more frequently, in private practice. I have, in my own experience of sixteen years, frequently met with patients sent to Bath, I might say to die, to whom the long journey must have been a cruel and painful infliction, and to whom even alleviation of their sufferings was almost an impossibility, unless the Bath waters were a veritable "Pool of Siloam." Such are the cases, fortunately rare, which bring such bitter disappointment to those concerned, and are calculated to cast doubt and discredit on the efficacy of these mineral waters, which are, I confidently believe, second to none in their curative powers in cases suitable for their administration.

In making this humble attempt to arrive at even something like definite conclusions on the subject in hand, I must beg my professional brethren to remember that the conditions under which such an attempt is made differ widely from those which obtain in reporting or relating circumstances connected with the history of disease otherwise treated. The cases on which are founded any observations, statistical or practical, which I may venture to offer, are, as a rule, subacute or chronic in their character. There are no hourly or daily changes to be reported; no frequent variations of pulse, temperature, or even treatment, to excite any special interest. The process, by which alone we can arrive at anything approaching to definite conclusions is the tedious and comparatively uninteresting one of observation, not of individual, but of aggregate cases of disease, as they are presented to our view in hospital or private practice. Thus, it becomes necessary to arrange, in some tabulated or statistical form, those cases from which we wish to derive therapeutic information of any scientific or practical value.

1. I propose to tabulate, under certain heads, the diseases which have been treated in the Bath Mineral Water Hospital during the past three years.

2. I shall append statistical tables representing the results of treatment in these various forms of disease as to sex and age, and giving the percentage as regards results: first, respecting sex; secondly, respecting age—these percentages being averaged on a given number of patients discharged from hospital within the several periods of life recorded.

3. I shall endeavour, as far as possible, from hospital statistics and from general observation, to delineate these diseases, in their general

aspect as well as in their particular forms, which positively or comparatively are successfully treated by the use of the Bath mineral waters, whether used internally, or applied externally, or administered in both ways.

I may here mention that, although the general rule adopted in almost all health-resorts famous for mineral springs—viz., that of restraining patients from taking any kind of medicine while making use of the water—is followed, yet, under certain circumstances, the most experienced physicians in Bath do not hesitate to supplement the waters with additional therapeutical means when they consider it judicious to do so. On the present occasion, it is impossible for me to individualise those cases so treated, but at some future time I may be able to do so. At present, I can only, in my observations, allude generally to those cases in which my individual experience would lead me to adopt some such supplemental treatment.

The diseases admitted or admissible into the Bath Mineral Water Hospital may be divided, for convenience of description, into four classes.

1. *Constitutional Diseases*; 2. *Local Diseases*; 3. *Diseases from Specific Causes*; 4. *Miscellaneous Diseases*. These four classes will include, each respectively, certain subclassifications, which I shall tabulate as follows.

1. *Constitutional Diseases*, producing local or general effects: A. Rheumatism (including muscular, articular, and chronic rheumatic arthritis); B. Gout (pure and so-called rheumatic gout); C. Sciatica (gouty, rheumatic); D. Lumbago (gouty, rheumatic); E. Coxalgia (gouty, rheumatic, or arthritic).

2. *Local Diseases*, with or without constitutional causes: a. Hemiplegia; b. Paraplegia; c. Chorea; d. Neuralgia; e. Paralysis after Injury; f. Hysteria (simple and complicated); g. Wasting Palsy; h. Locomotor Ataxy; i. Skin-Diseases (including eczema, lepra, psoriasis, impetigo, acne).

3. *Diseases from Specific Causes*, such as effects of metallic poisoning, including dropped wrist, colica Pictonum, mercurial poisoning.

4. *Miscellaneous*: Amenorrhœa, dysmenorrhœa, anæmia, debility, and others of various types which occasionally crop up among patients who may have been admitted for other forms of the diseases above mentioned.

The results of treatment I have divided under four different heads: 1. *Cured*; 2. *Much Better*; 3. *Better*; 4. *No Better*. As this classification may be considered somewhat arbitrary, I must beg leave to explain that, according to a time-honoured custom, all patients discharged from the hospital are discharged under one of the above-named divisions. I shall, as far as possible, define the meaning to be attached to these four terms or divisions. Under the head of "Cured," I include all those patients who leave the hospital free from all symptoms (constitutional or local) of the disease for which they have been admitted, and who are discharged able to follow their special trades or avocations. Under the head of "Much Better," I include all those patients who have obtained relief from pain and other prominent symptoms, and who are most of them sufficiently recovered to return to their usual occupations. Patients discharged as "Better" I may describe as simply temporarily relieved of their most painful and prominent symptoms. Under the head of "No Better," I comprise all cases in which, after sufficient trial, the mineral waters, however administered or supplemented, have been perfectly inefficacious.

I shall take the several diseases enumerated above into consideration in order, commencing with that of which the greatest number has passed out of hospital—viz., rheumatism in its various types and kinds.

During the year ending May 1877, I find 415 cases of rheumatism were discharged from hospital: that number being composed of 269 males and 146 females. Distributed according to periods of life, I find the following results:

	Males.	Females.	Total.
Under 20	23	24	47
20 to 40.. .. .	111	69	180
40 to 60.. .. .	107	43	150
Over 60.. .. .	28	10	38
	269	146	415

In explanation of the appended tables, I beg to state that Table I gives the results of treatment under four divisions, as above described, and within four periods of life; it also gives the total of males and females regarding these separate results of treatment, according to ages above mentioned.

Table II gives the percentage of results of treatment in proportion to numbers discharged under ages mentioned and according to sexes. As an illustration, under 20 years, 13 cases (males) were cured; total number of males discharged under 20 = 23; therefore, the percentage

of males cured under 20, in proportion to total number of males discharged at same age = 56.5.

TABLE I.—*Cases Discharged.*

Result.	MALES.				FEMALES.				Total Males.	Total Females.	Total Both Sexes.
	Under 20.	From 20 to 40.	From 40 to 60.	Over 60.	Under 20.	From 20 to 40.	From 40 to 60.	Over 60.			
Cured	13	34	18	4	8	8	6	0	69	22	91
Much better ..	10	67	74	14	13	50	23	8	165	94	259
Better .....	..	9	10	6	3	8	11	1	25	23	48
No better .....	..	1	5	4	..	3	3	1	10	7	17
Total	23	111	107	28	24	69	43	10	269	146	415

Table III gives also the percentage of results as affecting both sexes separately and collectively, according to total discharged.

TABLE II.—*Percentage of Cases Relieved, etc.*

Result.	MALES.				FEMALES.			
	Under 20.	From 20 to 40.	From 40 to 60.	Over 60.	Under 20.	From 20 to 40.	From 40 to 60.	Over 60.
Cured	56.5	30.6	16.8	14.2	33.3	11.5	13.9	..
Much better ..	43.4	60.7	69.1	50.	54.1	72.4	53.5	80
Better .....	..	8.1	9.3	21.4	12.5	11.5	25.5	10
No better .....	..	..	4.6	14.2	..	4.3	6.9	10

TABLE III.—*General Percentages.*

	Total Males.	Total Females.	Total both Sexes.
Cured ..	29.7	15.6	21.9
Much better ..	61.3	64.3	62.4
Better ..	9.7	15.7	11.5
No better ..	3.7	4.7	4.9

I trust the explanation I have given will enable my readers to follow me through the following analyses of results.

First, as to those discharged "cured": among males, the percentage falls regularly with increasing age; among females, the percentage becomes lower, but not in regular gradation, as we find the percentage of those discharged cured is higher between 40 and 60 than between 20 and 40. It is not easy to explain this apparent anomaly; had the ages been divided into decades, the cause might have been more apparent, and would probably be found to exist in the fact that between 20 and 40 is the childbearing age, bringing with it all the anxieties of domestic life, and rendering the sufferer much less amenable to treatment and much more difficult of cure than those of the male sex at the same age. The percentage of cures under twenty is, both male and female, proportionately to other ages, very large, 56.6 for males and 33.3 for females; doubtless, at this period of life, disease has had less time to stamp the patient with irretrievable consequences, and, moreover, very many of the cases admitted under twenty are suffering from effects of acute rheumatism, and are certainly more favourable cases for treatment as regards a prospect of cure than cases more advanced in age and more chronic in their character. The total percentage of cases among males in proportion to total number of males discharged is largely in favour of the sterner sex, amounting in males to 29.7, and in females to 15.6; in other words, the number of cures effected in males as compared with females is nearly two to one per cent.

The average of cures per cent. in both sexes collectively (21.9) is, I think, sufficiently large to demand attention; and I should think, if compared with the results of treatment of similar institutions either at home or abroad, were such a proceeding possible, would be found as favourable as could be truthfully represented.

I next come to the averages per cent. of those discharged "much better"; and I beg of my readers to attach to this term a value neither more nor less than that contained in the definition already given: 259 patients out of a total of 415 were discharged under this term, 165 males and 94 females. The percentage under this head is in favour of the females in the proportion of 61.3 to 64.3. The females have the higher percentage under twenty, from twenty to forty, and also over sixty. Males have the advantage at the period between forty and sixty. I would explain these averages in this way. Females, happily, in our country, are objects socially of great care and attention, and,

accordingly, girls under twenty are probably more objects of solicitude and anxiety, and less exposed to climatic influences, than lads of the same age, and their complaints are sooner attended to. Between twenty and forty, for a somewhat similar reason, females have the benefit of treatment sooner than the bread-winners of the family, who, at this period of life, can least afford, and are most unwilling, to succumb to effects of disease; but after forty comes the grand climacteric of female life, with all its constitutional disturbances and eccentricities. No wonder if we find, then, all treatment of disease comparatively ineffectual. The number of both males and females discharged over sixty as "much better" (only 22) are too few to enable us to arrive at a definite conclusion; as it stands, the percentage is in favour of the females in the proportion of 80 to 50 per cent.

I now come to those patients discharged under the category of "better". I confess, knowing the elasticity of that term, I feel much less disposed to place implicit reliance upon any conclusion arrived at under this head than on those arrived at under the other three heads. Many may be considered as very little more than "no better", indeed, a considerable number almost inappreciably so. The numbers discharged thus are comparatively small—25 males and 23 females, making a total of 48; here, again, the percentage is in favour of the females in the proportion of 15.7 to 9.7.

Last and lowest in numbers, but far from least in importance, I come to the consideration of those patients discharged "no better". The total number discharged thus, according to the records of 1876-77, amounts to but 17, composed of 10 males and 7 females; but I cannot help thinking that this number might receive a considerable addition from those described under the previous head. The hospital physicians are compelled, to a considerable extent, to accept the statements of patients, on being discharged, as to their actual condition; and, doubtless, many patients, from a feeling of thankfulness and gratitude for kind treatment in hospital, declare themselves better, who might more strictly speaking be relegated to the ranks of the "unfortunates". Moreover, I may say there are very few patients indeed who do not leave the hospital much improved in their general condition, though not improved as regards their specific ailment, and who gladly, on this ground, pronounce themselves better. However, I can, from personal observation, positively affirm that the number discharged "no better" is insignificant in the extreme. Analysis of the statistics shows that, under twenty, there were no patients discharged as "no better", either male or female. Out of 111 male patients discharged at ages between twenty and forty, one was no better; out of 69 females discharged within the same periods, three were discharged in the same condition. Out of 107 male patients discharged between forty and sixty, five were "no better"; 43 females were discharged within the same periods, and three were in a similar condition. Twenty-eight males were discharged over sixty; four received no benefit. Of ten females within similar periods, one was no better. The percentage between twenty and forty is much more unfavourable among females than males, being in the former sex 4.3, in the latter .9. From forty to sixty, the average is in favour of the males in the proportion of 4.6 males to 6.9 among females. Over sixty, the fair sex have it all in their favour, as the female percentage of "no better" is only 10 against 14.2 on the male side. I think the above percentages are only what we might expect. Up to sixty, the weakness of sex in resisting the effects of such a disease as rheumatism in its varied forms is palpable, and consequently females are less amenable to treatment than males; but after sixty the effects of the "battle of life", in addition to the consequences of disease, produce more hopeless cases among males than females. On the whole, the male average presents a more favourable aspect, though slightly so, than that of females, standing as 3.7 against 4.7. The total percentage of those "no better" in the combined sexes is 4.9, very low indeed.

I have now arrived at what may be called the summing up of the statistical evidence as to the efficacy of the Bath mineral waters in the class of disease under consideration. I know that evidence of this description, devoid of records of accredited clinical observation, may, by some severely critical members of the profession, be considered useless or even derogatory in a scientific point of view. No one knows better than myself that, as regards science, it may not be of much utility; but I fully believe that, as far as regards the practical object which I have in view, it will be found of considerable advantage. I have simply recorded results of diseases diagnosed by the hospital physicians, and I cannot think that there can be much doubt in such diagnosis, as there cannot have been much difficulty.

I think the foregoing statistics of the results of treatment as to age and sex will sufficiently point out those cases which may be considered favourable or unfavourable. I will venture, however, to make some remarks, as the result of my own personal observation, extending over a considerable period of time.

In estimating the probable amount of benefit or improvement likely to be derived from the use of the Bath mineral waters in any given case of rheumatism, at least two conditions must be considered, independently of age or sex: first, of *complications*; secondly, *conditions of parts affected locally*.

As to *complications*, those of the head and chest are the most likely to arise. I only give my own private opinion on these conditions. I have an unfavourable opinion of this form of mineral water treatment in cerebral complications suggestive of organic disease, whether it be in rheumatism or any of the diseases usually submitted to such treatment. As regards functional disturbances, such as are frequently produced by rheumatic poison—*a.g.*, headache, vertigo, visual affections, etc.—I believe that they form no bar to the use of the waters, carefully applied, internally or externally. I have in my own private practice, and also in hospital cases, met instances of rheumatism affecting the membranes of the brain, frequently preceded by rheumatism of the scalp, which were permanently relieved by the mineral water treatment. In such cases, the diagnosis is occasionally obscure.

In chest-complications, as we would expect, those of the heart are by far the most frequent. Here, again, the existence of organic or functional disease makes all the difference. Rheumatic poison, as we all know, produces functional cardiac affections generally of the anemic type; but I have generally found the internal use of the waters, occasionally supplemented by tonic treatment, produce the desired effect. In organic cardiac affections complicating rheumatism, I consider serious questions may arise as to the advisability of such treatment. In a case of decided fatty degeneration, I should certainly not advise baths. In cases of valvular disease, much would depend on the age of the patient. Were he or she over sixty, I might advise the internal use of the waters, but not the baths. I am speaking, of course, of the treatment of the rheumatic, not of the cardiac, affection. Under forty, and certainly under twenty, I do not think the existence of valvular disease need absolutely prevent the careful and judicious administration of the waters sufficiently far to alleviate pain and other symptoms in chronic rheumatism; but I must be understood to say that much depends on degree as to the valvular affection.

As to pulmonary complications, those most frequently met with in rheumatism are bronchitis, asthma, and phthisis. Bronchitis does not appear to me to be so frequently a complication of rheumatism as of gout; nor do I think that the existence of chronic bronchitis predicates the probable inutility of the mineral waters in a given case; neither does the existence of spasmodic asthma. As a rule, the complication with cardiac asthma is, I think, very generally highly unfavourable; but this is scarcely a pulmonary complication. Pulmonary tubercular complications of every kind, and at every stage, I have, in my own experience, found, as a rule, fatal to beneficial results from the use of the waters. There may be exceptions to the rule, but I have not met with them. I can recall to my memory at least three cases in private practice, all females, who came a long distance to Bath for the benefit of the waters, each crippled with rheumatism, having softened tubercle in the lung and constitutional symptoms of advanced disease. Even the occasional use of the baths increased the local lung-irritation, and also as surely aggravated the constitutional symptoms. They had much better have remained at home, and been spared the trial and consequent disappointment of the effect of the mineral waters.*

I now come to prognosis as depending upon local conditions. I think I may assert that muscular rheumatism, independent of articular affections, is the form most favourable for the exhibition of the Bath mineral waters, both internally and externally. I have already pointed out from statistics that cases under twenty are in large proportion, and probably most cases of simple muscular rheumatism are to be met with under that age or under thirty; but, even at much more advanced age, muscular rheumatism, if not entirely curable, is certainly affected by treatment so far as to be made much better. As to articular rheumatism, one must speak much less decidedly. Much depends on the conditions inside and outside the joint affected. True ankylosis (osseous), I believe, scarcely ever exists as a result of rheumatism; but fibrous ankylosis of long standing, particularly if accompanied by thickening of the capsule and loss of all movement of the tendons, connected with flexion, extension, or other movements of the joint, produces results almost quite as unfavourable for treatment by baths as complete ankylosis. The best guide in prognosis in such cases is to take into account, first, the age of the patient; secondly, the duration of the comparative immobility of the joint; thirdly, the amount of mobility which may be effected by the hands of the examiner. The position in which the joint has been allowed to become ankylosed forms also an

important ingredient in the prospects of improvement. I may here mention that a perusal of Mr. Brodhurst's work has firmly impressed me with the idea that there are numerous cases in which surgical interference, supplemented by the use of mineral baths, would be successful in restoring to joints a favourable position and sufficiently useful motion to make an useful joint.

I think my readers will fully understand from the foregoing remarks the conditions which will probably render a cure or even improvement likely to take place in any given case of arthritic rheumatism. Chronic rheumatic arthritis, once developed as a fact, is, as we all well know, a form of disease in which cure is hopeless. I mean when it has arrived at that stage in which there are "eburnation of the cartilages" and locking of the joints by osseous or fibrous deposits around the head of the bone, or rather around the circumference of the joint, if it be an enothardial joint, as the hip. Nothing can restore the destroyed cartilages or the synovial membrane. Nevertheless, pain may be relieved, and even some slightly increased motion imparted; or, if the disease be recognised and submitted to treatment in its early stages, much may be done to prevent pathological results; and I believe that no therapeutical agents will be found more effectual in promoting this most desirable object than the timely use of thermal mineral waters, such as are to be found in Bath. I have delayed, I fear, too long on the subject of rheumatism; but many remarks which I have made will be equally applicable to other diseases usually treated by the Bath mineral waters, my remarks on which I hope I may be permitted to lay before the readers of the BRITISH MEDICAL JOURNAL on a future occasion.

[To be concluded.]

CLINICAL OBSERVATIONS ON MACULE ATROPHICÆ.

By ROBERT LIVEING, M.D., F.R.C.P.,

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STRIÆ atrophicæ or linear atrophy is a fairly common affection, and usually takes the form of white stripes or bands from one to several inches in length and about half an inch or more in width, tapering towards each end. They occur in groups, especially about the hips and thighs, and are arranged in more or less parallel curves. Their colour is peculiar, and of a glistening bluish white, resembling mother-of-pearl. The atrophied condition of the skin is more easily felt than seen; to the touch, these streaks appear like furrows depressed below the surface, while the tissues over them seem tense, dry and thin. Microscopical examination shows that this is really the case, for there is a complete atrophy of the papillary layer of the skin, and a great diminution in the vascular and fatty tissues of the part affected.

The macular variety of this disease is far more rare than the striated form, but it is of exactly the same nature, and presents greater facilities for studying the different stages of the disease. I have lately had under my observation a patient suffering from maculæ atrophicæ, in whom the period of its duration had extended over six or seven years, and who exhibited a large number of spots in all stages of progress and of ages varying from a few weeks to several years, so that I was well able to observe the disease in its different phases of development. In the case to which I refer, the eruption affected the skin about the upper edge of the sternum, and extended up the neck nearly as high as the cricoid cartilage. It had been developing slowly for several years, fresh spots appearing from time to time, and going through a regular series of changes, which could all be seen and studied at the same time in the same individual.

The first stage, which I do not find described by authors, is one which is characterised by slight redness and by well marked hypertrophy rather than atrophy, for the spots are raised above the skin and are hard and fibrous; this enlargement is soon followed by an atrophic change, and we have produced the white appearance which is so characteristic of the second stage of the disease. The atrophy at this period is easily seen and more easily felt; on pressing a spot with the finger, the sensation is produced of touching a pit-like scar covered by a thin membrane. The size of the largest spots in the case mentioned did not exceed a threepenny-piece, and most of them were much smaller; they were all discrete and more or less round or oval. The general effect produced by maculæ atrophicæ is very striking and quite unlike that of any other affection. This is due chiefly to the abrupt contrast in colour between the opaque bluish white spots and the surrounding healthy skin. Another point of interest that I was able to observe, in addition to that already mentioned, was a third or final stage, consisting in the obliteration of some of the oldest

* I have not yet had sufficient experience of the results in Bright's disease to enable me to form a decided opinion.

spots; I cannot say that this obliteration was quite complete, because it was possible, by a close inspection, to see where they had been. They had much shrunk in size, and this shrinking appeared to me to be produced by a kind of lateral compression, as if the surrounding healthy tissues had encroached upon the spots so that they ceased to be a disfigurement. Thus we really have three distinct stages in this curious and rare disease; first, a hypertrophic stage, which is well marked; secondly, an atrophic stage, which is the only one usually described; and thirdly, a stage of contraction or obliteration.

A very interesting question arises as to the nature of these maculæ atrophicæ. Kaposi places them among the partial idiopathic atrophies of the cutis, and seems to overlook altogether the early stage of the disease that I have here described. We have no more right to regard them as simple atrophies of the cutis than we have so to regard many forms of scleroderma, unless it be contended that as atrophy is only occasional in scleroderma, and invariable (if it be so) in striæ and maculæ atrophicæ, therefore they may with more propriety be regarded as local idiopathic atrophies. Be that as it may, there is a hypertrophic stage, which I have described above, and which precedes any atrophic change whatever, and leads one to look upon this disease as closely allied to scleroderma. This view is confirmed by the fact that striæ atrophicæ have been observed in several instances coincidently with morphea and scleriosis.

THE POSITION OF REST IN FATIGUE AND IN PAIN.*

By THOMAS S. ELLIS, M.R.C.S. Eng.,
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THE importance will readily be acknowledged of everything which helps to define the principles on which *rest*—physiological or mechanical—should be applied to the treatment of disease.

Passing by other points (for instance, the discrimination between inactivity too prolonged or too complete, and necessary or desirable rest), it has seemed to me that, as this latter can in many cases be obtained only by completely fixing limbs for the time in one position, it is worthy of inquiry—What is *the* position in which the various parts of the body are most at rest? and, What are the laws which determine it?

It may, I think, be laid down as a rule that the position which limbs assume, when from any cause in pain, is essentially the same as that which is sooner or later assumed when in a state of rest from fatigue.

A man may "stretch his wearied limbs" for a short time, but he never retains them for long in a stretched position; by-and-bye they are drawn into one similar to that assumed when in pain, as a rule immediately on the pain accruing; for although, on a blow being struck over a muscle, the first movement may be to put that muscle in a state of relaxation, this is temporary only. Sooner or later, a limb in pain, as in fatigue, seeks what I call the *position of rest*—more marked in joint-disease, and especially in disease of the hip, but essentially the same. Briefly, it may be said that the arm falls to the side, the forearm is flexed and pronated, the hand in a line with it, and the fingers bent, but the index and thumb less so than the others; the thigh is flexed and rotated inwards, the knee bent, the foot tending towards the line of the leg, the great toe a little extended, the others rather contracted; and these rules hold good for parts of limbs left after amputation, at whatever point divided.

It has appeared to me probable that these constant positions, set up on the operation of different exciting causes, would have an explanation common to all. None that I know of has been given, as far as relates to pain generally, or to fatigue; but Mr. Hilton thus explains why an inflamed joint is flexed: "That the irritated or inflamed condition of the interior of the joint, involving the whole of the *articular nerves*, excites a corresponding condition of irritation in the same nervous trunks which supply both sets of muscles, extensors and flexors; but that the flexors, by virtue of their superior strength, compel the limb to obey them, and so force the joint into its flexed condition." (*Rest and Pain*, page 150.) Further on (page 157), he explains an exception in the case of the wrist, which when inflamed is straight, "in consequence of the flexing and extending forces being pretty equally balanced". So also the relatively less flexion of the thumb and forefinger, when the joints are inflamed, as compared to the other fingers. But this, even if otherwise satisfactory, involves no explanation of the position, when assumed as a consequence of pain from causes other than joint disease, or as a relief to fatigue; and I presume to offer an opinion that the real explanation of *all* is simply this:

That the limbs seek a position in which the parts of them are in a state of least tension and of least pressure; as skin and muscle have a property of ready adjustment, while ligaments have not, so, to obtain this, which I call the position of rest, it is necessary that the joints should be in such position that none of the ligaments are on the stretch, that is, somewhere about a mean between the ranges of easy motion.

This, then, I believe to be the principal element in determining the position of rest, though no doubt it is essential, too, that the articular surfaces should be in the position best adapted for each other. To me it is a readier explanation of the difference between the wrist and the elbow or knee; the wrist allows flexion and extension beyond the straight line; the position of rest, therefore, is neither, or straight: while the elbow and knee range in motion between extreme flexion and the straight line; the position of rest, therefore, is moderate flexion. It accords, too, with my statement that the position, essentially the same as in pain from other causes and in fatigue, is more marked in joint-disease.

To object, as I have heard done, that the ligaments are not sensitive, seems to me like arguing that to pull the hair of the scalp cannot cause irritation, because hair has no sensibility. Tension of any structure is never long tolerated.

Mr. Hilton (*op. cit.*, page 150) lays great stress upon the anatomical fact that "*The same trunks of nerves, whose branches supply the groups of muscles moving a joint, furnish also a distribution of nerves to the skin over the insertions of the same muscles; and, what at this moment more especially merits our attention, the interior of the joint receives its nerves from the same source.*" On this he remarks: "This implies an accurate and consensaneous physiological harmony in these various co-operating structures." Exactly so, but this is just what I insist on; the muscles, as the motor agency—some contracting, some relaxing—put the limb in a state of rest, a state of the least tension, which I would suggest as more like an "accurate consensaneous physiological harmony between co-operating structures" than would be the excitement of an unequal contest between flexor and extensor muscles, leading to the inevitable victory of the one, and inducing a position which, Mr. Hilton says, ought at once to be changed. I am referring to the first passage I quoted (*ante*) and also to page 155, where he lays it down, as seeming to him, "that it is a great mistake on the part of professional men, when they see an inflamed knee or other joint beginning to be contracted or flexed, not to correct it at once".

On page 153, the "mischievous assiduity" of the flexors is spoken of; and again (page 152): "The muscles, indeed, appear to be told, through the medium of the nerves of the interior of the joint, that its articular surfaces are overtaxed; and, the antagonistic muscular forces of the joint being involuntarily excited, the joint is at once rendered rigid and stiff, for the purpose of keeping it at rest."

Let us now inquire what is the effect of irritation of a portion of skin upon muscles which are supplied by nerves from the same trunk as those supplying the skin. The musculo-spiral, which is an example given by Mr. Hilton, is a good test. Let the outside of the forearm be bitten by a dog, or torn, or burnt: does the injury excite contraction of the supinator-extensor group of muscles which are alone supplied from the same nerve? Do we see patients, under such circumstances, with the arm in any other position than that which I call the position of rest? I think not. I can understand this on the principle of "harmony between co-operating structures", but not on the ground of the pronator-flexor group being the stronger. In the first place, there is nothing in the injury to excite these muscles to action; secondly, I cannot see how this group can be the stronger, unless we are to believe that a carpenter would drive a screw with greater force if the thread were reversed.

Again, if there have been an amputation below the elbow, the stump is drawn up, flexed. Is this because the biceps and brachialis anticus are stronger than the triceps? I do not think they are stronger; but further, the biceps is a powerful supinator, uninjured by the operation, yet the stump is always prone rather than supine.

It does so happen that there is one flexor muscle which, beyond all question, is stronger than its corresponding extensor: the flexor longus pollicis pedis; yet the great toe, at rest, or when a joint is inflamed, is always extended, never flexed. Moreover, to say that flexors are always stronger than extensors, is directly opposed to the teaching of Carpenter's *Physiology*, that "the extensors of the leg upon the thigh are much more powerful than the flexors, a character which is peculiar to man". We know the enormous strength of the extensor cruris in voluntary and involuntary action; but, upon what facts can it be asserted that the flexors are even stronger? I know of none.

I have felt it to be no light matter to differ from one of the great masters of surgery on a subject which he has made his own; but the opinions, which, to me, have at present the force of convictions, I am bound to express with no uncertain sound, or it would be vain to hope

* Read before the Gloucestershire Branch.

for the free criticism I am now seeking. At any rate, I have endeavoured to look at the subject from every point of view. I had sought, in the first instance, for an explanation in some type of position of limbs in animals generally, towards which in rest they might revert. I had noticed that the position of all the limbs in a state of rest is a falling back towards the typical position in other mammalian animals; but one could only dismiss this as a curious circumstance, having no practical value. The question has, however, its practical side. Let us deal with it as affecting particular joints in disease.

First, as to the hip: One of the first symptoms of disease is a flattening of the nates, in other words, a wasting of the glutei, of which I would offer the following explanation: That the muscles are "told" of something wrong in the joint, and the glutei, so far from being excited to act, are led to remain quiet, wasting in consequence. The reason of this seems clear; for, if it be true that the commencement of hip-disease is almost invariably in the ligamentum teres, anything which causes this ligament to be stretched must be injurious. Now, the muscles which would do this, by drawing the limb outwards, *relax*; those which flex and draw it inwards, *contract*; and tension of the ligament is removed; "*harmony*" between the co-operating structures". It will be noticed, too, that another great ligament of the hip-joint is by this means made comparatively tense: this, the ilio-femoral, is relaxed when the thigh is flexed and everted, which is exactly what occurs when effusion into the joint stretches it.

The usual treatment of hip-disease is at once to put the limb straight, and so make the ligamentum teres comparatively tense; but the indication which I should deduce from the considerations set forth would be, to give the joint all the benefit of extension, both as regards steadiness, and relief of interarticular pressure, without changing it from the position of rest; and this may readily be done by extension from the knee, obliquely upwards and diagonally across the bed, a treatment which is actually recommended as a temporary measure when the limb cannot at once be put straight.

Mr. Hilton argues (pages 149-150), that the flexed position is not the easiest, because, in hip-disease, "when the femur is put straight and the flexed position is destroyed, the patient from that time is free from pain". Not "from that time", I should say, though it soon becomes less painful, provided means are adapted to fix the limb quite still, and further to relieve interarticular pressure; but surely it is not fair to contrast this with the limb left all to itself in its previous position. Further, it may be said that stretching of ligament, provided it be continuous, soon ceases to cause pain in any position: Nature has her remedy in absorption of the unyielding element, on a principle applied every day in the treatment of deformities by mechanical means.

The desire, on the part of surgeons, to treat fracture of the thigh in an oblique position, is a very old one; and if it be accepted, that what I describe as such is really the position of rest, the desire would be strengthened, as a means of preventing the tendency of the upper fragment to project and as less irksome to the patient.

Again, as regards the knee, though it is less easy to fulfil the conditions of extension while retaining the position of rest, it follows, if my views are right, that it ought to be done. And here let me revert to the old question of flexors and extensors. It seems to me that, given a flexion of the limb as a means of attaining the position of rest, it is not necessary to conclude that the flexors are the stronger because of the dislocation which follows. The flexors, in this position, draw in the same plane as the opposing surfaces of the bones; while the extensors, with whatever force they draw, so long as the flexors do not relax, can only pull the head of the tibia against the posterior surface of the condyles.

Lastly, as regards the ankle, if for any purpose we wish to maintain a state of complete rest of it, or of the parts around it, for the healing of an ulcer or other purpose, it follows that, looking to the "physiological harmony" of all the parts, the joint itself should be free from tension—should be in a position of rest; but the effect of fixing the foot at right angles to the leg, as is usually done, is to force the wide part of the astragalus between the malleoli and stretch the ligaments which hold them together. A more extended position of the foot with the knee bent is clearly indicated.

It will be observed that I draw my illustrations from the lower limb alone; the fact is, that the joints of the upper one are habitually treated in the position they naturally assume. And when we consider how numerous are the cases in which disease of the hip or knee goes on to destruction of the joint, and that these are the joints which are forcibly fixed in positions most widely differing from the position of rest, it would seem to be possible that in our persistent determination to fix limbs in what would be the best position, should ankylosis occur, we may be doing something towards making ankylosis the best result to be hoped for.

CASE OF LARGE PROSTATIC CALCULUS, WITH NATURAL PERFORATION FOR THE URINE: REMOVED BY RECTO-URETHRAL LITHOTOMY, AFTER EXTRACTION OF A PENILE URETHRAL CALCULUS.*

By RUSHTON PARKER, F.R.C.S.,
Assistant Surgeon to the Liverpool Royal Infirmary, etc.

THE patient was a man aged 54, a native of the Edinburgh district, who came under notice and submitted to operation in the first week of July 1877. Five years previously, he had suffered from difficulty of micturition and other urinary inconvenience, in consequence of which he had entered the Liverpool Royal Infirmary, where an operation was proposed and was on the point of being performed, but was frustrated on account of the fear and sudden departure of the patient. Since that time, he had had repetitions of the old trouble, but not to a severe extent until shortly before the date of the present observations, when he consulted his private medical attendant, Mr. T. W. Evans of Liverpool, who found a stone in his urethra, and sent him to me at the Stanley Hospital.

The penis was thickened, and very much hardened about its middle, and so tender that little examination could be endured. The urethra terminated anteriorly at the margin of the retracted prepuce, where it was wide enough to admit the point of a finger, being, in fact, now but a wide sinus. That part of the urethra which should traverse the glans penis had ceased to exist, owing to sloughing chances which he had had many years ago in India. There was, moreover, a fistulous perforation of the urethral floor about an inch behind the preputial orifice, of the width of a crow-quill.

Under ether, on July 6th, the penis was explored with forceps, and eventually a triangular stone was removed, less than three-fourths of an inch long, more than half an inch wide, and a quarter of an inch thick. The surfaces were irregular; one concave and the other convex. This stone lay in a space lined with granulations; a wide sinus, bounded by a portion of the urethra and corpus spongiosum.

On passing a sound towards the bladder, it stopped in the prostatic region, and struck a stone or stones. By the finger in the rectum, it was felt that the foreign material was close above the mucous membrane of the roof of the bowel. The prostate felt hard, slightly enlarged, and of the usual shape. The patient was then turned on his side, and the stone cut down upon with a small knife in the middle line of the roof of the rectum; the hole was enlarged forwards and backwards with a blunt-pointed bistoury, after which a calculus with several projecting lobes could be distinctly explored with the finger, but not easily dislodged. However, at last, with the aid of a scoop, the stone was removed.

The patient had a severe rigor shortly after the operation; but, in other respects, he has been very well. The wound was left to take its course. In two or three days, he had a stool. He has complete control over his feces, and urine when in small quantity; the latter escapes partly by the penis and in part *per anum*.

The treatment adopted was the administration of morphia subcutaneously for the first few days regularly, and afterwards when required. The diet was at first warm sago and water; afterwards bread and other farinaceous stuffs. Throughout, milk has been avoided.

The left testicle, which had years ago been swollen during his attack of syphilis, and which had dwindled down to small dimensions, became the seat of acute inflammation, which at its height was perceptibly relieved by the operation of a single leech. This complication was probably set up a fortnight after the original operation, on an exploration of the penis under ether, undertaken on account of persistent pain and tenderness in the organ, on the supposition that possibly some stone still lay unremoved. It was found, however, that the original operation had in this respect been complete. The case is still in progress, and the recto-prostatic aperture still remains; but I have thought that, in view of the extraordinary size, shape, and general circumstances of the stone concerned, its relation, at even this early period and in this imperfect form, would not be altogether inappropriate to the present occasion.

I have not been able to find any record of a prostatic stone, perforated in this manner and pervading the prostatic substances so completely as this has evidently done. The calculus has the shape of the prostate itself, with the addition of a promontory or spur at one end. Including the spur, the total length is $1\frac{1}{2}$ inches; without it, $1\frac{1}{4}$ inches. The greatest

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

width is a little over $1\frac{1}{2}$ inches—strictly speaking, $1\frac{9}{16}$ inches. The remaining diameter is $1\frac{1}{4}$ inches. The canal runs parallel to the side which I take for the upper, at a distance below it of three-eighths of an inch, having a length of about half an inch, and opening forwards into a shallow groove on the surface in question, and extending along the promontory before referred to. Its horizontal diameter is an eighth of an inch, but the vertical less, so that a no larger catheter than a No. 2 of the English scale will pass.

The stone weighs $1\frac{1}{8}$ ounces, is of a pale yellow colour outside, and paler within. One or two chipped surfaces show a laminated texture.

The only specimen I have seen which bears it any resemblance is one nearly as large, like it in structure, but unlike it in shape, in the possession of Mr. Bickersteth of Liverpool.

PREVENTIVE MEDICINE IN ORDINARY MEDICAL PRACTICE :

BEING A SEQUEL TO DR. RANSOME'S ADDRESS ON
STATE MEDICINE.*

By WILLIAM OGLE, M.A., M.D., F.R.C.P.,
Physician to the General Infirmary, Derby.

DR. RANSOME'S able address (BRITISH MEDICAL JOURNAL, August 18th, 1877) on State Medicine closes with some valuable suggestions to the legislature, and he indulges the hope that these suggestions may be adopted before many more years have elapsed. There is also a final paragraph asking for supplementary aid from "voluntary sanitary associations", similar to the one in Manchester.

It is principally to this concluding paragraph that I desire to direct your attention, and, indeed, to propose an amendment. I understand the word voluntary to mean "gratuitous". Against this I entertain a twofold objection. First, the profession is already overweighted with this kind of "voluntary" work; and, secondly, an agency is required much more comprehensive and thorough than any yet devised, even in Manchester, and one that is capable of doing work which it were both visionary and wrong to desire done by unpaid agents. I shall show presently how sanitary associations of this comprehensive, and, if you please, commercial, character might be organised, not only in large towns, but, as Dr. Ransome says, "in every locality". But, before doing so, and, indeed, by way of introduction, I must offer some remarks upon the hope expressed that the legislature will adopt a more enlightened sanitary policy, and in particular that it will give greater consideration to, or at least will not wholly ignore, the suggestions of medical men in framing new laws that relate to the prevention of disease. These two aspects of the question—the legislative and the voluntary, *i.e.*, the individual, are in fact inseparable.

At first sight, it may seem incredible that an enlightened Government should have framed laws for the preservation of the health of the people without a reference at every step to the medical profession. But the reason is not far to seek. Legislation cannot safely be very far in advance of public opinion. A little in advance it may and ought to be; but to be far ahead is not possible, nor, if possible, would it be workable, for the simple reason that obedience to law must be willing and intelligent if it is to be effective. Men cannot, even if they would, thoroughly carry out laws which they do not comprehend. This is my first remark. My second is that public opinion on medical questions is very much, if not better, yet not worse, than what the medical profession (in a past generation) has made it; and consequently that the faults in medical legislation, which Dr. Ransome has so fully and so justly exposed, must in some way or other, if not directly, then indirectly, which practically amounts to the same thing, be chargeable on the profession itself. If you will dispassionately look into this, you will perceive that the very same fault might be found with us for our defective mode of dealing with our patients that Dr. Ransome finds with the legislature for its mode of dealing with the profession. We ignore preventive medicine in ordinary medical practice; therefore, the public ignores us when it frames its preventive laws.

To establish this position, and to enlarge, as I desire to do, the scope of my observations, I beg you to notice that there is the same sequence observable in regard to the cure of disease. The relations between patient and doctor are very from being in accordance with the requirements of modern medicine, and consequently public opinion on curative measures is generally at fault. We allow the form of acknowledgment for our services to remain very much the same as when medi-

cine meant "physic"—little more, and certainly nothing less; and, as a natural consequence, the public puts its faith in physio and in nothing else, even when, as in homoeopathy, there is nothing of physio but the name. Whilst medical charges continue to be based upon the quantity of medicine supplied, it will be to little purpose that Dr. Johnson (the same Dr. Johnson, be it observed, who gives castor-oil in cholera, and therefore not to be charged with scepticism as to the value of physio when physio is wanted) is bold enough to teach that typhoid fever is best treated solely by adjuvantia, such as careful diet and skilled nursing, and that many similar instances might be quoted on equally high authority. Payment "per bottle", or even "per visit", takes no account of enlightened methods of cure, and so to the general public they are unknown. In like manner, so long as the prevention of disease is ignored in the ordinary acknowledgment demanded for professional service, so long will the public most naturally conclude that prevention is not commonly regarded by us as any part of our duty; and the example of such noble men as Anstie, though emphasised by his death, so far as influence upon public opinion is concerned, is in a great measure lost.

The first step, therefore, towards the realisation of Dr. Ransome's most reasonable hopes of more enlightened sanitary legislation, should be for each of us who are engaged in the practice of our profession to consider our own ways.

To bring the question to a practical issue, I submit to the members of the British Medical Association the following proposals; *viz.*: (A) a thorough readjustment of our professional relations with the public on a preventive basis; and, second, arising out of this, (B) sanitary associations such as Dr. Ransome desires.

A.—The family doctor to be recognised as the "health-officer" of the family at all times, as well as the medical attendant in times of sickness. To make this possible, the acknowledgment for his services to be—*a.* A certain sum *per annum* for all ordinary work, including, of course, "preventive" work; *b.* Supplementary fees for extraordinary visits. Physio, whenever possible, to be supplied by druggists, or at least to be charged for separately.

1. The amount of the sum *per annum*, and of the exceptional supplementary fees to vary according to circumstances, and to be determined beforehand by private agreement between the doctor and his client.

2. The term "ordinary work" to include all attendances for which the request has been made at an early hour of the day—say by the time of the first postal delivery; also all visits made by members of the family to the doctor at his own house when he is "at home" for consultation. "Extraordinary visits" to be: night visits, but only such as are specially requested by the patient; Sunday visits, specially requested; and visits in obedience to summonses to come immediately, as to a confinement, or to a consultation, or, in short, at some particular time fixed by the patient.

In this simple way, the interests of the patient and the doctor become identical. The arrangement has been tried and proved satisfactory.

Proceeding on the same preventive principles, and calling in the aid of the principle of co-operation, sanitary associations may be formed "in every locality", but specially in large towns, "much more comprehensive and thorough than any yet devised". Thus—

B.—1. All *per annum* sums of, say, under ten guineas to be paid to a common fund.

II. Of these sums, the respective "family" doctors to receive only a part, a principal part, but only a proportion (say two-thirds or three-fourths). The remainder, which might readily amount to a large sum, to be held in trust for the general purposes of the Association, available for—

a. Exceptional payments by way of aid to the associated members, *e.g.*, supply of physio under exceptional circumstances (by provident dispensaries);* organisation of hospitals and convalescent homes for the well-to-do, as suggested by Mr. Burdett, etc.

b. Expenses connected with the registration, as in Manchester, of disease; the purchase of expensive instruments, which, by reason of their cost, and that they are only occasionally wanted, are not within the reach of ninety-nine out of every one hundred medical men in the

* Read in the Section of Public Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

* Many years ago I studied carefully the working of all the then existing provident dispensaries in the kingdom. I came to the conclusion that the one at Coventry was the best; but even that I could not now recommend heartily without reservation. Provident dispensaries were a noble experiment forty years ago, but that is all that can be said in their favour. In the recent imitations of them—on the whole, inferior imitations—I see nothing to induce me to modify this opinion. I take, therefore, this opportunity of saying, that I believe provident dispensaries, unless they be as here suggested, part of a larger and more comprehensive scheme of efficient medical aid, will be found unworthy of confidence, and in regard to hospital abuses, will sooner or later be classed among the remedies that are worse than the disease.

country. For instance, how few provincial towns possess a (Ransome's) stethometer, or even a sphygmograph, etc.

c. An organisation of this kind would also secure the introduction without delay of the newest modes of treatment, e.g., the method of curing spinal curvature, which has been so ably demonstrated to this meeting by Dr. Sayre of New York, etc.

In short, these co-operative medical associations would proclaim to the public, in language not to be misunderstood, that the profession is resolved to make the prevention of disease, both infectious and other, not only a part but a principal part of its duty. And, further, that, for the cure of diseases not prevented, physic or no physic is not the main consideration, but simply how to cure them as thoroughly, as quickly, aye, and with as little cost to the community as is compatible with efficiency.

Improvement in sanitary legislation would follow. The public, becoming day by day practically acquainted with preventive medicine in their own homes, would learn the necessity for legislative measures, and then the Parliament would as naturally give to the profession its legitimate position, as now this is naturally withheld.

The words of Professor Stokes of Dublin addressed to the British Medical Association at Oxford (1868), on vacating the chair of the President, are so appropriate that I cannot conclude with words more apposite than the following.

"When medicine is in a position to command respect, be sure that its rewards will be proportionately increased and its status elevated. In the history of the human race, three objects of man's solicitude may be indicated: first, that of divinity; next, that of law or government; and, as man often seems to love gold more than life, the last is medicine. But, with the progress of society, a juster balance will obtain, conditionally that we work in the right direction, and make ourselves worthy to take a share in its government."—BRITISH MEDICAL JOURNAL, 1868, vol. ii, p. 125.

THE THERAPEUTIC AND TOXIC ACTION OF SALICYLATE OF SODA.

By FREDERICK H. DALY, M.D., Dalston.

I HAVE used salicylate of soda a good deal, during the past twelve months, in cases of acute and subacute rheumatism; and the result of my experience of the drug is decidedly favourable. I have, like others, found it most useful in acute cases, when many joints are affected and where there is high temperature. Undoubtedly there is a greater tendency to relapse after treatment by this remedy than in those cases treated by alkalies and quinine; and it is remarkable for what a long period there is this liability to relapse, even after the pulse and temperature have been for days normal, if the salicylate be discontinued. The dose ought to be gradually diminished, and combined with a couple of grains of quinine three times a day. By this plan, the risk of relapse is greatly lessened. But all this is generally well known. My object in this note is to show how, in a single case, I had recently an opportunity of witnessing both the therapeutic and the toxic action of salicylate of soda.

On November 4th, I was sent for to see Mrs. B., aged 50, suffering from rheumatic fever in a severe form: both knees, one ankle, one shoulder, and both wrists were greatly swollen, and exquisitely painful. She was sweating profusely; the tongue was coated; and the temperature 103.2 deg. I ordered milk-diet and twenty grains of salicylate of soda every two hours. I again saw the patient in twenty-four hours. She had taken the twenty-grain dose regularly every two hours, and I found her quite free from pain, sweating very little, and the swelling nearly gone. The temperature was normal. She had slept very little, and was a little incoherent and inclined to call things and people by wrong names. She was ordered to take the salicylate every three hours. On the 6th, I found her quite delirious, refusing to take food or medicine, unless forced, and labouring under all kinds of absurd delusions. She appeared quite free from pain, and the temperature was still normal; but she had not slept at all and was wandering the whole night. She was ordered to stop the salicylate of soda, and to take an alkaline with quinine; also twenty-five grains of chloral-hydrate at bedtime. After my visit, the delirium became violent, but the chloral at bedtime gave six hours' sleep; and I found my patient next morning quite rational and much better, only complaining of pain in the right wrist. The urine was quite dark and contained a very little albumen. I resumed the salicylate of soda in ten-grain doses, with a grain of quinine, three times a day; and from this day there was no further trouble from the joints, but an attack of rheumatic conjunctivitis retarded the convalescence.

The above brief extract from my note-book needs no remark. My object is to draw attention to the toxic action of the salicylate, about which I have not seen much mentioned. I may remark that I have found small doses, repeated say every four hours, of little, if any, use in rheumatic fever. The remedy ought to be given every two hours for at least the first day.

A CONTRIBUTION ON THE TREATMENT OF THE PROFESSIONAL DYSCINESIÆ.*

By DR. LEONARDO BIANCHI,

Private Lecturer on Neuropathology and Medical Electricity in Naples.

IN the first number of *Il Morgagni* for 1873, I published a case of scribes' cramp, which, in a very short space of time, was cured with hypodermic injections of nitrate of strychnia. The young man whose case was the subject of that publication, at that time a student, is now a barrister, and has never since been troubled by the malady.

It appears, as far as I know, that since that time no other cases have been published in which the cure was obtained with hypodermic injections of strychnia, except one of Rossander, cited by Erb in *Ziemssen's Encyclopædia*. But I have had the opportunity of seeing many cases, the histories of which will be published in another work.

The views there expressed will perhaps be different from those expressed in my first publication. Therefore, putting aside for the present all pathological and physiological considerations, I will relate here some of these cases only, with the object of attracting the attention of this Association to the treatment of the disease.

CASE I.—In July 1873, I was consulted by Mr. D. L., a stout and strong man, for a disorder of his right arm. He informed me that he had been affected by it for six years, and had been prevented from writing by a painful feeling of tension and fatigue in every part of the arm and hand, with obstinate contraction of the supinators of the hand, turning it over; in the new position assumed by it, writing became impossible. Sensibility was undisturbed, and there was no difference, as regarded the muscular reaction with the faradic and galvanic currents, in the arms and forearms of the two sides. There were no painful points over the cervical spine. The faradic current applied for one month was quite useless; but he was very much improved by twelve injections of nitrate of strychnia; his writing became more regular, and he was less rapidly fatigued, as the contractions became less constant. He was then obliged to put off the treatment, on account of the necessity of writing, as he was occupied in a great deal of business which could not be left in other hands.

CASES II and III.—In 1874, I saw a man named Santilio, who consulted me on account of an irresistible and troublesome numbness of the right arm every time that he began little and delicate operations of the hand; viz., writing or sending telegraphic despatches. He was employed at the telegraph office, and the malady had manifested itself after two years of unusual and immoderate exercise of his profession. This is the second recorded case of telegraphists' cramp. The first was published in the *Lancet* in 1875, and it rather alarmed the English telegraphists. In my case, no spasm or contraction was observed in any muscle; but an irresistible torpor and sense of tension pervaded the entire arm when he attempted to write and to send telegraphic despatches, while he showed considerable strength in operations that required more muscular force and the exercise of both arms. There was no difference of reaction with the faradic current as regarded either the muscles or the nerves; but he sometimes felt pain on the cervical spine. He did not derive improvement either from muscular faradisation or from the continuous galvanic current, nor from injections of nitrate of strychnia, of which I made about thirty. I used two grains of the strychnia salt, after having ascertained that it was good by making experiments upon rabbits. The young man, who was very intelligent, assured me that his brother, employed at the Post Office, had suffered during about eight years from scribes' cramp, so much so that he was obliged to take an assistant for writing; and that, after the publication of my paper in *Il Morgagni*, he was completely cured by a number of hypodermic injections of nitrate of strychnia, and had resumed all the duties of his office.

CASE IV.—Mary D., a Sicilian, an elementary female teacher, had suffered during six years when she consulted me. She felt painful fatigue in every part of the right arm when she began to write, and had contractions of the interossei of the index and of the thumb, with also a slow contraction of the supinators, which, in the act of writing,

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

brought the hand into a state of supination, withdrawing it from the table. Her malady had developed itself after forced and prolonged writing in the schools. I saw her in 1875. A year before, she had been much relieved by fifteen injections of nitrate of strychnia, which were administered to her by Dr. Accetelli according to my recommendations. From that time, she was able to sew, having been quite unable to do so before, and to write during a longer period of time, which she was utterly incapable of doing previously. The treatment could not be continued for various reasons; nevertheless, the improvement has been constant, and she has persevered in sewing. There were no painful points on the cervical spine nor on the nerves of the arm; neither was there any difference in nutrition, nor in electro-muscular reaction, between the two arms, forearms, and hands.

CASE V.—I will relate a last observation, which, on account of the course of the malady and of the associated circumstances, is highly important and not less curious. Simone F. Paolo, aged 20, a native of Altamura, presented himself in my dispensary for nervous diseases at the end of June 1876, having been kindly sent to me by my friend Dr. Recchia. He was an intelligent, perhaps rather eccentric, youth. There was no previous history of nervous maladies. Being extremely fond of music, he had abandoned an honourable employment, which furnished him the means of an honest livelihood, and gave him the chance of happier prospects in the future, and left his paternal home for the purpose of indulging in his passion for music at Naples, where he was exposed to the most adverse fortune, with sufferings and privations of every sort. He ardently studied the flute, and soon became distinguished as a player on this instrument, studying about eight or ten hours a day. In that manner, two years passed away, when he began to feel a kind of torpor in the left arm, accompanied with pervading numbness. A few days afterwards, it returned, being now accompanied with irresistible hiccough that lasted day and night, and was not calmed by anything else but the electric current, which the lamented Professor Giannuzzi, his countryman, applied to his neck, using a large number of elements belonging to a telegraphic office; but neither the torpor nor the sense of numbness in the arm diminished; on the contrary, not long afterwards, he had a very limited cramp of the interosseal muscles of the ring-finger, so intense that, every time he played, he could not make the slightest use of that finger to open or shut the keys that he wished to; and he was soon obliged to desist from playing the flute, which was his only hope for the future. After having tried without success a great number of remedies, and also electricity with the interrupted current, he came to me, more discouraged and out of spirits than ever, and his incredulity seemed almost approaching to despair. His condition when I first saw him was as follows. He was robust and muscular, but pale, on account of the sufferings that he endured; the muscles of the arm, forearm, and left hand did not differ from those of the right side, either in density or in strength, or in the manner of responding to the constant and faradic currents. There was no difference as far as regarded the nervous reaction. He was capable of making any kind of movement, and of showing great muscular force; but he could not perform delicate and complicated operations, being hindered by the numbness, especially in the soft fleshy ends of the fingers. There was diminution of tactile sensibility in all the fingers, but without irregular movements. When he played the flute slowly, the left ring-finger rarely obeyed the will, but was impelled by lateral movements, in consequence of which it closed one of the keys higher or lower than he intended, so that the flute always produced a higher or lower tone with disagreeable discordance. If he made a greater effort of the will, the torpor and the cramp increased, so that, after a short time, he was obliged to desist from his unsuccessful attempt. I advised him to abandon all other treatment, and began to treat him with electricity. Having no hope of success from the faradic current, I employed from the beginning the continued current, applying it over the cervical and superior dorsal part of the spine, and a few times over the nerves. I used, at the same time, faradisation of the skin. The first symptom that disappeared was the anæsthesia; then the torpor began to diminish, so that after a fortnight the patient began to resume his musical studies, and after two months he was able to apply himself to them four or five hours a day without suffering much from torpor. However, the cramp of the ring-finger had not been greatly alleviated. After another month of electric treatment, the improvement totally ceased, and did not progress, notwithstanding my having persuaded him to desist from playing. It was then that I employed injections of nitrate of strychnia. I had prepared, as I have been accustomed to do in other cases, a solution of nitrate of strychnia, so that every *gramme* of the solution, representing the capacity of Liér's syringe, contained five *milligrammes* of the nitrate of strychnia. I began to use one *milligramme* and a half (.023 grain), and I increased the doses to

three *milligrammes* and a half (.054 grain) every other day. The injections were practised on the forearm; none of them were followed by inflammatory reaction, and after the tenth—that is to say, after twenty days of treatment—the patient told me that he was cured, and that his arm and his hand were firm. I also practised two other injections during a week after Simone had left my dispensary.

This young man passed his examination as a pupil with splendid success, and is remarkable for the rapidity with which he profits by the instructions he receives and his assiduity at study. I saw him last June, and no other symptom of the malady had reappeared.

I will not relate the other two cases of scribes' cramp treated by me, of which one completely recovered under this treatment, and the other obtained a great and durable improvement from the continuous galvanic current over the cervical spinal axis and the cervical sympathetic. With these results obtained by me from injections of strychnia, and electricity employed either alone or simultaneously, I think that I am authorised in considering the general prognosis of this disease as not so hopeless as it has hitherto been.

Among electrotherapists, Benedict is the only medical man with whom I am acquainted who considers the cure of this disease to be easy and frequent. Of about fifteen cases, he obtained in six or seven complete recovery, and in the others great improvement.* Perhaps also Althaus has the same opinion as Benedict, although, in his esteemed book, he does not relate cases, and does not clearly manifest it. But all the other esteemed and conscientious electrotherapists,† among whom allow me to mention Rosenthal, Onimus and Legros, Erb, Crichton Browne, etc.; and a still greater number of pathologists, with the exception of Niemeyer, Jaccoud, Eulenburg, etc.,‡ do not show much confidence in the continuous constant current, with which they have more often obtained improvement than complete and durable recovery.

It is true that, on making an investigation of modern literature, many cases of recovery are found, as those of Hulke, Solly, Niemeyer, Meyer, etc. But we ought to consider that this malady occurs much oftener than is believed, and that recovery is often obtained after treatment of very long duration, as in the cases of Crisanto Zuradelli. For this reason, if another method of treatment help the action of electricity, offering a greater average of recoveries, as far as I have been able to judge from my cases, my communication will not be useless in the treatment of a disease considered so fatal to some arts.

With one patient only have I been unsuccessful, the telegraphist, in whose case a cure was not obtained either by the faradic current or by the continual constant current, or by cold baths, or by the hot baths of the island of Ischia.

I do not maintain that this treatment is always preferable; and, as neither the anatomical process upon which the malady depends, nor its seat, nor the mechanism, nor the clinical form is the same, so it is not improbable that there are cases in which electricity is available, and others in which hypodermic injections of strychnia are of more utility, and cure the patient in a shorter space of time.

It would be desirable to know in what manner strychnia exercises its medicinal influence in these disturbances of coordination; but, as neither experiment has aided pathological investigations in these cases, nor has morbid anatomy given any certain revelation as regards the anatomical changes, if there be any, that are determined in the muscles, nerves, and nerve-cells of the spinal cord, cerebral ganglia, etc., let me offer an hypothesis.

There are parietic forms of professional dyscinesia, of which cramp is but a casual phenomenon, arising from disturbed harmony of force amid the many muscular groups employed in the various and delicate actions of writing; and in such cases, if the disturbance be chiefly occasioned by the exhaustion of the groups of cells in the anterior grey substance of the superior part of the spinal cord, strychnia may be successful in raising the physiological power of the spinal marrow, and increasing its excitability. There are cases in which the continued stimulus produces a greater irritation in the above-mentioned centres, with pain in the corresponding points of the back-bone and on the nerves; and, if the malady be of long duration, with wasting of some of the muscles, especially of the interossei, in these cases I do not believe that strychnia can be of any utility. But, in many other cases, probably the mechanism of the cramp and of the dyscinesia depends on a primitive disturbance of coordination of the spinal marrow in its superior region, or of the cerebral ganglia. In these centres, or, to speak more clearly, in the individual elements or groups of cells em-

* Benedict, *Nervenpathologie und Electrotherapie*. Leipzig, 1874, p. 352.

† I must also except Duchenne and his school, who employed the faradic current, which is evidently less productive of results than the continuous constant current.

‡ *Lehrbuch der functionellen Nervenkrankheiten*. Berlin, 1871, pp. 684-695.

ployed, first with a long exercise of the will, and then almost spontaneously, it is necessary to admit, in order to understand the coordination, the passage and diffusion of the volitional and spontaneous stimulus exclusively in those elements that correspond with the muscles or groups of muscles upon which the execution of the harmonised and complicated movement is devolved. Now, the faculty of retention possessed by the cellular elements in the marrow and spinal cord may be diminished, and the stimulus may be diffused into other cells and other cellular groups; and these may then put into action other muscles or groups of muscles, by which the delicate action of writing, of telegraphing, of playing the piano or the flute, is disturbed.

I believe I can corroborate this hypothesis with an observation that I have made concerning a patient in my dispensary, in whom I found the ascending current incomparably more useful than the descending one, and there were not observed any signs of irritation either on the spine or over the nerves. By the use of the ascending current over the cervical spine for five or ten minutes, with twenty or twenty-five elements, a catelectrotonic condition was produced, and in that manner the excitability of the spinal marrow was increased and the cramps were almost calmed. I am persuaded, by long observation which I have made upon this patient, that it was impossible to obtain the same effects with the descending current which produces the anelectrotonic condition.

Although I have determined on not entering on the discussion of the physiological pathology of this disease, and analysing all the hypotheses, I believe that, as far as the treatment is concerned, the following assertions may be made without danger of contradiction.

1. The condition or the morbid process in the professional dyscinesia, and its seat, differ in different cases.
2. The difference in the disturbing process of the disease, in its seat, and in the mechanism by which the malady is determined, is perfectly in harmony with the difference of the clinical forms.
3. The prognosis may be considered less grave than most pathologists believe.
4. The treatment, electric or internal, in order that it may obtain a greater average of recoveries, must be conformable to the clinical character of the disease, which differs in various cases, and which must indicate when the ascending or the descending current may have a better effect on the spinal cord and on the nerves, when simultaneous faradisation of the muscles and of the skin (disturbance of tactile sense) may be applied with success, when galvanisation of the brain or of the sympathetic nerves in the neck is useful, and when the hypodermic injections of strychnia, exclusively or associated with an established method of electrification, may be of more utility.

ANTEVERSION OF THE LIVER SIMULATING ENLARGEMENT.*

By T. D. GRIFFITHS, M.D., Swansea.

It appears that anteversion, or rotation forwards of the liver, on its own transverse axis, is not very uncommon. In this abnormal position, the anterior border of the liver falls below the ribs, the upper surface is turned forwards, and the hepatic dulness in the nipple-line is increased. This increase of dulness is in proportion to the degree of anteversion; in extreme cases, it becomes equal to the diameter of the liver in the antero-posterior direction. It is, therefore, important to recognise this displacement, as it simulates enlargement of the organ, and may, in this way, embarrass the physician, and lead him astray in his diagnosis. To illustrate my position, I shall briefly refer to three cases.

CASE I.—Mrs. B., aged 27, a tradesman's wife, of dark complexion, average stature, moderately well fleshed, has been married a little over three years, has had two children; the younger child was born a year ago. The patient consulted me in December last about "a lump in her stomach", which she had noticed since her previous confinement, and which she attributed to her nurse's neglect, who had not, as she supposed, bandaged her properly.

On examination, there was no visible prominence over the hepatic region when the patient lay on her back. The abdominal wall was wrinkled, and marked with "silvery streaks"; it was also soft and yielding on palpation. The lump in the stomach for which the patient sought advice was evidently the liver. It was easily felt by the hand, and appeared much larger than natural; the anterior edge extended down into the iliac fossa, and was easily grasped between the fingers. The hepatic dulness in the right nipple-line was seven inches, extending from the upper border of the sixth rib into the iliac fossa; the sur-

face was even and smooth, and without any indentation. It was very movable—it could be pushed under the ribs—but was not tender on pressure. There was no history of tight lacing. The left kidney was easily felt, and movable. The uterus was retroflexed. The spleen was normal in size. The heart and lungs were healthy. Digestion was normal. In short, the patient's general health was very good, and she complained of nothing, but wanted to know the nature of "the lump in her stomach", which caused her no discomfort or inconvenience. There was no doubt as to what this lump was; it could be felt, and even manipulated, through the abdominal wall. It was the liver, which was, apparently, very much larger than natural; but there was nothing besides this apparent enlargement indicative of disease in the organ itself. And there was nothing whatever to show that the liver had been pushed down from its natural position. The spine was normal. The thorax was well formed. There was no effusion in either of the pleural cavities. The heart was healthy, and there was no effusion in the pericardium, and, as far as I could ascertain, there was no tumour between the liver and diaphragm; but the abdominal wall was lax and limp, almost like washleather. The liver could be pushed upwards and made to assume its normal size and position. It was, therefore, evident that the enlargement was only apparent, due to rotation forwards, or anteversion.

With the view to improve the atonic and atrophied condition of the abdominal wall, and of the recti muscles in particular, Stohrer's interrupted current was applied, from five to ten minutes, every other day, for three months. It was only after repeated applications that the lower half of the recti muscles began to respond to the current. At the end of three months, the silvery streaks and the loose wrinkled condition of the skin had almost entirely disappeared, and the muscular condition of the wall had greatly improved.*

I have notes of several other cases of this kind in women who have borne children, but I will only allude to one of them, the first I ever noticed, some twelve years ago, and over which I blundered slightly.

CASE II.—Mrs. S., aged 60, a mother of a large family, of spare habit of body, below the average in height, of gouty constitution. When I was called in to see her, she was suffering from acute dyspepsia, and she had been failing in general health for some time previously. On examination, the abdomen was found very much in the same state as in the last case. The liver was apparently very large, and, in addition, it was slightly tender on pressure. There was nothing to show that it had been displaced by any intrathoracic disease, or by deformity of the chest-wall, curvature of the spine, or tight lacing. There was no history of gall-stones or of intemperance, and the enlargement could not be accounted for by simple congestion. Considering the apparent size of the liver, together with the symptoms and previous history, I was inclined to believe that the patient had some malignant disease of the liver. However, after a time, the tenderness of the liver passed away, the dyspeptic symptoms disappeared, and the patient recovered her usual health; but the apparent size of the liver remained the same, and I was able to satisfy myself afterwards that it was simply due to anteversion.

CASE III.—A. B., † aged 54, of fine physique, tall and stout in proportion, and somewhat corpulent. When he first came under my observation, in February 1875, his liver was found smaller than natural, the hepatic dulness in the nipple-line was from 2 to 2½ inches. Without going into the whole history, suffice it to say, that the case was diagnosed as cirrhosis of the liver. When the patient was again examined, in July 1876, the liver was found very much in the same state as to size. Towards the latter end of November last, one of the leading London physicians, an eminent authority on diseases of the liver, saw the patient with me in consultation. There was now a marked change for the worse in the patient's general condition; he was lethargic and drowsy, slightly jaundiced, emaciated, and confined to bed. There was no elevation of temperature; the liver was slightly tender on pressure; the hepatic dulness now extended from two fingers' breadth below the nipple to the crest of the ilium, and partly into the iliac fossa, eight inches vertically in the nipple-line. The edge of the liver was easily felt, as the full and prominent belly had become retracted and the abdominal wall flaccid and emaciated. With the exception of being very slightly emphysematous, the lungs were healthy. And, although there were well marked mitral regurgitant disease and hypertrophy of the heart, there was no apparent abnormal dilatation of the right side, nor indeed any cardiac trouble.

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

* To faradise both recti muscles, the rheophores should be applied to the seventh intercostal space, a little outside the nipple line on each side; and to act on one side only, one pole of the battery should be applied in the seventh intercostal space, and the other immediately above Poupart's ligament, midway between the superior iliac spine and symphysis pubis.

† This case was fully reported at a meeting of the Pathological Society of London.

Having excluded the ordinary possible causes of spurious enlargement of the liver, and having considered the previous history together with the then present physical signs and symptoms, the physician already alluded to was satisfied that we had mainly to deal with a *large* cirrhotic liver. Some months previously, according to my own observations, the organ was small and contracted. To account for this apparent increase in size was somewhat puzzling. The theories of congestion, cancer, etc., were considered, and dismissed as an unsatisfactory explanation. This apparent enlargement remained until the patient died, some months afterwards. At the *post mortem* examination, the liver was found lying on its under surface in the lumbar region, the anterior edge of the right lobe being down in the iliac fossa. The liver measured 12 inches transversely, 8 inches in the antero-posterior direction, and 2½ inches in the thickest part, and weighed 56 ounces—a small liver for the size of the body from which it had been taken.

Remarks.—The predisposing causes of anteversion of the liver appear to be distension of the abdominal cavity, followed by the opposite condition, and at the same time attended with atrophy of the recti muscles. With the distension of the abdominal cavity, the wall in front is expanded and the round ligament of the liver is stretched and lengthened. When the distension is afterwards removed, the abdominal muscles in front having previously become atrophied and lost their tonicity, the support of the anterior border of the liver is taken away.

SOME STATISTICS OF SMALL-POX.

By HENRY TOMKINS, M.D.,

House-Physician to the Royal Infirmary, Manchester; late Resident Medical Officer at the Monsall Fever Hospital.

IN the BRITISH MEDICAL JOURNAL for October 20th there appeared an article devoted to the consideration of a paper written by Mr. T. B. Sprague in the *Journal of the Institute of Actuaries*, in which some small-pox statistics compiled by Dr. Keller of Austria are strangely at variance with those published in this country, and notably those of the Metropolitan Asylum Hospitals. As a small contribution to the same subject, the following notes may be of some value in arriving at a more satisfactory conclusion than that of the above named writer as to the efficacy of vaccination in affording protection from small-pox, when performed in a proper manner and at proper intervals of time.

The cases from which the following tables have been formed were those received into the Monsall Fever Hospital, Manchester, from the 1st of January to the 31st of December, 1876, and for the accuracy of which I hold myself responsible. During that year, variola was present in an epidemic form in Manchester and its suburbs, being at its height during the spring and early summer months; and, although these cases represent but a small proportion of the total number recorded in this district, being less than one-half the number recorded by Dr. Keller and scarcely one-fifteenth of those treated in the Metropolitan Asylum Hospitals during the epidemic of 1871-72, still, as they were received from all parts of the city, they may fairly be taken as representing the average mortality of the disease in this district during the epidemic of last year.

Arranged below is the total number of cases, with the average mortality of the vaccinated and unvaccinated, compared side by side with Dr. Keller's and with those of the Metropolitan Asylums.

TABLE I.—*Death-Rate in Cases of Small Pox.*

	Cases.	Deaths.	Death-Rate per 100.		
			Monsall.	Dr. Keller.	Met. Asyl.
Vaccinated with one or more distinct cicatrices	745	71	9.53	16.4	10.2
Unvaccinated cases	78	45	57.7	24.8	44.8
Said to be vaccinated, but no cicatrix visible	37	13	35.13		
Not known whether vaccinated . .	61	29	47.54		
Total	921	158	17.1	13.7	13.7

In all these, the death-rates of the total number are about the same, and they agree in being higher among the unvaccinated than amongst the vaccinated. Dr. Keller, however, makes the remarkable statement that, *except during infancy*, the mortality is much higher amongst the vaccinated cases, and brings forward figures to prove this assertion.

In the article of the BRITISH MEDICAL JOURNAL before alluded to, the mortality of the cases under five years of age from Dr. Keller's reports is compared with that of the Metropolitan Asylum Hospitals. I have analysed the cases at Monsall in the same manner, and find them still more at variance with Dr. Keller's. Thus:

TABLE II.—*Cases of Variola at Five Years of Age and under.*

	Cases.	Deaths.	Monsall.	Rate per 100.	
				Dr. Keller.	Met. Asyl.
Vaccinated with one or more distinct scars	21	1	4.8	38.6	19.5
Unvaccinated cases	23	19	82.6	33.3	61.2
Said to be vaccinated, but no scar visible	7	3	42.8		

In all statistics, there is a liability to draw false deductions; and, in quoting the above, it should be stated that, owing to a prevalent idea abroad in this part of the country, that parents are liable to punishment for the omission of vaccination when this is discovered by the occurrence of variola, it is often difficult to get them to acknowledge non-vaccination, and therefore it is not unlikely that some of those cases said to be vaccinated, but no scar, were really unvaccinated; and the same with those set down as not known. But, after allowing for this, the plain fact still stands out most prominently, that immense protection is undoubtedly afforded by successful vaccination; and, in conclusion, I would earnestly commend the following to the careful attention of those zealous but misguided individuals who are constantly clamouring against vaccination and its compulsory performance. Firstly, in the nine hundred and twenty-one cases at the Monsall Hospital treated during the year 1876, in those where there was any evidence of vaccination at all, the death-rate was but 9½ per cent. Secondly, amongst children under five years of age, where there was a distinct cicatrix, there was but *one* death in the twenty-one cases under treatment, and this solitary one was a poor puny child, whose death was occasioned quite as much by diarrhoea as by small-pox; whilst amongst the twenty-three unvaccinated cases, only four recovered. Not a single death occurred among adults where successful revaccination had been performed within four years; and, lastly, out of all the numerous workpeople coming into the hospital during the year as porters, labourers, servants, nurses, etc., not *one* contracted small-pox, every individual being compelled to be vaccinated before commencing work there.

One other point is worthy of consideration. It is this: in a population where compulsory vaccination is in active operation, it may fairly be assumed that the children who escape vaccination are in an extreme minority; and yet out of this minority a larger number of cases were received than from amongst the exceedingly large majority of vaccinated children. What, then, would have been the number had the unvaccinated been in the majority, and what the number of deaths at the rate of 82.6 per 100?

THERAPEUTIC MEMORANDA.

THE TREATMENT OF OBSTINATE SICKNESS BY KOUMISS.

I WISH to record briefly the result of my experience in the treatment of obstinate sickness by koumiss; for I believe, with Dr. Jagielski, that we possess here a simple but a satisfactory remedy, and one likely to be of use when the ordinary remedies fail.

Miss S., aged 31, far advanced in phthisis, and already much exhausted by incessant cough, profuse sputa, sweats, and diarrhoea, was suddenly attacked by hæmoptysis, accompanied by obstinate and distressing sickness. The patient was *in extremis*. After exhausting the ordinary remedies, I administered, cautiously at first, No. 2 koumiss with the best results. The sickness immediately ceased; the hæmoptysis merged into tinged sputa and gradually disappeared; the pulse became stronger; the skin warm and moist; the diarrhoea ceased. The patient, who had previously loathed all food, gratefully took the koumiss, at first alone, then mixed with milk. A return of hæmoptysis in the fourth week, with secondary bronchitis, took her off.

Miss T., aged 50, was attacked by hæmatemesis (due probably to gastric ulcer) and persistent vomiting. Iced drinks, gallic acid, etc., failed to give much relief; for, when food was taken, the sickness and hæmatemesis returned. We were reduced to the treatment by enemata of beef-tea and brandy, which was continued for five days, notwithstanding which the patient became much weaker. No. 2 koumiss was then given, as in the last case, with good results.

In a case of severe vomiting caused by mental shock, but remotely connected with concussion of the spine, the result of a carriage accident, koumiss No. 1, made from the extract, was successful after hydrocyanic acid, bismuth, creasote, etc., had failed.

In several other cases, I have given koumiss, and always (except

when malignant disease was present) with good result. In stricture of the colon (the diagnosis being subsequently established by *post mortem* examination), it relieved the pain and attendant sickness, and prolonged life. In the vomiting of pregnancy and in obstinate constipation I have seen it do good.

RICHARD LOWTHER, M.D., Cartmel.

TREATMENT OF TETANUS BY CHLORAL.

In the JOURNAL for January 5th, are given cases of tetanus treated by chloral-hydrate; I wish to add to the cases there given two in my own practice.

A boy, aged 11, had tetanus caused by a lacerated wound of the hand. He was treated by full doses of chloral-hydrate, resulting in complete recovery. This case occurred about nine years ago.

The other patient was a man aged 40, whose finger was lacerated by machinery. Forty grains of chloral produced almost immediate relief. The drug was administered in reduced doses for a fortnight, resulting also in a complete recovery. The spasms in this case were torturing in the extreme; and the man's life was despaired of. The marvellous influence of the drug was most marked.

GEO. MILES, M.R.C.S., L.S.A., Plympton, Devon.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

GUY'S HOSPITAL.

DR. PAVY'S WARDS.

Malignant Disease of the Liver.—A woman aged 53, rather emaciated and of a dark swarthy complexion, was admitted to the clinical wards, complaining of weakness and a dragging pain on the left side of the body, which she attributed to the effects of "a strain" received four weeks previously. On examination, the thoracic viscera appeared normal. The abdomen was distended, and the liver could be plainly felt through the thin abdominal walls; it was very large, and its margins could be plainly felt; the edge was well defined, hard and nodular; the notch was felt opposite to the umbilicus; and the left lobe appeared enlarged out of all proportion to the size of the right lobe; in parts it was very tender on palpation and presented an elastic feel. There was no jaundice. The urine was normal and free from bile-pigment. The patient was much troubled with dyspeptic symptoms. No other indication of malignant disease in the abdomen or elsewhere could be obtained; but there was a suspicious little tumour in the neck, rounded, movable, and not adherent to the skin. This might prove to be cancerous, but at present there was no indication of this. The woman said it had been coming about a fortnight.

A diagnosis was made of malignant disease of the liver. The history and physical condition did not correspond with those of cirrhosis; the surface of the liver was distinctly nodular; the whole organ was much enlarged, especially the left lobe. A cirrhotic liver may be nodulated, but this is not usual till the stage of contraction is advanced. In this case also, the somewhat irregular enlargement of the liver, the tenderness of certain parts of it, the age of the patient, and the dark swarthy complexion, were mentioned as points indicative of malignant disease.

The presence of lardaceous disease was rendered improbable by the absence of chronic suppuration and syphilis. Further, there were no other signs of lardaceous disease, no disturbance of the bowels, and no albuminuria. She was ordered iodide of potassium, in five-grain doses, three times a day.

Enteric Fever.—A young woman was convalescing from a rather mild attack of enteric fever, having almost completed the third week of the disease. The temperature had never been higher than 102 deg. Fahr.; the bowels throughout the illness had been rather loose, but not tender. The spleen was not enlarged. Dr. Pavy remarked that it was favourable to see the patient lying upon her side, as indicating that she had plenty of power. The rash had almost died away, no fresh spots having appeared for some days; but the disease could not be considered as gone till the spots entirely disappeared. The prognosis appeared good; but it was impossible to tell what might happen. A relapse might come on, hæmorrhage or perforation might occur; a guarded prognosis was, therefore, necessary. In this respect, a more

cautious opinion must be expressed in a case of enteric fever than is necessary in typhus. In enteric fever, it is difficult to ascertain with certainty the condition of the bowels; there may be much sloughing of Peyer's patches, or the congestion may subside without the occurrence of ulceration.

Chronic Bright's Disease.—A woman was admitted, complaining of severe pain in her head and almost total loss of sight in her right eye. She was thirty years of age, and had been failing in strength four years. Two years ago, she had moderate and transient anasarca for some months. A month ago, she was attacked with convulsions, in which consciousness was completely lost. On recovering from this attack, she found that she was almost blind with the right eye. Ophthalmoscopic examination revealed a large hæmorrhage in the fundus of the eye. The urine was albuminous; of specific gravity 1015, pale in colour. No casts could be found, but occasionally a few blood-corpuscles could be seen. The heart and vessels appeared normal. Dr. Pavy considered this as probably a case of contracted granular kidneys, the vascular system not as yet having become diseased. It appeared to be a case in which the kidney-disease was primary, and not dependent upon a general vascular change, such as without doubt often precedes the local renal disease. It was then pointed out how important it is to test the urine in cases of continuous headache, especially if the arterial tension be high.

Salicylic Acid in Acute Rheumatism.—Dr. Pavy has obtained very favourable results in using salicylic acid in the treatment of acute rheumatism. He usually prescribes twenty-grain doses of the acid, dissolved with liquor ammoniæ acetatis or carbonate of soda, to be given at first every two hours; and believes that, while reducing the temperature and relieving the pain, it also prevents endocarditis and other complications, if commenced early enough. The more acute the case, the more reliable is the action of the drug; but in all cases it is essential to continue its administration, in diminished doses, for at least a fortnight after the subsidence of the fever; if this be neglected, relapses are very apt to follow.

Diabetes Mellitus.—Two cases of diabetes were under observation. In the clinical investigation of diabetes, Dr. Pavy observes the condition of the urine and of the blood while the patient is taking a mixed diet. The blood is drawn by cupping; the amount of sugar is determined by the following method. The blood is first mixed with sulphate of soda, and heated to separate the albuminous and colouring matters; the liquid is then separated, and the coagulum well washed to remove all the sugar. The liquid is next boiled with an excess of the copper solution, and the reduced suboxide is afterwards collected and dissolved by the agency of an acid. In this solution a cylinder of platinum foil is immersed, for the purpose of receiving the copper removed by means of galvanic action. Weighing the platinum foil before and after the operation, gives the weight of the deposited copper; and from this may be calculated the amount of sugar which has effected the reduction of the cupric oxide (see *Proceedings of the Royal Society*, No. 182, 1877).

Dr. Pavy usually treats his diabetic patients with codeia or opium, and a restricted diet. The pre-ent patient was ordered powdered opium and extract of nux vomica, of each half a grain, in a pill three times a day.

Ulceration of the Bile-Ducts and Suppuration of the Liver.—A woman was attacked, six weeks before her death, with severe paroxysmal abdominal pains, together with shivering and feverish symptoms, which were attributed by her medical attendant to the presence of gall-stones. When admitted to the hospital, she was manifestly ill and moderately jaundiced; the abdomen was distended; the liver enlarged, but not tender; and no distinct tumour could be felt. The spleen was normal. The temperature was generally low; but, towards the end of the case, it varied from 101 deg. Fahr. to 103 deg. Fahr. There was no vomiting. The diagnosis appeared to lie between some form of blood-poisoning and disease of the liver, either malignant disease or cirrhosis.

At the necropsy, the liver was found to be large, the gall-bladder was empty and contracted, the common duct was ulcerated and contracted, all the ducts in the liver were dilated, the capsule of the liver was much thickened, and diffused suppuration was found throughout the substance of the organ.

It appeared probable that gall-stones had caused obstruction of the common duct, leading to ulceration, dilatation of the hepatic ducts, and finally suppuration of the liver.

Cerebral Hæmorrhage in a Young Man.—A young man aged 23 had died from extensive hæmorrhage into the right ventricle, which burst through into the fourth ventricle; no coarse change was seen in the cerebral vessels, the heart, or kidneys. A dark-brown scar in the corpus striatum of the opposite side indicated a former slight hæmorrhage, corresponding to a slight hemiplegic attack a year before.

Extensive cerebral hæmorrhage in a young subject, presenting no coarse visceral disease, being exceedingly rare, it appeared probable that a small aneurism might have ruptured; the vessels were, therefore, macerated, and reserved for microscopic examination.

REVIEWS AND NOTICES.

LECTURES ON CLINICAL MEDICINE, delivered in the Royal and Western Infirmarys of Glasgow. By Dr. McCALL ANDERSON, Professor of Clinical Medicine in the University of Glasgow, 1877. Pp. 268. London: Macmillan and Co. 1877.

THIS volume consists of seventeen clinical lectures delivered by Dr. McCALL ANDERSON in Glasgow, and forms a valuable addition to our medical literature.

As in other clinical treatises, we do not look merely for a record of new discoveries, but rather for good clinical descriptions and the faithful records of sound clinical work, whereby we may increase our familiarity with the natural history of disease and receive hints as to the best methods of clinical study and clinical teaching. In these particulars, we are well pleased with the volume before us.

Clinical teaching is year by year becoming more systematic; and, as years go on, it must adapt itself to a wider range of knowledge, and afford instruction in the more refined and elaborate methods of physical examination. In the works published from time to time by our clinical teachers, it is interesting to observe the methods by which each endeavours to impart clinical instruction. Dr. McCall Anderson teaches his students at the bedside, by demonstrating selected cases to classes of moderate size, and also in the class-room by means of clinical lectures. In this work, he is aided by medical tutors, senior students acting under his direction, who give individual instruction to the younger students in the methods of examining patients, etc. By these means, the class have ample opportunities of gaining practical knowledge.

In his introductory chapter, the importance of observing symptoms is dwelt upon, and the methods of observing are briefly described; while their usefulness is impressed by the records of cases illustrating their successful employment in the art of diagnosis.

The second chapter is devoted to cases illustrative of Pain as a symptom of disease, and introduces the student to the study of subjective symptoms, at the same time urging, in the absence of signs of coarse disease, the necessity for seeking the diathetic indications of the case, as the presence of syphilis, gout, or rheumatism. In this, as in succeeding chapters, the interest is excited and maintained by the narration of cases of considerable interest in illustration of the teaching given, and this renders the work throughout very suggestive to the student and to the practitioner.

The subject of Aortic Aneurism occupies three lectures, and several cases are recorded of successful treatment by galvanopuncture. The cases recommended for this treatment are those in which the tumour bulges forward from the surface of the chest; the method pursued is as follows. The skin having been frozen by ether-spray, needles carefully insulated to within half an inch of their points are thrust into the aneurism, being passed obliquely into the sac; these needles are then connected with the positive pole of a large-cell Stohrer's battery; a zinc plate connected with the negative pole being applied to the chest-wall on the opposite side, and about three inches beyond the edge of the swelling, a sponge wrung out of warm salt water intervening between the zinc plate and the skin. Six or eight cells are used in most cases. In the first case narrated, a prominent tumour, of the size of a hen's egg, pointed near the root of the neck; it was distinctly expansile, and very soft; a vibrating "purring tremor" was felt over it, and it presented other signs of an aneurism of the arch of the aorta. As the tumour increased in size, galvanopuncture was decided upon; and this was carried out four times in all. After the second operation, the tumour was somewhat firmer; on one occasion, two needles were employed, one connected with either pole of the battery. On withdrawing them, no blood escaped from the opening made by the positive needle; but when the negative needle was removed a jet of blood spurted out; this was, however, soon stopped. As a result of this treatment, the tumour underwent considerable solidification, and the patient was able to resume active work for some weeks, though she eventually returned to the hospital and died. The *post mortem* examination showed that the sac was filled with old and recent clots, and a very distinct stratified coagulum, paler and firmer than the rest, indicated the line of one of the needles. An illustration represents the pathological appearances.

In another chapter, we find a clear and graphic sketch of the Cirrhotic form of Bright's Disease; comments are made upon the case of a

man who presented many of the natural characteristics and complications of the disease, including retinitis albuminurica and cerebral hæmorrhage. Several drawings are given in illustration of the pathology of the case. We observe here, as in other chapters, that the author, while describing the disease, seeks to impress the facts upon his hearers by frequent reference to the case under notice, and thus sustains their interest in the subject.

Space forbids us to go further than briefly to notice an interesting case of Ephidrosis Cruenta, which occurred in a young lady. From certain rounded patches on the face, arms, and chest, somewhat resembling erythema, there occurred at times attacks of hæmorrhage; each attack was preceded by a burning pain. At times, the exudation was like water, but more often actual blood flowed as from a cut surface. These patches usually healed quickly, but some suppurated. Menstruation was very irregular. After a twelvemonth's duration, the disease passed away.

This work presents many other points of interest upon which we have been unable to touch, and is likely to prove of much value to all who study it.

THE MEDICAL DIGEST: being a Means of Ready Reference to the Principal Contributions to Medical Science during the last Thirty Years. By RICHARD NEALE, M.D., etc. London: The New Sydenham Society. 1877.

CONSIDERING the vast extent and complexity of medical literature, the deficiency of collated indices to many large portions of it is very remarkable. Each half-yearly volume of our weekly journals contains its own index—a long and cumbrous document; and thus each year accumulates, in London alone, at least a dozen indices, which must all be separately looked through by any one desirous to ascertain what has been written on any given subject. The labour involved, if it be wished to go over a series of years, is simply appalling. Hence the back volumes of our journals rapidly lose in value, for their treasures can be got at only by the zealous student, or under circumstances of urgent necessity. Several of our Societies, the Royal Medical and Chirurgical and the Pathological, for instance, have published indices to their whole series of *Transactions*; but nothing of the kind, until the present volume, has been attempted for any part of the weekly press. The work just issued by the New Sydenham Society is, however, not a mere index, nor, on the other hand, is it a complete index. It professes to be a Digest, by which term it is intended, we suppose, to express that special arrangements have been made, by bringing into juxtaposition references to the same subject, to save the time and trouble of the reader. Dr. NEALE's plan is very simple, and at the same time admirably concise and clear. His references are classified under headings, which are printed in capitals, and numbered and sub-numbered; and thus, instead of being obliged to look down a long column, the reader may find the subject of which he is in search in many cases without reading an unnecessary line. The Index alone, as we are told in the preface, contains 9,000 references; and these include, in the body of the work, nearly ten times as many entries.

The work was not, it appears, written for the Society; but, having been prepared by Dr. NEALE for his own use, was offered in its complete state to the Council. We have no hesitation in expressing the opinion that it is one of the most valuable which the Society has yet issued, and shall be much surprised if, when it becomes known, it do not acquire a high reputation. In saying this, we by no means ignore its defects. It is, in the first place, an index to only a small part of even English medical journals—chiefly, indeed, to the *Lancet*, *Medical Times*, and *Medico-Chirurgical Review*—for the last thirty years; nor for these is it exhaustive. Dr. Neale has evidently selected according to his own tastes and appreciation of value; and it is difficult, in many instances, to guess his reasons for notice or omission to notice. Taking the work, however, for what it is, and not for what it is not, we may pronounce it a remarkable effort of industrious and successful collation. The real test of the work is to use it, and this we have had occasion to do frequently since it came into our hands. We can testify that it gains greatly on acquaintance. To the not very numerous persons who possess a set of back volumes of either the *Medical Times* or *Lancet*, it will be especially valuable, and will convert what was almost useless from its cumbrousness into a library of medical knowledge of easy reference. Nor is the book, although compiled confessedly for those in general practice, likely to be less valued by authors, editors, librarians, and all who have access to public collections of books. Its pages will save time and temper immensely to those to whom time and temper are most valuable. That its incompleteness, and perhaps now and then its errors, may occasionally annoy is not to be denied. It is written rather for those who can be grateful for posi-

tive help than for those who insist on absent excellences. No one who has looked up the references which its pages afford must suppose that he has found all that has been recently written on the subject of his search. He will, however, have certainly found much, and that very easily; and, if he desire completeness, at any rate part of his labour will have been saved. As it is, with all its very conspicuous imperfections, we accept Dr. Neale's Digest as a boon to the profession, and as likely to prove a great help to medical research.

BENGAL MEDICAL REGULATIONS FOR BRITISH TROOPS. Non-Official Supplement to Part I, Bengal Medical Regulations. Calcutta: 1877.

The appearance of these regulations, in neat and portable volumes, recently issued by authority from the Government Printing Office at Calcutta, must be very welcome, not only to the officers of the British Medical Department, but to all those whose duties bring them into official relations with the medical establishment of Her Majesty's British Forces in Bengal; and those who are similarly connected with the Army Medical Department at home and in the colonies may well desire that the fragmentary pamphlets of rules issued from time to time from the office in Whitehall Yard, were available in so concise, well-arranged, and complete a form.

The Bengal Medical Regulations, which had been the sole guide for medical officers and others up to 1857, were abrogated by the code published in 1873; but the compilation of a new code, in supersession of that bulky volume, became a necessity, owing to the recent changes in the condition of the Army Medical Department, and its altered relations to the Government of India, the Military Departments, and the Local Medical Service. The task of compilation was undertaken by Surgeon-Major Ogilvie, Secretary to the Principal Medical Officer; and the volumes under notice are the outcome of much labour on the part of that officer. Dr. Ogilvie had had some years' experience of the administration of the Army Medical Department in the office of the Director-General in London; and, while retaining all that was good in the obsolete local regulations, he has engrafted into the new code much that is intended to assimilate the working of the department in India to the customs obtaining in other parts of the world.

The contents of the official volume are divided into thirteen sections, and these again into subsections and numbered paragraphs, with marginal headings, for easy reference. The first section deals with the administration of the department, and the relations of the administrative officers to the several authorities; while the mode and conditions of their appointment, and all details connected with their duties, are clearly laid down. Section ii naturally treats of the executive, and epitomises the multifarious duties of surgeons-major and surgeons under almost every circumstance; while Sections iii and iv contain the rules for the subordinate departments, including the several classes of apothecaries, hospital assistants, and purveyors. The subject of hospitals is dealt with in Section v, including those in cantonments, and those to be formed during war; and under the head of establishments, are laid down the rules for hospital sergeants, writers, nurses, and servants. The mode and sources of supply for the maintenance and conduct of the medical establishments are explained in a separate section, No. vii; and in that following are all the rules connected with the increasingly important subject of hill sanatoria. The regulations for sick leave, and the invaliding of officers and soldiers are laid down in detail in Section ix; and in Section x are issued such clear instruction on the subject of medical attendance to be afforded, as must prevent unpleasantness in connection with that hitherto fruitful source of misunderstanding. The duties while on the march, on shipboard, and when moving by rail, form the subject of a section by themselves, and are very complete.

As might be expected, the rules relative to sanitation form an important section; and if space allowed, it would be of interest to point out how much is now officially done to contribute to the health and comfort of the troops. We can but mention that, alike for troops in garrison or the field, on road or railway, if the rules laid down are carried out little remains to be done. Under sanitation, too, are treated the means for prevention of venereal disease; those for preventing the outbreak of cholera and limiting its spread, as well as that of small-pox, and the subjects of filtration of water and disinfection of bedding, clothing, and buildings, complete the section.

Last, but not least, is the section dealing with returns to be sent in to the several departments; and while noticing how complete are the rules laid down, we cannot but lament that the "red tape" element is still so important that the instructions alone, without any specimen blank forms, occupy 84 out of the 250 pages which comprise the volume; exactly one-third of its entire size, and three times as much as is devoted to sanitation. Appended to the regulations is a "non-

official supplement" of great value. It contains the most recent warrants for the army medical officers and the subordinate departments, as well as the latest rules for pay, pensions, and allowances under all circumstances; clear and ample references being given in the margin to all rules and orders on the subjects. Scales of equipment and supplies are given, and specimens of all blank forms are added. Still more important are the instructions relative to cholera, and the mode of conducting inquiries respecting it, forming as they do an epitome of all recent sanitary investigations. Useful information is added on the modes of cleaning and charging filters; on the native names of drugs and other articles of use; on postal rules and recruit examination; and finally and appropriately on the duties connected with the homeward voyage.

It is impossible in a brief notice to do justice to the new code. Dr. Ogilvie has brought a faculty for organisation and arrangement to bear upon an important subject; and he has constructed, from a somewhat chaotic mass of materials, scattered far and wide, a code of regulations which, for clearness, conciseness, and completeness, leaves little to be desired. It is not too much to say that, provided with the new Bengal Medical Regulations and the non-official supplement, the medical officers of Her Majesty's service will have a *Vade Mecum* which, from the time of their arrival, throughout their Indian service, and to their return to England, will give them full instructions that, if carried out with care and ordinary skill, must conduce to the welfare of the soldier and the good of the service.

ILLUSTRATIONS OF CLINICAL SURGERY: Plates, Photographs, Woodcuts, Diagrams, etc., illustrating Surgical Disease, Symptoms, and Accidents. By JONATHAN HUTCHINSON, F.R.C.S. London: J. and A. Churchill.

WE have already expressed a very high opinion of the value of this important contribution to medical literature, and each succeeding fasciculus confirms and increases our estimate. It presents a quite unrivalled series of pictures, most of which are of great fidelity and pictorial beauty, of interesting forms of disease observed with accuracy throughout a career of large and varied experience, and discussed with clinical sagacity and sincere observance of the true methods of research. Amongst the subjects treated are inherited syphilis, mercurial vaccinosyphilis, deforming rheumatism, cheiro-pompholyx and xanthelasma palpebrarum, injuries of the head and bones, etc. Few men, if any, in the profession have at their disposal so great wealth of clinical material as Mr. HUTCHINSON has collected with unwearied patience for a long series of years in more than one vast field of observation. The work promises to be one which no surgeon will willingly omit from his collection, and which will certainly do honour to British surgery. The artist, Mr. Burgess, is well known as a draughtsman of great fidelity and skill, and the publishers have produced the plates in a style which does them credit.

NEW ORTHOPRAXY: the Mechanical Treatment of Deformities, Debilities, and Deficiencies of the Human Frame. By HENRY HEATHER BIGG, Associate Institute C.E. Third Edition, revised, enlarged, with 319 Illustrations. London: J. and A. Churchill. 1877.

MR. HEATHER BIGG's well-known and valuable practical treatise has achieved just popularity, with steadily increasing success. In this third edition, it has grown to notable dimensions, which it has legitimately acquired by the gradual accretion of an increasing experience from a large field of practical observation. Mechanical therapeutics have come to play a very important part in what are here comprehensively described as deformities, debilities, and deficiencies of the human frame; and no doubt benefit has resulted from the very careful study given to the improvement of mechanical devices and apparatus, and to the invention of special appliances for unusual cases by men of large experience and intelligence, such as Mr. Bigg. Increased attention has been given in this volume to the preventive treatment of spinal curvature, and the section on gymnastics of the spine is carefully treated and will be read with profit. We are inclined to think that Dr. Sayre's recently published book on the use of the plaster-jacket in the treatment of spinal curvature will supersede a vast deal of instrument-making for that purpose, and will make every general practitioner his own instrument-maker to a large extent, for which purpose he requires only a suitable flannel jacket bandage and a basin of plaster of Paris. But, while the field of orthopædics may thus be narrowed in one direction, it is constantly increasing in others; and the interest and extent of subjects treated in this work suffice to indicate how much of progress has been made, and how great services may yet be rendered by skilled mechanics who possess the requisite anatomical knowledge.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 19TH, 1878.

A LOST MEDICAL SCHOOL.

OUR pages this week include a continuation of the correspondence commenced three weeks ago, in which a series of important statements have been laid before the profession concerning the once famous Medical School of the University of Oxford. This correspondence has discussed the state of the Medical School of Oxford, and has disclosed a present state of things and a historical series of facts which certainly deserve prompt and serious consideration, and seem to call for deliberate and very vigorous action. When first the statements contained in the letter of "A Member of Convocation" were brought under our notice, they appeared to us of so unexpected and remarkable a character, that, but for the excellent means of information at the command of "A Member of Convocation", and the obvious attention which he had given to the subject, as well as the great importance of the question in its general relation to the progress of medicine and the privileges of the medical profession, we should have hesitated to allow it to appear. An investigation of the subject, however, afforded us grounds for believing that substantially, as regards the facts themselves, and irrespectively of any personal relation to them of the eminent men whose names he cites, the statements which he brings forward have so large a mass of evidence in support of them as to be at least deserving of the thorough sifting which they are likely to have when published in the columns of this JOURNAL. "A Member of Convocation" very closely connects the decadence of the Medical School at Oxford with the name and the acts of a medical man than whom no one has more amply testified, by his public statements and by his public functions, to a deep interest in the progress of medical science, the maintenance of medical interests, and the development of medical education. Dr. Acland is known to all the profession, not only as Regius Professor at Oxford, but also as the President of the General Medical Council of Great Britain, and as having taken a large and active part in the promotion of the costly Museum of Physical Science at Oxford; he is also known as having devoted a large amount of time and consideration to questions of public health and organisation of preventive medicine. As a past President of the British Medical Association, which he received with generous hospitality at Oxford, and to whose prosperity and public influence he largely contributed during his period of active association with it, and since then and to this moment, we can testify to the active and large interest which he takes in the promotion of legislative or other action which tends to the highest interests of medicine and the medical profession. Dr. Acland cannot, however, have lived a life of busy public occupation, and held important public offices, without being aware that his public acts are open to free debate, and if necessary to arraignment. This is especially the case in respect to the method in which those functions have been carried out, when a *prima facie* case is made out supporting the view that, however good or however wise the intentions may appear to have been by which he has regulated the performance of those functions, the result has not been satisfactory.

Such investigation as we have made of the present and past history of the Medical School at Oxford appears to show that there is ground for saying, irrespectively of any individuals, that the decadence of the Oxford School of Medicine is not only a serious loss to the University and to the profession, but that it has been accompanied, and has been largely due, to a diversion of funds intended for the purpose of medical education; and that the present state of things calls urgently for a sweeping measure of reform, such as can only be carried out upon application to the recently appointed University Commissioners for a large measure of reorganisation. Great medical names are connected with the early history of the Medical School of Oxford—the names of Harvey, Radcliffe, Willis, and its many benefactors. Linacre and Lee left large funds, which have been slowly but systematically diverted from the study of medicine, until at last the Medical School, as "A Member of Convocation" states, has been squeezed out of existence, and until the Medical Faculty of the University has been, within the last few years, completely abolished. Our correspondent, in his first letter, wrote:

"At a recent date, the Medical Faculty of the University of Oxford preserved a nominal existence; and in the *University Gazette* we read—Medical Faculty: Regius Professor, H. W. Acland (no lectures); Clinical Professor, H. W. Acland (no lectures). This, however, probably exposed too plainly the peculiar manner in which Dr. Acland understands his duty to the profession and in which he administers his historic office. The Faculty has, therefore, been removed from even nominal existence, and this professorship appears now only under the head of Physical Science and Mathematics, to which latter department it is probably considered more properly to belong, as having only an abstract existence. The Professorship of Physiology and Anatomy is scheduled under the same heading, the contempt of its incumbent for medicine being thus officially proclaimed."

Two Oxford Graduates of Medicine, writing on January 12th, whilst paying an eloquent tribute to the personal merits of Dr. Acland and Dr. Rolleston, concluded their letter by affirming that medical education at Oxford is now a scandal and disgrace to the University by its absence.

In order to remind ourselves by what course of proceedings the present state of things has been brought about, we have to remember that Dr. Acland holds at the present moment, as "A Member of Convocation" this week points out, the combined offices of Regius Professor of Medicine, Aldrichian Professor of Medicine, and Lord Lichfield's Clinical Professor, as well as those of Chief Examiner of the Medical Faculty, and Radcliffe Librarian; the sum total of the activities of the three professorships combined in one person are alleged to be represented by the notices in the *University Gazette* which have been quoted. Although notices have at regular intervals appeared in the papers which led many to suppose what they were probably not intended to lead any one to suppose, that the Regius Professor and the Clinical Professor was in the habit of affording regular instruction in medicine and in clinical medicine to Oxford medical students, it appears from the statements of "A Member of Convocation" that such is not the fact.

As to Dr. Rolleston, whose high attainments as a comparative anatomist and physiologist are so well known as to render any tribute from us superfluous, he will probably not contend that he has been in the habit of teaching human anatomy and physiology in the manner customary in other medical schools or intended for ordinary medical use; and, whatever may be the excellent reasons which have prevailed in his mind in divorcing the professorship which he holds from the regular course of medical education, he will probably be one of the first to admit that he has not included in his instruction a course of physiology and histology such as is required by the examining bodies, with the approval of the General Medical Council, as the base of a sound medical education.

But we have had to point out that the whole story is not told, if attention be confined to the clinical professorships of medicine and to the professor-

ship of physiology. There exists at Oxford a Trust Fund of considerable annual value, which, in addition to the endowments of which we have spoken, would make up a large part of the annual funds requisite for the establishment of a staff and a system of teaching as would make the Medical School of Oxford a reality; and these funds have been often more flagrantly diverted from the service of medicine than have been the funds designed to endow the chairs already spoken of. On this subject, our readers will find the Blue Book containing the report and evidence of the University Commission, published in 1852, and that of the University Commission (Revenue), published in 1874, invaluable as throwing light on the determined misappropriation to other purposes of funds originally applicable to the furtherance of medical study in the University of Oxford.

A Trust Fund was left by Dr. Matthew Lee to Christ Church, Oxford, for the sole and express purpose of providing for the study of human anatomy. The Blue-Book of 1874 shows, if we rightly read it, that this fund is now actually no less in value than £3,400 annually. It also shows in what way the governing body of Christ Church are spending the money. Of the whole £3,400, only £294 is paid to a teacher of anatomy; and this not to a teacher of human anatomy, but to a gentleman learned in details of zoology. *Not a farthing of Dr. Lee's bequest is now used in the interests of medicine.* Christ Church is actually allowed to employ the remaining £3,100 of Lee's fund in making the following payments; viz.: a Reader in Chemistry, £294; a Reader in Physics, £294; a College Lecturer in History (can malversation go further?), £294; a Mathematical Lecturer, £50; expenses of the Chemical Laboratory, £500; and (perhaps the most preposterous perversion of the fund of all) to boys from Westminster School, as "scholarships" awarded for classical attainment, £1,200.

It is really an affecting thing to read by the side of the above figures the will of the excellent Dr. Matthew Lee, dated August 27th, 1755. It is to be found on page 282 of the Blue-Book of 1852. Dr. Lee gives the most precise directions as to the duties and payment of his anatomical lecturer, for whose support alone his bequest was intended, although he did not expect the property left by him to realise more than one hundred pounds a year. The lecturer was to be a layman. He is to be paid his salary "half-yearly for ever". He "shall take, teach, and instruct no pupils in any art or science whatever except anatomy, physick, or botany; and shall go through two regular and complete courses of anatomy every year, in each of which he shall dissect at least one adult human body". Poor Dr. Lee further directed the Dean of Christ Church to withhold from the reader his salary if he had failed on any occasion to dissect and expound a human body in the half-year for which the salary was due. These provisions were made and solemnly accepted only one hundred and twenty years since. For fifty years there has been no more attempt to carry them out than would be expected were solemn compacts the work of lunatics.

From the Blue-Book of 1852, it is obvious that the systematic neglect of medicine, though now, it is alleged, developed to an extreme, had reached a high pitch under the late Regius Professor, Dr. Kidd. This gentleman stated with great *naïveté*, in his evidence (Blue-Book of 1852, p. 256) before the Commissioners: "On the subject of medicine I have never been called on to lecture, partly because it has been an universal custom, for the last sixty years at least, for the medical students of Oxford to resort to the London or other schools for the purpose of attending lectures on the Theory and Practice of Medicine as soon as they had taken their degree of Bachelor in Arts at Oxford; and partly because the very few who wished for information on the subject of medicine during their undergraduateship preferred an attendance on the lectures delivered by Lord Lichfield's Clinical Professor at the Radcliffe Infirmary." It is, of course, not irrelevant here to

notice that Dr. Kidd's successor as Regius Professor—namely, Dr. Acland—has been appointed also to the Clinical Professorship; and that that office has, it is alleged, become, like the Regius Professorship, a sinecure.

We had hoped to have had, perhaps, the benefit of Dr. Acland's remarks upon the correspondence thus far; but it would be unjust to complain of his reticence. He may object to answer correspondents who, while singling him out by name, have not given their own; though that is a discomfort to which the incumbents of public offices soon become accustomed; and it is obvious that not every one who feels it his duty to point out a public grievance feels called upon to do more than to give to the editor of the journal to which he writes the requisite proofs of his personal *bona fides* and right to be heard on the subject. Dr. Acland may, perhaps, on the other hand, decline to come forward as a champion of a system of which he recognises the abuses, and with which he has possibly only a powerless and unwilling association. We prefer to think the latter the more probable hypothesis; and, at any rate, while we have thought it our duty to do all that can forward free discussion and prompt reform of the present state of the Medical School of Oxford, we anticipate that we shall find Dr. Acland in what, from the whole tenour of his public utterances and acts, we believe to be his place of predilection—in the van of a reforming movement. For such a movement we hope the recent publications in these pages have now given the signal. The moment is unquestionably opportune. The shame to the University of Oxford of such a state of things as has been described appears great and crying. The highest educational interests of the profession are involved, and the usefulness of the University has been seriously damaged. The graduates of the University, both in medicine and, we would fain hope, in other faculties, will no doubt feel it now to be their duty to form an organisation for the purpose of pressing upon the University Commissioners the necessity of putting an end to such a state of things as has been disclosed, and restoring to Oxford, in whatever form or however modified, its "lost School of Medicine". Nor can the profession at large be expected to stand by unmoved, now that we have put fairly before them the history of the past, the promise of the future, and the outline and schedule of their wasted heritage.

PHYSICIANS AND FEES.

THE correspondence on the subject of the relations of physicians, practitioners, and patients, and of medical fees, is being carried on in our papers by writers, many of whom occupy eminent positions in the profession, and who are, in their respective spheres, in the best position to judge of the difficulties of which they speak, and of the advisability of the suggestions which they make; and we could wish that they should have added to their letters their own signatures, which would have given great additional weight to their writings. However, the mere fact that so many eminent men should take part in the discussion, indicates the large hold which it has at the present moment on professional attention. The letter signed by Mr. Crombie, and relating to a circumstance at Aberdeen to which a former correspondent had called attention, is of particular value, as illustrating the very mixed nature of the duties and classes between which a sharp line is sometimes drawn, and the local character of distinctions thus made. It would seem that in Aberdeen, as our correspondent of the 29th ultimo states, a gentleman holding the position of Professor in the University, and the appointment of Surgeon at the British Court, has for some years acted as surgeon to a small club of eighty members, almost wholly belonging to the operative classes, at a stipend of £10 *per annum*, made up by small uniform contributions from the members. Mr. Crombie, the secretary of the club in question, explains the circumstance; and observes that in Aberdeen, as in other provincial towns in Scotland, there is no distinction made between the con-

sultant and the general practitioner. He adds, that he could not see what injury the club in question has done to anyone by availing itself of the services of its distinguished medical attendant, and that the yearly stipend is surely too trifling to excite envy or ill-feeling. We may perhaps agree with him that the club has done no one any injury, and that there is, in the stipend of £10 *per annum*, nothing to excite envy or ill-feeling; nevertheless, the situation is one calculated to excite considerable interest, as throwing light upon the relative position of consultants and general practitioners, and the extent to which the duties, emoluments, and relations of the various classes are sometimes mixed; and its main interest, at the present moment, is an apposite illustration of the difficulties to be solved if any attempt is to be made to maintain distinctions between these classes, and to arrive at any sort of understanding of what is the relative position of the members of the profession distinguished by such titles, and what principle is to guide the tariffs of fees demanded. It has to be considered in the light of this example, whether the limit is to be solely at the upper end of the scale, so that the consultant shall never charge more than a guinea if the patient consult him at home, but may be, without objection, brought down at the lower end of the scale to a sixpenny or a shilling fee, which, we presume, would be the maximum payment for individual cases calculated upon an annual stipend of £10 for eighty members. In order to arrive at any conclusion as to these limits, cases in the different parts of the Kingdom, in the great cities of Scotland and Ireland, as well as of England, should be brought before the profession, so that it may be determined how far any understanding arrived at is to be local or general.

NAVAL MEDICAL ADMINISTRATION.

THE question of the premeditated changes in the government of naval medical establishments was, it is alleged, raised through an article which appeared in a weekly naval paper about a month ago, instigated through pique and animosity against the head of a naval hospital. If that be so, we regret that better means were not taken for making public such causes of complaint. There are, however, good grounds for doubting whether the Admiralty contemplates the changes spoken of, for there has been no complaint raised by them against the present system, and until a charge is brought against the medical officers, there is no occasion for them to stand upon their defence. *Qui s'excuse s'accuse*. Nor is there, we think, any reason why they should make the changes which have been proposed. It has been said that they would act upon the ground of discipline. Now, as to this, the reply is clear that no executive could act without consulting the medical authorities, and the experience of a gentleman of many years' standing and of high repute in naval medical affairs is that the *suaviter in modo* is the strongest law; and that, moreover, as no power to punish was ever vested in captains superintending hospitals, beyond confining a patient to bed, with the sanction of the medical officer, there is no reason here to return to the former state.

Another motive assigned is that there should be a check upon the too powerful medical element, or some one who would look upon proposed alterations and suggestions for improvement from a disinterested point of view. But is not the "common sense" of one man equal to that of another, whether he be a captain or a doctor? And so also should be power and sense to govern a large establishment for the cure and relief of suffering, from which the elimination of military rule has done more to conduce to the comfort of the inmates than the feeling that military discipline follows them to their bedside, and that, even in their walks in the grounds, they must also be always on the alert to stand straight and turn their eyes right or left. Nor, indeed, are sick persons the most likely to be guilty of a want of proper respect.

Whatever the good expected from this proposed change on public grounds by the agitators in this matter, in justice to those who now hold the office and to those who have preceded them, a fair trial should be allowed; and if found wanting, they should be treated according to

their deserts. Nothing better could be desired, than to see a fair report of what has been done in naval hospitals during the time they have been under the superintendence of medical heads. We question whether, in one in particular, of which we have taken special notice, under other rule, so few changes in the personal staff of the hospital, whether of the attendants on the sick or labourers who work in the grounds and offices, would have taken place, or more have been done to improve their comfort without deteriorating from their efficiency; while, at the same time, there has been complete harmony between the medical chief and the other officers, and the establishment has been maintained in a state of complete efficiency. Similar results, we are assured, would be generally found to have been attained in the other institutions which would be affected by the changes proposed; and this is entirely in accordance with the experience of those great county asylums, as at Wakefield, where the medical superintendent has been invested with general governing power.

FOUND DROWNED.

WHAT is the meaning of the verdict "Found drowned", often returned by coroners' waterside juries in inquests on bodies taken from the river Thames? Would it not be more correct to record a verdict of "*Found dead*"? But the inconvenient question might then arise between the coroner and the magistrates who pay the expenses of these inquiries—Of what use is an inquest, when the waterman who picked up the body could arrive at the conclusion just as readily and upon as safe grounds as the twelve discreet persons summoned as jurors by the coroner? The verdict is surely based on a mistake. The body is not found "drowned", but simply "in the water"; and so the verdict ought to run in a large proportion of these cases, in which no *post mortem* examination is either ordered or made. We are induced to make these remarks from the report of an inquest held on December 22nd by Mr. Humphreys, at a tavern in Poplar, on the body of a gentleman aged 35, found floating in the river Thames. George Harrison Abbott, a lighterman, stated that on Thursday morning he found the body of the deceased floating in the Thames off Blackwall Pier. George Sander, Inspector of the Thames Police, stated that the deceased was dressed in dark tweed trousers and vest, but *no coat*. All the under-linen was of a superior quality. The button-hole of the vest showed that the deceased had worn an Albert chain. In his pockets were one shilling and twopence, and a pocket-knife. The body, which bore *severe marks of violence*, had been in the water about ten days. Dr. Bramfield, police-surgeon, who had examined the body, said the injuries had been inflicted *before death* by some sharp instrument. Mr. Thomas Gray, surgeon, said he had examined the body, and found a *severe cut over the left eye, caused by a sharp instrument*. The right eye was black and much swollen; *the bridge of the nose was broken; the cheek-bone had been flattened into the face*; and the left eye was severely contused; but no other bones were broken. All these injuries had been inflicted *before death*. The cause of death was *drowning*. A photograph of the body had been taken. A verdict of "Found drowned" was recorded.

We are at a loss to reconcile the medical opinion and the verdict of the jury with the state of the body. The "severe marks of violence" on the body inflicted by a sharp instrument, and, as it is alleged, all bearing the appearance of having been inflicted before death, are medical facts not consistent with death by drowning, unless we assume that there had been a violent struggle with assassins on board of some vessel or on the banks of the river immediately before submersion.

The marks of violence found on the body are wholly unlike those which are seen on the bodies of drowned persons as the result of accidental collisions with anchors, chains, or other objects in a tidal river, after death. Besides, we presume that the two medical gentlemen had good reasons for stating that all the injuries had been inflicted *before death*; and, so far as they are described, they appear to be adequate to account for death. The injuries to the face were such as

were likely to be followed by insensibility, and to prevent a person receiving them from making any effort to save himself if immediately thrown into water. There was nothing about them to indicate suicide; and the only conclusion to be drawn is, that this was really a case of homicide, probably murder, preceded by robbery.

It is loosely stated that the cause of death was drowning; but there is no evidence of this. So far as the report allows us to judge, the body was inspected externally, but no internal examination was made. At any rate, there is no account of the appearances on which the medical witnesses relied to show that the deceased had really died from drowning, or that he had gone into the water living. After a dead body has been floating in a river for ten days, it would be somewhat difficult to express a positive opinion on this point.

In our view, all the facts proved at this inquest render it highly probable that this was an act of murder screened by the verdict of the coroner's jury "Found drowned"; one of many which, we believe, occur yearly in the metropolis under similar circumstances. No *post mortem* examination of bodies taken from the river is usually made; and whether the persons have died in the water from drowning, or out of the water from murderous violence, the bodies being afterwards thrown into the river for concealment of the crime, remains a matter of conjecture; the inquiry of the coroner being commonly satisfied by the evidence that the body was found in the river, and therefore "Found drowned".

This case will, no doubt, appear in the registration returns of deaths as one of drowning. It will form an erroneous unit of the large number of cases of alleged drowning which occur annually in London, and will, of course, mislead the statistician who is dealing with the causes of death. To give our readers some idea of the number of these so-called drowning cases which occur yearly in and around London, we may state that according to the returns for ten years from 1858 to 1867 there were 3,367 deaths registered in London from this cause; 2,965 by accident (as returned), and 402 by suicide. At the present date, with the increase of population, they probably do not average fewer than from 350 to 400 *per annum*. As to murder by drowning, it will be practically ignored until the present perfunctory method of conducting these inquests is abolished. In a large number of these cases, the unsatisfactory verdict of "Found dead" would be more appropriate than "Found drowned". Under a new system of conducting such inquiries, we may hope to have mortuaries like the Morgue in Paris, to which all drowned bodies may be taken, and there undergo a proper medico-legal examination, without permitting that indecent exposure whereby the dead bodies in the Morgue are made a public exhibition.

DR. J. S. TAYLOR has been appointed, not without protest, medical officer of health for Liverpool, in the room of the late Dr. Trench.

DR. PATRICK HERON WATSON of Edinburgh accompanies Lord Rosslyn as one of his suite as the deputation to Madrid to represent the English Court at the wedding of the King of Spain.

DR. GUY, F.R.S., is nominated one of the Commissioners to hold the inquiry relative to convict prisons, promised by the Secretary of State last session.

WE regret to see announced the death of Dr. James Blundell, the famous accoucheur, which had on more than one occasion been erroneously reported. Dr. Blundell died at his house in Piccadilly on January 15th, aged 87. We must reserve further notice until next week.

THE paper by Dr. Bastian which we published in the last number was the concluding part of a communication now in course of publication in the fourteenth volume of the *Transactions* of the Zoological Section of the Linnean Society; and it was read by him to the Society summer.

THE Earl of Derby is, we are glad to hear, favourably convalescing from a sharp attack of dysentery, which has compelled his absence from the recent Cabinet Councils.

UNIVERSITY OF LONDON.

At a meeting of Convocation on Tuesday last, the new Charter for admitting women to all degrees in the University of London was approved by a large majority. Sir William Jenner, Dr. Quain, Mr. Lister, and others, spoke expressing their disapproval; Dr. Pye-Smith, Mr. Hensman, and Mr. Bompas speaking in support of it. It is, however, understood that the question of the best method of acting upon the Charter will be left to the consideration of the medical members of the Senate.

FRIENDS OF ADULTERATION.

THE Justices of Pembrokeshire have decided, in answer to a renewed application from the Local Government Board on the subject, that it is unnecessary at present to appoint a public analyst.

MILK-STANDARDS.

THE present standard of purity, or rather of impurity, accepted in the London police courts in respect to milk, is eminently unsatisfactory, and facilitates large and systematic frauds on the public. The Society of Public Analysts, after long deliberations, adopted a limit in the case of milk which allowed the milk of an ordinary healthy cow to be diluted with five per cent. of water, and yet pass without condemnation. This in itself was a doubtful proceeding; but the *employés* at Somerset House have apparently capped it by taking as a standard the poorest possible milk that ever man extracted from a cow under any circumstances; and they have seemingly finally decided that, as far as they are concerned, average milk with twenty per cent. of added water should be passed as genuine, lest by chance the proprietor of a diseased or underfed cow should accidentally suffer, say once in twenty years. Such a conclusion is, the *Analyst* holds, as lamentable as it is ridiculous, and against all preconceived notions of public morality. In that opinion we entirely concur; and we may add that its practical effect is to place the public entirely at the mercy of the milk-dealers, many of whom largely profit by it to dilute and skim the milk to such an extent as to rob it of twenty-five per cent. of its nutritive properties, and then retail it at the highest price and under cover of the most imposing misstatements.

THE TREATMENT OF CONFIRMED DRUNKARDS.

THE Mayor of Boston appointed lately a Committee of three, consisting of Rev. Dr. A. A. Miner, Dr. George C. Shattuck, and Dr. John E. Tyler, to examine and report on the treatment of drunkenness in the city institutions, and to suggest some measures for the reform of this class. The report of the Commission, as stated in the *American Quarterly Journal of Inebriety*, appears to be worthy of attention. They condemn the method of dealing with drunkards by which men and women arrested and charged with intoxication are fined in some small amount, generally ten dollars, or sent to a workhouse or penitentiary for some short period, commonly thirty days. If the fine be paid, the burden falls upon the family or friends of the drunkard, who are innocent of all fault, and are sufficiently punished by the mere fact of his drunkenness. If he be sent to prison, the term of his confinement is long enough for him to get sober, but not long enough for him to acquire habits of sobriety. The consequence is, they say, that a restoration to liberty is followed by a new outbreak and another commitment. The police statistics of London and New York establish this fact, in their opinion, beyond all doubt. The worst defect, however, of this method of punishment is its failure to make any distinction between drunkards and criminals. These conclusions lead to the recommendation which the commissioners make for a new mode of proceeding in the treatment of inebriates. They suggest that the city of Boston should convert the institution at Deer Island into a sort of reformatory, where all kinds of agricultural and mechanical labour can

be carried on. Thither drunkards should be sent for terms long enough to enable their constitutions to recover thoroughly from the effects of alcohol and to give them an opportunity to acquire habits of industry. In some cases, a year would be sufficient for this purpose; in others, three years might be required. There would be enough of punishment involved in the reformatory process to make it thoroughly salutary. So long as the present system of fines and temporary imprisonment serves to manufacture drunkards instead of reforming them, this topic of the relation and duties of the community towards inebriates will continue to be of the highest interest in all countries; and we on this side of the Atlantic, who have already been greatly influenced in this matter by American precedents, shall attentively watch the result of any fresh experiments at Boston.

SALT IN BEER.

PROFESSOR BERNAYS, Public Analyst for Camberwell, makes some statements in his last report which are very important in relation to a recent prosecution. In the past quarter, he has examined eleven specimens of beer, ale, and porter. As to alcohol, except in a spruce-beer which contained 14.3 per cent., the variation was only between 8 and 10.5 per cent. The same lack of hops is exhibited as of old; at least, a little goes a long way. But the most curious feature is in the increase of salt. He has mentioned the almost absence of salt in days gone by. Now, however, we have arrived at a quantity, in one case, so large that he obtained a magisterial decision and a penalty, reduced, at the request of Mr. Marsden, from £10 to £5, together with costs. He gives examples, stating the grains per gallon: No. 57, not estimable; 58, 5.60; 59, 11.20; 68, 13.30; 67, 30.10; —, 32.90; 63, 34.30; 61, 44.10; 60, 47.69; 69, 58.10; 70, 82.60. Here, then, we have, from a merely nominal presence, as much as eighty-two three-fifths grains of salt in a gallon: a quantity sufficient to induce thirst and to encourage drunkenness.

HOSPITAL SUNDAY IN LIVERPOOL.

SUNDAY last was the eighth anniversary of Hospital Sunday in Liverpool, and, so far as is at present known, the results promise very satisfactorily. The total sum realised by the Sunday collections and "Saturday boxes" has for some years averaged £10,000, at an annual expense of three per cent. The late Mayor (Sir A. B. Walker) remarked that this sum would, if capitalised, represent a sum of £200,000. It may not be unprofitable to point out the chief causes to which Liverpool owes its success in this matter. To begin with, the Sunday and Saturday collections are under the management of the same Committee, which has for its chairman the Mayor for the time being, and is thoroughly representative, numbering clergy and laity in nearly equal proportions. The former comprise the Archdeacon and Rector of Liverpool, and representatives of nearly all the various sects. Among the lay members are gentlemen who are members of the Committees of the principal medical charities, and three members of our profession (Dr. Steele, Dr. Lodge, and Mr. F. W. Lowndes). The Secretaries, the Revs. W. Banister and Charles Beard, take the greatest interest in their honorary and very arduous duties; and to them and Mr. W. Crosfield, jun., the Honorary Treasurer, much of the success is due. On this latter gentleman devolves the arduous duty of receiving the "advices" from nearly three hundred clergy and ministers, and the counting of the Saturday boxes, in addition to other duties. The daily press cordially aid the movement by drawing the attention of the public to the coming Sunday or Saturday in leading articles; and on the previous Sunday due notice is given by the clergy and ministers in all the churches and chapels that the collections on the following Sunday will be given to the medical charities. Full particulars of each hospital and dispensary are distributed freely among the congregations, and notices posted on all the church and chapel doors. It may be some encouragement to those who find it difficult to establish Hospital Sunday in their midst, to learn that this means of augmenting the funds of the hospitals was only accomplished in Liver-

pool by the most strenuous exertions carried on for years. The difficulties in the case were so great, that they were not overcome till Hospital Sunday had become an institution in all the large and many smaller provincial towns and cities.

ELECTRICAL EQUIPMENT OF HOSPITALS.

IT has often been suggested that some means might be adopted by which electricity could be made more readily available as a remedial agent in cases of suspended animation, collapse, and other conditions which are met with occasionally in the surgeries and operating theatres of all hospitals. Arrangements to this effect have been recently carried out in Guy's Hospital, where the two surgeries (male and female) as well as the operating theatre, are brought into continuous connection with the electrifying-room in the centre of the Hospital. In the theatre, the surgeon, in the event of his requiring the agent, has simply to press a small stud, which rings a bell in the electrifying-room, and a simultaneous movement on a numerical indicator shows where the current is required, and not a minute elapses ere the battery is in full operation, the power of the current in the theatre being regulated by the raising or depressing of a metal rod in a glass tube filled with water. In each surgery, in consequence of the absence of the electrician during the night, when the battery is in greater requisition, a somewhat different arrangement is adopted. The current is here placed on by the operator himself by the simple movement of a spring which becomes affixed to a metal button, and the strength of the current is regulated in a similar manner to that in the theatre. Suitable indicating apparatus enables the electrician to discover where the current has been used during the night, and whether it has been left negligently on; and in the daytime, he knows where it is being used, how long it is in operation, and the varying strength of the battery, and whether it requires recharging. The whole apparatus works satisfactorily, and has already been found exceedingly serviceable. Mr. Seymour, the electrician to the Hospital, who has been solely instrumental in carrying out these arrangements, proposes to conduct the currents from the electrifying room to the separate medical wards, so as to obviate the necessity of carrying about his heavy batteries to distant parts of the Hospital.

SMALL-POX CASES AT ST. BARTHOLOMEW'S HOSPITAL.

DURING the present prevalence of small-pox in London, and especially in the Eastern districts, it is not surprising to hear that some cases have occurred in our Metropolitan hospitals. The large number of patients and their friends who enter the hospital every week from infected districts must at times bring the danger of contagion. Five cases of small-pox have just occurred in St. Bartholomew's Hospital. These were confined to two of the wards. As soon as the cases were identified, they were removed from the hospital, and stringent measures were adopted for the complete isolation of the patients remaining in these wards, as well as of the nurses and servants there engaged. These restrictions were maintained until the medical staff were of opinion that they were no longer necessary, the visits of friends to the two wards where the outbreak had occurred have been prevented for a few days longer. No fresh cases have occurred.

SMALL-POX AT HARWICH.

WE are informed from Harwich that fresh cases of small-pox, at the average of one daily, have occurred there; and, judging from the virulent type of the cases, it does not appear that the epidemic can be said to be on the wane. Out of thirty-nine cases received into hospital, as many as sixteen have been confluent or semiconfluent. Amongst them are included two that come more properly under the class of variola cruenta, where the skin on the face and forehead had a purple hue, as if from effused blood; and, instead of raised vesicles, there appeared rather hyperæmia of the papillæ. So far, there have been eight deaths in the hospital, making a little more than twenty per cent. of those admitted. There appears, indeed, to be only one way of stamping out the disease, and that is by extensive (compulsory)

revaccination. If this be not carried out, an epidemic, which could easily be stamped out in three months, will hang like a pall over the district, perhaps for twelve months to come, not only paralysing trade and commerce, but severely thinning and weakening the population.

THE HEALTH OF THE POPE.

A MEDICAL correspondent in Rome informs us that the health of the Pope is as satisfactory as his old age and state of habitual debility can allow. For six weeks he kept his bed, not from actual necessity, his physicians having given advice to the contrary, but because he suffered less pain in his leg when in a recumbent position; and he may be influenced by the knowledge that one of his brothers, who died at an advanced age, remained in bed almost continuously for seven years without detriment to his general health. The mechanical structure of the pontifical couch has been arranged in Paris so that, by means of a system of wheels, he can easily be transported from one place to another; and, by the advice of his attendant, he changes his room more than once a day. His intellectual faculties and spirits have shown no sign of decadence; and, in spite of his advanced age, it is quite possible that his life may be prolonged for some years to come. I am just informed that, following the wish of Dr. Ceccarelli, the Pope has left his bed for some hours. All that relates to the health of His Holiness is enshrouded in mystery.

ROYAL EAR HOSPITAL, SOHO.

THE Committee have been during the past year very busy reorganising this charity, which is the oldest special institution for aural diseases, having been founded in 1816. In January last, the vacancy occasioned by the death of the Senior Surgeon, Mr. W. Harvey, was filled by the promotion of Dr. Urban Pritchard, and Dr. Matheson was appointed Assistant-Surgeon. The Committee have now been fortunate enough to secure the services of Dr. Lionel Beale as Consulting Physician, and Mr. John Wood as Consulting Surgeon. The name of the institution has been changed from the "Royal Dispensary for Diseases of the Ear" to the above; and an in-patient department with six beds is to be added, thus supplying a want long felt by the surgeons.

THE SOCIAL SCIENCE ASSOCIATION.

AT a recent meeting, this Association considered the question of the water-supply to the metropolis, in regard first to its purity of source, the continuance of its service, the pressure at which it ought to be delivered, and the manner in which it ought to be controlled; when it was stated that of eight leading water-companies of the metropolis, seven obtained their supplies from a sewage-polluted source, the exception being the Kent Water Company.

CLINICAL SOCIETY OF LONDON.

THE following is the list of officers and Council for 1878 elected at the last meeting of the Society. The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during 1877. *President:* G. W. Callender, F.R.S. *Vice-Presidents:* *Wilson Fox, M.D., F.R.S.; *S. O. Habershon, M.D.; C. Murchison, M.D., LL.D., F.R.S.; R. Barwell, Esq.; C. Heath, Esq.; *J. W. Hulke, Esq., F.R.S. *Treasurer:* E. H. Greenhow, M.D., F.R.S. *Council:* H. Charlton Bastian, M.D., F.R.S.; Andrew Clark, M.D.; Thomas H. Green, M.D.; *Graily Hewitt, M.D.; A. J. Pollock, M.D.; *J. E. Pollock, M.D.; R. Southey, M.D.; *H. G. Sutton, M.B.; *Thomas T. Whiphram, M.B.; C. Theodore Williams, M.D.; Frederick J. Gant, Esq.; *James G. Glover, M.D.; J. Warrington Haward, Esq.; *J. Langton, Esq.; W. Mac Cormac, Esq.; Arthur B. R. Myers, Esq.; *Thomas P. Pick, Esq.; Michael W. Rice, M.D.; Edgcombe Venning, Esq.; *William W. Wagstaffe, Esq. *Honorary Secretaries:* William Cayley, M.D.; *F. Howard Marsh, Esq. The annual reports of the Council and Treasurer which were read to the meeting showed that the Society was in a flourishing

condition. Dr. A. P. Stewart and Mr. Spencer Watson moved that the reports be adopted. The motion was carried unanimously. Mr. Maunder and Mr. T. Smith moved a vote of thanks to the retiring Vice-Presidents and members of Council. This was also carried unanimously. Lastly, Mr. Berkeley Hill and Dr. Burney Yeo moved that a special vote of thanks, for his very valuable services to the Society, be accorded to Mr. Pick, the retiring Surgical Secretary. This proposition was carried with marked approval.

SUICIDE OF AN ENGLISH DOCTOR.

THE *Globe* states, on the authority of a Russian correspondent, that on the 21st ultimo, as Dr. Radcliffe, who was suffering from mental aberration, was being conveyed from Massan Yoor to Tiflis, under the charge of a Russian military surgeon, he contrived, at the Tsalkanski Station, to effect his escape, and was afterwards found in a retiring room lying dead on the floor. In his hand was found a knife, with which he had almost severed his head from his body. At the official inquiry held on the following day at the Tsalkanski Station, a district doctor stated that, during the *post mortem* examination, he had extracted from the head of Dr. Radcliffe a rifle-bullet, which had penetrated the skull sufficiently deep to cause insanity, though not death. The injury had been inflicted while the doctor was attending the wounded on one of the battlefields of Armenia.

THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE Quarterly Court of the Directors of this Society was held on Wednesday, January 9th, by the kindness of the Royal Medical and Chirurgical Society, in their rooms, 53, Berners Street. The chair was taken by Dr. Pitman, Vice-President. The sum of £1,238 was voted to be divided, according to their circumstances, among sixty widows; a sum of £55 was distributed to twelve children; and £25:10 was given from the Copeland Fund to four applicants for assistance. The expenses of the quarter amounted to £39:1:3. The Treasurer informed the Court that the Christmas present had been distributed on December 17th among fifty-eight widows and fourteen children, and was received with much gratitude. The amount given was £326. Fresh applications for grants were accepted from two widows and two orphans. Six new members were elected. We may once more call attention to the extremely valuable results achieved by this beneficent Society, and the very small amount of the expenses incurred in distributing the relief granted. Moreover, there is here no loss of interest chargeable to capital sunk in grounds and building, and in salaries of officers necessary for keeping up the same; and, as the whole of the benefits are distributed without the pain, costs, labour, and injustice involved in the canvassing system, we cannot too highly commend this Society to our members. It is a matter of surprise that they do not join it in greater numbers; for, in so doing, those whose means of sustenance hang upon a precarious thread provide for their families some direct claim upon the funds to which many are by the hard strokes of fate unexpectedly compelled to appeal, whilst those who are sheltered from such misfortunes contribute a tax but lightly felt towards funds which are distributed in the most unexceptionable, careful, and economical manner to the distressed widows and orphans of medical men.

EXCISION OF THE LARYNX.

THE man on whom Dr. Foulis of Glasgow performed the operation of excision of the larynx, as reported in the *JOURNAL* of December 8th, 1877, was exhibited at the meeting of the Medical Society of London, on Monday evening last. The artificial larynx, devised by Gussenbauer for the subject of Billroth's first operation of the kind, in 1873, was also shown. The apparatus used in Dr. Foulis's case is a modification of that of Gussenbauer. It consists of two tubes, one of which goes downwards to the trachea, and the other upwards to the mouth. The patient, we are informed, can talk in a whisper without these tubes; but when a reed-plate is slipped into a groove in the lower tube,

a resonant sound is produced, which is modulated into letters and words by the mouth. The articulation with or without reeds is perfect. The reeds are made of metal, vulcanite, ivory, horn, etc., and the patient himself is fond of making reeds which give his voice new and surprising tones. The voice is a monotone, varying in *timbre* according to the reed used. The sound-waves of the patient's voice on König's mirror were similar to those of other voices, as was shown by Mr. Ward with a mirror lent by Mr. Spottiswoode. Dr. George Buchanan (the President of the Society), Dr. B. W. Richardson, Professor Lister, and others, spoke very warmly of the results achieved.

UNIVERSITY FACILITIES.

THE English medical student is the only student in the three kingdoms to whom the degree of M.D. is made almost inaccessible unless he consent to expatriate himself. We have often pointed out the hardships, and shall not cease to return to the topic until a remedy is provided, that the London medical student, after he has passed through a triple ordeal of examination by the three great licensing bodies of London—the Colleges of Surgeons and Physicians and the Apothecaries' Society—is not entitled to call himself a Doctor, although that privilege is acquired on certainly no more onerous terms, and after no more severe tests of knowledge, by students of Edinburgh, Glasgow, Aberdeen, Durham, Belfast, Cork, Galway, etc. Dr. Charteris of Glasgow, in an address which he gave last November at the Andersonian College, Glasgow, observed that he has heard it stated, as a reproach to that College, that its fees are small, and that it offers a cheap pathway to the profession. He considers this as no reproach. Nay, he deems it an unspeakable boon, as well as a distinguishing characteristic. The lips of the slanderer should be sealed when Andersonian students point to the life of an old Andersonian student. Many years ago, a weaver-boy placed a Latin grammar on the spinning-jenny, and, unmoved by the noise of the machinery and the novelty of the position, learned its rudiments as he passed from loom to loom. The boy grew into a loose slim-jointed lad of nineteen years, and was fired by the innate ambition of his nature to become a member of a profession which, as he expressed it, "is pre-eminently devoted to practical benevolence, and which with unwearied energy pursues from age to age its endeavours to lessen human woe". So he scraped together, by the hard work of his handicraft, what would support him here as a medical student during the winter, by returning in the summer to his loom and his weaver's lot. With justifiable independence and pride, he said, "I never received a farthing of aid from any one". The Blantyre weaver-boy had his ambition gratified by the facilities which the Andersonian College gives, and David Livingstone became the great traveller, the good physician, the Christian missionary; and when, tired and worn with life's journey, he sank to his rest, faithful hands bore him homewards, and a grateful nation placed his remains in that mighty mausoleum where England loves to bury those of whom she is proud.

THE PUBLIC HEALTH.

DURING last week, 6,196 births and 4,080 deaths were registered in London and twenty-two other large towns of the United Kingdom. The natural increase of population was 2,116. The mortality from all causes was at the average rate of 25 deaths annually in every 1,000 persons living. The annual death-rate was 28 per 1,000 in Edinburgh, 24 in Glasgow, and 32 in Dublin. Whooping-cough showed exceptional fatality in Plymouth, Birmingham, and Liverpool, and the deaths from scarlet fever were numerous in Manchester. Small-pox caused 35 deaths in London, but not one in any of the nineteen provincial towns. In London, 2,681 births and 1,760 deaths were registered. Allowing for increase of population, the births exceeded by 125, and the deaths by 62, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two previous weeks had been equal to 25.9 and 27.6, declined again last week to 25.7. The 1,760 deaths included 35 from small-pox,

97 from measles, 39 from scarlet fever, 9 from diphtheria, 69 from whooping-cough, 38 from different forms of fever, and 17 from diarrhoea; thus to the seven principal diseases of the zymotic class 299 deaths were referred, against 311 and 292 in the two preceding weeks. The fatal cases of measles, which had been 109 and 104 in the two preceding weeks, further declined to 97, but exceeded the corrected average by 58, including 42 in the South, and 25 in the North groups of districts; 15 occurred in Islington, 8 in Bow and Poplar, 7 in Southwark, and 9 in Camberwell. The 39 deaths from scarlet fever included 19 in North London, of which 7 occurred in Pancras, and 9 in Islington. The deaths from whooping-cough showed a marked decline from the numbers in the two preceding weeks, but included 7 in Islington, 5 in Bethnal Green, 11 in Southwark, and 5 in Deptford. The deaths referred to fever, which had been 41, 36, and 28 in the three preceding weeks, rose again to 33 last week, and were but 4 below the corrected average; 7 were fatal cases of typhus, 19 of enteric or typhoid, and 7 of simple continued fever. The 7 deceased typhus patients had resided in Islington, Hackney, Clerkenwell, St. George's-in-the-East, Bow, Camberwell, and Lambeth. Four deaths were referred to enteric fever in Pancras (of which 3 occurred in Somers Town), 2 in Islington, and 2 in Deptford. Zymotic disease has recently shown exceptional fatality in Islington; and during last week, of 126 deaths registered within this district, no less than 41, or 33 per cent., were referred to the seven principal diseases of this class.

LIVERPOOL MEDICAL INSTITUTION.

THE following office-bearers were elected at the annual meeting of the Liverpool Medical Institution, held January 8th, 1878. *President*: Dr. A. T. H. Waters.—*Vice-Presidents*: Dr. Lyster, Dr. Wm. Carter, Mr. Manifold, Dr. Oxley.—*Treasurer*: Dr. Dickinson.—*Honorary Secretary*: Dr. Caton.—*Honorary Secretary of Ordinary Meetings*: Mr. C. Puzey.—*Honorary Librarian*: Dr. Campbell.—*Members of Council*: Dr. Alexander, Dr. Bailey, Dr. Braidwood, Mr. E. A. Browne, Dr. Finegan, Mr. Harrison, Dr. Matthew Hill, Dr. S. Lewis, Mr. McCheane, Dr. Robertson, Dr. Samuels, Dr. Turnbull.—*Microscopical Committee*: Dr. Braidwood (*President*), Dr. Ashby (*Honorary Secretary*), Dr. Davidson, Dr. Glynn, Dr. S. Hicks, Dr. Lupton, Dr. Paul, Mr. Hamilton, Mr. Newton, and Mr. Rushton Parker.

SCOTLAND.

THE medical men of the burgh of Kirkcaldy, along with the Hospital Committee of the Local Authority, have had a meeting for the purpose of taking steps for the erection of a hospital for the treatment of infectious diseases. The matter was favourably considered, and there is every likelihood of a hospital being erected.

GLASGOW ROYAL ASYLUM FOR LUNATICS.

THE sixty-fourth annual meeting of the subscribers was held last week. During the past year, 751 patients had been treated; of whom 81 had been discharged recovered, 69 relieved, 48 had died, and 553 remained at the end of the year, of whom 198 were private patients and the remainder paupers. There had been 532 at the beginning of the year. The new halls had been finished and opened during the year.

SUSPECTED MURDER.

A PROLONGED inquiry has been held during the last week or ten days, in private, by the Procurator-Fiscal of Edinburgh, into a case of supposed wife-murder. The woman supposed to have been murdered was found in a dying state, in a room in which gas was escaping from a hole in one of the pipes. The husband, a teacher of French, has been arrested on suspicion. Beyond the fact that, a short time before the woman's death, a policy of insurance had been effected upon her life, none of the evidence has as yet been allowed to transpire. An

analysis of the contents of the stomach has now been completed in Edinburgh; and, in consequence of a report of Professor MacLagan and Dr. Littlejohn, the husband has been committed for trial on a charge of having poisoned his wife by administering to her chloral and morphia, or one or other of these poisons.

THE EDINBURGH INFIRMARY.

At the annual general meeting of the Edinburgh Royal Infirmary, held on January 7th, the report for the past year was read, showing that, during that period, there had been treated in the hospital very nearly 5,000 persons; among these were 109 cases of fever. Of these whose cases terminated during the year were 2,404 ordinary medical cases and 1,945 surgical; 389 persons remained in the house at the date of the report. The highest number in hospital on any one day was 490, the lowest 377; the average time during which each patient remained under treatment was thirty-six days. Above 10,000 out-patients, principally surgical cases, were attended to, receiving all the necessary dressings and appliances at the hospital. The directors reported in most favourable terms of the high state of efficiency of the nursing department; and brought in evidence the fact that they had frequent applications, from all parts of the kingdom, for nurses to fill the position of matron or head-nurse in other hospitals, and for private nursing. The actual cost per occupied bed, including expenditure of every kind, during the year 1876-77, has been £52 6s. 9½d., showing a decrease of fifteen shillings on the corresponding expenditure of the previous twelve months. The building of the new Infirmary was being steadily proceeded with, and it was expected that all the buildings will be ready and complete by the summer of 1879. Upwards of £200,000 had already been expended on the new buildings, and it was estimated that about £130,000 would be required to complete them.

UNIVERSITY OF EDINBURGH.

THE matriculation returns for the past year have now been completed, and show a considerable increase in the number of students in residence over any former period. The number on the register for 1876 were 2,302; for 1877, they amounted to 2,560. In the Faculty of Medicine there were 1,176, by far the highest share, the next being the Faculty of Arts, with 953. In the medical faculty, the wide range of supply of students is as remarkable as in former years, and shows how largely our Colonies and India are availing themselves of the special educational forces of this country. Of the 1,176 students of medicine, 521 are from Scotland, 407 from England, 20 from Ireland, 135 from the Colonies, 65 from India, and 28 from foreign countries. In the list of graduates during 1877, are 7 who took the degree of D.Sc. and 17 that of B.Sc., of whom three of the former and four of the latter were in the department of public health. In medicine, 34 took the degree of M.D., 109 that of M.B., and 101 that of C.M. The ground is now being cleared for the erection of the University Extension Buildings, which, with the aid of the Government grant—the first instalment of which, viz., £20,000, it has just been intimated, is to be inserted in the Estimates for next year—will be vigorously proceeded with, so as to furnish as soon as possible the additional accommodation urgently required for the increasing number of students, and for the fuller development of the teaching resources of the University.

AN EPIDEMIC TRACED.

DR. RUSSELL has just published a brilliant report on the epidemic of enteric fever, which has been prevalent in the west end of Glasgow and the west end suburbs of Hillhead. He traces the steps by which he pursued the inquiry into the source of the infection, and no one can read his report without being convinced that here again we have an epidemic traceable to infection through milk. We shall tell the tale, not as Dr. Russell does, but rather in the order of time, and with all possible brevity. In a picturesque situation, on the banks of the Avon, stands a farm, whose arrangements are such as to favour the contamination of the products of the dairy. In this farm a son sickened with en-

teric fever on December 1st, a servant girl on December 20th, and another boy on December 27th. The work of the dairy was carried on by persons who attended the patients. From this farm there were sent daily twenty-five gallons of milk to Messrs. Semple and Wilson of Hillhead, and they passed on eight gallons to Messrs. Morrison. The seventeen gallons retained were distributed to families in Hillhead and the west end of Glasgow, partly to wholesale and retail customers. The immediate result was an epidemic of enteric fever, almost entirely among the customers of Messrs. Semple and Wilson and Messrs. Morrison. The manner in which the disease picked out the persons using infected milk is most graphically shown, by one or two examples appended, by Dr. Russell, which we may quote.

"In Hill Street (Garnethill) there are seven families supplied with suspected milk, of whom three are infected, and a hundred and eighty-one supplied otherwise, not one of whom is infected. In Berkeley Terrace there is one family supplied with suspected milk, which is infected, and thirty-seven otherwise supplied, not one of whom is infected. In Royal Terrace there is one family supplied with suspected milk, which is infected, and twenty-eight which is otherwise supplied, not one of whom is infected. In Lynedoch Crescent there are two families supplied with suspected milk, of whom one is infected, and fifteen otherwise supplied, not one of whom is infected. In Park Street East, there are five families supplied with suspected milk, of whom one is infected, and twelve otherwise supplied, not one of whom is infected. In Park Circus there are nine families supplied with suspected milk, of whom two are infected, and twenty-seven otherwise supplied, not one of whom is infected. In Woodlands Terrace, there are seven families supplied with suspected milk, of whom five are infected, and fourteen supplied otherwise, not one of whom is infected. In Park Gardens two families are supplied with suspected milk, one of whom is infected, and four supplied otherwise, not one of whom is infected. In Clairmont Terrace there are seven families supplied with suspected milk, of whom three are infected, and five supplied otherwise, not one of whom is infected. In Woodside Crescent there are four families supplied with suspected milk, one of whom is infected, and thirteen supplied otherwise, not one of whom is infected. Another area of infection is amongst the students of the University, who, on the 21st December, were dispersed over the country for their Christmas holidays. There are now some absentees from illness, and I have obtained the names of seven of these who have already been discovered to have enteric fever. Of that small number three are now dead—at Kilwinning, at Langloan, and in Islay. The refreshment room in the University was supplied with milk by Semple and Wilson. It was largely patronised by the students, and those men are known to have partaken of the milk."

Dr. Russell may well remark that, in this epidemic, we have as clear an experiment performed for us as in any of the demonstrations of the chemist's laboratory.

IRELAND.

At the Belfast Police Court, last week, Dr. Owen O'Hare of Castle Street, to whose case we recently referred, was sent for trial to the spring assizes, on the charge of forgery and obtaining money under false pretences. Bail has been refused, the charge being a serious one.

AN election for medical officer for Oola Dispensary, in the New Pallas district, took place last Monday, when Dr. Ryan of Scarleen was appointed by a majority of four votes. A large force of constabulary and two troops of dragoons were sent by an early train to the locality, in consequence of a riot which occurred at the same place some years ago during a dispensary election; but fortunately their "services" were not required.

THE LATE DR. STOKES.

THE funeral of this eminent physician took place on the 11th instant. In accordance with the wishes of the family, the ceremonial was of a private character. Notwithstanding, a large number of his former professional and private friends were present on the occasion in the quiet little country church-yard of St. Fintan's, in Howth. As a token of

the universal respect in which Dr. Stokes was held, his coffin was borne the short distance which intervened from his house to the entrance of the graveyard on the shoulders of some of the labourers living in his neighbourhood, in front of the hearse. From the gate, a selected few of the students of the Meath Hospital—who attended in a large body—carried the remains of their former beloved and illustrious teacher to the grave. The Royal Irish Academy, of which Dr. Stokes was an ex-President, and the Governors of the Meath Hospital, have adopted resolutions expressive of their sincere sorrow at his death, and tendering their condolence to his family. It is generally believed that Dr. Banks, Physician to the House of Industry Hospitals, and formerly King's Professor of the Practice of Medicine in the School of Physic, will be chosen to succeed Dr. Stokes as Regius Professor of Physic in the University.

OVARIOTOMY.

THIS operation was performed in each of the two Lying-in Hospitals of Dublin last week. Both cases were considered unfavourable ones for operation. The patient operated on in the Rotunda died on the second day.

DONATIONS TO DUBLIN HOSPITALS.

SEVERAL of the Dublin Hospitals have received, within the last week, considerable sums of money from the Misses Brooke, sisters of the late John Brooke, Esq., Q.C. These charitable ladies have given, among other donations, £1,000 to the Adelaide Hospital; £600 to Stevens's Hospital and the National Eye and Ear Infirmary respectively; and £200 each to Sir Patrick Dun's, the Meath, Mercer's, and the Rotunda Lying-in Hospitals.

DUBLIN HOSPITAL SUNDAY FUND.

THE annual meeting of the friends and supporters of this fund was held on Tuesday last. From the report of the Council presented to the meeting, it was satisfactory to find that the number of collections made during the year (1877) showed an increase of 21, as compared with the previous year, and that the total amount collected—£4,143 19s. 6d.—was £270 10s. 3d. over last year. The average amount collected from each congregation has also showed a steady annual increase. For the first time since the institution of the Hospital Sunday collection in 1874, there has been a falling off this year in the gross receipts from subscriptions by the participating institutions. But this may be attributed to the causes which have produced a similar result in the case of the public charities of the United Kingdom. After deducting

the very moderate working expenses, and placing a sum of £153 18s. 4d. to the credit of the fund for next year, a sum of £3,900 remained in the hands of the Committee for distribution among the fifteen hospitals participating in the fund. This sum was awarded as follows:—Sir Patrick Dun's, £290 11s. 9d.; City of Dublin, £557 18s. 2d.; Stevens's, £85 17s. 7d.; Meath, £444 19s. 6d.; Mercer's, £208 0s. 9d.; Whitworth (Drumcondra), £70 8s. 11d.; Coombe (Lying-in), £142 16s. 9d.; Rotunda (Lying-in), £235 14s.; St Mark's (Ophthalmic), £184 2s. 4d.; National Eye and Ear Infirmary, £68 10s. 5d.; Convalescent Home, £347 2s. 10d.; Cork Street (Fever), £186 18s. 7d.; Adelaide, £659 6s. 9d., less £37 5s., proceeds of a charity sermon, deducted under rule 9; Rathdown (Monkstown), £147 17s. 10d.; Orthopædic, £269 13s. 2d. Total, £3,900. The mode in which the distribution for each hospital is made is by dividing the fund into thirds, and allotting two-thirds according to the amount of voluntary contributions received by the hospital during the year, and the remaining one-third according to the number of beds maintained by such contributions.

THE DISEASED MEAT QUESTION.

WE are glad to learn that the Corporation of Dublin, as the authority for the city, have, in consequence of a suggestion of Dr. Cameron, their Medical Officer of Health, adopted a resolution to the effect that, in view of the unsettled state of scientific opinion as to the fitness of the

flesh of animals affected with pleuropneumonia for human food, the Government be requested to issue a Commission to inquire into the whole subject, with a view to a more uniform administration of the law bearing upon this important question. Dr. Cameron has recently published an able Report on the Use of the Flesh of Animals affected with Contagious Pleuropneumonia as Food for Man (*Dublin Medical Journal*, November, 1877), which has been adopted and circulated by the Public Health Committee of the Corporation. In this report, Dr. Cameron has collected a large amount of professional opinion in favour of and against the use of pleuropneumonic meat as food, in different stages of the disease; and as, under the Animals' Diseases Act of 1876, 1,100 beasts have been slaughtered in the two Dublin Unions in a period of barely twelve months, at a very large pecuniary outlay, it is important for every reason to have the question finally decided, if possible, by a competent Commission.

THE HIGH DEATH-RATE OF DUBLIN.

THE deaths registered in the Dublin district during the week ending January 12th, 1878, represented an annual mortality at the enormous rate of 31.7 in every 1,000 of the population. In London, during the same period, the death-rate was 25.6 per 1,000. Of the 36 deaths registered in Dublin during the week from zymotic diseases, 26 were amongst children under five years of age; measles and whooping-cough being the chief assignable causes. Fifty-six deaths resulted from diseases of the respiratory organs; being an increase of 7 over the average number of deaths from such causes in the second week of the year for the last ten years. The number of deaths registered in the Dublin district during the last quarter of the year 1877, was 2,122; being equal to an annual ratio of 27 per 1,000.

DEPORTED PAUPERS.

AN inquest recently held in Dublin again calls attention to the unsatisfactory condition and laxity of administration of the law which is supposed to regulate the removal of persons of Irish birth who happen to become paupers in England. The following is the brief but dismal history of Michael Kenny, aged 35, who died in the South Dublin Union Workhouse on January 3rd. The deceased was admitted to the Brownlow Hill Union Workhouse in Liverpool, and on October 10th, was placed under medical charge, as he was suffering from chronic pulmonary disease, which proved to be phthisis. He was placed in the Workhouse Infirmary, and no substantial change took place in his condition up to November 16th. The medical officer declared that at this time, or rather on November 10th, when he examined him, he considered him unfit to be removed to the "healthy wards" of the workhouse; yet on November 16th, he was sent as a deck-passenger to Dublin, in company with another pauper just removed from the infirmary, two other apparently healthy paupers, and a little girl (said to be only four years old). Kenny, on his arrival in Dublin, was found to be so ill that he was at once removed to the Workhouse Infirmary, where he remained confined to bed until the day of his death. On the day before his death, Kenny cut his throat, and declared that he did so to terminate his sufferings, which he said had been aggravated by his voyage from Liverpool; hence the inquest. The only excuse urged by the Liverpool officials was that Kenny had not complained, and had signed the official form consenting to his removal; that he had got hot coffee and some food on board ship. This is all very plausible, but in no way excuses the barbarity of permitting, not to say compelling, one convalescent pauper, one dying pauper, and a helpless little girl, to pass the night on the deck of a steamer, even with a "hurricane-deck", in the middle of November. Some of our readers know what the decks of the splendidly formed Holyhead and Kingstown steamers are on a wet and windy November night, and must shrink with horror at the thought of poor Kenny with only the "hurricane-deck" to shelter his weak and wasted frame. We trust some of the Irish members of Parliament, who talk so loudly of imaginary political grievances, will see to this real grievance.

ON THE APPOINTMENT OF CORONERS; THEIR QUALIFICATIONS AND DUTIES.

THE following important further memorandum has with great kindness been prepared by Dr. Alfred Swaine Taylor, F.R.S., for the use of the Parliamentary Bills Committee. We invite comment upon it.

1. In a former paper, suggestions were offered for the improvement of medical evidence at coroners' inquests by the appointment of a skilled expert to conduct the *post mortem* examination, and of an analyst to make an analysis when required.

2. These suggestions admit of being carried out more or less, wholly irrespective of any change in the mode of electing or appointing persons to the office of coroner.

3. It seems desirable, however, that the rules and regulations now in force regarding this office, should undergo a complete revision, and, with this view, the following additional suggestions are submitted for consideration.

QUALIFICATION AND APPOINTMENT OF CORONER.—4. The duties of the office of Coroner should be limited to inquiries into the *causes of death* in all cases in which there is reasonable ground to believe that the deceased person has not died from natural causes; or there is reasonable ground to suspect that his death has been accelerated or caused by violence of any kind. We are told by authority that, "in his judicial capacity, a coroner has to inquire when anyone comes to his death suddenly or violently, and how and by what means such death was caused". His inquiry should extend also into those cases in which persons are found dead, and nothing is known concerning them.*

5. From the nature of these duties, it will surely be admitted that no person should be appointed to the office of coroner until he has undergone some test of his qualifications to perform the duties thereof.

6. Registered members of the medical profession, solicitors, and barristers of a certain number of years' standing, should be eligible as candidates for this office.

7. All the Acts for appointing coroners by charter, or election by freeholders of the county, should be repealed or consolidated into one Act, with new provisions for the appointment of fit and proper persons to the office. The election of coroners by the votes of freeholders dates from the 3 and 4 Edward I (A.D. 1275), about six hundred years ago. Other Acts on the election of these officers have been since passed—e.g., the 28 Edward III, 38 George III, c. 95; 7 and 8 Victoria, c. 92; 6 and 7 Victoria, c. 12. Such a mode of electing a man to a judicial office requiring a knowledge of the law of evidence and, in a medical point of view, an acquaintance with the ordinary causes of sudden and violent death, is a perfect anachronism unworthy of the age in which we live, and conflicting with all modern legislation in reference to other judicial offices.

8. Records of boroughs, stipendiary magistrates, and County Court judges are not elected to their offices by the votes of county freeholders, but according to their merits; they receive their appointments by nomination from the law-officers of the Crown, or from the hands of men well qualified to judge of their fitness for the office.

9. Under the present mode of county election, the editor of a newspaper, an auctioneer, land-agent, house-agent, or a retired tradesman, provided he renders himself popular with the freeholders, may be elected to the office of coroner, although quite incompetent to perform its duties. The election system for counties is objectionable under another point of view. It has thrown a great expense on many of the candidates. In an opposed election, committees are appointed, committee-rooms hired, hustings erected, public-houses retained for voters, and votes are obtained by bribery and corruption. In fact, at these elections, an office for conducting inquiries into the causes of death is

put up to a sort of auction and is knocked down to the highest bidder.* It is a bad copy of the Parliamentary mode of election.

10. So long as the election system of appointment continues, there can be no hope of substantial reform or improvement, since there can be no guarantee that a properly qualified person will succeed in obtaining the office.

11. As the appointment by election carries with it no test of competency, it is not surprising that inquests are often ill-conducted. There are mistakes in holding inquests in cases in which none are required, or in not holding them where they are really necessary; there are mistakes in the reception of evidence and in the verdicts of juries, and, finally, such errors of omission or commission in the drawing up of depositions that, in every case of great public interest, a magisterial inquiry generally follows. At this inquiry, the same witnesses are again examined in proper legal form, and it is upon these depositions before the magistrates, and not upon the verdict of a coroner's jury, that an accused person is subsequently tried.

12. A medical man without any knowledge of the law of evidence, and a barrister or solicitor in entire ignorance of the ordinary causes of sudden and violent death, are equally at fault, and are out of place in the office of coroner. There is special knowledge required, and of the possession of this a man should, it is submitted, give some proof before he is allowed to act as coroner.† Persons are not admitted into the army, navy, or civil service, for the performance of duties of great responsibility, and affecting the public interest, until they have given some test of their competency by examination; and, if we desire to exclude ignorant and incompetent persons from the office of coroner, the examination system should be applied to all who seek this office.

13. An examining board for this purpose might be easily constituted by the appointment of three qualified examiners: a barrister of seven years' standing, a professor of medical jurisprudence or forensic medicine of similar standing, and a lay member selected from educated men of the middle or upper class. This board of three members should have the power of deciding whether the candidate (6) is or is not qualified for the office.

14. Although it might be thought desirable, for obvious reasons, to confine the office of coroner to registered or admitted members of the legal and medical professions, this scheme need not exclude any qualified men who can pass the examination, and satisfy the examiners of their competency to perform the duties of the office.

15. Those candidates who can produce certificates of having passed

* When the subject of coroners and their inquests was brought before the House of Commons in July 1876, Mr. Secretary Cross stated that "there were instances without end of enormous sums of money being spent in order to secure the election of a coroner". Mr. Cole said that some elections had cost as much as from £10,000 to £12,000! The election of a popular candidate for this office for one division of Middlesex many years since is reported to have cost the candidate or his friends £7,000. It is impossible that such sums as these can be expended in any lawful charges. This fact alone is sufficient to deter many competent men from offering themselves as candidates. The inconsistency and absurdity of this mode of election will be further apparent from the fact, that the thousands of educated leaseholders, annual tenants of houses, and lodgers in a vast borough like Marylebone, have no vote in the election of a coroner for this division of Middlesex. The coroner, however, when elected, claims an equal right to hold inquests on the bodies of the leaseholders and lodgers after death. A writer on this subject truly says, that "the qualification of the electors is such as to secure the exclusion from the constituency of those persons who may be most likely to form a competent opinion of the merits of the candidates in relation to the requirements of the office. The owner of the site of a pigsty may be a voter, while the occupier of an estate may have no voice in the election."

† It is a common opinion that the office of coroner should be occupied exclusively by members of the legal profession. I cannot assent to this view. A coroner should undoubtedly be well acquainted with the law of evidence and the mode of examining witnesses, so as to elicit the truth; but the acquisition of this legal knowledge is not beyond the capacity of a well educated medical man. Promptness of decision, tact, and discretion—qualities most necessary to a coroner—may be met with in both professions. A legal coroner, who has no knowledge of forensic medicine or medical jurisprudence, will be unable to distinguish between cases which require, and those which do not require, an inquest. Unless he know something of the various causes of sudden death, and the circumstances by which sudden death from disease may be distinguished from sudden death by poison or violence, he will be unable to make any safe distinction between them. Without some medical knowledge, he cannot arrive at a correct conclusion on this important point. In holding an inquest, he will always be liable to misunderstand the medical facts put before him. He will not be able to distinguish the true from the false, to detect errors in medical evidence, or to determine the relative value of the medical opinions. Some amount of medical knowledge is undoubtedly required for the efficient performance of a coroner's duties. It will not only enable him to sift cases with judgment before ordering an inquest, but to put proper questions to medical witnesses and arrange and condense the medical facts in an intelligible form for the consideration of the jury. If he know something of the hydrostatic test as applied in infanticide, of the properties of the drugs used in criminal abortion, or of the detection of blood-stains upon clothes and weapons, this knowledge will enable him, in the event of a conflict of opinion, to point out to a jury the most trustworthy evidence. Intelligent men appointed to the coronership under existing rules acquire this knowledge in time, but there is no reason why a coroner should not start with it. The true causes of death are sometimes overlooked by medical witnesses in making an inspection of the body. A medical coroner has been able to make a suggestion as to parts of the body left unexamined, which no purely legal coroner would have thought necessary, and thereby to determine the cause of death, and save an innocent man from a charge of manslaughter.

* The time has arrived when the jurisdiction of the coroner should be completely separated from that of the magistrates in petty sessions, so that there should be only one public investigation instead of two. The coroner's duty should be simply a preliminary inquiry, limited to determining the cause of death, with a power of committing for examination before the magistrates in petty sessions any person to whom the verdict may point as being probably guilty of a criminal act. Magistrates in petty sessions can only take cognisance of a charge against an accused person; and here a public prosecutor is required, in order to prevent the failure of justice. The action of the coroner should be as soon after the death as possible, and the magistrates should deal with the case only after this preliminary inquiry by the coroner. The commitment of an accused person for trial should rest entirely with the magistrates and not with the coroner. This officer has no right or power to have the accused before him; and it is contrary to the spirit of English law to take evidence against an accused person in his absence. The depositions taken before a coroner should be used only to establish the *cause of death*. Those taken before the magistrates, under strict legal rules, should alone be used at the trial of the accused.

this examination should be considered eligible for the office of coroner on any vacancy occurring. The appointment might be made from among such candidates by a board of county or borough magistrates nominated or selected for that purpose. The appointment of the selected candidate should receive (if considered necessary) the sanction of the Secretary of State for the Home Department.

16. The candidates so appointed should hold the office of coroner on the rule *quandiu se bene gesserit*. On proof of malversation, neglect of duty, or improper conduct, it should be in the power of the board of magistrates who appointed him, to remove him at once from the office by summary process, and to appoint another in his place. The removal should lie with the sanction of the Secretary of State for the Home Department.

17. The present county and borough coroners should retain their offices and emoluments, except where it may seem desirable to superannuate them, or allow them to retire on a pension. According to a statement made in the House of Commons (July 1876), there were at that date, in England and Wales, three hundred and thirty-two coroners; viz., two hundred and thirty-three county and ninety-nine borough coroners.* On the average rate of mortality, these numbers would not lead to more than nine vacancies *per annum*.

18. The emoluments of the newly appointed officers to be similar to those of the present coroners. This officer should, in all cases, be paid by a fixed salary, and not by a fee for each inquest. The latter mode of payment, which is still prevalent in boroughs, offers a direct premium upon the holding of unnecessary inquests with the attendant expenses.

INQUESTS.—19. It is not easy to describe or define all the cases in which inquests are required, or in which they should be held. Experience, however, has clearly shown that we cannot trust to the discretion of one man. The indiscriminate power which is now allowed by law to an English coroner to hold inquests on his own arbitrary will, has led to great abuses, and offers no security to the public. Unnecessary inquests are held; the feelings of private families, and even public decency, are outraged upon the most trivial grounds; and the result of the inquiry has, of course, been what any qualified man might have anticipated from the first, "Death from natural causes".

20. In Scotland, the practice is different, and such indecent exhibitions as those above referred to could not occur in that country. The Procurator-Fiscal is an officer appointed by the sheriff for each county. He is always a member of the legal profession, and it is his duty to inquire into every case of suspected crime and into all sudden or suspicious deaths. This inquiry is made in private from information supplied by the police or any other source. If he find that the death was due to natural causes, there is an end of the matter. If otherwise, he procures a warrant for the apprehension of the suspected person, and the case proceeds before a magistrate. The Procurator-Fiscal, who acts like a public prosecutor, in cases in which he deems it necessary, can procure orders for a *post mortem* examination and an analysis. On the necessity for these proceedings, he consults with competent medical men. There is a further protection for an accused person. The whole of the depositions drawn up by the Procurator-Fiscal are finally submitted to the Lord Advocate or one of his deputies, and the proceedings are either quashed or the accused is sent to trial.

21. It will be perceived from this statement that the feelings and reputations of the relations of the deceased, are not outraged by a public inquiry in a case of death from "natural causes". In cases obviously of death from apoplexy or diseased heart, an inquest carried on *ab initio* by the English coroner in opposition to the wishes of the relatives of the deceased is not only painful to their feelings, but may prove injurious to their reputation and prospects. It has been justly said of this indiscreet mode of proceeding that, "if you once give the public leave to suspect, it will be sure, with or without reason, to fasten the suspicion on some one". Every unnecessary inquest may give rise to these unjust suspicions. It would be a good rule to lay down that an English coroner should not be allowed to issue his precept for

holding an inquest until after a consultation with the medical officer of health for the district, and receiving from him a certificate that an inquest is necessary. This would be, as in Scotland, a proper protection to the public. It is not to be supposed that the medical officer of health would connive at the concealment of any suspicious death, and he would not allow any simple case of apoplexy or heart-disease to be treated in the same way as a case of suspected poisoning.

22. In many cases, under a properly qualified coroner, a jury would not be required. In those cases, however, in which the cause of death has not been certified by a medical man, or when the evidence is likely to be conflicting, or where a person has been found dead, and there is no direct evidence of the manner in which he came by his death, it would be proper to have a jury; but this should be limited to five of the parishioners or neighbours. The County Court number would be sufficient in all cases. The present system of summoning twelve, fifteen, or twenty of the neighbours, with the condition that twelve must agree in a verdict, is cumbrous and unnecessary. The agreement of five upon the facts would reasonably suffice for all the purposes of the agreement of twelve. The presence of a jury is a check on the proceedings of an inquest. It will insure publicity to the proceedings; it will prevent the concealment of facts or the misrepresentation of evidence, and it will satisfy the public that the case has been duly investigated. Jurors are justly considered as "important protections against arbitrary convictions, and valuable checks upon overweening judicial authority".

23. In what cases should inquests be held? A large expense is now thrown on counties and boroughs by the holding of unnecessary inquests. Some coroners are disposed to act strictly upon the rules laid down six hundred years ago, and they carry their inquiries into all those cases pointed out by the statutes of Edward I. These include all violent deaths, all casualties by which death ensues, all sudden deaths, persons found dead, persons dying in prison, lunatics who die by suicide, and felons of themselves (Baker on Coroners). Modern legislation has added another to this list; namely, criminals executed in prisons. The most serious abuses have taken place with regard to *sudden deaths*. There are many sudden deaths obviously due to natural causes, and these are in general easily recognisable by a medical practitioner. Except under circumstances elsewhere mentioned (4), such cases demand no inquiry beyond that of the registrar of deaths. Yet, of the thirty-five thousand inquests annually held in England and Wales, these cases form, there is reason to believe, a very considerable proportion.* *Post mortem* examinations have been made, the feelings of relatives have been shocked by these unnecessary and inquisitorial proceedings, and the result has been what any man with a slight amount of medical knowledge might have predicted, a verdict of death from natural causes. This *nimia diligentia coronatoris* has given rise to scandal on recent occasions in some conspicuous cases, and has led to severe public censure. A well qualified coroner would always act upon the spirit, and not upon the letter, of the ancient statute. On good legal authority,† it is stated "that it is not in every case of *sudden death* that the coroner is justified in holding an inquest, but only where there are grounds for supposing that the deceased died by a death other than natural".

24. This very plain and simple rule, according to my observation, is almost universally neglected. A coroner, whether medical or legal, seems utterly to forget that sudden death, as understood in the reigns of Edward I and Edward III, required a kind of investigation no longer necessary in modern times. To quote the words of an anonymous writer on this subject, "we are no longer so ignorant of disease, no longer so unfamiliar with pathology, as to regard all sudden deaths as suspicious. It is doubtless true that long previous illness is some evidence that death was due to natural causes, but it is not conclusive evidence; for certain poisoners, such as Palmer and Pritchard, have so administered the drugs which were ultimately used to cause death as to produce symptoms closely resembling those of ordinary disease. But, although previous illness is some evidence of death from natural causes, it would be absurd, in the present state of medical science, to say that the mere suddenness of a death, or the mere absence of symptoms previous to its occurrence which were palpable in-

* From the statements made in Parliament (July 1876), it appears that out of the 233 county coroners, 175 were elected by freeholders; but they were so unequally distributed, that, while Dorsetshire had seven, Middlesex had only five; and, while the populous towns of Liverpool and Manchester had one each, the borough of Malmesbury had two. There are seven different coroners for Norfolk and five for Suffolk, in addition to borough coroners for a number of towns in both counties. Of the Suffolk coroners, one was an auctioneer, another a land-agent, a third a doctor, a fourth calling himself a gentleman, and there were two or three others who were lawyers. It was recently stated in this JOURNAL that in the county of Kent there were no fewer than twenty-two coroners in addition to five deputy coroners. In two boroughs in this county the mayor, on his election, becomes a coroner *ex officio*!—the legal qualification for counties is the possession of a certain amount of landed estate. This may be temporarily given to the candidate, and surrendered by him immediately after election.

* Mr. Sergeant Cox estimates that four-fifths of the inquests held by coroners, under a proper preliminary inquiry like that adopted in Scotland, would be proved to be unnecessary. Judging by the number of verdicts of death from "natural causes", it is not improbable that the number of inquests not strictly necessary might be taken at one-half. In the autumn of 1874, the Manchester Watch Committee reported to the City Council that in Manchester alone, between 1863 and 1873, inquests were held in 3505 cases, in which the juries found that the persons had died from "natural causes". It cannot be doubted that in a large proportion of these cases a skilled assessor or medical officer of health, under a proper preliminary inquiry, would have pronounced that an inquest was not required.

† Sewell, *Law of Coroner*.

indications of disease to unprofessional observers, was of itself a legitimate ground for suspicion, or a sufficient reason for holding an inquest". Dr. W. Farr, writing on the causes of death in the annual report of the Registrar-General for 1872, says: "The mere fact that death is sudden is a ground for medical inspection, but not necessarily for an inquest; and there are many violent deaths of which a medical inspection may ascertain the cause without moving the apparatus of the inquest, there being no more suspicion of crime in such cases than there is in deaths from fever, pleurisy, or consumption."

25. In order to guard against abuses in this direction, the medical officer of health for the county, district, or borough should be empowered to make inquiry in all cases of death, whether sudden or slow, of all fatal accidents and casualties, and certify to the coroner whether there are any suspicious or unexplained circumstances to justify the holding of an inquest. Under the present state of things, information is generally procured through a parochial beadle. This duty would, however, be better performed by the police.

26. If the medical officer of health have himself attended the deceased person, the officer of a neighbouring district might be substituted. If a medical coroner have attended a deceased person, then the necessary duties of his office should be entrusted to the coroner of an adjoining district. But it would be most desirable that both these officers should be sufficiently remunerated to allow them to abstain from private medical practice.

27. With respect to the coroner, whether he be a member of the legal or of the medical profession, he should, in all cases hereafter, be compelled to resign his practice on his appointment. As a solicitor, he may be required to prosecute, on a charge of murder, a person whom he has committed on the verdict of a jury; and as a medical man, he may have attended the deceased, dying from fatal personal injuries, and be called as a witness for the prosecution, in a case in which he has already acted judicially. These evils may be avoided by assigning a certain district or circuit to each coroner sufficient to give him full occupation, and to compensate him for loss of practice. (The circuits assigned to county court judges may serve as a precedent for this arrangement.)

28. *Super visum Corporis*.—The view of the body at the same time by coroner and jury, now strictly enjoined by law, is an unnecessary proceeding; and when the inquest is on a body exhumed after many months' or even years' burial, it is, according to my observation, both a painful and disgusting spectacle. It is a useless form, but is so strictly adhered to by some coroners, that in the case of the late Sir Charles Lyell, the leaden coffin which was known to contain the body, and which had been soldered down, was cut open in order that the coroner and jury might take a view of it in accordance with the terms of the ancient statute.* The identity of a body might in any case be easily proved by the oral testimony of witnesses, by a certificate from the registrar of deaths, or, if no inquest can be held except upon the whole or part of a human body, the view of the remains might be taken by the coroner or medical officer of health.

29. Inquests should not be held in private houses, or in public-houses or taverns. In reference to the use of private houses, the first inquest in the Bravo case, shows how easily a great crime may thus escape public notice. Such a practice may lead to the concealment of crime. On the other hand, it may be highly objectionable to the feelings of relatives. Public-houses and taverns are places wholly unfitted for conducting such inquiries. The village or district schoolroom, or a room specially set aside for the purpose, should be selected. Many difficulties in this respect will be removed when it is no longer made imperative on the jury to view the body.

30. *Mortuaries* for the reception of bodies should in all cases be provided in parishes or districts where such an arrangement is possible. In boroughs, there would be no difficulty in establishing a court for the coroner.

31. In the event of an inquest being imperfectly conducted, owing to the rejection of medical or other evidence, provision should be made

* Under an order of the Secretary of State, I was present at the exhumation of the body of a man six months after death. The coffin was raised from the grave in a country churchyard, and placed by the side of the grave. The lid of the coffin was removed, and fetid effluvia with ammonia copiously escaped from it. The jury (about fifteen in number) stood at a distance of several yards with handkerchiefs to their faces; some rushed up to the grave and took a momentary view. All that they could see was the collapsed face of the corpse, discoloured by putrefaction, and a shroud covered with white and blue mould. This was considered to be such a legal view as the ancient statute requires! No one could identify the body from the features. The carpenter who made the coffin was able to depose that he had placed the body of deceased in the coffin in that grave. Surely this might have sufficed for all the purposes of identity, without requiring the jury to be present at such a spectacle. In order to destroy the effluvia, a quantity of chloride of lime was thrown over the remains in the coffin. This had a temporary effect, but a thick white cloud resembling smoke (sal ammoniac) suddenly issued from the coffin. After this, none of the jury would approach, but all of them in a body precipitately left the churchyard.

by some simple process on application to a superior court for the holding of another inquest by the same or another coroner. It has been suggested that for the reopening of an inquiry, application should be made either to the Home Secretary or the Lord Chancellor, and that it should rest upon either of these ministers to decide upon the necessity of such a proceeding; further, that it should be in the power of either of them to order an inquiry to be made by a coroner in cases in which this officer has declined to hold an inquest, but in which the circumstances may be such as, in their judgment, to justify inquiry. At present, there are many difficulties in the way of reopening an inquiry before the coroner which has once been closed. This was shown in the Bravo case.

32. In the event of a number of persons perishing by a common calamity, as by drowning, shipwreck, suffocation, explosions in mines, or by the bursting of steam-boilers, it should suffice that an inquest, if considered necessary, should be held on one body which could be identified; and if the locality of the accident be one of divided jurisdiction, the inquest on one body, and by one coroner, should suffice for all other bodies and other coroners who might claim a legal right of inquiry. The district in which the body is found dead, wherever the fatal injury may have been received, should be the place in which the inquest is held, and the coroner of that district should be the proper officer to conduct the inquiry.

33. In cases in which a deceased person has been attended shortly prior to death by a registered medical practitioner, and an inquest is considered necessary, that practitioner should be summoned to give evidence of the cause of death. If he be not able to give this evidence in the absence of a *post mortem* examination, it should be for the coroner, with the advice of the medical assessor or medical officer of health, to issue an order to the medical attendant, or any other local practitioner, to make the requisite examination and give evidence thereon.

34. It should, however, be always in the power of the coroner, by and with the advice of the medical assessor or medical officer of health, to call in the aid of a skilled *post mortem* examiner, and assign the examination of the body to him, in place of the local practitioner or practitioners; the examiner so selected to draw up a report of the appearances and his view of the cause of death, and to give oral evidence thereon at the inquest.

35. In any case in which a chemical analysis is required, not merely of the stomach and intestines and their contents, but of the liver and other organs of the body—of suspected blood-stains on articles of clothing, on weapons, or furniture, the coroner should be empowered, by and with the advice of the medical assessor or medical officer of health, to place such articles for examination and report in the hands of a competent and skilled chemist, who should be required to attend before the jury if, in the opinion of the coroner and assessor, such attendance is necessary, and give oral evidence on the results of his analysis.

36. The fee to be paid to the *post mortem* examiner and the skilled chemist should be respectively from three to five guineas each, provided these gentlemen are not paid for such services by fixed salaries. The coroner should be empowered to pay or issue an order for the payment of these fees at the termination of the inquest. Local practitioners should receive the fee now awarded, namely, one guinea for attendance and evidence, and two guineas in those cases in which they have been required to make a *post mortem* examination.

37. Any medical man making a *post mortem* examination in a case intended for an inquest, without a legal order from the coroner, should receive no fee for such examination; and no order of the coroner should be valid except that which has been issued in due legal form, according to the schedule of the statute, before the examination is made.

38. Any general orders issued by coroners to certain medical men in a district to make *post mortem* examinations without the proper warrant signed by the coroner, under the schedule of the Act, should be invalid and of no effect. A coroner must in no case delegate his power of selecting cases for inquests or for a *post mortem* examination to local medical men who may be subsequently summoned as witnesses, and may claim fees for attending such inquests, or for making such *post mortem* examinations.

PAYMENT OF EXPENSES.—39. Some difficulties have arisen between coroners and medical witnesses, in reference to the payment of fees and expenses. The 6 and 7 Will. IV., c. 89, specifies in a schedule the amount of fees allowed by law to medical gentlemen summoned as witnesses; and under 1 Vict. c. 68, the coroner is directed to pay "all expenses reasonably incurred in and about the holding thereof, not exceeding the sums set forth in the said schedule". This throws a heavy charge on coroners, as they are only repaid quarterly. The pro-

visions of the Act are not observed. The local medical men, who should receive their fees immediately after each inquest, are left unpaid for weeks or months; and, in some instances, the coroner thus incurs a debt which is not always discharged without some trouble. The fees scheduled in the Act (one and two guineas) are not a sufficient remuneration for skilled analysts, when, in a suspected case of poisoning, a chemical analysis is absolutely necessary. A chemical analysis in cases of suspected poisoning takes a much wider range than that pointed out by the Medical Witnesses' Act. Since that Act was passed, the method of detecting absorbed poison in the liver and other soft organs has been discovered; and this is often of much greater importance in the trial of a case than the very limited analyses recited in the Act ("contents of the stomach and intestines"). It requires great skill, and the application of all the refinements of modern science in the hands of an experienced analyst. The analysis for absorbed poison should be made in all cases; if this be omitted, none may be found in the "contents" specified by the Act, and a guilty person may escape conviction.

40. The fees of skilled chemists for such analyses vary from five to ten, fifteen, and twenty guineas, according to the amount of research and the time occupied. A coroner cannot be expected to advance these fees out of his own pocket, with no certainty that they will be repaid to him at the quarterly meeting of magistrates. No analyst will undertake the chemical examination except under a guarantee from the coroner. I have known an instance in which the stomach of a man was hawked about the chemical laboratories of the London hospitals, but no professor would undertake the examination of it for the inquest, as the coroner could not allow more than the Parliamentary fee of two guineas! It was the case of a man dying suddenly in suspicious company, under a strong suspicion of poisoning. A long time afterwards, I heard that an inquest had been held, and a verdict returned of "Death from natural causes", in the absence of a proper analysis!

41. Coroners of large experience and long standing are sometimes allowed by the financial committee of county magistrates to give a guarantee to the analyst that the customary fees will be paid. Credit is taken for the heavy charges thus incurred at an inquest, and the amount is paid to the analyst at the quarterly settlement. In a large number of cases, the magistrates refuse to make any allowance beyond that of the schedule in the 6 and 7 William IV, c. 89. In the course of forty years, a number of stomachs, with suspected bottles of medicine, poisoned food, etc., have been brought to the laboratory of Guy's Hospital for analysis, but again taken away, because the usual fees for such analyses are not provided for by law, and the coroner naturally declined to pay them out of his own pocket. I believe that, as a rule, coroners are quite disposed to act honourably in the payment of scientific witnesses whose special services they require. In a very long experience, I can only recall two instances in which analyses were made by me for coroners and the fees were not paid. In these cases, no poison was found; but the suspicion of its existence gave rise to more trouble and research than if it had been present.

42. For many years, I have declined to make any analyses for coroners or magistrates, except under an order of the Secretary of State for the Home Department. In all cases of importance or of a mysterious or intricate character, the Home Secretary has not only granted the order so far as the inquest was concerned, but has ultimately paid also the fees for attendance at the subsequent trial, when the prisoner had been committed for trial.

43. These facts show clearly that coroners are placed in very great difficulty. The financial arrangements connected with them and their inquests require entire revision. They are expected to procure all the scientific evidence required to make these inquests perfect, and to enable the jury to arrive at a correct verdict, while the means for insuring this are denied to them.

44. If the Scotch procedure be contrasted with the English practice, it will be seen how miserably deficient our present system is. We are informed on good authority that, in Scotland, in all cases in which an analysis of the contents of the body is necessary, the Procurator-Fiscal must commit them to the Crown office in Edinburgh, there to be submitted to "skilled chemical examination". The analysts receive their proper fees, and the Procurator-Fiscal is not required to pay for them out of his own pocket.

45. There is no reason to believe that crime escapes detection more under the Scotch system of procedure than under the English; on the contrary, experience seems to show that, under the English practice, it is more likely to remain undetected. The crimes of William Palmer of Rugeley were brought to light by the mere accident of a pocket-book being missed by his stepfather, when called to see him lying dead. It was then found that he had previously poisoned, without detection, his brother and wife. Others of his family, including

friends to whom he owed turf-debts, had died under his roof under the suspicion of poisoning. The Rugeley undertaker informed me that, in two years, he had taken seven coffins into William Palmer's house. The case of Catherine Wilson furnishes another illustration. This woman was tried and convicted of the murder of a Mrs. Soames in 1862. The facts proved that deceased had died from the effects of colchicum secretly administered by the prisoner. Three other cases of poisoning by the same agent were then traced to her in the years 1854, 1859, and 1860. The case of Mary Ann Cotton, tried and convicted at the Durham assizes in 1873 of killing her stepson by arsenic, furnishes also a striking instance of the facility with which the act of poisoning may be perpetrated and concealed under the present system of conducting coroners' inquests. This woman, it was stated on good authority, had at different times killed by poison her mother, fifteen children, three husbands, and a lodger, making altogether twenty persons destroyed by arsenic in the course of a few years! They died rather rapidly one after another under similar symptoms. Inquests were held in some of the cases, and the cause of death was said to be gastric fever, thus proving that neither the medical man nor the coroner could recognise the symptoms of arsenical poisoning. I believe that such cases as these have never occurred, and could not occur, in Scotland under the Procurator-Fiscal's investigations.

46. Although the changes here advised for the English coroner's inquest would necessarily lead to great expense, I believe that, on a proper sifting of cases for inquests and *post mortem* examinations in England, there would be a reduction in the present charges which would cover any increase that might occur.

THE ILLNESS AND DEATH OF KING VICTOR EMMANUEL.

OUR own correspondent writes from Rome under date January 14th:

The acute nature of the illness and the sudden death of the King have thrown a deep gloom over Rome. Nothing could be more impressive than the aspect of the population on Wednesday and Thursday last week. The general depression and the evident sense of personal loss exhibited by all prove that the unity of Italy is not a mere name.

The King had been ailing for about a fortnight previously to the onset of the pleurisy and pneumonia, on Saturday, the 5th instant. His symptoms were those of slight ague, feelings of cold, slight enlargement of the spleen, and perspirations. He had himself told the President of the Council of Ministers that he was well during the day and only ill at night, when he could not sleep. He had, however, driven out each day. During the night from Friday to Saturday, he had risen to smoke a cigar at an open window when in a state of perspiration and only lightly clothed. The next day (Saturday), at 1 P.M., he had a violent shivering fit, and was at the same time seized with acute pain in the right side of the chest. The same evening, at 11 P.M., he was seen by Professor Baccelli, sent by the Council of Ministers. He was then found to have very extensive pleurisy and pneumonia involving the whole of the right lung. The heart was dilated—both ventricles—and was probably fatty. Pulse quick, and very irregular. A very grave prognosis was given. The next morning, he was bled to a slight amount; but he never took the quinine, camphor, and anti-mony ordered to any extent, as throughout only one and a half grammes (about twenty-two grains) of quinine could be given. He tore off the counterirritants, too, that were used, and insisted on smoking cigars even when expectorating prune-juice coloured masses, and he continued to drink very large quantities of iced water. He took some sherry, but very little fluid nourishment. On Sunday, his symptoms were worse, and Baccelli gave a hopeless prognosis; but the bulletins were not worded as he wished, as the Council decided not at once to alarm the nation. With the same object, the official dinner that evening at the Quirinal to the diplomatic corps was not deferred. His state became aggravated on Monday and Tuesday, as described in the telegrams, and on Wednesday morning, at 5 A.M., he was sinking. Oxygen was then given by inhalation, and it had a great effect, as the cyanosis of the face, hands, and chest almost disappeared, and he was able to take the last sacrament and to say a few words. About noon, he turned over on to the left side, when his breathing at once ceased and he seemed *in articulo*. The physicians succeeded in raising him, however, and, by using the oxygen and by artificial respiration, he again rallied for a short time, but finally died in collapse at 2.30 P.M. The quantity of oxygen used on Wednesday was three hundred and twenty litres.

From the beginning, such an attack, in a man of Victor Emmanuel's

constitution, with the heart dilated and fatty, would obviously prove fatal; and Professor Baccelli even ventured to predict on Sunday that he would die on the fifth day. The body has been embalmed, but not very successfully, King Humbert having refused to allow the removal of the viscera. It seems certain that the wish of the nation is to be granted, and that the body of the most constitutional monarch any continental nation ever had is to remain in Rome.

THE UNIVERSITY OF LONDON.

A MEETING of Convocation was held on Tuesday last, the Chairman, Dr. Storrar, presiding. The attendance of members was very large, and the greatest interest was evinced throughout in the proceedings. The chief business for discussion was the draft of a new supplemental Charter, ordaining that all the powers and provisions relating to the granting of degrees (excepting admission to Convocation, unless and until Convocation shall have passed a resolution for their admission), shall henceforward be read and construed as applying to women as well as to men. The Registrar announced that the regulations under which degrees in music are to be conferred had been approved by the Senate and the Home Secretary; and that the degrees in music would take the same high rank as those in the other faculties. The Chairman said that copies of the draft supplemental Charter had been circulated amongst the members, and that it might be taken as read. They were asked to concur with the Senate in surrendering the existing supplemental Charter, and in approving of the new proposals contained in the document which had been circulated amongst them. If they approved of it, the course which would naturally be taken would be to petition the Crown, on behalf of the University, to grant the new supplemental Charter to the University.

The report of the Annual Committee was then presented, and its reception moved by Mr. H. M. Bompas, seconded by Dr. Hilton Fagge. The motion was carried unanimously.

Mr. H. M. BOMPAS moved that the draft supplemental Charter be approved of. The real question, he remarked, which was raised by that document had been already considered by Convocation on two occasions, and each time that body had arrived at the same conclusion on the subject. For the sake of those women who were actually engaged in tuition, or who were looking forward to such work, it would be desirable that they should be permitted, if they chose, to go into the same examination with men and to be tested alongside of them. With regard to the question of actual practice, it seemed to him that the members of the profession should regulate the admission of others to such practice, and that the University should regulate the stamp of knowledge which should entitle them so to act. He was not sure that the admission of women to medical degrees would give them the right to practise; and he should be glad to see a scheme by which, in some way, their doing so would depend, not upon the University degree, but upon a professional body of medical men. Several side issues had been raised during the last few weeks; but they must remember that in this case the Senate had adopted that plan which Convocation had said should be followed out.

Mr. T. HENSMAN seconded the motion. He said, Convocation should meet the Senate in the same spirit in which the Senate itself had acted in the matter. This subject had got beyond the point of argument. It had been more than once before Convocation; it had been fully debated; Convocation had confirmed the principle for which he contended; and he could not suppose that the latter body would now go back on its old lines, and so to a certain extent stultify itself with regard to its former votes.

Dr. W. TILBURY FOX said that those who constituted the medical section of the University were anxious to promote the acquisition of knowledge by women, and were not opposed to granting certain degrees to them, provided the subject were properly investigated. They had heard that the Chancellor of the University had issued a circular on this subject, but he thought the noble Earl (Granville) would have consulted his dignity much more if he had occupied a position of impartiality in the matter. But the circular had evidently been issued with the express purpose of influencing votes that evening. Lord Granville had said that he had written it in order to remove any misapprehension as to the feelings of the Senate towards Convocation; and in the course of the present debate it had been contended that the acceptance of the new Charter would be in accordance with the views

previously expressed by Convocation. The Chancellor said the same thing, but he maintained that the statement that the present proposal was one for which Convocation had always contended was not just to the members. They had confirmed the desirability of women being admitted to degrees, but not to the same degrees as men. They had not a single line placed before them showing the grounds upon which it was considered desirable to effect this radical change; and in the circumstances, would it be dignified on the part of the University to consent to it? He recommended unanimity, and asked why they should split up the University into sections at a time when a strong current of feeling was setting in against it. The opinion of the members of the Senate themselves on this question had only changed since last June, and the house ought to reject the proposed Charter on this account if on no other.

The CHAIRMAN here read a letter which he had received from Earl Granville, enclosing a copy of a letter addressed to Dr. W. T. Fox, in answer to a letter giving his reasons for thinking that a statement in his (Earl Granville's) letter to the Chairman was not in accordance with the facts. The copy of the letter was forwarded to meet the charge, if it should be made at the meeting. Earl Granville referred to the resolutions passed on this subject by Convocation from 1874 in proof of his statement, that the supplemental charter was in accordance with the previously expressed views of that body; and, with regard to the statement that the article "the" in the words "the degrees" in a resolution had been inserted by mistake, his lordship said the resolution, as communicated to the Senate, contained the word "the", and it must be interpreted according to its terms. The letter concluded as follows:—"In these circumstances, I consider my statement as to Convocation having on three different occasions recorded its opinion in favour of admitting women to degrees in all the faculties is not fairly open to the remark that it is not consistent with the facts."

Mr. T. S. OSLER, LL.B., a member of the Senate, having spoken in reply to some remarks of Dr. Fox,

Mr. T. TYLER spoke against the Charter, and Mr. J. G. FITCH and Mr. CREAK in its favour.

Dr. QUAIN held that no proposal could be more injurious to the University than that which was contained in the proposed new Charter. It could not fail, if adopted, to hurt the institution as a whole; while to the Medical Faculty in particular it would be simply ruinous. Dr. Quain next read some correspondence showing that women did not want the degrees of the University, and that, if they had to compete for them, they must give up the study of subjects which were likely to be of the utmost advantage to them in their various vocations in life. He thought the Senate and that House should seek to establish a separate University for women, or perhaps a separate department in the University of London for women. Those for whom he spoke were not opposed to the admission of women to certain departments in connection with the medical profession; but they must be kept in their proper places; for nothing could be more unfit for them than the practice of that profession to its full extent.

Mr. BLACKWOOD opposed the new Charter, on the ground that it would be injurious to women themselves.

Sir WILLIAM JENNER said reference had been made, in the course of the discussion, to the letter which had been issued by their chancellor. As to whether it was a dignified proceeding for Lord Granville to issue that letter, he should not say. They had all their opinions on the subject; but he thought that their chancellor, having descended from his high position to send out what he must term an electioneering circular, should never have said that the Senate had entered into a compromise. Where had the compromise been shown? He maintained that the chancellor was not justified in stating that there had been any compromise at all on the part of the Senate. With regard to the general question, he did not yield to any man in his desire that the education of women should be improved; but he denied that that effect would be produced by giving them degrees in medicine, and by obliging them to undertake the course of study through which they would have to pass. He had one dear daughter, and he would rather follow her to her grave than allow her to go through such a course of study. He held up both his hands, and he earnestly prayed that those who knew but little on this subject might follow those who ought to know a great deal about it.

Professor LISTER thought it would be a serious thing for Convocation to force upon the Medical Faculty a measure which he was firmly convinced the majority of the graduates in the profession to which he belonged viewed with detestation. If anything were to be done in the matter of degrees at all, let it be done after the most careful consideration as to what honours should be opened up.

Mr. HERSCHEL, M.P., pointed out that the proposed new Charter was not compulsory, but merely gave certain powers which it would

be open hereafter to the governing body of the University, influenced, if they would, by the views of Convocation, to put into force, in whole or in part, or, if they were of such an opinion, not put into force at all. As regarded the Senate, he believed that in this matter it had bowed to the will of Convocation, and he hoped that no gentleman present would vote against the proposal simply because of any feeling of resentment against the Chancellor for the letter which he had issued.

After a few words from Dr. MURRAY and Mr. ADAMS in support of the supplemental Charter,

Mr. W. H. HARKFORD said he would regard it as a distinction if a daughter of his were able to fit herself for taking a part in the world which would enable her to help her fellow-creatures with the skill of her male colleagues, and, at the same time, with that delicacy and tenderness which but too seldom belonged to men.

Dr. WILSON FOX would vote against the proposed Charter, because it would admit women to medical degrees.

Dr. PYE-SMITH said that, in connection with the Senate, Convocation had achieved a great victory, and it was their true policy to register that victory on the present occasion. It would be an advantage to the University to get questions of dispute out of the way, so that subjects of reform could be discussed. As Liberals in the best sense of the word, they could not deny the claim of women to try for degrees. With regard to what had been said of the subjects of medical study, they knew that the familiarity of scientific study took off the effect of what, without the study, would be obscene. What would otherwise be impure, was sanctified by the desire for knowledge, and the wish to alleviate human suffering. What already applied to medical students, to nurses, and to sisters of mercy, would apply to women generally. The question which had been urged upon them was one of difficulty, and the best course was to act boldly. Let the experiment be made. He should vote for the Charter in the interests of peace and reform.

Dr. MOXON said that Mr. Herschell had seemed to say that, because Convocation had three times voted for this question, therefore Convocation for all time should be bound thereby. This could not be, any more than that the Senate were to be bound by their former votes, which were opposed to the admission of women to degrees. If one accepted the equality of women in intellectual acquirements, then logically some day they must be admitted to Convocation.

Dr. BUCKNILL would vote against the Charter, on the principle that what was called the higher education of women was mischievous. All who had studied physiology and psychology were of that opinion.

Mr. BOMPAS, in reply, said that, if the medical graduates voted against the Charter, they would take away from the Arts and Science graduates the power to admit women to degrees; whereas, if the Arts and Science members of Convocation, in voting for the Charter, passed it, the carrying out of its proposals as far as regarded the medical degrees must rest with the medical members of the Senate.

A show of hands was then taken, and declared to be in the affirmative. Upon division, the numbers were: Ayes, 242; Noes, 132; the majority for the Charter was consequently 110.

MEDICO-LEGAL CASES.

A RAILWAY CASE.

IN the case of *Durrant v. the Midland Railway Company*, to which we have already referred, a rule *nisi* was moved for a new trial this week, on the ground that the verdict was against the evidence as to the total loss of eyesight, and also the damages were excessive in amount. After hearing the arguments, the Lord Chief Justice said the case had assumed a very painful character; for the counsel for the railway company did not hesitate, in the face of the verdict of a jury for such heavy damages, to impute downright imposture to the plaintiff. But there was nothing in the evidence to warrant the imputation; for even the medical witnesses for the company did not deny a very serious injury, and the court would hesitate long before they set aside a verdict upon such an imputation, which appeared to be without foundation. Whether or not the damages given were more than adequate, it was difficult to say, because it might depend partly on the possible loss of eyesight. On the one hand, if loss of eyesight ensued, the amount of the verdict would be hardly adequate; and, on the other hand, even setting that aside, it could hardly be said that the amount was excessive. The verdict therefore ought, in his opinion, to stand. Mr. Justice Manisty concurred, and accordingly the verdict stands.

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the Branch will be held at the York House, Bath, on Wednesday evening, January 30th, at a quarter past Seven o'clock: H. MARSHALL, M.D., President.

The evening will be devoted to the discussion of Hospitalism, which will be opened by R. W. Tibbits, M.B.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, December 31st, 1877.

DUBLIN BRANCH.

THE first annual meeting of this Branch will be held in the Hall of the King and Queen's College of Physicians, Kildare Street, on Wednesday, January 30th, at 4 P.M. The President, Dr. HUDSON, will deliver an address.

The annual dinner of the Branch will also take place at 7 P.M. the same evening in the College.

GEORGE F. DUFFEY, M.D., *Honorary Secretary.*

30, Fitzwilliam Place, Dublin, January 8th, 1878.

THAMES VALLEY BRANCH: ORDINARY MEETING.

AN ordinary meeting of this Branch was held at the Spread Eagle Hotel, Wandsworth, on December 18th; Dr. PRICE JONES in the chair.

Communications.—1. Dr. HOOPER related a case of Intussusception in a Child.

2. Dr. BATEMAN read a paper on Muco-Enteritis.

3. Mr. BATEMAN showed a case of Amputation at the Ankle-Joint by Pirogoff's operation.

New Member.—Mr. Franklin was admitted a member of the Branch.

Dinner.—The members afterwards dined together.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

M. Raspail.—*Magic Pipe.*—*Infectious Diseases in General Hospitals.*—*Ethnographic Gallery.*—*Prevention of Fires.*—*Sir Richard Wallace.*

THE name of M. Raspail, whose death has been announced in the JOURNAL of last week, has been so intimately connected with the profession that a short biographical sketch of his life may perhaps not be unacceptable. François Vincent Raspail was born at Carpentras, on January 29th, 1794, of poor parents. His father, though a simple publican, had him educated for the Church; but, finding himself unsuited for such a calling, young Raspail turned his thoughts in another direction, and soon became Professor of Natural Philosophy and Theology at Avignon, in which capacity he distinguished himself, so much that, in 1812, being then only eighteen, he was brought to the notice of the Emperor Napoleon, who, with his keen-sightedness, saw in the young professor something out of the ordinary. This prognostication, as has been seen during his subsequent career, was fully realised. In 1816, he came over to Paris with the view of improving his position, but had to work hard to earn a livelihood. During the day, he gave lessons on literature, and during the night he worked at chemistry and botany; and, among his earliest productions as an author, may be named his work on Organic Chemistry, a Memoir on Vegetable Embryos, and another on the Organisation of Flowers. He was of an irascible disposition, and quarrelled with everybody who differed from him. He entered into warm controversies even with the princes of science, and he looked upon Cuvier as his great rival in natural history. The senior members of the profession may well remember the part he took in the celebrated case of Madame Lafarge, on which occasion he was appointed by the Court to control the analysis of the great chemist Orfila, the expert for the prosecution, whom he actually accused of having surreptitiously introduced the arsenic (the substance alleged to have been used for the accomplishment of the murder) into the matter which M. Orfila was analysing. Without having studied even the principles of medicine, he created a system of therapeutics of his own, based on the theory that all diseases were of parasitic origin, and that camphor was

the antidote. This substance was accordingly prescribed by him in every variety of form, both internally and externally, and camphor cigarettes became the fashion; and, in order to give his theories a serious character, he published a work entitled *Manuel de la Santé*, which is a sort of household guide, and is to be found in almost every family throughout the country. This haphazard sort of practice soon brought him an immense fortune, which naturally excited the jealousy of the regular practitioners, who sued him for illegal practice, for which he was fined a nominal sum. Not content with the reputation and fortune he thus created for himself, he rushed into politics; but here he was not so successful as he was with his camphor, for he more than once got into trouble, and spent a great part of his life in prison. Who among those who have visited Paris does not remember the dramatic tomb, erected over his wife at the Père la Chaise, representing the wall of a prison, through the bars of the window of which the hand of Raspail is passed as if in expectation of meeting that of his departed wife? M. Raspail was also a member of the Chamber of Deputies, and was as great a fanatic in politics as he was in everything else. He had a large property at Arcueil, not far from Paris, where he died on Monday, the 7th instant, from an attack of pneumonia. He leaves four sons: Benjamin Raspail, who was a painter by profession, but which he has given up for politics; Camille is an "Officier de Santé", and keeps up his father's practice; Emile, the third son, is a chemist, and superintends the fabrication of the products employed in the therapeutics instituted by his father; and lastly, Xavier Raspail, who is a physician, but he also has sacrificed his profession for politics. The remains of the great democrat were interred at the Père la Chaise, in the midst of an immense crowd, representing all classes of society, both official and otherwise; and, being a member of the Chamber of Deputies, he received the honours due to his rank.

In my letter of November 17th, I brought to notice the hygrometric flower that has been much in vogue in Paris. The novelty in Paris now is a "magic pipe". This resembles an ordinary clay-pipe as long as it is confined to its case, but, as soon as it is exposed to the air, or rather to the light, it becomes intensely brown, very much resembling the colour eagerly sought after by professional smokers. Others, again, are so marked as to form different designs, such as caligraphic characters, words, distichs, proverbs, and even portraits. The invention is due to MM. Dagron and Gisclon, who have published the composition of the liquid employed. It consists of ether and alcohol, to which is added a little essence of rose or other essence, in which is dissolved about 10 per cent. in weight of camphor and 10 per cent. of borax. To this is added a slight trace of a salt of silver, such as the nitrate, to obtain a coating easily impressionable to light and easily fusible by the heat in the pipe, which is dipped in the solution with the designs previously traced on it.

The question, often discussed, about the isolation of patients suffering from infectious diseases, is at last about to receive some attention through the persistent efforts of the medical members of the Municipal Council of Paris, and the reiterated representations of the medical staffs of the different hospitals, particularly those of the children's hospitals, where the mortality is in excess, owing to the monstrous practice of conglomerating all the patients together irrespectively of the nature of their maladies. Thus it has frequently happened that a child, admitted with a mild affection and perfectly curable under ordinary circumstances, contracts an infectious disease, such as croup or diphtheria, from which it almost certainly dies.

A new Ethnographic Gallery has just been opened at the Hôtel des Invalides. Here may be seen a number (about seventy) of the different types of the warriors of America, Asia, the coasts of Africa, and of the different ocean isles, of the natural size, made of plaster of Paris, and painted with great ability. The statues are represented with the arms, costumes, ornaments, and the different articles worn by the men, sufficiently indicating the manners, habits, and the mode of fighting of these different people. Such a display is, we believe, not to be seen anywhere else; and is due to the initiative of Colonel Le Clerc, the indefatigable Director of the Ethnographic Section of the Museum of Artillery, who hopes soon to add to the above a suite of Greek, Roman, and Gallic warriors, which will form the natural introduction of a gallery for French and foreign modern combatants.

I lately brought to notice an extensive fire which took place at the Hôpital Saint Antoine, on which occasion the wooden huts annexed to the building were burnt down and some lives lost. This naturally led to serious inquiry on the part of the authorities; and Dr. Loiseau, a member of the Municipal Council of Paris, suggested that such disastrous consequences may be prevented by previously injecting into the wood with which huts are made a solution of alum, and painting it over with the same substance, mixed up with any other paint desired. This may be useful even for household furniture.

In acknowledgment of the services munificently rendered to the Parisians from time to time by Sir Richard Wallace, and particularly of the drinking fountains liberally established by him all over Paris, it is proposed to erect, in some public place in this town, a gigantic fountain, surmounted by the bust of the illustrious philanthropist, as a lasting tribute of a grateful people.

CORRESPONDENCE.

THE LOST MEDICAL SCHOOL.

SIR,—Without further inquiry, we may now take it for granted that there is at present no Medical Faculty at Oxford; that there is in that city a large and amply sufficient Infirmary; and that there are in the possession of the Colleges and University funds sufficient to pay a staff of first-rate men as professors. What the Commission should, I think, be asked to do is to assign funds for the payment of such a staff; namely, an uniform sum of £1,000 a year to each ordinary professor (the sum already determined on by Trinity College, Cambridge), and £300 a year to each extra-professor. The staff, once appointed, should have power to draw up a medical curriculum, commencing with a matriculation examination and ending with the M.B. degree. The time occupied by this curriculum should not exceed five years, and the whole course should be fully carried out from beginning to end within the precincts of the University. Students, though perhaps they might be permitted for special reasons to do so, should not be encouraged to take any part of this five years' curriculum elsewhere than at Oxford. The Oxford degree should be for Oxford men, and should mean that its holder has received such a thorough academic training in the medical arts and sciences as no medical school appended to a London hospital (the endowments of which cannot be employed in its support) can ever be expected to give.

The staff which the Commissioners have to create for the restored Medical Faculty of Oxford, to be paid at the rate above mentioned, must be, at the very fewest, as follows.

1. Professor of Medicine (allowed to practise).
2. Professor of Surgery (allowed to practise).
3. Extra-professor of Gynæcology (allowed to practise).
4. Professor of the Surgical and Regional Anatomy of the Human Body (with dissecting-room and endowed demonstrator).
5. Professor of Physiology (with laboratories and endowed demonstrator).
6. Extra-professor of Physiological Chemistry (possibly this should be a full professorship).
7. Professor of Pathological Anatomy (with laboratory and endowment for assistants and demonstrator).
8. Professor of Therapeutics and Materia Medica (with laboratories and endowment for assistants).
9. Professor of Hygiene and State Medicine (with laboratories and workshop).
10. Extra-professor of Medical Jurisprudence.
- 11, 12. Extra-professors of Medicine and Surgery, to take part in clinical and elementary instruction.

The precise duties of the offices thus created should be laid down, and power given to the Medical Faculty as a body (in which certain of the professors of the branches of physical science would be included: viz., those of chemistry, botany, and zoology) to coerce its members, so as to ensure the due delivery of the lectures and practical teaching demanded by the curriculum.

Were these arrangements made, and were the student intending to study medicine freed from all "schoolboy studies" on passing an entrance or matriculation examination (which, in a few years' time, not even the most infatuated pedant will expect to comprise the rudiments of Greek), we should have, in a very short time, a school of medicine and physical science in Oxford, which, though probably less numerous than that of Edinburgh, would be the largest and best equipped

in England, and the most efficiently arranged in the kingdom, for the profound study of the scientific bases of medical practice.—Yours faithfully,
A MEMBER OF CONVOCATION.

SIR,—The following further particulars relating to the history of the abused medical endowment at Oxford will serve to complete the partial information afforded by the letter of "A Member of Convocation", and will, I hope, do some service in helping you to press forward the much needed reform for which that letter establishes the grounds, and in promoting which I trust we may count upon your powerful aid.

The Regius Professorship of Medicine (now held by the same person who holds the Clinical Professorship) was assigned a stipend of £40 a year by Henry VIII. James I added to it the "Mastership of Eveline Hospital". In 1624, Mr. Richard Tomlins of Westminster annexed to it a Lectureship in Anatomy (of course, Human Anatomy in relation to Medicine); and, in 1803, by the will of Dr. George Aldrich, a Professorship of Human Anatomy was superadded to these. Dr. George Aldrich also endowed a Professorship of the Practice of Medicine; so that, at the beginning of the present century, there were in Oxford three Professors of Medicine; viz., the Regius, the Aldrichian, and Lord Lichfield's Clinical Professor. Each of these offices was distinct; the ingenious device of giving them all to one person to do nothing did not at first occur to those concerned. The Regius Professor was at this time, and is now, distinctly bound by statute to give one course of lectures in the year "on Celsus, Galen, or Aretæus, or on the Practice of Medicine". In the first quarter of this century, he had further the duty of teaching human anatomy, as provided for by the Tomlinian and Aldrichian endowments. In addition to the three professorships already mentioned, the trustful simplicity of her medical sons has resulted in yet another endowment for the promotion of medical study in the University of Oxford: an endowment which, like all the others, has been shamefully misappropriated, though no blame can be attached in any sense whatever to the present recipient of the benefaction in question. Dr. Lee, at the end of the last century, made the Dean and Chapter of Christ Church the trustees of his property, which was to be employed in paying a reader in chemistry and a reader in anatomy, the latter post being founded for the express purpose of promoting the study of human anatomy as relating to medicine. This endowment has now been diverted by the ecclesiastical corporation to which Dr. Lee foolishly entrusted it. The clergy have proved themselves the deadly enemies of the Medical Faculty at Oxford, and Dr. Lee's Readership in Anatomy (worth £300 a year) is now misapplied in paying a gentleman to coach the undergraduates of Christ Church in zoology for their B.A. degree.

One reason of the failure of the Medical Faculty and the collapse of the various medical offices from time to time founded, is the smallness of the stipends assigned by the endowments. Dr. Acland receives, as Regius Professor, Master of Eveline, Aldrichian Professor, Clinical Professor, and Chief Examiner in the Medical Faculty, something less than £800 a year. In addition, however, he is Radcliffe's librarian: a post to which Dr. John Radcliffe assigned in 1714 a salary of £150 a year. Since Dr. Acland has held this post, the library of works on medicine and physical science, brought together in pursuance of Radcliffe's directions, has been removed from its beautiful receptacle, the well known dome, and the trust altered by making the Radcliffe funds supplement the Bodleian Library. The two libraries are now mixed up to a large extent, and the Bodleian librarian refuses to buy works on physical science.

You, sir, have rendered many and great services to the medical profession at large, and there can be none in which you can use to better effect the just influence which you have acquired in the profession than in moving the profession by organised proceedings to restore to medical science and medical education their part in the powerful and great education resources of the University of Oxford; nor, indeed, can any of the sons of the University who think with shame of the past

neglect and injury inflicted upon medicine and upon the University by the misappropriation of the endowments intended for the purpose of promoting medical education, engage in a task more grateful to the best wishes of the University, or more fitly atoning for its shortcomings and its faults than in assisting the present movement to swell the voices of those who have found in your columns a hopeful means of making their voices heard, and who may count, I hope, upon the aid of the British Medical Association to see that the question so raised shall not carelessly be let fall upon the ground and buried once more in the dust.—I am, etc.,
A LIBERAL CONSERVATIVE.

SIR,—I have only to-day seen the letter of "A Member of Convocation", and I lose no time in writing to your JOURNAL. I would, however, at once say that I do not in any sense intend to answer "A Member of Convocation", or to enter into a discussion with him. My object is twofold: to assure your readers who are not Oxford men that he does not represent the general feeling, nor (Heaven save the mark!) the average of good feeling of my university; and, secondly, to assure my old teacher and friend how affectionately and gratefully he is borne in mind by the large majority, I am quite sure, of his pupils. I think it is high time that this should be done; for we have for some time been annoyed either, it may be, by several jealous and discontented men, or, it may be, by one such person under various aliases; at any rate, by a series of personal attacks sent anonymously to a series of journals, showing more or less spiteful ingenuity, directed against Professor Rolleston. From behind the breastwork of a pseudonym, the enemy wages from time to time his chivalrous warfare with a feeling of security.

I protest against the right of "A Member of Convocation" to stand godfather for the body of science students, past and present. Professor Rolleston, as a scientific man, has no need of any apology or defence from any man; but, when he is attacked as a teacher, his pupils must be his champions.

Let me assure your readers and him that few indeed of those whom he has taught fail to remember with gratitude the devotion with which he has always laid himself at their service, and that not a few feel that, while his teaching has been most valuable to them, the example of his remarkable energy, his ardent enthusiasm, and his hatred of what is petty and mean, have been appreciable motive forces which have sensibly helped them again and again in the struggle for existence. I would add that the number of his students has increased instead of diminishing, "prehistoric pigs" or not.

The question of how far Oxford would be the better or the worse for being a regular medical school is a large one. You have seen one side; the other side is that, in a limited space of time, it may surely be better to confine studies to the purer scientific branches. I believe, and so do many others, that we are all the better for studying human anatomy and physiology at Oxford only so far as they are parts of the larger department of comparative anatomy and physiology. At any rate, a tree is known by its fruits, and I do not see among the men who come up from Oxford to the London hospitals that flippancy and want of preparation which ought to result from the lamentable arrangements over which "A Member of Convocation" weeps crocodiles' tears. On the contrary, Oxford can there hold her own, to say the very least.

There are "Members of Convocation" who are not a little indebted to the professor whom your correspondent abuses. He, no doubt, owes nothing. Reforms may be needed at Oxford from time to time, but proposed and carried out in a very different spirit from his. I have always been, and still am, proud of my university, and of the work which she is doing. I can only see one prospect of my ever feeling ashamed of her; but I should, indeed, be heartily ashamed of my connection with her if ever the day came for her to be re-represented by men showing no more good feeling than "A Member of Convocation".—I am, sir, your obedient servant,

FRANCIS HENRY CHAMPNEYS, M.B. Oxon., M.R.C.P.;
Casualty-Physician to St. Bartholomew's Hospital;
Formerly Radcliffe Fellow.

11, Wyndham Place, Bryanston Square, Jan. 12th, 1878.

SIR,—I have read with great interest the correspondence upon the Oxford School of Medicine, and, as one who has had some practical acquaintance with it, I should be glad to make a few remarks as the result of my experience. These I would preface by an expression of astonishment that "A Member of Convocation", who has ventured to make most serious charges against two of his colleagues, should have lacked the courage to sign his name. I, who must follow his example

in writing anonymously, shall avoid, as far as possible, the personal matters raised by his letter. Both the objects of his accusations are doubtless well able to defend themselves, if they think it desirable. As one who recognises the debt that science in Oxford owes Professor Acland, I would respectfully urge him to abandon for once the good rule of refusing to notice anonymous accusations, and, in view of their gravity in the present instance, and out of regard to the university which he represents, to state to the public his conception of the duties of his offices, and the manner in which he fulfils them. As a former pupil of Professor Rolleston, I would add my testimony to that of "Two Oxford Graduates in Medicine" to the unfailing zeal, energy, and patience with which he not only introduces beginners to the first principles of biological science, but also advances that science step by step each day he works by the unwearied researches of his "leisure" hours.

In common with many others, I attribute the small number of medical degrees conferred at Oxford in no slight measure to the difficulties thrown in the way of candidates by the faulty arrangement of the examinations, and, with your permission, I would sketch the university career of the ordinary type of man, one not clever, not proficient in natural science or any other branch of learning, but one of those men of average attainments, such as two-thirds of the undergraduates possess, whose wants the university, to be worthy of the name, is bound to supply.

Under the present system, such a man, after passing moderations at the end of his first year, has to pass the Preliminary Honour examinations in Chemistry and Physics before he can present himself for examination in his Honour subject, which will probably be biology. In this, we will suppose he gains a first-class at the end of his fourth year, and then goes to London and begins the first year of his recognised professional education with a good knowledge of physiology and histology, a vague notion of ordinary descriptive anatomy, and a hazy recollection of his Preliminary Honour subjects passed probably two years ago. Strangely enough, these last subjects he has to resuscitate for his "first M.B. examination"; and, while all his energies should be concentrated upon human dissection, he has to devote much of them to renewing his acquaintance with such topics as the mechanism of the steam-engine and the laws of falling bodies. This "first M.B." is not only extraordinary in the number of its subjects, but also in the high standard of knowledge expected in them (botany excepted), especially in physiology. Reference to last December's papers will show this, and further, that many more questions are set in subjects of secondary than in those of primary importance in medical education. Thus, on the last occasion, about twenty-four questions were asked in physics and mechanics to four or five in human anatomy. As might be expected, the result of such an examination is sometimes not a little peculiar. Not so very long ago, a candidate who had recently passed the primary examination for the Fellowship of the R.C.S.E. failed at the same time that another who had not then dissected an entire body passed. I would bring to your notice that failure entails a year's delay.

And, if it be difficult for a man who has studied science at the university to master this multiplicity of subjects, success is almost impossible for one who only begins to work for the examination when he has entered on his hospital life in London. The Cambridge method ensures a fairer test and works better. There the subjects comprised in the one examination at Oxford are distributed amongst two, and the addition of *Materia Medica* to the second examination does not prevent this arrangement from much facilitating the preparation of the work.

I cannot ask you, sir, to give me more space than that sufficient to briefly suggest a few alterations, which would, I believe, be improvements upon the present system.

1. At least let men be excused from taking up for their "first M.B." the two subjects in which they have passed in the Preliminary Honour School.

2. Abandon the idea of making Oxford a seat of instruction in medicine and surgery, subjects surely better studied in London than in the best provincial school; establish instead a final Honour examination in human anatomy and physiology alone, to be taught practically by demonstrators, as in our London hospital schools. Were such a plan as this carried out, the Colleges of Surgeons and Physicians would, I imagine, allow a man to register directly he had passed moderations, and the student would combine all the advantages of an university life with the prosecution of his professional studies. By this method, the present "first M.B." would be divided into two examinations: the first part comprised in the Preliminary Honour, while the Final Honour examination would embrace the other remaining subjects. The last two years of professional education might

most advantageously be spent in London, and the degree of M.B. would be attainable in the more reasonable time of five years or a little longer, instead of as at present from seven upwards.—I am, sir, your obedient servant,
AN OXONIAN.
January 15th, 1878.

PHYSICIANS' FEES.

SIR,—Some time ago, I addressed you on the subject of consultants' fees, and I complained of the practice of the leaders of the profession, who charge fees which to the public and to the profession seem ludicrously inadequate. If I wish a patient of my own to see one of the leaders of the profession, I always ask for a special appointment, stating that the fee will be from three to ten guineas, according to the means of the patient and the importance of his case. Otherwise, I receive a courteous letter from the consultant, and an opinion worth less than my own—worth less because the case has been but half investigated. We seek the advice of our leaders in cases of difficulty; and it is absurd that, when I and others have made a minute examination of a case, using all known methods, physical and chemical, we should be put off with a clever gloss arrived at in twenty minutes and written out in three. We require a careful written opinion, going fully into every point, as counsel in such cases would do, and paid for at a like rate. What would the Solicitor General or Sir Edmund Beckett charge for a careful opinion on a difficult point of law? It is absurd that the heads of our profession should lose time and lose money in a sort of gossiping out-patient practice which pays them little more than one guinea per consultation. Many fashionable physicians are really thus forgetting what "going into a case" means. Let physicians in London, at any rate, give up promiscuous morning receptions, as they find they can venture upon it, and see patients only by appointment and at fees proportioned to the time required, say, at an average rate of five guineas per consultation. They would make more money at less wear and tear, and with far more intellectual advantage to themselves and to the profession and the public.

Turning now to the other points under discussion, and speaking anonymously myself as a medical consultant in very large practice, I may say that the loss of fees, so much complained of, is to me unknown or scarcely known, and I cannot understand how it happens to be known so well to others. Occasionally, the shillings are filched from one's fees, but this is not common; and when I know those who do it, I add a guinea to my usual charge, and am careful not to remit fees to them on small occasions. I keep no books, and the few people who leave my chambers without payment have invariably forwarded a cheque when informed of the fees due. This information is sent, not by bill but by a written note on my behalf. I think those consultants who lose money must be more or less family practitioners, undertaking, that is, attendance upon patients at their own homes. This is clearly out of the province of a consultant, and if he be not paid for his services he must not complain. As a country consultant, my fee is one guinea for every visit of importance, but I am glad to encourage the return of a patient who merely calls to report progress. I always charge two guineas for single consultations, upon which much may turn, and for all consultations at which the family attendant is present. "General Practitioner" is surprised at this: I will explain my reasons, at any rate. Such consultations are, as a rule, serious ones and in important cases. They mean, first, a talk with the medical man alone; then with him and the patient; thirdly, again, with the medical man alone; and finally, with both him and his patient together. I beg to add, that any consultant who takes for granted the medical man's report of physical conditions, etc., does not earn his fees or do his duty to the patient. Moreover, medical men cannot wait a consultant's convenience, and thus some further trouble is caused. Another general practitioner points out the folly of his brethren in shirking consultations. No men are more anxious than these very men for consultations when themselves in illness, nor can I imagine anything more unsympathetic than to deny or fail to secure to sick people a full discussion of their own case. No intelligent person will choose to deprive himself of such advantages. The result is, that they come unknown to their own attendant, and forbid the consultant to write to him because "Mr. So-and-so is so touchy" on this subject. I fear consultants are somewhat to blame in this, as they have not been in all cases so careful as they should be of the reputation and skill of the general practitioner. The consultant feels he is coldly regarded, and if he be not very scrupulous may take a little quiet revenge.—I am, sir, yours, etc.,
A COUNTRY CONSULTANT.

January 14th, 1878.

P.S.—A practice has sprung up in London of charging one guinea for consultation and the second guinea for writing to the private

attendant. This is most objectionable, as patients are, as it is, far from ready enough to allow letters to be written to their own attendants, and prefer to "take a prescription"—a proceeding really far less for their interests and for our own.

SIR,—As you open your columns to a discussion on the subject of fees, I beg your permission to point out that much of the difficulty which consultants feel in raising their charges above the time-honoured guinea must really be placed at the doors of those who are at the top of the tree, and who fail to set an example which would enable other and less employed men to follow in their footsteps. When such men as Jenner, Paget, and Gull, and a few more that could be named, do not ask more than a guinea for a visit or two guineas for a consultation, you cannot be surprised that things should stop as they are. Is it not really an absurdity that such men should drive out, say to Notting Hill, give half or three-quarters of an hour's consultation, and, when asked their fee, claim two guineas? I am satisfied that many patients would think more of their opinion, and quite as readily pay their fee, if they asked five guineas for a single consultation; and that would be much more like the sum which a barrister of equivalent standing would charge for the same amount of work. Many consultants ask two guineas for a first visit; but I doubt if those I have named do so. What I would suggest is, that some half-dozen of the leading physicians and surgeons—men who can command work, whatever their scale of charge may be—should agree together to make some change in the direction indicated. Were this done, others could follow in their wake; and this would have a beneficial influence through all ranks of the profession. But, until some common action is taken, and until the example is shown by some of our leading men, who really owe a duty to their less fortunate brethren, it is to be feared that it will be long before any satisfactory result is arrived at.—I am, etc.,

F.R.C.P.

January 12th, 1878.

SIR,—As a physician in busy practice in one of the largest provincial towns, in which there exists a flourishing medical school, I have long felt that the question of physicians' fees, and the relations of physicians to their professional brethren and to the general public, was one which ought prominently to be brought forward in the medical journals and at medical societies. I rejoice that the subject has at last been taken up in the columns of the JOURNAL. I wholly agree with "General Practitioner" in his opinion that what is required is "a thorough and proper understanding between the consultant, the general practitioner, and the public"; if such existed, physicians would have little doubt as to the amount of their fees, and little trouble in securing them. Whether general practitioners are pleased that it should be so or not, there will always be a large body of consultants whom the public will recognise, and to whom they will appeal in cases of unusual danger or difficulty: a body made up of eminent physicians, eminent surgeons, and eminent specialists.

Much, if not all, of the confusion which exists as to physicians' fees arises from a confused notion in the public and professional mind as to what a consultant is. Let this idea be clear, and there will be no difficulty as to fees. For this confusion both consultants and general practitioners must be held responsible. Those consultants have mainly contributed to it who have habitually practised as general practitioners; but general practitioners have been accessory to this anomaly, and have borne their share in the result, by wrongly continuing to recognise as consultants men who are so styled falsely, and who are general practitioners, like themselves, differing only from them in holding hospital appointments, in occasionally being consulted, and in gaining a remuneration for their work as general practitioners usually a little higher than that which their brethren can secure. It is expedient and right that general practitioners should meet each other in consultation. I would encourage such conferences. But there must be no mistake; one general practitioner has no right to expect another general practitioner to meet him in consultation as a consultant, and to acknowledge him as such in fees and in precedence, whilst outside the particular case in which they are engaged they are competitors in general practice. It is often asserted, and sometimes, I am afraid, with truth, that general practitioners are averse to consultations. If this be true, in the interests of the public, such aversion is to be regretted. But that many general practitioners favour rather than resist consultations, every physician knows. Such an aversion, however, may not naturally arise when general practitioners know that their own particular sphere of practice is treasured upon largely and systematically by many so-called consultants. To a very great extent, general practitioners have the remedy for these abuses in their own hands; let them always use their influence in favour of consultations, whenever the need

for them fairly arises; but let them take care that they use that influence, so far as they may do so with due regard to the interests of the patient, towards securing as the consultant some one who is really worthy of the name.

In medicine, what ought a consultant to be, and what ought he to do? He ought to be a man of high academic standing and of wide and liberal culture; he ought to hold, or to have held, some distinguished public appointment as a physician, which secures for him a large and varied experience in the management of disease; he ought to have done, or be engaged in doing, some work for the advancement of his profession. He ought not to practise as a general practitioner; that is, except in his own consulting-rooms, he ought only to see patients in conjunction with their ordinary medical attendant; and he ought always to receive his fees at the time when the service by which he earns them is rendered. Such a standard of character and conduct would shut off many from consulting practice who are now getting some of it, or who are now expecting some of it. Such a man as I have described must be content to work hard without pay, and to wait long for remunerative employment, while perhaps he sees many who were his fellow-students earning in general practice a comfortable competence; but the time will surely come, sooner or later, if he have worked well and wisely, and if he have kept an unspotted reputation, when he shall reap an abundant reward in the justly won confidence and support of his profession and of the public.—I am, etc.,

January 14th, 1878.

A PROVINCIAL PHYSICIAN.

THE ACTION OF CHLORAL.

SIR,—I am requested by the Chloral Committee of the Clinical Society of London to beg the favour of the insertion of the accompanying letter and queries; and to express a hope that those members of the profession with whom we have been unable to communicate individually may also aid our inquiry by contributing the results of their experience. Copies of the circular may be obtained on application to the undersigned, at the Clinical Society's Rooms in Berners Street.—I am, sir, your obedient servant,

ROBERT FARQUHARSON, Honorary Secretary.

Brook Street, January 1878.

"Clinical Society of London, 53, Berners Street, January 1878.

"Dear Sir,—The inconvenient effects which occasionally follow the incautious or long-continued use of the hydrate of chloral have induced the Clinical Society to appoint a Committee for the purpose of investigating certain points in the action of this important drug. The scope of the inquiry has been defined within the following limits: 'To investigate what deleterious effects follow the prolonged and continuous use of chloral in ordinary doses.'

"The Committee consists of Sir William Jenner, Bart., Dr. Andrew Clark, Dr. Buzzard, Dr. Duckworth, Dr. Barlow, and Dr. Farquharson.

"It is evident that a report upon such a subject will be valuable in proportion to the number and accuracy of the observations upon which it is based; and, in entering upon its task, the Committee therefore invites the co-operation of the profession at large, and especially of those members of it who enjoy the opportunities afforded by family practice. Every accurately noted fact, even though it be isolated and of little evident utility, will be of service; and, from the mass of evidence which may thus be placed at its disposal, the Committee hope that some generalisation of an useful kind may at least be attempted.

"The enclosed list of questions has been framed with the view of drawing attention to the points most worthy of consideration, and the Committee will feel much obliged by replies to as many of the inquiries as your opportunities of observation enable you to furnish.

"Should it be preferred, however, this column may be left blank, and the information afforded in any other form that may be thought desirable.

"In the event of your being able to favour the Committee with the advantage of your experience, you will oblige by posting the circular to the Honorary Secretary, at the abovementioned address.—We are, dear sir, yours faithfully,

"WILLIAM JENNER, M.D., Chairman.

"ROBERT FARQUHARSON, M.D., Honorary Secretary.

"Results of the Prolonged Use of Chloral.—1. Age. 2. Sex. 3. Temperament, if marked. 4. Occupation, sedentary or otherwise. 5. Habits as regards stimulants. 6. For what purpose was the chloral given. 7. In what doses. 8. For how long, and whether continuously, or with intervals of what duration. 9. If taken continuously for a prolonged period without obvious ill-effects. 10. If use followed by obvious ill-effects in reference to the—A. Nervous; B. Circulatory;

c. Digestive ; D. Cutaneous ; E. Urinary, or other systems. II. Any further information on any other head, not tabulated, which your experience may afford. (N.B.—Additional schedules will be forwarded on application.)”

THE BEARING OF EXPERIMENTAL EVIDENCE UPON THE GERM-THEORY OF DISEASE.

SIR,—Dr. Bastian's remarks on the above subject, published in the last number of the BRITISH MEDICAL JOURNAL, will receive the attention due to any deliberate statement made by so high an authority. I question, however, if pathologists will be impressed with either the clearness or the cogency of the arguments adduced by Dr. Bastian against the germ-theory of disease ; or will regard as other than rash and unwarranted his statements, “that existing evidence seems abundantly sufficient for the rejection of this doctrine as untrue”, and that “all the distinctive positions of those who advocate a belief in the so-called ‘germ-theory of disease’, or rely upon the exclusive doctrine of a ‘contagium vivum’, seem to be absolutely broken down and refuted”. Before we can be in a position to talk so decidedly and confidently regarding “the distinctive positions of” those who maintain the germ-theory of disease, we must have an intelligent appreciation of what those distinctive positions are.

To understand or appreciate arguments for or against the germ-theory of disease, we must have a clear understanding what that theory is. Till we have this, we cannot see the exact force and bearing of a given argument. What, then, is the germ-theory of disease? This is no unnecessary question ; for, both by its friends and foes, this theory is referred to in the most loose and indefinite manner. Not only by Dr. Bastian, but by many others, the germ-theory of fermentation, and the germ-theory of disease, are treated and written about as parts of one and the same question. It cannot be too strenuously insisted on that the two questions, though allied, are totally distinct and separate ; and that each must stand or fall on its own merits, and independently of the other.

A short statement of what each theory implies will make this apparent. There are two theories as to the mode of production of fermentation. One is the vital theory, according to which living organisms are the sole causes capable of producing fermentative change. The other is the physico-chemical theory, according to which such change may be produced by any organic matter, living or dead, which is undergoing change. All admit the presence of organisms in the fermenting fluid. According to one theory, these organisms are developed from the pre-existing germs whose presence in the fluid gave rise to the fermentative change. According to the other, they are developed *de novo* in the changing fluid.

Such, briefly, are the two opposing views. The question is, not whether living organisms can set agoing fermentation—that is admitted by all—but whether or not living organisms are the sole causes capable of doing so. Of the invariable presence of masses of minute organisms in fermenting fluids there is no doubt. The point of discussion is the source and mode of origin of these organisms. Thus it has come to pass that the discussions which have taken place regarding the mode of production of fermentation (and putrefaction) have really been discussions on the doctrine of spontaneous generation. Those who uphold the germ-theory of fermentation deny the occurrence of heterogenesis, and maintain that all life springs directly from antecedent life. Those who uphold the physico-chemical theory as strenuously maintain the doctrine of heterogenesis.

The germ-theory of fermentation is thus essentially antagonistic to the doctrine of heterogenesis ; and the question with which we are really dealing, when we discuss that theory, is the doctrine of spontaneous generation. It is not so with the germ-theory of disease. This theory is that many diseases (notably epidemic and contagious diseases) result from the propagation in the system of minute organisms having no part or share in its normal economy. It deals simply with the competence of living organisms to produce the phenomena of disease ; and does not necessarily take cognisance of the question, whether or not organisms may originate *de novo*. The germ-theory of disease, therefore, exists on an independent footing ; and would still exist and hold sway, though the physico-chemical theory of fermentation and putrefaction had been proved beyond a doubt. The competence of germs to produce fermentation is admitted by all. The competence of germs to produce the phenomena of disease is the special subject of discussion between the supporters and the opponents of the germ-theory of disease.

I have elsewhere* shown that the germ-theory affords of the pheno-

* *The Germ-Theory applied to the Explanation of the Phenomena of Disease* London: 1876.

mena of the specific fevers a more complete and satisfactory explanation than any theory hitherto advanced ; the whole of the phenomena presented by these diseases being quite explicable on the view that millions of minute organisms are being propagated in the system during the period of their continuance. And this is the line of argument to which we must sooner or later come, if we would fulfil the highest duties of our calling.

It is not enough to try to explain why infusions of meat decompose, why wine ferments, and why urine becomes putrid. We are constantly surrounded by ailments whose causation and pathology the germ-theory of disease seeks to explain. People are annually dying of these ailments by tens of thousands. It is the investigation of the phenomena of these diseases, as they present themselves at the bedside and in the *post mortem* room, that should engage the attention of physicians and pathologists. Earnest hard-working men of science are eagerly engaged in investigating the more purely scientific, and, to humanity, less practically useful, question of the germ-theory of fermentation and putrefaction. Let us, as medical men, have an equally keen sense of the importance to our science of the allied question of the germ-theory of disease—a theory which deals with the question of the causation and pathology of the most important ailments to which man is liable. But let us free ourselves at once from the fatal error of supposing that our question is inseparably linked with that of the philosophers, or that we are in any way dependent on them.

There are in our ranks earnest, able, and willing workers enough. Let us only have a clear conception of what we are called upon to do. Let us be alive to the great fact that the subjects of our investigations and inquiries are the phenomena of disease, as they present themselves to our notice at the bedside ; and let us discard for ever the deluding idea that the germ-theory of disease must stand or fall with the germ-theory of fermentation, or that it has even any necessary connection with it.

What has been said affords all the answer that is required to Dr. Bastian's hostile remarks on the germ-theory of disease. The arguments which he brings forward are all meant to support his well-known views on the doctrines of heterogenesis and archebiosis. They have no bearing on the germ-theory of disease. Dr. Bastian refers to the experiments of Drs. Lewis and Cunningham, and of Dr. Bardon Sander-son. It would not be difficult to show that their facts tell more in favour of than against the germ-theory of disease. On a future occasion, I may take the opportunity to do so. In the meantime, as Dr. Bastian merely adduces them “to show that, under certain conditions, low independent forms of life may originate in the midst of living tissues, previously free from them, by a kind of transformation (heterogenesis) of some of the units of protoplasm, which, though still living, have been modified in nature and tendency by reason of their existence in a partially devitalised area”. As this is all that he adduces them for, I shall content myself with pointing out that he is arguing, not against the germ-theory of disease, but in support of the doctrine of heterogenesis ; and that arguments which favour the latter do not necessarily tell against the former.—Your obedient servant,

T. J. MACLAGAN, M.D., Physician to the Dundee Royal Infirmary ;
Examiner in Medicine to the University of Aberdeen.

DYSIDROSIS AND CHEIRO-POMPHOLYX : AN EXPLANATION.

SIR,—I beg to be allowed to correct the impression my contribution of December 29th seems to have made upon Mr. Hutchinson's mind. First of all, let me disclaim all intention of implying that the disease was comparatively new to him at the time when he first spoke to me about it. From the manner in which the subject was introduced—not by the presence of an actual illustration of the disease—I, not unnaturally perhaps, concluded that Mr. Hutchinson had not then seen many cases ; but after the publication of his apology in 1876, I was willing to allow any reasonable claims that he or his friends might prefer as to the date and the independence of his observations. From that time, the matter ceased to have any interest for me, until I read Dr. Thin's article in the BRITISH MEDICAL JOURNAL of December 1st. That gentleman, while allowing that Dr. Tilbury Fox had published a detailed account of the disease in January 1873, affirmed, on the evidence of the publication in 1876 of a clinical lecture alleged to have been delivered by Mr. Hutchinson to his pupils in 1871, that “as far as published evidence goes” the credit “of having first recognised that there is a distinct and previously undescribed vesicular or bullous disease chiefly attacking the hands” belongs to Mr. Hutchinson. As a protest to this strained judgment, I felt bound, in justice to Dr. Tilbury Fox, to state that as early as the commencement of the year 1870, he

had pointed out to me, and to others of his pupils, the chief characteristics of a bullous eruption occurring on the hands, similar to, if not identical with, that described by Mr. Hutchinson as cheiro-pompholyx. The obvious reply to Dr. Thin is, that if Dr. Tilbury Fox had been as fortunate as Mr. Hutchinson in securing devoted assistants and amanuenses, he would have been able to produce the *ipsissima verba* of his expositions of the year 1870.

I trust that Mr. Hutchinson will perceive that he is mistaken in thinking that I revived the controversy respecting the "priority of observation", and that he will accept the assurance that in referring incidentally to our conversation I was not actuated by the sinister motives he has imputed to me, but with the simple desire to call him to witness that at that time the disease was not new to me.—I am, sir, yours truly,

JOHN TWEEDY.

Harley Street, W., January 12th, 1878.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 11TH, 1878.

CHRISTOPHER HEATH, F.R.C.S., Vice-President, in the Chair.

Lupus of the Face treated by Linear Scarification aided by Erasion.—Mr. BALMANN SQUIRE exhibited a woman aged 32, single, a needle-machine worker, who had been affected with lupus of the face since the age of fourteen. The disease appeared first on the nose, and remained restricted to the nose until three years ago, when the disease appeared on the right cheek, also occupying here a distinct position quite isolated from the patch on the nose. Her condition in September 1877 was that the lower third of her nose had disappeared, and become replaced by a thick scab covering an ulcer, the floor of which consisted of pale flabby granulations exuding a thin purulent discharge. The patch of disease on the right cheek measured two inches vertically by an inch and a half horizontally. It consisted of unbroken lupus-tubercles, and presented no scabs or ulcerations. On September 27th, Mr. Squire operated on the whole of the diseased area both of the cheek and of the nose by scraping away the friable portion of the diseased skin by means of a small steel spoon provided with sharp edges, after the manner originally advocated by Dubini of Italy, and subsequently by Volkmann of Halle, and, as soon as the surface had healed, he again, after about a fortnight's interval, repeated the operation. On the surface healing for the second time, a very considerable improvement was noticeable. In fact, the cure of the disease was evidently for the greater part already accomplished. There remained still various portions of skin which, although not sufficiently diseased to permit of their being scraped off by means of the spoon, were, nevertheless, evidently affected in an obvious degree with lupus-infiltration. These accordingly were treated by means of linear scarification repeated at short intervals several times over the same area. The ulcers of the interior of the nostrils were treated in the same manner, namely, by operating through a nasal speculum. The patient did not on any of these occasions avail herself of anaesthesia, either general or local, but bore the process almost without flinching. She seemed now to be quite cured of her disease. The period between the time at which the disease had now long since seemed to be cured; and this present time had been occupied by Mr. Squire in watching to see if any return of the disease took place, and by his eradicating by means of erasion with the sharp spoon or by scarification with the scalpel any minute traces of the disease which seemed to be still left unobliterated. His deviations from the course of his predecessors in this method had consisted in the use of much smaller spoons for the purpose of attaining greater accuracy in manipulation—an important point, when it was requisite to eradicate even the smallest possible remains of the disease, and for the other matter in employing linear scarification in place of the hitherto used and so-called multiple punctiform scarification, equally also for the purpose of attaining greater uniform precision in the treatment.

In reply to the Chairman, Mr. SQUIRE said the nares were affected to the extent of half-an-inch, and that in some instances incising was not enough, scraping being required when the infiltration of leucocytes had proceeded to any depth.—Mr. PICK asked if there had been treatment, as he had seen good results from large doses of arsenic, pushed almost to poisoning. He had never, however, seen perfect healing, as out-patients generally disappeared before that period.—Dr. WHIPHAM spoke of a case of lupus, where both local and general treatment had been employed with little success. The woman came one day with her face quite raw on one side from the kick of her child, but the lupus speedily healed. The other side was then cauterised, and that, too,

healed.—Mr. SQUIRE had only used local treatment; and, in reply to a question from Dr. Althaus, said he had used Hebra's treatment with nitrate of silver, but only superficially, whereas Hebra used it deeply. Sometimes, so used, it left a permanent discoloration.

A Case of Chorea, complicated with Epilepsy, in the Adult Male.—Dr. ALTHAUS read a paper on this case, which was that of a gentleman, both of whose parents had the neurotic constitution, and had moreover been first cousins. The chorea appeared when the patient was fifteen years of age, there being no history of fright, rheumatism, or endocarditis, the exciting cause having probably been masturbation. After having lasted six years, the St. Vitus's dance became complicated with epileptic attacks, the first one of which occurred after exposure to a powerful sun, and which after a time became numerous, both in the daytime and during sleep. These attacks were peculiar, inasmuch as they could apparently be brought on by a variety of circumstances under the control of the patient, and could also frequently be arrested by other proceedings. The patient was good-humoured, somewhat childish, but very fond of reading. The symptoms of chorea were seen in all the voluntary muscles of the body, there being no difference between the two sides. There was great tendency to general vaso-motor disturbance. Dr. Althaus treated the case with arsenic and bromide of potassium, without result; and, after these medicines had been given for a sufficient time, with various other nerve-tonics and sedatives. Nothing, however, seemed to benefit the patient until, in 1870, hydrate of chloral was given, which greatly checked the restlessness and general convulsibility from which he then suffered, and was also useful in arresting the epileptic fits. The patient unfortunately soon contracted the habit of taking immoderate doses of chloral, and, although the chorea was nearly cured, his digestion and general health became greatly impaired, and the epileptic attacks became more frequent and uncontrollable. He died in 1874, under peculiar circumstances, being found dead in his bed, with a wineglass half full of chloral clasped in his hand; and it was believed at the time that he had died of an overdose of the chloral. Dr. Althaus could not entertain this idea; but argued that, if chloral had killed him, there would have been complete muscular relaxation, and the patient could not have been found several hours after death clenching a glass half full of liquid. He thought that the patient had intended to take chloral for a fit, the symptoms of which were coming on; that he died in the fit before being able to take the chloral, and that rigor mortis, setting in immediately after death, caused the glass to remain clenched in the hand of the patient. Dr. Althaus drew attention to the value of the hydrate of chloral in the treatment of chorea, saying that cases of this disorder in adult males were generally incurable, but that in this case the chorea, which had lasted eighteen years and was severe, was very nearly cured when no other medicine nor the continuous current had made the slightest impression on it. He explained this effect by the theory of chorea being caused by active hyperæmia of the corpora striata and of the territory of the Sylvian arteries generally, while chloral caused anæmia of these structures, and was, therefore, a direct antidote. After some further remarks on the pathology of the case, he discussed the question whether the custom now obtaining in this country of chemists supplying patients with any amount of a powerful medicine like chloral, from a single prescription, should not be checked by legislative interference. In the present case, the patient had procured wholesale supplies of chloral from a West End chemist at a time, and had thus rendered it impossible to regulate the dose. Dr. Althaus alluded to the law of Germany and Austria, that a prescription, after having once been made up, was detained by the apothecary, and could only again be used on the physician once more attaching his initials and the date to it. The present custom in force in England not only enabled patients to do themselves and their friends a great deal of harm, but also opened the door to crime, inasmuch as it rendered the Sale of Poisons Act utterly futile.

Dr. CAYLEY had used chloral in the treatment of chorea, but had not found it very useful, probably as he feared to give it freely to out-patients.—Dr. SOUTHEY had used both chloral and bromide of potassium in two cases, one being very bad. He gave ten grains of each every two hours till sleep was produced; after that, the dose was reduced. Speedy improvement followed.—Mr. SOELBERG WELLS, referring to the subject of prescriptions, mentioned two cases. In one of these, morphia had been ordered in small quantity as an injection under the skin, but the practice was continued till ten or twelve grains a-day were used. He sent the patient to Dr. Levinstein at Berlin, who had treated of this matter (*Morphiumsucht*). In another case, arsenic was the substance used. One day, a very large dose was taken, but the patient was seen at once, and the life saved.—The CHAIRMAN asked if the masturbation was stopped, or any surgical operation done to arrest it. He had often seen blistering do good. He thought the question of epileptics marrying an important one. He had found bromide of potas-

sium the best thing in delirium tremens.—Dr. BURNEY YEO, referring to the marriage of epileptics, mentioned a case where an epileptic attack came on shortly after marriage, which terminated fatally in a few days.—Dr. ALTHAUS, in reply, thought the use of chloral in out-patient practice was not so advantageous as when the patient was under complete control. Chloral and bromide formed a good combination. He thought the prescription question very important.

Severe Hemorrhage, following Operation for Cleft Palate, Stopped by Plugging the Posterior Palatine Canal.—Mr. HOWARD MARSH read notes of the case. The patient, a young man aged 23, was admitted into St. Bartholomew's Hospital, where the following operation was performed. The patient being under chloroform, and Mr. T. Smith's gag having been introduced, the edges of the fissure—which involved the soft and the posterior half of the hard palate—were pared. The posterior part of the soft palate and the uvula, there being no tension in these parts, were brought together; then the soft structures were detached from the bone at the sides and anterior extremity of the cleft of the hard palate, and brought together; lastly, lateral cuts, about three quarters of an inch long, were made through the soft parts to relieve all tension on the sutures at the middle line. There was no undue bleeding at the time of the operation, but, three hours afterwards, hæmorrhage to the extent of about half an ounce occurred from the left nostril; this, however, ceased when the palate was syringed through the nose with iced-water. On the fourth day, the palate had all united and the patient was allowed to be up. The same evening, when he had, contrary to orders, eaten a thick crust of bread, blood was found to be dropping quickly from the left nostril and trickling down his fauces. Though arrested for a time by iced-water, the hæmorrhage soon returned; and when Mr. Marsh was called to him, two hours later, he was in a very prostrate state, for he had just vomited fully a pint of blood from the stomach, and was still bleeding quickly from the nose. Imitating a practice followed by Mr. Willett some years since, in a similar case, of plugging the posterior palatine canal, as Mr. Smith had suggested—an experiment which Mr. Willett found completely successful—Mr. Marsh having, by means of a sharp-pointed probe, passed through the lateral cut, found the orifice of the canal (which is situated about a third of an inch anterior to the hamular process of the sphenoid, and about the same distance directly inward from the wisdom-tooth) he passed into the canal a wooden peg, about as big as a common match, and straightened at its end. This was done by holding the peg in a pair of strong forceps with its point directed upwards and somewhat backwards in relation to the roof of the mouth. The bleeding at once ceased; but it returned when the plug slipped out two days later. It was, however, at once stopped when Mr. Schofield, the house-surgeon, reintroduced the peg. All went on well now; and, three days later, the plug again came out, and no bleeding ensued. But, two days later still—that is, fourteen days after the operation, five days after the last bleeding, and forty hours after the plug had come away—the patient was suddenly awoken by renewal of the hæmorrhage. He now bled severely for nearly three hours, in spite of various attempts to arrest the trouble; and, when Mr. Marsh was called to see him, he was found to be in a most dangerous condition of prostration. While he was under chloroform, however, the plug was introduced into the canal, from which blood could be plainly seen to be flowing, and the hæmorrhage, as on the previous occasions, immediately ceased. From this time, there was no return, and the patient soon recovered. The union of the palate remained sound and apparently unaffected by these repeated hæmorrhages. The author drew attention to the amount and very obstinate character, and repeated recurrences of the bleeding in this case, and strongly advised the plugging of the palatine canal in any case of serious hæmorrhage from the palate. The patient manifested severe pain when, by the introduction of the peg, the large posterior palatine nerve accompanying the artery was crushed; but no subsequent permanent trouble had ensued from this nerve-injury.

Mr. MAUNDER said that, although the time of the meeting was short, he could not refrain from congratulating Mr. Smith upon his suggestion, and Mr. Willett and Mr. Marsh upon their successful application of it. There was nothing to cause greater alarm to a patient, or more anxiety to a surgeon, than recurring hæmorrhage. On three occasions he (Mr. Maunder) had been called upon to consider the question of tying the common carotid artery for severe bleeding within the mouth. In one of these, he had ligatured successfully the main artery to arrest dangerous hæmorrhage from the region of the internal maxillary artery. In the other two, milder measures had fortunately sufficed. Surgeons would certainly not forget the useful hint which had been just given them.—Mr. T. SMITH said it was not so difficult to find the canal, as it was possible to feel the vessel pulsate, and then it might be easy to insert a sharp-pointed needle.—Mr. GOULD asked the effect

on the nerve of such pressure as to stop the bleeding.—Mr. HEATH thought the incision indicated in Mr. Marsh's figure was too far back. He preferred to make longitudinal incisions, and then to work backwards and forwards in them. If cut too near the orifice of the canal, the vessel was in a measure bound down.—Mr. BARWELL spoke of a child on whom he had attempted to operate, but was prevented by the hæmorrhage, and this went on for days. Again he tried, but the bleeding came on as before, so that he was obliged to desist. Some time afterwards, the child hurt her foot and bled to death. The whole family, as it turned out, were bleeders.—Mr. MARSH said he had used a sharp probe to discover the orifice of the canal. The bleeding was so bad that the man had serious fainting fits. In the operation, it was often necessary to go near the orifice of the canal. The question of family bleeding ought to be carefully gone into.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: MICROSCOPICAL SECTION.

DECEMBER 21ST, 1877.

W. HINDS, M.D., in the Chair.

Granular Kidney.—Dr. SAUNDBY showed some specimens to illustrate the pathology of granular kidney. Besides demonstrating the vascular changes, he drew especial attention to the mode in which the renal tubules atrophied; the lining epithelium lost its protoplasm, and became converted into small cells, which gave rise to appearances very like biliary canaliculi. Dr. Saundby remarked that an analogous process took place in cirrhosis of the liver, and showed a specimen of liver taken from the same case, so that the two processes could be compared. He regarded the pathology of the affection in both organs as essentially similar, and as commencing, as all affections of the connective tissue do, around the blood-vessels.

Parasites.—Dr. HINDS showed trichophyton tonsurans which he had mounted from cases recently under his care, and which illustrated in a marked manner the direct transmissibility of the disease and its high degree of contagiousness. Although this microphyte was regarded by authors in general as the direct cause of the affection, he considered that there was room for grave doubt; and that, though the contagiousness was admitted, it could hardly follow of necessity that the proximate cause of the disease was the fungus itself. If the special food and the conditions were present, the plant was sure to be produced. While the trichophyton was a mainly a sporulous fungus, and was an essential feature in tinea tonsurans, being always present, it should nevertheless be borne in mind that certain decompositions, or those of certain organic bodies, were often or always characterised by the spontaneous growth of specific fungi.

Phthirius.—Dr. HINDS showed a mounted male and female phthirius, found, with some other specimens, upon a gentleman of great respectability and of most cleanly and moral habits, and aged about 42. The specimens inhabited the neck, wrist, etc., only. The patient was of a very sensitive and kindly nature, was subject to occasional attacks of deep depression of spirits, and finally, a few weeks afterwards, committed self-destruction. Mere accident did not appear to account for the presence of these parasites. Dr. Hinds thought that it was probably to be explained by a morbid secretion from the sebaceous follicles and pores, or dirt from within, which attracted and fed the parasite, and gave it a congenial resting-place and a home of luxury.

THAMES VALLEY BRANCH.

DECEMBER 18TH, 1877.

W. PRICE JONES, M.D., in the Chair.

Intussusception in an Infant.—Dr. HOOPER related a case of intussusception in a child four months old, in which there were constant vomiting and copious discharge of blood-stained mucus, with considerable distension of the abdomen; while in the rectum was felt what appeared to be a cylinder of impacted intestine. At 3 P.M., an injection of soap and water was administered by means of a catheter, and a drop-dose of tincture of opium given. At 6 P.M., the child was free from vomiting or straining, a natural motion was passed, and the child was convalescent in two days.—An interesting discussion ensued, in which Drs. WYMAN and JONES and Mr. BATEMAN took part.

Muco-Enteritis.—Dr. BATEMAN read a paper on muco-enteritis. He described an ordinary case in a child about seven months old, with a well-marked Hippocratic expression, plaintive wail, and the bowels acting frequently, with almost constant tenesmus and discharge, of at first feculent matter, and afterwards of watery mucus with flakes. There were erythema around the anus, elevation of temperature, etc.

These symptoms continued while either ordinary or Swiss milk, thickened or not, was administered, exhaustion and death terminating the case. Dr. Bateman advanced the opinion that the principal cause was the caseine of the milk upon which the infants are fed, and propounded the question why it should not be produced by the caseine of woman's milk?—A discussion followed, in which Dr. JONES, Dr. WYMAN, Mr. SHIRTLIFF, and Dr. HOOVER took part.—Dr. JONES stated his opinion, as the result of long experience, that the caseine of cow's milk was indigestible only when cows were fed on brewers' or distillers' grains. It was found that by such food the proportion of caseine was increased, and, further, he believed that caseine was in an isomeric and more indigestible state. He mentioned numerous instances in which he put the idea to a critical test, by varying the food of the cow or goat.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

LUNATICS IN WORKHOUSES.

THE Brighton Board of Guardians had before them, at a recent meeting, a question of importance to parochial bodies, which has been brought prominently under consideration by a circular letter from the Bradford Union; namely, the desirability of memorialising the Local Government Board with the view to obtaining an Imperial grant for the maintenance of pauper lunatics, where such persons are housed and provided for within the walls of local workhouses. At present, a grant is made with respect to such male lunatics as are supported in the county asylums; but in many instances, Bradford and Brighton amongst them, efficient accommodation for such cases has been secured in workhouses, without, however, any subsidy being paid for them. The Board unanimously resolved on a memorial to the Local Government Board, pointing out that provision had been made, at great expense, for the maintenance of idiots and chronic lunatics in special wards at the Brighton workhouse, and that upwards of one hundred and twenty-three such cases were actually there at the present time; also, that the cost of such persons was two shillings per week in excess of ordinary inmates; and asking the Local Government Board to take the subject into consideration with a view to ending the inequality in the matter. As it was understood that other Boards were taking steps to memorialise the Board with the same object, it was decided to await their action before presenting the present memorial.

THE BROMYARD GUARDIANS AND MEDICAL EXTRAS.

FROM *Berrow's Worcester Journal* of the 5th instant, we learn that, at a recent meeting of the Bromyard Board of Guardians, the Chairman—Sir Robert Harrington, Bart.—brought up the report of the Committee appointed, in September last, to inquire into the amount and nature of the medical extras ordered in District No. 1, containing a population of 6,581 and an area in acres of 32,979. The Committee reported that not only was there a larger number of cases in receipt of medical extras in this district than in either of the other two, but that the medical officer gave an uniform order for three pounds of meat weekly, instead of two as ordered by his colleagues; that they had called on Mr. Powell for an explanation, who had stated that, if the number of cases in his district in which he had ordered extras exceeded that in the other two districts, it was because he had received orders to attend a larger number of cases, which was accounted for by the fact that the population of his district exceeded that of the other two districts. (We perceive, by the last census, that the united population of the other two districts amounts to 5,353, and the united area to 28,028 acres). He also pointed out "that two-thirds of the patients had been over sixty years of age, and that the majority of the cases were those of malnutrition or chronic starvation (infirmity), and that if such patients had been supplied with, or had had the means of supplying themselves with, a better kind of diet, they would probably not have sought an order for medical relief; that he had ordered for each case on its merits, and the Committee must not expect that he should be guided by the practice of the other medical officers, or that they should be guided by any treatment adopted by him". He also showed that the meat supplied consisted of breasts, necks, and scrag-ends of necks, and that, when the bone was extracted, the amount left available for food was about equivalent to the dietary in use in the workhouse.

Taken aback by this remarkably cogent and conclusive reply, the

Committee recommended that the master and matron should receive stringent orders to act, in all cases, on the rule of retaining the bony portions of the meat in the house for soup, and delivering the best and least bony portions of the meat to out-patients; that no difference in this particular should be made in either of the districts; and that the relieving officers, medical officers, and guardians should be invited to inquire into and report whether this was done. At the same time, it was decided that the clerk shall, by way of reminder, send to the medical officers a copy of the rule bearing on the ordering of extra medical relief, the purport of which is that the out-door medical officer can only recommend, but not order, medical extras, the responsibility of complying with the recommendation being thrown on the relieving officer.

The subject of ordering and the supply of medical extras to the infirm and sick poor is one of great importance in rural districts; and we urge that a very considerable amount of latitude should be conceded to the medical officer in issuing his recommendations to the relieving officer on this subject, for there can be no question that the maintenance of the very life even of the aged and infirm is mainly dependent on the supply of properly nutritious food; and, if this be correct of these classes, it is even of still more importance when the patient is young, or when the bread-winner has been stricken down by illness, and needs a generous dietary to restore him to health and work. Feeling this to be the case, we consider that the best thanks of the service and the public are due to Mr. Powell for the able and manly stand he has made against the attempt of the Bromyard Board to fetter and obstruct him in the righteous performance of his duty.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 10th, 1878.

Fergusson, Reginald Archfield, Ronald Street, Glasgow

Maybury, Lysander, Frimley, Surrey

Roper, George Arthur, Denmark Road, Camberwell

The following gentlemen also on the same day passed their primary professional examination.

Blackwell, Frederick William, London Hospital

Green, Harry, General Hospital, Birmingham

MEDICAL VACANCIES.

THE following vacancies are announced:—

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Assistant-Physician. Applications to be made on or before the 26th instant.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 26th instant.

IPSWICH BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.

KENT COUNTY LUNATIC ASYLUM.—Assistant Medical Officer and Dispenser. Salary, £165 per annum, with furnished apartments, milk, vegetables, washing, and attendance. Applications to be made on or before February 6th.

LIMERICK UNION.—Resident Medical Officer of the Workhouse. Salary, £200 a year, with apartments, rations, etc. Applications up to the 30th instant.

LOUGHBOROUGH DISPENSARY AND INFIRMARY.—Resident House-Surgeon. Salary, 100 guineas per annum, with furnished rooms, fire, lighting, and attendance. Applications to be made on or before the 26th instant.

NEWCASTLE-UPON-TYNE INFIRMARY.—Senior House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before February 4th.

RADCLIFFE INFIRMARY, Oxford.—Surgeon. Applications to be made on or before the 20th instant.

ST. JOHN'S HOSPITAL FOR SKIN-DISEASES.—Honorary Medical Officer. Applications to be made on or before the 21st instant.

SCARBOROUGH DISPENSARY AND ACCIDENT HOSPITAL.—House-Surgeon and Secretary. Salary, £120 per annum, with apartments, coals, gas, and attendance. Applications to be made on or before the 21st instant.

SUNDERLAND AND BISHOPWEARMOUTH INFIRMARY.—Senior House-Surgeon. Salary to commence at £80 per annum, with board and residence. Applications to be made on or before the 24th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

DAVIES, H. W., M.R.C.S. Eng., appointed House-Surgeon to the Memorial Hospital, Jarrow-on-Tyne, *vice* J. B. Emmerson, M.B., resigned.

*PARKER, Rushton, F.R.C.S., B.S., appointed Assistant Surgeon to the Royal Infirmary, Liverpool, *vice* W. M. Banks, M.D., appointed Surgeon.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

DEATH.

EASTON.—On December 27th, 1877, at 19, Norfolk Crescent, Hyde Park. Eleanor Margaret, eldest daughter of *John Easton, M.D.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY..... St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY..... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY..... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Lettsomian Lecture by Francis Mason, F.R.C.S.; subject, "The Surgery of the Face".

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. C. Higgins, "On a Case of Rodent Ulcer". Dr. George Thin, "On the Proportion of Red Corpuscles in the Blood in some Skin-Diseases"; Dr. John Harley, "A Second Communication on Simple Atrophic Sclerema".

WEDNESDAY.—Hunterian Society, 7 P.M.: Council Meeting. 8 P.M.: Open Meeting.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Pearce Gould, "A Case of Spina Bifida cured by Injection of Iodine" (a living subject); Mr. Berkeley Hill, "Cases of Spinal Curvature treated by Sayre's Plaster-Jacket" (living subjects); Mr. Nunn, "Two Cases of Cancer of the Breast"; Dr. Broadbent, "A Case of Paracentesis Thoracis"—Quekett Microscopical Club, 8 P.M. Mr. T. Charters White, "On Insect Dissection".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The following communications have been handed to the General Manager:—Mr. W. Hasler (Killiney); Mr. Howgrave Graham (Enfield), with enclosure; Mr. J. Herbert Mearns (Richmond, York); Miss King (Southfield); Mr. C. Taylor (London); Mr. G. Rice (Woolwich); Mr. W. T. Grant (Birmingham); Mr. W. M. Banks (Liverpool).

THE PROPER TREATMENT OF APOPLEXY.

SIR,—My attention has only just been directed to an article in your *JOURNAL* of the 5th instant, headed "The Proper Treatment of Apoplexy". As I am the person therein alluded to as having instigated the charge against Dr. Bates, I beg to give this statement (which is apparently given solely on the authority of a local newspaper) my most emphatic denial. Although some difference of opinion existed between me and Dr. Bates as to the treatment of the case in question, I neither originated the attack against him, nor was I aware, until I read the report in a local paper, that any charge was even contemplated against this gentleman. I may add that no one regrets more than I do the undue publicity given to the case to which your article refers, such a course being calculated to promote ill-feeling amongst members of the profession.—I am, sir, yours, etc.,

T. D. STANISTREET, L.R.C.S. & P. Edin.

Cowbridge, January 12th, 1878.

DR. GEORGE BIRT.—Our correspondent probably means Rogers's Portable Disinfecting Chest, which contains an outer and inner coating of iron round the bottom and four sides. The fire-box is made movable when the required temperature of 220 to 240 deg. is reached, recognised by a thermometer graduated up to 300 deg. Fahr. It is placed on wheels, to facilitate its removal from one place to another. The price varies from £10 to £30, and it can be obtained of Mr. Charles Rogers, East Retford, Notts.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a Post Office.

SAYRE'S TREATMENT OF SPINAL CURVATURE.

SIR,—Having in July 1876, while in New York, had a month's practical experience with Dr. Sayre of his method of treating spinal curvatures, I may perhaps be pardoned for making a few remarks on the first case of those recorded by Mr. Parker in last week's *JOURNAL*. It is stated that, after the application of the jacket, the child was kept in bed a few days, in order to give it time to dry. Now, the object of his method of treatment, as in hip and knee-joint diseases, is to prevent the patient from being kept in bed, or even in the house, that he may take exercise in the open air the same as ordinary individuals. Dr. Sayre remarks, "Give the patient as little medicine and as much sunning as possible". I think if Mr. Parker put up his patients in a room where the temperature is at about 60 deg., and, after the jacket is applied, carefully lay the patient on a flat cushion or couch, the curiass will be sufficiently firm and dry in half an hour. A heated circular roller now applied over the whole surface will greatly hasten the process. I would recommend also that the plaster be baked in an oven just previously to use, and that the bandages be kept in a tin box, with tightly fitting lid. If the skin-jacket fit, and the dinner-pad be used, I think there would not be any necessity for using cotton-wool or plaster, which is apt to become hardened and displaced, inflaming the skin and causing the curiass to be become loosened. From first to last, the patient should not feel the least discomfort, but the contrary; if so, the jacket should be immediately removed and a fresh one adjusted.

As Mr. Parker observes in Case II, the "jury-mast" is undoubtedly highly essential in all cases of cervical disease.—Yours truly,
GEO. CHAS. COLES.
20, Great Coram Street, January 7th, 1878.

DR. SAMUEL LEARY (Berbice, British Guiana).—Letter and enclosure.

MALFORMATION.

SIR,—The following may be of interest to the readers of the *JOURNAL*. N., a delicate woman, was delivered of her first child at the commencement of the seventh month of pregnancy. The child (dead, of course) presented the following malformation. The great toe of the right foot was prolonged into a tendril-like appendage two inches long, not thicker than a small bristle; this had encircled the left leg immediately above the ankle so tightly, that the foot was almost completely amputated at that point. The child was in every other respect well developed.

In the third month of pregnancy, this lady was most seriously alarmed one night by a violent storm of thunder and lightning close to her house, which occupied a very exposed situation.—I am, sir, your obedient servant,
L.R.C.P.

DR. W. B. MCHET writes, in reply to Mr. Balding, that the age of his patient with tibial aneurism was 28.

INQUEST AT CATERHAM ASYLUM.

SIR,—I can only express regret that you have not seen fit to publish the letters of Dr. Curtis and myself; but surely the commonest sense of fairness requires you to state in your *JOURNAL* not that the original strongly censoring paragraph which appeared in your columns on the above subject, and which remains unexplained and uncontradicted, was put there after carefully considering the statements on both sides—for up to that time no communication had been made on the subject to you from the asylum—but the contrary. The verdict after an adjourned inquest in the case in question, which you already know, as well as in another adjourned case which has taken place since—viz., "Died from bronchopneumonia, accelerated by removal from the workhouse to the asylum", shows not only the necessity which exists for such action on the part of the management of the asylum, but justifies it in every particular.—I am, sir, your obedient servant,
JAMES ADAM, M.D., Medical Superintendent.

Caterham Asylum, Caterham, Surrey, January 9th, 1878.

* We have twice gone through the papers on both sides, and adhere to our original opinion, which is adverse to the course pursued, and to the evidence given and the verdict obtained.

AN OFFICIOUS PATIENT.

SIR,—I attend a peculiar patient, inasmuch as I am not allowed to dispense my own medicine nor write a prescription for the chemist to make up. He prefers making it up himself, though he possesses very little knowledge of the *Pharmacopoeia*. When I am sent for, I am not allowed, in a manner, to undertake the management of the case, for he is afraid I may make too many visits, I suppose; therefore, it is always a case of "I will send for you if the patient be not better". I was once sent for to a child with a wound of the leg, which required to be nicely dressed. After dressing it once, my services were dispensed with, but I was sent for in about a week to find that the wound had never been dressed, had festered, and the edges were inflamed and gaping. I feel in a very awkward position. What is my duty under such circumstances?—I remain, yours very respectfully,
J. L. T.

* Why not decline to attend unless full confidence is given, and necessary control? A medical man is not called to solve puzzles in disease, or to answer questions, but to cure; and if all the reasonable conditions of cure be not fairly placed in his power, may fairly decline the responsibility of the case altogether.

MR. STAMFORD'S CASE OF VILLOUS DISEASE OF THE BLADDER.

SIR,—The case narrated by Mr. Stamford of Tunbridge Wells in the *JOURNAL* of January 5th appears open to doubt. Here was a case of a man passing blood in his urine, and the case is diagnosed by Mr. Stamford as one of "villous disease of the bladder"; but his friend Mr. W. H. Rix thought the hæmorrhage possibly came from the prostate. We are left rather in the dark as to why these two surgeons formed these opinions, although informed, "from the history of the patient, that the case is one of villous disease of the bladder". Mr. Stamford suggests that he lacerated or injured the urethra during catheterism, and probably he is correct in attributing the rigor to this cause. Although it appears that it was necessary to relieve the bladder by catheterism, I question the propriety of leaving the catheter in the bladder. Perhaps Mr. Stamford or Mr. Rix will kindly supply some further information upon the case, and state what is the man's present condition, now six months after the treatment. I am, sir, yours, etc.,
L.R.C.P. Lond.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

THE ABERDEEN MUTUAL ASSURANCE SOCIETY.

SIR—In your number of the 29th ultimo, an anonymous correspondent, subscribing himself "Not a Court-Surgeon and Club-Doctor", calls attention to the affairs of the Aberdeen Mutual Assurance and Friendly Society. The directors of the Society, in justice to their medical officer, consider it but fair that the facts should be known, and have authorised me to state them. In October 1831, the Society was formed to encourage prudence, providence, and self-help, by way of "health and life-assurance", with a limited number of members (now about eighty), almost wholly belonging to the operative classes. The present medical attendant was offered the appointment, and his acceptance of it at the time was considered of great advantage to the Society. Notwithstanding the eminence attained by him in his profession, he has given the benefit of his advice to the members during the last thirty-seven years. The directors are satisfied that, in continuing as medical officer, he has been actuated chiefly by a reluctance to break off early professional ties, and by a desire to give specially to the earlier members the benefit of his advice in their declining years. The remuneration, fixed thirty-seven years ago, by way of small uniform contribution from members, has never been increased; and the yearly total (now about £10) is surely too trifling to excite envy or ill feeling.

The directors are unable to see that they have done injury to any one, looking to the well known fact that in Aberdeen, as in other provincial towns in Scotland, there is no distinction made between the "consultant" and the "general practitioner". In Aberdeen, there is no physician or surgeon who is a pure consultant, and there is no general practitioner who is not occasionally called into consultation—I am, sir, your most obedient servant, JOHN CROMBIE, Secretary.

J. G. H. (Great Malvern)—The medical bath establishment in Baker Street is still carried on, but under other management, which has tended to improve it considerably.

MR. WALLROTH appears to place his proposed society (the Universal Society for the Prevention and Cure of Ictoxication and Dipsomania) on an objectionable basis—namely, for the purpose of employing certain valuable receipts of which he alleges himself to be in possession. Medical recipes for relieving the craving for drink of great value have been published by many eminent physicians—Dr. Marcet, F.R.S., Dr. T. L. Brunton, F.R.S., and others—and if Mr. Wallroth has any further information to contribute, he had better do so: there is no very great need of a society for the purpose. We observe, however, that in one paragraph of the prospectus, in which he seeks for subscriptions, he states that "the cure by the society will be varied according to constitution; and it does not pretend to know any secret medicine or to have found out anything new (as the shameless tribe of quacks always do); on the contrary, the recipes have been tested and proved to be efficacious nearly a hundred years ago: but, alas! the public in general is not sufficiently aware that this evil is easily to be checked". In another part elsewhere we find that Post Office orders are made payable to Mr. Wallroth as manager of the society, that subscriptions and donations are solicited, and agents wanted. We do not see the names of any other persons who are to be responsible for the application of the funds or for the management of the society. Under all these circumstances, we think that philanthropic persons should be very careful in contributing funds to such an enterprise. If Mr. Wallroth be looking to the benefit of others rather than himself, he is taking the most possible means to secure the result.

SIR—Can you inform me, in the next number of the *BRITISH MEDICAL JOURNAL*, if there are, in Edinburgh, any private medical tutors who prepare candidates for the examination of the College of Physicians of that city?—I am, sir, yours truly, January 1878. ENQUIRER.

DIPHTHERIA.

SIR—It is to be regretted that your correspondents Mr. Walter Lattey, in the *JOURNAL* of the 12th instant, and Dr. Maunsell, in the number of the 5th instant, have not yet arrived at more definite conclusions respecting the relations existing between the so-called "croup" and diphtheria. Dr. George Johnson's lecture, alluded to by Dr. Maunsell (*BRITISH MEDICAL JOURNAL*, September 18th, 1875), explains the matter clearly enough; and I would point out a letter by myself in the *JOURNAL* (April 1st, 1876, p. 431), in which, I think, the question is also fully explained. If Dr. Maunsell and Mr. Lattey would carefully read these two communications (to say nothing of Sir William Jenner's lecture on the same subject in the *Lancet* at the beginning of 1875), they cannot fail to see that, under the name of "croup", at least two totally different diseases have been hitherto confounded together—namely (1), acute tracheitis, or, more correctly, as Dr. Maunsell suggests, acute laryngo-tracheitis; and (2) laryngo-tracheal diphtheria. In the first, there are all the symptoms and the results of a common inflammation of the air-passages—namely, fever, cough, difficult breathing, redness and congestion of the mucous membrane, increased secretion of mucus; in the second, there is a false membrane, which is the very essence of the malady. The first disease is very tractable, and is not fatal; the second is dreadfully fatal, destroying more than half of the persons attacked. The first is caused by the ordinary conditions, giving rise to inflammation of the respiratory passages, such as cold winds, exposure to vicissitudes of weather, the winter season, etc.; the second is a specific disease, arising generally from contagion or infection, like typhoid fever or scarlatina. Dr. Maunsell's case, which he treated so well and so successfully, was, as he states, one of acute laryngo-tracheitis, and certainly not laryngo-tracheal diphtheria. Mr. Lattey, in attributing to Dr. George Johnson the opinion that croup and diphtheria are the same, must have read Dr. Johnson's lecture imperfectly. What Dr. Johnson has said, and what I have said and written repeatedly, is not that croup and diphtheria are the same, but that what is called "membranous croup" is identical with laryngo-tracheal diphtheria. The evidence that these two latter are the same is overwhelming, and it seems to be as much a waste of time to attempt to discover points of difference between them as it would be to point out the difference between typhoid fever and enteric fever. If Dr. Maunsell and Mr. Lattey would get rid of the word "croup" altogether, and designate by appropriate names the diseases hitherto confounded under it, all the difficulties under which they now seem to labour would disappear. Croup means nothing at all except roughness of breathing, and has no more pathological significance than the old word "cynanche", which was formerly made to do duty for all diseases of the throat and air-passages.—I am, etc., R. H. SEMPLE, M.D., F.R.C.P.L.

8, Torrington Square, January 15th, 1878.

M. E. P. appears to us to have acted in a straightforward, honourable, and professional manner. We see no reason to object to his private lithographed note.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

AN INDIAN GUIDE.

SIR—With reference to Mr. Lennox Browne's inquiry about an "Indian Guide", will you allow me to mention two works—viz., 1. *The European in India; or, Anglo-Indian's Vade Mecum*, by Edmund C. P. Hull; to which is added *A Medical Guide for Anglo-Indians*, by R. S. Mair, M.D., F.R.C.S.E., late Deputy Coroner for Madras; published by H. S. King and Co., Cornhill. The price is a few shillings. The addition may be obtained alone, for 3s. 6d. 2. *A Manual of Family Medicine for India*, by W. J. Moore, Bengal Medical Establishment; J. and A. Churchill, London. Price (I think) five or six shillings. This latter book was published by order of the Government of India, who, recognising the utility of such a publication to residents in localities far removed from medical aid, offered one thousand rupees for the best treatise on the subject. Of more than forty competitors, Dr. Moore was the successful one; and, for the purpose for which it was designed, the work is undoubtedly admirably suited. But it is better adapted for residents in India; whereas the *Vade Mecum*, by Hull and Mair, gives not only similar information, but what is generally useful to the intending emigrant. I recommend both; but if I were required to choose between the two books, I should unhesitatingly select the first.—Faithfully yours, C. R. FRANCIS, M.B., Surgeon-General. Sutton, Surrey, January 16th, 1878.

H. L. S.—We do not see that H. L. S. can persist in refusing to furnish particulars, unless he is prepared to forego his claim. It is at least certain that he could not enforce his claim in a court of law except by producing items.

INFECTIOUS DISEASES IN THE FAMILIES OF MEDICAL MEN.

H. C. B. (L.R.C.P.) begs to say, in reply to "Young M.D.", that from inquiries made in his neighbourhood of medical friends, the opinion is strongly in favour of exemption of medical men's families from infectious diseases.

DR. MANSON (Darlington)—The subject shall have attention next week.

The communications of Dr. Newman (Stamford), and others, stand over for want of space.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Brinton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. Savory, London; Dr. J. B. Bradbury, Cambridge; Dr. Sanderson, London; Dr. Collie, Homerton; Mr. C. Taylor, London; Mr. Griffiths, Swansea; Mr. G. E. Wherry, Cambridge; Dr. Leeper, Dublin; The Secretary of the Hunterian Society; Mr. H. F. O. Liddell, London; Mr. Wm. Haslar, Killiney; Mr. John Crombie, Aberdeen; Mr. Tweedy, London; Mr. Berkeley Hill, London; Mr. T. D. Stanistreet, Cowbridge; The Secretary of the Liverpool Medical Institution; Mr. Rushton Parker, Liverpool; Dr. Playfair, London; Dr. Boyd Mushet, Birkenhead; Dr. Sawyer, Birmingham; Our Paris Correspondent; Dr. F. Warner, London; Dr. Hitchcock, Lewisham; The Secretary of the Obstetrical Society; Dr. Balthazar Foster, Birmingham; Mr. John Simon, London; Mr. G. Miles, Plympton; The Secretary of the Medical Society of London; Dr. Macnaughton Jones, Cork; X.; The Secretary of Apothecaries' Hall; Dr. Levinge, Stapleton; The Registrar-General of England; Mr. T. S. Ellis, Gloucester; The Registrar-General of Ireland; Dr. J. Milner-Fothergill, London; Dr. Farquharson, London; Mr. T. Holmes, London; Dr. Fairlie Clarke, Southborough; Mr. W. J. Ward, Wortley Grange; Mr. H. C. Boutflower, Tunbridge Wells; Mr. Lattey, Southam; Dr. Murphy, Sunderland; Dr. MacLagan, Dundee; Dr. W. C. Wicks, Newcastle-upon-Tyne; Mr. J. G. Howell, Great Malvern; Mr. W. S. Paget, Great Crosby; M.D.; Mr. Balmano Squire, London; Mr. Reginald Harrison, Liverpool; Dr. A. S. Taylor, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. Newman, Stamford; Dr. Grimshaw, Isle of Wight; Dr. Braxton Hicks, London; Mr. F. Mason, London; Surgeon-Major Francis, Sutton; H. L. S.; Mr. Oliver Barber, Sheffield; Dr. Saundby, Birmingham; Mr. W. T. Grant, Birmingham; Mr. G. Birt, Stourbridge; Dr. Cayley, London; Dr. A. D. L. Napier, Fraserburgh; Dr. Bastian, London; Dr. Semple, London; Mr. W. S. Wigner, London; Dr. Fletcher, Earl Soham; Dr. Joseph Rogers, London; Mr. Jonathan Hutchinson, London; Dr. Attfield, London; Mr. Nelson Hardy, London; M. J. L. H. Graham, Enfield; Our Glasgow Correspondent; Dr. Henry Ashby, Liverpool; Our Edinburgh Correspondent; Dr. Champneys, London; Mr. F. W. Lowndes, Liverpool; Mr. J. H. Mearns, Richmond, Yorkshire; Mr. J. G. Blackman, Sandford; Mr. Puddy, London; Our Dublin Correspondent; etc.

LECTURES ON THE INFECTIVE PROCESSES OF DISEASE.

Delivered in the Theatre of the University of London.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College; and Superintendent of the Brown
Institution.

LECTURE III.—*Pathology of Septicæmia (continued).*

I WILL now ask you to allow me to bring together the conclusions at which we have up to this point arrived, in order that we may ascertain what is still required to enable us to understand the relation between the process of putrefaction as it is known to the chemist and physicist, with its morphological accompaniments, bacteria, and the pathological result in which we are so much interested, septicæmia. We have seen, first, that the septic virus is exclusively a product of the vegetation of bacteria—that it can no more come into existence independently of these organisms than the ferment* or enzyme of the stomach or pancreas can be formed without the secreting structures to which each belongs; secondly, that the bacteria which so generate the virus are incapable of carrying on or continuing the process in the healthy human or animal organism; and finally, that the most important pathological effects of septic poisoning may be explained and accounted for on the supposition that it determines the disintegration of the leucocytes of the blood. We are now prepared to examine another set of facts which have a bearing on the question of the alleged pathogenic action of bacteria; namely, those which show what happens to those organisms when, by accident or design, they find their way into the tissues or the blood. It is not until we have done this, that we shall be in a position to form an opinion in how far we are justified in speaking of them as causes of disease.

Four years ago,† we fully considered the question of the channels by which bacteria enter the animal or human organism. We then saw what an open doorway the absorbent apparatus of the mucous membrane of the small intestine affords for the purpose. I placed before you the experimental proofs that bacteria certainly do enter the organism constantly by the lacteals, and also by the pulmonary mucous membrane. That they enter the healthy body in any other way, cannot be asserted. It may, however, be considered certain that they may enter by any recent wound or traumatic surface, as, for example, by the uterine surface after delivery. I also brought before you experiments showing that, in the healthy state of the animal body, the circulating blood never contains septic bacteria or their germs; the proof being that it is always possible, if blood be received from an artery or vein into a calcined tube, to preserve it without putrefactive change for an indefinite period.

I will take these facts as proved, and content myself with corroborating the evidence they afford by new ones bearing on the same subject. In order to make it perfectly clear that bacteria or their germs may exist in the animal body without in any way interfering with health, I will refer to an experiment which I have several times made.‡ It consists in killing a healthy animal (a rabbit) and rapidly opening the abdominal cavity, cutting out the liver and kidneys with perfectly pure instruments, and allowing each organ to drop without a moment's

delay into a basin previously prepared, containing fused paraffine at the temperature of 110 deg. C. (230 deg. Fahr.) As soon as the mass has solidified, its surface is covered with Venice turpentine, in order to provide against the possibility of contamination by the cracking which is apt to occur in cooling. In some instances, the experiment was varied by substituting oil at the same temperature for the paraffine. Whichever of these plans is adopted, the organ, be it liver, kidney, or heart, by its greater specific gravity sinks to the bottom. If, after a day or two, it be removed and cut into, it is found that its internal surface is firm and opaque, in consequence of the action upon it of the hot paraffine or oil, but that the interior still retains its red colour, a proof that, notwithstanding the very high temperature of the paraffine, that of the central kernel of the immersed organ can never have much exceeded the coagulation point of albumin. Under the conditions I have described to you, it seems to me quite impossible to suppose either that germs could penetrate to the organ from the outside, or that any germ encountered by the organ in its transference from the body of the animal to the basin, could escape destruction. If, therefore, bacteria be found, they or their germs must have been there before the organ was plunged into the hot liquid.

The results of all the experiments, whether with liver or kidneys, was the same. The soft red kernel of uncooked tissue at the middle of the organ always contained bacteria, the vigorous development of which was indicated by their large size, countless numbers, and active movements. To my own mind, the experiment is conclusive. It proves that, in each of the organs experimented on, germs were present during life. If this be so, why did they not grow and multiply? I believe that the question cannot be answered consistently with the germ-theory,* provided that theory is to be understood in the sense in which I stated it to you at the beginning of this lecture. If it be said that the animal is a rabbit, and that you cannot argue from a rabbit to a human being, I answer that only increases the difficulty; for it is certain that under pathological conditions bacteria grow with great facility, not only in the tissues, but even in the blood of these animals. If, therefore, it be true that septic germs are capable of developing at all in the healthy organism, they ought to develop with special facility in the bodies of rodents; for it will hardly be suggested that, if these animals had not been killed, the germs which were present in their livers would have germinated. There are, therefore, two possibilities open to us. What is observed is (1) that by means of the portal circulation, germs must be continually entering the general blood-stream; and (2) that no bacteria exist in the circulating blood, or at all events only a stray one here and there. The alternatives are: either that the bacteria are formed and are immediately afterwards destroyed (for no provision exists in the organism for their elimination), or that they are not allowed to germinate, *i. e.*, that the conditions under which they are placed in the living organism are such as to prevent their development. The question, which of these alternatives is the true one, I shall not attempt to answer definitively. There are, however, considerations which seem to me to render the first of them more probable than the second. Certain recent and extremely beautiful experiments of Professor Tyndall have shown that comparatively low temperatures, when discontinuously and repeatedly applied, *coup sur coup*, have the power of gradually destroying the germinating power of a liquid, *i. e.*, of rendering it sterile. Now, evidently this is a case which resembles that of the germs continually delivered into the blood-stream of a living animal. Professor Tyndall explains it by supposing that a period of latency intervenes between the germ state and that of the finished organism, during which the germ particles are being prepared for their emergence into fully-formed bacteria. The same thing may very possibly happen in the organism. The germinal material may be allowed just to spring into activity in order to be at once destroyed. The reason why I think this probable is that, when I collect blood (with the precautions that were so admirably described to us last night at the Pathological Society), I find, as Mr. Lister and others have found, that it is sterile. I must, therefore, suppose that germs are not normally present in the blood. Now, inasmuch as material which has been proved by experiment to be so extremely resistant, as germinal stuff has been shown to be by Professor Tyndall's experiments, is not likely to be destroyed while in the germ-state in the circulation, it is not at all improbable that its fate is comparable to that of the germs which are destroyed by the discontinuous application of heat. It is allowed to live in order that it may die.

All of this, of course, is mere speculation. We have no means of observing what happens. The one fact that is certain is, that the

* See the enunciation of the "germ-theory" at the beginning of the lecture. I am well aware that it is possible to attach great importance to the exclusion of germs, without holding the extreme view that the intrusion of a single septic germ, or of any moderate number of them, can of itself be the determining cause of disease.

* In order to get rid of the confusion which often arises from the employment of the word "ferment" in different senses, Kühne proposed, in the first of the elaborate series of papers he has lately published on the action of the digestive ferments, to designate "the unorganised ferments, which act in the absence of organisms"—enzymes. See Kühne, "Ueber das Verhalten verschiedener organisirter und sog. unorganisierter Fermente"; *Verhand. der naturhist. med. Vereins zu Heidelberg*, 1876, p. 190.

† See BRITISH MEDICAL JOURNAL, February 13th, 1875.

‡ It is necessary to explain that this mode of investigation is not mine. The method was employed by Dr. Tiegel in Professor Kühne's laboratory in 1874, and described by him in a paper in the 6th volume of Virchow's *Archiv*. He investigated not merely the liver, but the pancreas, spleen, salivary glands, lymphatic glands, and other organs; but it was in the three first mentioned that he obtained the most conclusive proofs of fertility. About the same time, similar observations were made by Professor Billroth, of which an account will be found in his work already quoted (*Coccobacteria*, pp. 26, *et seq.*). In my own experiments, made in 1874, I followed Dr. Tiegel; but in repeating them, with the kind aid of my friend Dr. Roy, last autumn, I adopted what I thought a better method.

common septic bacteria cannot live in the circulating blood of a healthy animal. Why is this? Various explanations have been given of it. It has been attributed to the alkalinity of the blood, to the want of oxygen, to the excess of oxygen, to the struggle for existence between the blood-corpuscles and the bacteria. The suggestion that it is due to the excess of oxygen is groundless; for in the circulating blood the quantity of free oxygen present is not more than a quarter of the quantity that can be pumped out of this same volume of water freely exposed to the air.* Nor is it dependent on defect of oxygen; for recent experiments have shown that bacteria continue to vegetate, though slowly, in the entire absence of oxygen. As regards the third suggestion, that bacteria are destroyed in the struggle for existence, it is difficult to criticise it till we know what is meant. I confess I do not understand the analogy which is implied in the expression.†

In connection with the fact that germs are met with in the liver and other abdominal organs, I would remind you of another which clearly stands in relation with it: the observation which has been referred to by Dr. Bastian in his published writings (and was adverted to by him in his observations at the Pathological Society last evening), that, in peritoneal and pleural inflammations in rodents, however produced, it invariably happens that the exudation-liquids contain swarms of bacteria.‡

There are two cases in which this result presents itself: the first, in which in the course of a general infection, which may happen to be of a specific kind, the serous membranes become secondarily inflamed; the other, in which a traumatic inflammation is produced by the introduction of a drop or two of an irritating liquid. If this liquid be, as in the original experiment, itself a germicide, it is clear that no germs can come from outside with it. Obviously, here you have virtually an occluded wound, in which a traumatic inflammation is set up of an infective character. I do not doubt that the germs in this case come in from the intestine; but it is no less certain that they would be utterly harmless, unless the substratum for their development existed in the development of the inflammatory process.

I will conclude by drawing your attention once more to an experimental fact, to which, if I mistake not, I adverted to in my Lectures of 1873. I refer to an experiment made by my friend Professor Chauveau§ for the purpose of illustrating the influence of blood-contamination—in short, of the septicæmic state—as the progress of traumatic inflammation. It is well known that, among the many operations which are daily inflicted on animals for the purpose of adapting them to the requirements of human luxury, there is one known as *bistournage*, which is largely employed in certain countries. This consists in twisting the spermatic cord, without making any external wound, in such a way that the circulation in the organ is permanently stopped. Of the thousands of operations of this sort which are daily performed, none are ever followed by infective consequences. The organ becomes encapsuled, and eventually shrivels. But if, previously to the operation, a dose of septic matter have been introduced into blood-stream, what happens then? The textures around the organ become the seat of acute diffuse inflammation, which soon extends to adjoining parts, and may threaten life. What is the meaning of this? In the thousands of animals that undergo *bistournage*, without suffering from it, the result is but a counterpart of what happens in a wound when entirely protected from contamination. In the single case, which is infected, a poison present in the blood-stream determines in the injured part an infective inflammation. The experiment affords a striking instance of

the co-operation of two agencies in one pathological process; both of which agencies, although not affecting the result with equal directness, were alike essential. The immediate cause of the septic inflammation of the testicle was evidently the injury to which it had been subjected; but no infective process would have developed itself—nay more, no inflammation whatever would have occurred—had it not been that masses of septic matter were at the time of the injury circulating in the blood-stream, some of which were conveyed to the injured part, and then became centres of infective action.

On the other hand, the constitutional effects which were produced by the injection of the septic liquid into the blood would have passed off without endangering the life of the animal, if there had been no injured organ to afford the necessary conditions for the development of a septic focus. Two causes, therefore, were concerned: the injury and the septic particles which were brought to the injured part by the blood-stream; and of either it could be stated, with equal truth, that it would not have been efficient without the other. In this respect, the *bistournage* experiment admits of the same explanation as the one previously mentioned, in which a septic peritonitis was induced by the injection of a drop or two of solution of iodine into the peritoneal cavity; for, in the one case as in the other, the injury which was the immediate cause of the pathological process would have had no infectious results, unless infective particles had been present. But here the parallelism ceases; for, by a further experiment, Chauveau showed that, if the septic liquid were carefully filtered before injection, so as to deprive it of its visible particles, *bistournage* could be performed without unfavourable result. The filtrate, though obviously still contaminating, was quite innocuous. It appeared to be essential to the morbid fruitfulness of the seed sown that it should be enclosed in particles of sufficient size to lodge in the capillaries of the injured part.

[To be continued.]

LOCALISATION IN SPINAL DISEASE:

ILLUSTRATED BY (1) A CASE OF "ATROPHIC PARALYSIS" IN AN ADULT; (2) A CASE OF CENTRAL MYELITIS; (3) A CASE OF ALCOHOLIC PARAPLEGIA.

By JAMES RUSSELL, M.D.,

Physician to the General Hospital, Birmingham.

WE are indebted to the labours of Lockhart Clarke, of Duchenne (de Boulogne), of Charcot and his pupils, and other observers, for the knowledge that the spinal cord, though so narrow in its lateral dimensions, yet presents a special localisation in different districts, under the influence of disease, almost, if not quite, as distinct as has been observed in diseases of the brain. Several districts in the cord can be mapped out by the phenomena of disease, some of them equally distinct in their functional endowments, and some in the different periods in which they undergo development during foetal existence. Among these districts, particular interest attaches to the central grey matter, and especially to its anterior and posterior cornua; these cornua presenting a remarkable distinctness in the diseases to which they are subject, as much so as in the functions to which they are respectively subservient.

A large and important group of maladies originates in morbid changes taking place in the anterior cornua, and belongs in essentials to these cornua, the implication of neighbouring tissues constituting a secondary and subordinate process. This group has been classed by M. Charcot under the title of "myopathies spinales". In the maladies by which it is constituted, whether acute or chronic, the distinguishing characteristic is, that the transmission of sensitive impressions is not modified at all, or only in a secondary and subordinate manner. The entire stress of the disease falls upon the motor function and the nutrition of the muscles. Voluntary motion is more or less enfeebled; but what localises the paralyzing influence in the anterior horns is the muscular atrophy by which it is attended. As is well known, the atrophy in some of the diseases reaches the extent of entire destruction of the muscle affected.

My first case belongs to the acute variety of this group. It is intimately related to a well-known malady, "atrophic paralysis of infancy": a disease in which the morbid changes commence in the anterior horns of the spinal grey matter, and, according to M. Charcot, are usually restricted to one or to two of the circumscribed oval groups of large ganglionic motor cells characterising those horns. These cells form the starting-point and centre of the morbid process, and it is only in the utmost stage of alteration and in certain regions that the horn is invaded through its entire extent. (*Leçons*, 2me série, p. 181.)

* The quantity of free oxygen in common water exposed to the atmosphere is about 0.6 per cent. per volume at ordinary temperature, that of oxygen in the blood about 0.15. The extreme smallness of the quantity of free oxygen in circulating blood is due to the presence of a body (hæmoglobin) which seizes upon the oxygen with great avidity. On the other hand, there can be no doubt that the oxygen present in the blood is sufficient for the maintenance of bacterial life; for in the experiments recently conducted under Professor Donders' supervision at Utrecht, it was found that although oxygen, as is well known, promotes the vital activity of bacteria, these organisms can live in its absence—a fact explained by supposing that they have the power of tearing it from other combinations. See Grossmann and Mayerhausen, "Ueber das Leben der Bacterien in Gasen"; Pfüger's *Archiv*, vol. xv, p. 245.

† Since delivering this lecture, I have become acquainted with a paper by P. Granitz ("Experimentelle Untersuch. über die durch Parasiten bedingten Krankheiten"; Virchow's *Archiv*, vol. lxx, p. 546), in which the author adduces several striking facts in support of the conclusion that, just as the vegetative processes of the fungi are checked whenever they are brought into competition with those of more vigorously growing organisms, so the growth of ferment organisms is restrained in presence of actively growing cells—e.g., pus-corpuscles.

‡ On the same occasion, Dr. Bastian referred to another fact of a similar nature—namely, that when by the injection of irritant liquids under the skin an inflammation of the subcutaneous tissue is produced in rabbits, the exudation liquids are found to swarm with bacteria. The explanation is, that the skin at the injured part being infiltrated with exudation, is no longer protective. Its external contaminated surface is thereby brought into relation with the subcutaneous tissues.

§ Chauveau, "Étude expérimentale sur les phénomènes de mortification et de putréfaction qui se passent dans l'organisme animal vivant"; *Bull. de l'Acad. de Médecine*, 1873, p. 520.

There is, however, a matter of interest of a different character attaching to my case; viz., that the subject of it is an adult. The malady, as its name implies, is one which has been known as belonging chiefly to early childhood. It is most frequent (Charcot) between the first and third years, is rare after the fifth year, and is quite exceptional after the tenth year. It appears, however, from a paper on the subject in *Le Progrès Médical*, 1874, No. 7, that in 1866 M. Kussmanl had formed a suspicion, correctly based on two cases of his own, that the disease may also occur at a later period of life. Afterwards M. Duchenne took up the subject. In his work *De l'Electrisation Localisée*, third edition, he has a chapter (iii, p. 437) plainly provisional, "Paralysies Spinales de l'Adulte"; and the first article, entitled "Paralysie Spinale Antérieure Aiguë de l'Adulte", is devoted to the consideration of the cases at present in question, three instances being given in illustration. Dr. Moritz Meyer, in his work on *Electricity in its Relations to Practical Medicine*, translated by Dr. Hammond, 1872, p. 229, adds to his article on "Infantile Paralysis" the remark, that a similar paralysis of the lower extremities occurs in rare cases among adults also, occasioned, he believes, either by the influence of some exanthematic action or by some other unknown cause. He proceeds to notice some particulars in which the malady, as affecting adults, differs from the ordinary phenomena presented by children. These particulars depend chiefly on the circumstances that the development of the limbs has been completed, and that the nervous functions have attained a condition of greater stability. Hence temperature is not lowered in the affected limbs as it is in those of children, and the disabling effects of the paralysis are less developed: a statement which receives illustration from the case of my patient. Dr. Meyer details two cases which occurred simultaneously in twins, in each after an attack of measles.

M. Charcot, in his second series of lectures, enlarges on the same topic, and expresses a suspicion, plainly well justified, "that cases of this kind are not unfrequently misunderstood, and that in reality they are not absolutely rare" (p. 171). He details the particulars of two cases. In an article in *Le Progrès Médical*, to which I have already referred (No. 7 and succeeding numbers, 1874), other cases are added by the authors, MM. Bourneville and Teinturier.

Among the various cases to which I have thus alluded, there are particulars of only one *post mortem* examination. This occurred in the practice of MM. Charcot and Gombault, in a female who died of cancer at the age of sixty-seven, having been attacked seven years before by this peculiar form of paralysis. In this case, reported in *Le Progrès Médical*, the morbid changes in the proper tissue of the cord were limited to the large motor cells of the anterior horns. The changes in these cells extended through the entire length of the cord, and were especially advanced in the lower part of the cervical region. The only other change in the cord was diminution in the size of the horizontal bundles of fibres passing from the anterior horns to the corresponding nerve-root. Certain points are remarked as distinguishing the changes in this case from the changes usual in childhood, especially that the affected horns were not lessened in size, that the white columns were not secondarily affected, and that there was no disappearance of an entire group of cells, with increase of interstitial tissue.

The general characters presented by the disease in the adult have been a close copy of those observed in childhood. Most of the cases set in with severe fever; but in one case general paralysis attacked the patient so suddenly as to be complete in half an hour, the patient thenceforward lying absolutely without power of voluntary movement for two years. In two others, also, fever seems to have been absent. Generally there appears to have been complete immunity from any interference with the cerebral functions, except that in one instance the initiatory fever was attended with delirium, and in another is described as having presented the character of an invasion of typhoid "d'une haute gravité". In two cases only was the paralysis confined to the lower extremities. In my own case, it will be seen that a still greater limitation was observed. The paralysis was attended with the usual loss of faradic contractility, and with flaccidity and atrophy of the muscles. Functional power was retained in the sphincters, and there was entire absence of any tendency to the formation of sloughs; all being characters belonging to those forms of spinal disease in which the changes are restricted to the anterior grey matter of the cord. Sensation was not impaired in any instance; but there appears to have been one particular in which the symptoms differed from those occurring in childhood; the presence, viz., in certain instances, of pain, especially seated in the vertebral region and loins, frequently radiating down the limbs. Particular mention must also be made of one case, in which a double herpes zona appeared upon the chest during the initiatory fever. This latter symptom, as well as the pains, appear to indicate a tendency in the disease of adults to transgress the limits

generally observed at an earlier period of life: a supposition favoured also by certain subjective sensations referred to the limbs, indicating irritation in the posterior cornua, with which there is every reason to associate the transmission of sensitive impressions. Finally, recovery was complete in one case only.

The ages of the patients varied between fifteen and sixty-two years. As respects the subject of causation, M. Duchenne refers to the impression of cold, especially when made whilst the subject was perspiring; and it is to be noted that this influence is prominent among the cases which I have quoted. In a case by M. Bernhardt, the element of cold was especially distinct. The patient went into the courtyard of his house without his shoes and in his night-dress, whilst in a state of profuse perspiration. On regaining his chamber and washing his hands, he found a difficulty in handling the soap. On the next evening, he had trouble in counting out money to pay for a *fiacre*; on the next day but one, he could not hold his cup, and was obliged to be fed; and, the day after, all his limbs were paralysed. He had no fever. Intense mental emotion appears also to have had some share in causing the illness in one or two instances.

CASE 1.—W. B., aged 15, was a fine healthy-looking young man, free from any family history of serious disease or of rheumatism, and had enjoyed very good health. He had been subjected to a considerable amount of muscular exertion, noticed by M. Duchenne as predisposing to the disease, in having to walk a great deal. The legs of his trousers were wet through on Thursday, and were allowed to dry on him; on Friday, he complained of being cold, and on Saturday shivered and became feverish, and went to bed. At that time, he suffered from pain across the loins and down the right lower extremity. The attack lasted for two days, when he got up, but found his right leg give way. Three or four days afterwards, the pain returned, and he again went to bed; but there was no return of fever. On again getting up two or three days afterwards, the power of his right lower extremity was greatly enfeebled. The pain in the back and stiffness lasted for a fortnight longer. Seventeen weeks later, he was admitted into the Birmingham General Hospital. At his admission, the disease was found to be completely limited to the right lower extremity; all the other limbs were muscular and well developed. The patient had a light complexion, with dilated pupils. He had all the appearance of being in excellent health. The sounds of his heart were quite normal. His urine was free from albumen. Though the segments of the right lower extremity could not be employed separately, yet, by using the extremity as a whole in the manner of a crutch, the young man was able to accomplish a walk of more than three miles, though not without some muscular aching. The walk was, of course, marred by a very decided limp; the swing of the body being called in to assist the advance of the leg at each step forward. The right buttock was somewhat flattened. The right thigh was greatly atrophied; but, in the leg, the recovery of the calf-muscles occasioned the difference in girth between the two limbs to be small. During the first six weeks of residence, the right thigh lost about half an inch; the difference between the thighs on each side increasing from two inches and a half to three inches, the relative dimensions remaining afterwards unchanged. The difference between the girth of the legs increased from one-quarter to half an inch. The flexors of the thigh upon the trunk, the adductors, and the extensor muscles of the knee, though just able to effect movement in the limb, offered not the least resistance to passive motion. Extension of the thigh and flexion of the knee were both performed with considerable force. The calf-muscles possessed nearly, if not quite, their normal force, and had retained their normal nutrition; the diminution in the girth of the leg probably depending on wasting of the anterior muscles. Flexion of the toes also was performed energetically; but flexion of the foot and extension of the toes could hardly be effected at all. The muscles of the sole of the foot retained their natural amount of power and degree of nutrition. The function of sensation in all its forms was in a natural condition. There was no increase of reflex irritability. Faradic contractility was very low in both lower extremities; but there was a decided difference in favour of the left side, excepting in the muscles of the right calf, in which the contraction on each side was nearly alike. Contractility to the interrupted galvanic current was no greater than to faradism. The comparative temperature was taken twice. On one occasion, the right (diseased) limb was .6 deg. the warmer; on the second, the temperature was alike on each side. The toe-nails were unchanged.

The patient remained under observation for six months. During that period, very full trial was made of electricity by galvanism and by faradism; of shampooing the muscles; of counterirritation to the spine by means of blisters, and afterwards of the hot iron. He took iodide of potassium and tonics; but he left the hospital without having under-

gone any perceptible improvement, and not having acquired a talipes equinus, to which the preponderating action of the calf-muscles appeared to dispose him.

[To be continued.]

ON STRICTURES OF THE INTESTINE: WITH REMARKS UPON STATISTICS AS A GUIDE TO DIAGNOSIS AND TREATMENT.*

By SIDNEY COUPLAND, M.D., Assistant-Physician, and HENRY MORRIS, M.A., F.R.C.S., Senior Assistant-Surgeon to the Middlesex Hospital.

THE subject of intestinal obstruction has been so exhaustively treated from all sides, that it may be thought almost unnecessary to add anything to what has been already written on the question. But, during the past few years, our attention has been several times directed to the subject, owing to the comparatively large number of cases, either in the care of our colleagues or under our personal supervision, that have fallen under our observation at the Middlesex Hospital. The study of these cases has led us to carefully collate a large amount of evidence with respect to the causes and effects of that class of obstructions included under the term of "stricture" of the bowel; and the conclusions at which we have arrived seem to us worthy of some consideration, as indicating more precisely than has yet been attempted the particular lines of treatment to be adopted in such cases, so distressing in their symptoms and so fatal in their results. We wish also to call attention to the methods of diagnosis employed for detecting the seat of a stricture, when once it has been ascertained that the patient is suffering from this form of obstruction.

1. *Situation of Strictures.*—With regard to this, indeed, we have nothing novel to propound; for the ground has been already fully gone over by writers, such as Dr. Hilton Fagge in his article in *Guy's Hospital Reports* (vol. xiv, 1868)—an article which has justly become the standard of reference for all writers since it was published; Dr. Brinton, in his posthumous essay on Intestinal Obstruction, and others. We have, however, deemed it worth while to seek for fresh facts in this direction; and the result of our search has been, that in all respects we have been able to adduce strong confirmation of the general truth of the statements made by those authors. Our sources of inquiry have been the *post mortem* records of the Middlesex Hospital from the year 1844 to the present time (with the exception of the year 1852 and the greater part of 1851); and the *Transactions of the Pathological Society* since its formation in the year 1846. From the former source, we have collected thirty-one, and from the latter, thirty-two cases of stricture of the intestine. It is justly remarked by Dr. Fagge that the *Transactions* of a Society do not afford a correct basis for statistical inference, seeing that they include only selected cases, interesting from their rarity or some peculiarity incident to the case. This is doubtless true; but with respect to the subject under consideration, the *Transactions of the Pathological Society* are of especial value. For here, if anywhere, we should find recorded instances of stricture in unusual and rare situations, and a certain safeguard would be found against drawing too hard and fast a line in one's conclusions. It is interesting to note, therefore, that whereas the number of cases of rectal stricture to be found in these volumes is comparatively small and is below the average drawn from other sources, yet, on the other hand, only one case has been brought before that Society in which the disease giving rise to the obstruction was seated above the cæcum. Bearing in mind Dr. Fagge's reservation, we think we may fairly quote the *Pathological Transactions* in our statistical deductions. We must also add that none of the cases have been quoted twice, care having been taken to exclude from the list culled from the Society any case that had been first entered in the Middlesex Hospital records. We find, then, that out of a total of thirty-one cases of stricture of the intestines examined after death at the Middlesex Hospital, in no fewer than twenty-seven was the disease situated in the large intestine. Of the remaining four cases, in one it involved the ileo-cæcal valve; in another, the ileum at its lower end; in a third, the upper part of the ileum; and in the fourth, the jejunum. No cases of stricture of the small intestine are recorded by Dr. Brinton, by Dr. Fagge, nor by M. Duchaussoy, whose figures are quoted by Dr. Fagge; so that we may hold that instances of stricture of the ileum or above the ileum are of extreme rarity. Out of the thirty-two cases recorded in the *Pathological Transactions*, thirty-one involved the large bowel alone, and one the lower end of the ileum and the cæcum.

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

The case of jejunal stricture referred to occurred at the Middlesex Hospital in 1867, and is recorded as being due to cicatrisation of an ulcer. The patient was a man aged 58, who died from peritonitis consequent upon perforation above the stricture. Of the cases of ileal disease, one was that of a male aged 65, also in 1867, in whom cancer of the lower end of the ileum had determined invagination of the gut into the cæcum, and death in this case also was due to peritonitis from perforation above the stricture. The other instance occurred in 1859; it was in a female aged 42, and was a cancerous stricture of the ileum at its upper extremity, secondary to cancer of the breast. A somewhat parallel case has come under the notice of one of us in the *post mortem* room of the Middlesex Hospital during the present year. It was a case of primary epithelial cancer of the uterus, with an unusual dissemination of secondary growths, one of which had involved the lower end of the jejunum in all its coats, so as to produce an annular constriction half an inch in width. It had given rise to no symptoms during life, although the stricture was so small as to admit only of the passage of a No. 7 catheter. A mesenteric gland in connection with the affected bowel was also infiltrated. We may also refer to the two cases, out of the total number of sixty-three, in which the disease, in both cases cancer, attacked the cæcum as well as the ileum at its lower extremity. One of these was admitted into the Middlesex Hospital last October. She was only twenty-eight years of age; had been losing flesh for six months, and for three months had suffered from abdominal pain, constipation, and vomiting, the last three weeks being marked by continued enlargement of the abdomen. The lower bowel contained feces, and daily the patient passed a small quantity. There were constant attacks of severe pain, during which the coils of small intestines could be seen on the surface. Acupuncture afforded but slight relief; and death soon followed from peritonitis due to perforation of the cæcum, which, at its valve, was the seat of a luxuriant growth of epithelial cancer. The other case is recorded in the *Pathological Transactions*, vol. xii, p. 117, by Mr. G. Lawson. The patient was a woman fifty-six years of age, in whom complete obstruction had lasted for only about a week before death. The site of the ileo-cæcal valve was occupied by a dense scirrhous mass, which infiltrated also the wall of the cæcum. A similar case to the first of these is to be found in Dr. Fagge's paper (*loc. cit.*, case No. 33).

In the remaining cases, *i.e.*, in fifty-eight out of sixty-three, the seat of stricture was in the large intestine. Of the twenty-seven cases in the Middlesex Hospital, we find that in twenty-four the stricture was situated in the sigmoid flexure and rectum, there being twelve instances in each of these sites; two were in the middle portion of the transverse colon, and one was in the descending colon. It may be observed that in no case was the cæcum (alone) attacked, nor the ascending colon, nor either of the flexures of the transverse colon, the latter being generally regarded as more frequent seats of stricture than is the centre of the arch. The figures obtained from the *Pathological Transactions* accord better with generally accepted views, for there we find one case of disease of the cæcum recorded, three of the hepatic, two of the splenic flexure, and two of the middle part of the transverse colon, two of the descending colon, thirteen of the sigmoid flexure, and eight of the rectum. Thus, in round numbers, nearly three fourths of the cases of stricture involve the lower end of the intestine, the number met with in the sigmoid flexure and in the rectum being practically equal; whilst of the remaining one-fourth, the ascending colon is the rarest, and the cæcum the next rarest seat, the remainder being equally shared by the three regions of the transverse colon and the descending colon. In all but an insignificant minority of cases, the disease is seated below the cæcum; and this broad general conclusion approximates tolerably closely with the statements of the writers above named. We could point out, however, that Dr. Brinton's figures appear to us to give rather too high a range for affections of the cæcum and ascending colon.

II. *Nature of the Strictures.*—In general terms, it may be said that the majority of the strictures are malignant, and this notwithstanding the fact that few are associated with secondary infection of remote viscera. This may be explained by reason of the new growths mostly belonging to the class of epitheliomata, which are notoriously the most local of all forms of cancer, and also possibly because they lead to fatal results before the system comes to be infected. In a case under our care last year of epithelioma of the sigmoid flexure, an annular ulcer with thickened infiltrated margins, and a depressed and ulcerating base, which gave to the gut externally the appearance of having been constricted by a tight cord, the epithelial new growth infiltrated the coats of the bowel for about half an inch above and below the constriction; but there was absolutely no secondary infection in any part. A case precisely similar as to the form of local disease in the sigmoid flexure, which was in the Hospital in 1875, was asso-

ciated with small secondary nodules in the liver and in the cutaneous tissues of the umbilicus. We think, then, that even some cases which in past times have been recorded as instances of simple stricture may really have the same fundamental structure histologically. To the naked eye, they conform to the type of "annular ulcers", but microscopically they are composed of an exuberant growth of cylindrical epithelium in the deeper tissues of the wall of the gut, and frequently with small outpouchings on the serous coat. In the cæcum, this growth may attain a larger size, and, as in the case above related, may form a large cauliflower excrescence, partially filling that portion of bowel. A smaller number of cases are due to scirrhus cancer, or to colloid; whilst there remain others, which from the presence of ulceration elsewhere in the bowel and the absence of any signs of infiltrating cancer, may be attributed to the cicatrization of tubercular, dysenteric, or syphilitic ulceration; the latter, as is well known, being chiefly limited to the rectum. Analysing, as before, the sixty-three cases we have collected, we find them recorded or described as follows. Out of the thirty-two cases to be found in the *Pathological Transactions*, eighteen are recorded as cancer, eight as simple stricture, or stricture following ulceration; seven of these being in the sigmoid flexure, it is possible that some may have been of the nature of epithelioma. There is one case of stricture of the sigmoid attributed to tubercular ulceration, and in two at the same region the nature of the stricture is not alluded to. There remain two instances of supposed syphilitic stricture of the rectum, and one attributed to cicatrization of a dysenteric ulcer in the same portion of the canal. In the thirty-one cases recorded in the Middlesex Hospital register, twenty were undoubtedly cancerous; seven are described as simple strictures (but some of these, again, were in the form of "annular ulcers"), and four as "ulceration with stricture".

III. *Perforation*.—In the course of inquiry, we were struck particularly by the fact that in a large number of cases in which the obstruction was complete and where it remained until death, unrelieved by the operation of colotomy, the fatal issue was brought about by the occurrence of perforation of the gut either just above the seat of stricture or at the cæcum; and it is upon the latter complication that we desire especially to insist. Its occurrence in several cases under our own notice brought the fact forcibly before us, and has largely influenced us in advising a definite line of procedure. The occurrence of inflammation and ulceration of the intestines from simple accumulation of their contents is notorious. The history of ordinary typhlitis is an illustration of this; and, not to mention the, unhappily, too frequent instances of perforation of the vermiform appendix from impacted feces, we could instance several cases in which the cæcum itself and other portions of the canal have suffered extremely from a like cause, even to the extent of perforation. In the class of cases we are particularly considering, the cæcum is usually the point to suffer most severely; but here again we proclaim no novelty;* we only affirm that the fact has not perhaps received sufficient attention. Dr. Hilton Fagge refers to it in his paper—it was met with in four of his cases; and he adds further that Dr. Wilks "had seen, in his private practice, a case of stricture of the colon, which (although it never caused total obstruction) gave rise to accumulation in the cæcum, to inflammation and perforation of this part of the bowel, and consequently to the death of the patient". If we turn to our own experience, one of the most striking instances we have seen was in a female patient thirty-five years of age, who was admitted into the Middlesex Hospital under the care of Dr. Greenhow on November 25th, 1873. She had been losing flesh for the past two years, and during the same time, had been subject to hypogastric pain and more or less constipation, which had become pronounced only for twelve days. She had travelled up from Wales to enter a London hospital; and, on admission, she was evidently dying from peritonitis. She lived but six hours; and after death the obstruction was found to be due to cancer of the body of the uterus invading the rectum; all the intestines were enormously distended with fecal matter, and fecal matter had escaped in large quantity into the peritoneal cavity. This extravasation was due to a perforation of the cæcum, the walls of which were extensively ulcerated. In 1874, a man, thirty-two years of age, with cancer of the rectum, also died from peritonitis due to perforation of the cæcum, there being no ulceration present in any other part of the greatly distended bowels. In 1876, two cases which came under our notice of annular stricture of

the sigmoid, both in females, also terminated in this manner. In one, the cæcum was opened shortly before death; and in the other, the ascending colon; but in both, the operation was done too late to prevent the perforation of the cæcum, which, in one case at least, must have been established before the operation. Lastly, in the remarkable case of epithelial cancer of the ileo-cæcal valve already referred to, which allowed the entrance of fecal matter into, but partially hindered its exit from the cæcum, there was extreme disorganisation of the walls of this *cul-de-sac*.

We need not here dwell upon these cases, but they all illustrate forcibly the fact of cæcal ulceration in cases of stricture even so far removed from the cæcum as the lower end of the rectum. The reason why the cæcum suffers in this way is not far to seek. In cases of simple accumulation, it is generally the chief part to be involved; and in cases of accumulation from organic stricture beyond, the same causes operate with increased force. These are, first, the shape of the cæcum, a mere *cul-de-sac*, above and on the inner side of which the ileum opens at a right angle. It thus acts as a kind of reservoir, where, in cases of obstruction in the course of the large bowel beyond, it serves as it were for the meeting of the two currents, that, namely, setting downwards from the ileum, and that regurgitated backwards from the seat of obstruction. Its dependent position is a second factor favourable to accumulation within it. More effectual still is its fixity, placed as it is between the abdominal wall in front and the iliacus muscle behind, and only partially invested by peritoneum, except in rare cases. Hence its power of independent movement is very slight; and that will be lost with the increasing distension. Contrast this with the transverse colon, which being, as a rule, more free, is enabled, so long as its muscular walls retain their tonicity, to empty itself. Further, to all this must be added the constant chafing of the distended gut by the action of the abdominal and iliacus muscles between which it is placed.

We are unable to give any accurate statistical details in support of our assertion of the frequency with which this cæcal ulceration occurs, owing simply to the fact that in a considerable number of cases the state of the intestinal mucous membrane above the stricture has not been put on record, or, if mentioned at all, the description is usually limited to the few inches of bowel in the neighbourhood of the stricture, except in those cases which have proved fatal from perforation. Eliminating twenty-six cases in which the state of the mucous membrane is not described, we find that ulceration occurred in the cæcum, or in its vicinity, and far removed from the seat of stricture, in fourteen out of thirty-one, a proportion which, judging from our own limited experience, is considerably within the mark.

IV. *Treatment*.—We pass now to the question of treatment, which, we think, should be based upon the knowledge of these facts. Obviously, those cases of rectal cancer must be set aside in which the diagnosis by means of physical examination is easy, or in which the nature of the case has been made out long prior to the supervention of total obstruction. Of course, in such cases, the only rational procedure is that universally pursued by surgeons, viz., left colotomy; and all, in such cases, recognise the futility of delay and the long-lasting relief, for months or even for years, frequently obtained by that operation. But in all other cases, where the history is one of chronic obstruction, where the age of the patient favours the view of cancer, where, in fine, it is probable that a stricture of the bowel exists, then, without wasting time over repeated injections, administering powerful and harmful purgatives, we think that recourse should speedily be had to colotomy in the right loin. We advise this operation, because in a certain proportion of cases (about one-fourth) the stricture is higher than the sigmoid flexure; because in all these cases, whether the obstructing cause be far from or near to the cæcum, there is undue strain thrown upon that portion of the canal; and because the only chance of a favourable issue (in so far as an operation for relief of symptoms can be said to have a favourable result) obviously lies in giving prompt and early relief to the cæcum thus overstrained. It must be borne in mind that cases have occurred in which, the symptoms pointing to the disease in the sigmoid flexure, the descending colon has been opened and found to be empty, owing to the obstruction being situated in the course of the transverse colon or in one of its flexures. Had the operation of right colotomy been performed, not only would it have been above the seat of stricture, but it would also have at once unloaded the distended cæcum. The danger of delaying this operation cannot be too strictly insisted upon. Unfortunately, in the majority of cases, the surgeon is not called until the obstruction has been already complete for some time, and the cæcum has suffered in proportion. A case of stricture under our care last year, affords an illustration of this. The patient, a woman fifty years of age, was admitted into the

* Seventeen years ago, it was alluded to as a well known fact by Dr. J. C. Messer, apropos of a case of stricture of the rectum, complicated by perforation of the cæcum. He says: "The existence of ulceration of the cæcum in such cases has been remarked, and was present in this instance. The explanation of this circumstance would appear to be, that the walls of the cæcum are more easily affected by the distending pressure of accumulating feces, which ultimately results in ulceration." *Pathological Transactions*, vol. xi, p. 110.

Hospital on October 10th, 1876, with a history of complete constipation of twelve days' standing, unrelieved by purgative medicines. There was great distension of the abdomen to about an equal extent on both sides, perhaps some slight fulness in the right iliac region. There was no vomiting. A long tube was passed *per anum* to the extent of twelve inches; warm water injected into it could not be heard on auscultation to find its way into the cæcum, and was speedily returned, without the passage of either feces or flatus. When the patient was under the influence of chloroform, the hand was introduced into the lower bowel, without meeting with any obstruction except that which appeared to be a fold of mucous membrane. Right colotomy was performed about six hours after admission, and was followed by marked relief to the distressing symptoms of distension, etc., but the patient sank from peritonitis, dying thirty-six hours after the operation. The peritonitis—which must have been present on admission—was due to ulceration of the coats of the cæcum, leading to extravasation of its contents into the peritoneal cavity. The stricture was confined to the sigmoid flexure. In the twenty-third volume of the *Pathological Transactions* (p. 119), Dr. Bristowe records a case of colloid cancer of the splenic flexure in a young man twenty-three years of age, in which for some days injections appeared to give relief, and in which, at length, the operation of right colotomy was entertained. The patient died, however, a few hours before the morning fixed for the operation, and ten days after his admission into the hospital. There was perforation of the ileum close to the cæcum, the lower end of the small bowel being extensively ulcerated.

But we would go further than this. The operation of right colotomy may have failed in its main object, owing to the disease being situated in the cæcum or small intestine, for so difficult is the diagnosis in cases where the abdomen is uniformly distended that to ascertain the precise seat of a stricture is well-nigh impossible. The ascending colon may then be found collapsed and empty. In such a case, the wound in the loin should be stitched up, and relief afforded to the distended bowels by the operation of enterotomy, or the small bowel may be opened at the loin if thought desirable. The intolerable distress from fecal and gaseous accumulation endured by the patient is too great to be let pass, without an effort on the part of the surgeon to remove its cause. Possibly he cannot hope to do much more than ease the path to death; but surely that is some gain. The desirability of performing this operation to give relief to over-distended intestines was insisted on by Trousseau (*Lectures on Clinical Medicine*, New Syd. Soc. Ed., vol. iv, p. 205), who, in his lecture on intestinal obstruction, gives directions as to the performance of enterotomy. He relates, also, four cases in which recourse was had to the operation at his suggestion, and as a final attempt, to relieve symptoms of obstruction. In two of these cases, the patients recovered, both being, probably, cases of volvulus or internal strangulation of the small intestines. In the *Medico-Chirurgical Transactions* for 1872 (vol. lv, p. 267) Mr. McCarthy relates a case of cancer of the stomach involving the splenic flexure, in which, on the advice of Mr. Maunder, he performed enterotomy in the right inguinal region, and with perfect success. The patient died from the cancerous disease and fatty degeneration of the heart, seven weeks after the operation. The operation has also been performed by Mr. Wagstaffe (*St. Thomas's Hospital Reports*, 1873, p. 181), for the relief of great distension and sickness from obstruction due to a pelvic tumour; and with such success that the patient was alive four years after the operation; and by Mr. Maunder (*Clinical Society's Transactions*, ix, p. 102), in a case of suspected stricture at the lower part of the ileum. The patient, who was sixty-eight years of age, lived for some months after the operation. It has also been performed by Mr. Bryant with a successful result. For ourselves, we may say that to us it seems that in all such cases, where the distension of the intestines is a source of suffering, as well as of danger, the operation of enterotomy is as imperatively called for as is that of puncture of the bladder in cases of overdistension of that viscus from impermeable stricture, and notwithstanding that fatal disease of the kidney may be already established. We hold that a free opening into the bowel is at once more effectual and safer than the method of acupuncture, which has been frequently adopted of late years. It is true that many may hold with Trousseau that puncture is not dangerous; but in a recent discussion at the Clinical Society of London, there appeared to be a pretty general consensus of opinion that acupuncture of the bowels was in many cases attended with considerable risk. Mr. Bryant said that in two cases in which he had practised it, fecal extravasation resulted; and Dr. Silver, although urging the necessity of the procedure for the relief of overdistension, admitted that in one case, fecal extravasation had occurred. In Dr. Bristowe's case of stricture at the splenic flexure, fatal from ulceration of the ileum, acupuncture was practised. It produced temporary relief, but seemed to

determine the fatal perforation of the bowel. Certainly, this happened in the case of ileo-cæcal cancer under our care last year; for there numerous punctures were made into the various distended coils of small intestine, and were followed by a considerable escape of flatus, with slight diminution of the girth of the patient. The operation was also, however, followed by increased violence in the peristalsis of the small intestines, with a proportionately great increase in pain, and the patient died from peritonitis due to perforation of the cæcum. Neither in this, nor in Dr. Bristowe's case, was there evidence of there having been any extravasation at the seats of puncture. There is more risk of such extravasation where the muscular coat has lost its tone and the walls are thinned by distension or spoilt by inflammation. This was well seen in a case of internal strangulation, under the care of Mr. Hulke, at the Middlesex Hospital in 1872, and recorded by him in the *Medical Times and Gazette* (1872, vol. ii, p. 463). In this case, acupuncture was resorted to for the purpose of replacing coils of small intestine which had been drawn out of the abdomen in the search for the constricting band. The puncture allowing not only of the escape of flatus but also of the oozing of feces, Mr. Hulke laid the bowel open at the spot and made an artificial anus in the small intestine. In Dr. Bristowe's and our own cases, the puncture appeared to be the exciting cause of the perforation of the ulcers produced by the fecal accumulation, probably by exciting a more ready contraction of the small intestines, owing to the displacement of their contents. Had a free opening been made, however, it is probable that by thus allowing a vent for the escape of the feces, the cæcum or the lower end of the ileum would not have been exposed to the additional strain caused by the increased peristaltic action. We have three times witnessed the great relief experienced by the operation of enterotomy in these cases; once in the case of Mr. Hulke, just referred to, and again last year in a patient of Dr. Henry Thompson (a case of sigmoid stricture), where the cæcum, already far advanced in ulceration, was laid open in the operation by one of us, and thus exit was given to an enormous quantity of feces. In both cases—although the patient only survived for a few hours—the relief obtained was very marked. The third case was one of obstruction from intussusception, where twenty-four inches of ileum were removed, and a double artificial anus made. The patient lived twenty hours after the operation, and for many hours was made easy and even cheerful by it (*Transactions of the Pathological Society*, vol. xxviii, p. 131).

v. *Diagnosis*.—What we have to say upon the subject of diagnosis may be summed up in a very few words. We must confess, with Dr. Fagge, that so far as regards the methods employed for the accurate diagnosis of the seat of a stricture of the intestine, it is often impossible to be sure whether the disease is situated in the small or large bowel; and if it be in the large intestine, its precise situation there is extremely difficult to determine. All the rules based upon the symptoms of the disease have been at different times found wanting; and much the same statement may be made in truth with regard to such aids to diagnosis as are afforded by the amount of fluid that may be injected into the canal, by auscultation over various parts of its course during the injection and even by the passage of the long tube. In every case where digital examination has proved negative, it might be worth while to adopt the method first practised in this country by Mr. Maunder, largely employed by Professor Simon of Heidelberg, and advocated by Mr. Walsham of St. Bartholomew's Hospital; that, namely, of the introduction of the whole hand into the rectum. This method was employed in our case (above referred to) of stricture of the sigmoid, but, owing to the folds of the canal, the stricture was not reached; and it was well that it was not, for at the necropsy subsequently, the bowel at the seat of stricture gave way on the slightest traction. Mr. Walsham also had failed in detecting a stricture of the sigmoid flexure by this means; so that, valuable as the method may be, it cannot be fully relied on, and, moreover, it should be practised with the greatest caution.

But, after all, from what has gone before, it will be seen that, in our opinion, the precise determination of the seat of stricture is not of primary importance. In determining this seat, we are thrown back upon statistics: a knowledge of these will be a valuable guide, and they should be taken into prominent account when forming a diagnosis. We know that three-fourths of the cases of stricture involve the rectum and the sigmoid flexure; and we know that, of the remaining one-fourth, a very small proportion are seated above the ileo-cæcal valve. Nor if we have arrived only at so imperfect a diagnosis as one based upon mere numerical averages, is our line of treatment at all the less secure. For we know, also, that the chief part of the passage to suffer from the effects of stricture of the large bowel is the cæcum; and we know that, if the ascending colon be opened, in 90 per cent. of these cases the opening will be above the seat of

stricture, and will also give relief to the overdistended cæcum; whilst, as for the remainder—that is, those cases in which colotomy fails in its object—enterotomy should be performed and relief thus afforded, although it may be with but a very imperfect conception as to the exact locality of the source of obstruction.

[Since this paper was written, we have been informed by Mr. Maunder that, after hearing the views expressed therein respecting right colotomy before gastro-enterotomy, he was prepared to act on the suggestion in a case under his care; but the necessity for enterotomy did not arise, as he found the right colon distended.]

THE SILK LIGATURE AS A METHOD OF SECURING THE OVARIAN PEDICLE:

ITS ADVANTAGES AND DISADVANTAGES, WITH BRIEF NOTES OF ITS RESULTS IN THIRTY-EIGHT CASES.

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SOON after commencing to perform ovariectomy, I determined to give the silk ligature a fair trial in a series of consecutive cases. It seemed to me worthy of such a trial, because of its universal applicability, its cleanness and neatness, both at the time of operation and in the after-progress of the case, and because it yielded such good results in the hands of those who only used it in cases in which it alone was applicable.

With the works of Spencer Wells and Peaslee in our hands, in which the whole question of its use is ably discussed, a paper on this subject may seem unnecessary. It differs, however, from the treatment of the subject in either of the works named, inasmuch as it deals only with one of the methods of using the silk ligature which they describe, viz., that in which the ligature or ligatures are made to transfix the pedicle, both ends being then cut off close to the knot and returned with the pedicle-stump free into the peritoneal cavity. I should hope that the old plan of leaving one end of the ligature hanging out at the lower angle of the wound has for ever passed away. It has no advantages to recommend it, and at least two serious disadvantages to contraindicate it. It necessitates the cutting off of the distal end of the stump by ulceration, and, during this slow process, it keeps open a moist highway for the causes of irritation and putrefaction to travel by from the exterior of the wound to its deepest recesses; to the very parts, in fact, which we wish to heal as quickly as possible.

Before proceeding to discuss the details of its application and the difficulties and dangers to be encountered, I will sketch briefly the various methods by which the healing process is accomplished and the ligature disposed of.

It always seemed to me probable that, though the tissues included in the ligature were tightly enough constricted to prevent hæmorrhage, they were not usually so grasped as to completely destroy the nutrition of the distal end of the stump. The following observation confirms the correctness of this view. In one of my cases, I tied a large piece of omentum adhering to the cyst in two places and divided it between the ligatures, thus leaving a stump on the outside of the tumour very like that of the ovarian pedicle. I afterwards injected the cyst with Beale's Prussian blue fluid, and, when the injection was complete, noticed that the distal end of this stump was blue, though not so blue as the proximal part, and there was no appreciable escape of the fluid from its cut surface. Microscopic examination showed that the injection had passed into the minute capillaries, but not into the larger vessels, except where it had passed into them by the anastomoses beyond the ligature.

If the injection would so pass, the blood would also pass; and in this way the vitality of the part would be at any rate partially sustained until the other processes by which the distal end of the stump is nourished had time to be completed.

The five following conditions of the stump after ligature I have myself observed in the dead or living subject. I do not claim any novelty for the observations, but, so far as I am aware, they have not as yet been all recorded side by side.

1. The ligature is buried in the peritoneal coat of the pedicle, the portions on the opposite sides adhere, and vascular connections are thus rapidly established. Cells penetrate between the fibres of the silk and break up the ligature, which is absorbed and disappears. The finer the silk used, and the softer the pedicle, the more likely is this to happen.

2. Lymph is thrown out over the ligature and cut end of the stump; in this new vessels are formed, and the same result is obtained, but more slowly.

III. The stump adheres to some neighbouring peritoneal surface, and from that new vessels pass into it, through which its nourishment is obtained.

It will at once be seen how the passage of some nutriment through the capillaries in the constricted portion must aid either of these processes, and we must also remember that the pedicle is surrounded by the nutritive fluid naturally present between the peritoneal surfaces, and probably always somewhat increased when repair is going on.

The first two of these methods are the most favourable, and are those which we must aim at securing. As a result of either of them, the stump may be in a few months merely represented by a little button of smooth tissue at the site of the pedicle. Such a result I had an opportunity of seeing when assisting my colleague Dr. Bantock at an exploratory operation a few months after ovariectomy. The exploration revealed the above condition of the pedicle, which was not adherent to any neighbouring surface, and was also quite free from the malignant disease of the peritoneum which had caused reaccumulation of fluid. How often such a result is obtained it is of course impossible to say, but I think we may fairly suppose it to have occurred when there is no symptom of any irritation about the pedicle, or at any rate in the majority of such cases (*vide* Cases I, VII, VIII, X, XI, XIV, XV, XVII, XVIII, XXII, etc.). When the stump adheres to some neighbouring peritoneal surface, most commonly some part of the intestine, because they are generally in contact with it, we are by no means likely to get such a good result. We may have no sign of mischief for some time, usually not till after the bowels have been moved. Sometimes, however, some intestinal irritation shows itself much earlier, especially if there be trouble with flatulent distension; indeed, the latter is often a sign of the irritation. When symptoms follow the first action of the bowels, they usually appear from the tenth to the fourteenth day. There is usually some rise of pulse and temperature; this may be considerable, and is, I think, proportionate to the extent of adhesion which has been disturbed. There is often depression of spirits, pain about the pedicle, and sometimes hardness may be detected in the iliac fossa, or by vaginal or rectal examination. All the symptoms may gradually subside, or they may persist for some time with obstruction to the passage of the flatus and fæces or with troublesome diarrhoea and tenesmus. In the former case, fatal obstruction may result; in the latter, the case will end in discharge of pus by rectum or vagina, and all will go well. In the cases given below, examples of each of these results may be found except that of fatal intestinal obstruction.

IV. Fatal hæmorrhage may follow the use of the ligature, and one such case (XX) may be found below; and the same accident has been reported to me by several surgeons as having occurred in their practice. This most formidable accident is due to the escape of one or more of the large veins, which are common at the outer edge of the pedicle (pampiniform plexus), from the external loop of the ligature. It requires great care and some experience to avoid it, when treating a very broad and short pedicle.

V. The ligatures may remain uncovered around the pedicle in cases where diffuse peritonitis with effusion of serum or rapid septicæmia follows the operation; and if the patient survive only a few hours, they will be found just as they were when applied; or if she survive for a longer period, they may be found somewhat loose, with an ulcerated groove round the pedicle, the distal end being in a sloughing condition.

I do not think the fatal result is much influenced by the ligature in this last class of cases, though it is possible that it may become early soaked with the products of putrefaction and be a constant source for their propagation; whereas the tissues might have been able to dispose of the purid or irritative matter had no such absorbent material been present to hold it. Excluding these cases from our consideration, we still have a formidable array of dangers to consider; but, fortunately, experience teaches us that the favourable terminations are the most common after the use of the ligature, as the cases here given will show. There being only five fatal cases out of a total of thirty-eight, and only one of these fairly to be attributed to the ligature; two of the others (Cases II and XIX), being hopeless under any treatment, and the other two sufficiently serious to render it impossible to attribute the fatal result to the ligature, at any rate with certainty.

I will now endeavour to point out certain precautions to be adopted in using the ligature, which will, I think, ensure for it results even more favourable than my own have been up to the present time.

First, as to the material. It should be the pure Chinese silk, without any admixture of cotton. The hemp ligature still finds some advocates, but it has, so far as I can see, no advantages, and the great disadvantage of being a vegetable instead of an animal tissue, and it is slippery and cutting to the fingers when wet. One advantage claimed for it is that it shrinks after tying, and hence is a security against

hæmorrhage. From experiments I have made with it, I do not believe it shrinks at all after it is once thoroughly wet, and this it always is before it is tied; and, if it did so shrink, I should not consider it an advantage in view of what I have already said as to the partial circulation through the constricted portion. The silk, if properly tied, never fails to sufficiently constrict. As to the method of applying the silk, I believe it to be important that the two ligatures should interlock when tied, so as to form a figure of eight, otherwise they may pull apart at the point of puncture and hæmorrhage may result. In a thin pedicle, it is easy to avoid puncturing a vessel, and the interlocking of the ligatures is a matter of less consequence; but, in a thick one, it is often impossible to see and avoid every vessel of sufficient size to be dangerous if punctured. If more than one transfixion be required, the ligatures should all interlock so as to form a chain. This has one disadvantage, tending, in a broad short pedicle, to cause a drag upon the outer loop of the ligature-chain, and hence to increase the risk of hæmorrhage from slipping of some of the large veins to which I have referred. The weight of the uterus and other ovary, aided perhaps by the contractile nature of the tissue of the broad ligament, increases this risk. It is well, therefore, in every case, to examine the pedicle-stump carefully just before closing the incision; and, if any sign of hæmorrhage or slipping be found, to apply a fine silk or catgut ligature by transfixion on the proximal side of the other ligatures, this last ligature to include the veins already referred to. I always adopt this plan now, using either fine silk or catgut wherever the outer edge of the broad ligament feels tight as one passes the fingers along it from the pelvic brim to the edge of the pedicle. In all the earlier cases, I employed very thick silk, and seldom more than a single transfixion, with an accessory ligature if necessary. Thinking this thick silk might be the chief cause of the trouble with the pedicle, I tried a medium thickness, tying the pedicle in smaller pieces and with more transfixions. I found the results satisfactory, and I now use the finest silk that will bear the necessary strain in tying.

Since performing ovariectomy antiseptically, I have, whenever it was possible, sewn the posterior peritoneal cut surface of the pedicle over on to the anterior surface of the broad ligament with fine silk or catgut with a view of covering over the raw surface, and at the same time placing it in immediate contact with a peritoneal surface, from which it might receive its blood-supply quickly. This method has also the great advantage of carrying the stump over to the anterior surface of the broad ligament, and so away from the risk of adhering to the intestines. I am not prepared to advocate this proceeding, however, unless the operation be performed antiseptically, because it has the disadvantage of opening up the cellular tissue of the broad ligament, and it is very probable in some of the cases small vessels are also transfixed in their continuity. In cases where the pedicle is very broad, thick, and short, this sort of flap operation would not be possible; but I think a suggestion made to me by Mr. Lister would answer well in such cases, viz., to unite the cut peritoneal edges of the stump with catgut sutures, placing a few strands of catgut between the sutures to drain, and prevent any possible risk from accumulation of serous fluid and tension.

I am aware that the catgut ligature has been successfully used instead of silk for securing the pedicle, but the results with the silk are so good that I shall not change it for catgut, at any rate, until one can be more certain of always getting a good sample of the catgut. As at present sold, it is too uncertain in its quality.

CASE I.—Both ovaries removed; clamp on left pedicle; right one transfixed and tied in two parts with strong silk, one ligature being made to encircle the whole again. Recovery perfect; no sign of mischief from the stump or ligatures.

CASE II (D).—Right ovary removed; pedicle trans-fixed and tied in two parts and returned. Case of gangrene of cyst after tapping during pregnancy. Died in sixteen hours.

To save repetitions, I may state that in every case, when no special reference to method or nature is made, the strong silk was used, the ends in all cases being cut off close to the knots, transfixion was employed, and the pedicle always dropped free into the peritoneum.

CASE III (D).—Both ovaries; very complicated case; extensive uterine, vesical, intestinal, and omental adhesions; several transfixions and many ligatures used. Wound continued to discharge for months after the operation, and several of the ligatures came away. Now in good health.

CASE IV.—Left ovary; ligatured as in Case I. On sixteenth day, irritability of bowels, passing off in a few days. Went home well on twenty-third day.

CASE V (D).—Left ovary; an enormous solid dermoid tumour;

strong silk soaked in carbolic oil; right ovary; fine silk also, soaked in carbolic oil. Died on fifth day; congestion of the brain. There was nothing to show that the ligatures influenced the result.

CASE VI.—Right ovary. On fifteenth day, I noted "Bowels do not act very well, and patient is evidently suffering from the irritation which ligatured cases so often have twelve or fourteen days after operation". Went home well on eighteenth day.

CASE VII.—Both ovaries; each two ligatures. No sign of irritation.

CASE VIII.—Left ovary; combination of enucleation and ligatures; three medium silk ligatures used. No trouble of any kind. Left hospital on twenty-first day.

CASE IX.—Right ovary; similar to last, but thick silk used. Died on fifth day. (?) Pyæmia.

CASE X.—Left ovary. No trouble. Went home on twenty-second day.

CASE XI.—Enormous dermoid tumour of right ovary, with very extensive adhesions; smaller one of left ovary; two ligatures on each pedicle. Slow recovery, but no symptom referable to ligatures.

CASE XII.—Both ovaries; two ligatures on each; abscess in left iliac fossa discharged by abdominal wound. Bowels were very irritable for a week from fifteenth day onwards. Slow but perfect recovery.

CASE XIII.—Right ovary; two ligatures; many finer ones on adhesions. Much trouble with suppuration in abdomen. Very slow recovery.

CASE XIV.—Both ovaries; right, strong silk; left, medium silk; each two ligatures. Rapid recovery; temperature never rose above 99.6 deg.

CASE XV.—Left ovary; two ligatures. Good recovery.

CASE XVI (D).—Right ovary; combination of enucleation and ligatures; four transfixions with medium silk; tumour peeled off a large fibroid uterus; abscess in right iliac region discharged by wound. Phlegmasia dolens first in left leg, then in right. Recovery perfect; went home on fifty-fifth day.

CASE XVII.—Left ovary; two ligatures. No after-trouble. Up in a fortnight.

CASE XVIII.—Right ovary; two ligatures. No after-trouble.

CASE XIX (D).—Inflamed cyst united to both ovaries and everything it was in contact with; numerous ligatures. Hopeless case. Died in seventy-two hours from suppression of urine.

CASE XX.—Right ovary; two ligatures; portions of pedicle slipped from outer one, and serious hæmorrhage occurred. I did not discover it for three hours, then found bleeding-point and secured it; but she never rallied. Died in nine hours.

CASE XXI.—Left ovary; several transfixions; laced ligature. Bowels acted on ninth day, and again on twelfth. On fourteenth day, great rise of temperature and pulse, followed by diarrhoea; pus in the evacuations. Not right again till twenty-first day.

CASE XXII.—Both ovaries; right, two ligatures; left, four; laced. No after-trouble. Went home on twentieth day.

CASE XXIII.—Left ovary; several ligatures, laced; firm pelvic adhesion also transfixed and tied in two halves. No after-trouble. Went home on twenty-first day after operation.

CASE XXIV (D).—Right ovary; laced with strong silk; several transfixions. No after-trouble. Went home on twenty-seventh day.

CASE XXV (D).—Left ovary; four ligatures. No after-trouble. Went home on twentieth day.

CASE XXVI.—Left ovary; two ligatures; many others on very extensive vascular adhesions. Nearly died from sickness, commencing on eighth day; afterwards had offensive diarrhoea. Went home well on twenty-first day.

CASE XXVII (D).—Both ovaries; three ligatures on each pedicle. A great deal of pain and trouble afterwards. Went home on twenty-second day.

CASE XXVIII (D).—Both ovaries united into one large universally adherent tumour; two ligatures on each pedicle; many on adhesion. No after-trouble. Went home on twenty-third day.

CASE XXIX.—Both ovaries; three to four laced ligatures on each. Much trouble with bowels, commencing on twelfth day; pain, depression, high temperature; pus in evacuations. Went home on twenty-second day.

CASE XXX (D).—Both ovaries; several ligatures on each. Chronic pyæmic condition followed operation; bowels very troublesome. Went home well on twenty-seventh day.

CASE XXXI (D).—Right ovary; three ligatures. No trouble referable to pedicle. Went out of hospital on eighteenth day.

CASE XXXII.—Left ovary; antiseptic operation; four thick silk ligatures soaked in carbolic oil. Much trouble with bowels from twelfth day; ended in abscess discharged *per rectum*. Went out on twenty-fifth day.

CASE XXXIII.—Right ovary; antiseptic method; two ligatures soaked in carbolic oil. Much trouble with bowels commencing before they had acted, afterwards threatening complete obstruction; gradually passed off; and patient went out on twenty-fourth day.

CASE XXXIV (D).—Left ovary; antiseptic method; two strong silk ligatures soaked in watery solution of carbolic acid (1 in 20); three fine ones in carbolic oil. No after-trouble. Went home on nineteenth day.

CASE XXXV.—Right ovary; antiseptic method; two strong silk ligatures soaked in watery solution of carbolic acid (1 in 20); partial flap operation mentioned above. No after-trouble. Bowels open on eighth day. Patient up on couch on eleventh day.

CASE XXXVI.—Right ovary; antiseptic method; five medium silk ligatures soaked in watery solution of carbolic acid; partial flap operation. No after-trouble. Went out well on seventeenth day.

CASE XXXVII.—Left ovary; antiseptic method; four medium silk ligatures (carbolic). No after-trouble.

CASE XXXVIII.—Left ovary; antiseptic method; two fine silk ligatures (carbolic); partial flap operation. Went out quite well on nineteenth day.

In the above cases, I have placed the letter (D) to those in which drainage was employed, as it is often an important element of success in cases treated by ligature. Other details I have purposely left out, as they are such as are common to cases treated by any method, and therefore do not affect the special question of ligature.

I may mention that I have followed the history of all my cases since they left my care, and in no case have I heard of any after-mischief from the ligature. All upon whom I have operated, who recovered, were still in good health a few weeks ago.

ON THE THERAPEUTIC USE OF IODOFORM.

By BERKELEY HILL, M.B., F.R.C.S.,

Professor of Clinical Surgery in University College; Surgeon to University College Hospital, and to the Lock Hospital.

LOCALLY, iodoform, as a dry powder, brushed lightly over the surface with a moistened camel-hair pencil, has been for three years my almost invariable treatment of venereal sores, especially the local chancre. During the last few months, I have often substituted for the dry powder an ethereal solution (one part of iodoform in six or eight of ether). The sore is touched or dabbed with a pencil dipped in the ethereal solution, according to its size and depth, lightly or copiously. The ether quickly evaporates, leaving a thin pellicle of iodoform, that as effectually stays the spread and produces healing of chancres as does the more copiously applied dry powder. Thus the surface is covered more exactly, and the disagreeable smell of the iodoform is too faint to attract attention. The sore is well washed with water and dried before the iodoform is applied, and the surface is lastly protected by a bit of dry lint. When the secretion is abundant, the dressing must be renewed twice daily, but in three or four days the amount of discharge becomes so scant that one dressing *per diem* suffices.

In this way, venereal sores heal quickly. Pain subsides at once; the sore is well in a week or ten days, and the chances of consecutive inoculation or bubo are greatly lessened. In a very few cases, the application of iodoform gives momentary smarting, which is very bearable; even the ethereal solution does not hurt, and usually the patient declares the application to be quite painless. I avoid using iodoform on inflamed sores, or on simple granulating wounds; but indolent non-specific ulcers are rapidly improved by iodoform locally applied.

Lately, I have given iodoform internally with great benefit. It acts more rapidly than potassic or other iodides, and, judging from experience thus far, is as readily borne as are those salts. I have given it in one-and-a-half-grain doses as a pill with extract of gentian. Three pills are given each day, increasing gradually till eight or ten pills are taken in twenty-four hours.

I have used it with excellent effect in cases of obstinate syphilitic ulceration of the tongue, where the dorsum is covered with rugged thickened epithelium, which is constantly splitting into deep fissures, and thus causing continual severe pain to the patient. This affection is often quite insensible to mercury, alkaline iodides, or arsenic—the remedies usually beneficial. In three of these obstinate cases, where I had been treating the patients at intervals for years with the remedies just mentioned with little lasting benefit, iodoform-pills have acted like a charm. Pain, immediately lessened, in two or three days ceased wholly; and the fissures healed rapidly, while the tongue soon shrank to its natural size. How long the relief will endure, time alone will show; but any interval of only apparent cure of this very painful affection is a great blessing to the sufferer, and time is given for the exhibi-

tion of mercury if required. In December last, I had under my care in University College Hospital a patient with ulcerated and protruding gumma of the left testis, non-ulcerating gumma of the right testis, and ulcerating gummata of the skin over the upper end of the right tibia, with other syphilitic affections. Iodoform was administered in pills, and water-dressing applied to the ulcers. Rapid healing and subsidence of the swellings took place, notwithstanding that, when the dose of eight pills *per diem* had been reached and administered for three days, an outbreak of pyrexia, coryza, and iodic acne rendered it necessary to drop the drug completely for a short time. In three weeks, the patient left the hospital almost healed, and continued his treatment as an out-patient. Again, a lady who has during the last two years consulted me occasionally for intensely agonising pain in the head caused by syphilitic pericranial and cranial disease, for which a customary dose was thirty grains of sodium iodide three times daily, was at once relieved of pain by the iodoform pill taken three times daily, though, on the third day, nausea became too urgent to allow the iodoform to be continued in that quantity; it was at first diminished till pain ceased, and then discontinued altogether. This small experience has satisfied me that in iodoform we have a very useful addition to our store of weapons for fighting syphilis. Further observation will enable us to apply it more exactly and when most suitable.

THERAPEUTIC MEMORANDA.

CHLORAL-HYDRATE IN DELIRIUM TREMENS.

A SHORT time ago, I was almost despairing of a case of delirium tremens. The man was most violent, and in a fearful state of excitement; and the remedies adopted appeared only to increase his activity and make him more and more unmanageable. The treatment had been Battley's solution in half-drachm doses; afterwards pure solution of the hydrochlorate of morphia by subcutaneous injection, as much as one grain repeated every two hours. There was no vomiting of the mixtures given on any occasion; these being, in addition to the liquor opii sedativus just mentioned, half-drachm doses of tincture of digitalis given every two hours, etc. After two or three days of the above treatment, and no improvement taking place, I determined to try the chloral-hydrate. Accordingly, at 5.10 A.M. I gave him half a drachm (thirty grains), and the same quantity at 5.40. At 6.0, he had a subcutaneous injection of half a grain of morphia. At 6.10, forty grains of chloral were given; at 6.25, two-thirds of a grain of morphia were injected; and at 6.45 he was asleep. The man slept for eight hours, and awoke without headache or other unpleasant feeling except great thirst. He was now supplied with good nourishing food (beef-tea, etc.), and he was out walking next day. The quantity of the chloral given was one hundred grains, and of morphia one grain and one-sixth, in the space of an hour and fifteen minutes. Previously to the administration of chloral, the pupils were contracted to a point: an indication, of course, that the previous mixtures had been absorbed, but, as we have seen, with the effect only of increasing the excitement. Considering that the preparations of opium given previously had not conduced to somnolency, I attribute this condition to the chloral-hydrate chiefly, if not entirely. In another obstinate case of delirium tremens, in which the usual treatment by digitalis, morphia, etc., was ineffectual, I had recourse to chloral, repeated every ten minutes till one hundred and sixty grains had been taken. The patient then fell over, and, after sleeping for seven hours, was, on awaking, altogether a changed man.

I may add that, during the first two doses, there is always increased excitement, the patient becoming very garrulous—indeed, *intoxicated*, to all appearance; but this soon gives place to thick speech, inarticulate mummings, and peaceful sleep.

J. FARRAR, L.R.C.P.Ed., etc., Morecambe, Lancaster.

PILOCARPIN, THE ACTIVE PRINCIPLE OF JABORANDI.

A MORE elegant and effective way of introducing the active properties of jaborandi into the system than that proposed by Dr. Coghill as a therapeutical remedy in hydrophobia (*vide* BRITISH MEDICAL JOURNAL of January 5th) would be by the hypodermic injection of the alkaloid named by its discoverer, Merck, pilocarpium maritimum (muriate of pilocarpine). It consists of transparent white crystals, and forms an easy and clear solution in equal parts of water. A hydrochloric solution of two per cent. is used for subcutaneous injection, one *gramme* or sixteen minims of which are equivalent to five *grammes* or eighty minims of the infusion of jaborandi leaves. About one to one-

and-a-half grammes (of this solution), containing one-third to half a grain of pilocarpin, are injected. From two to ten minutes hardly elapse before the effects of the pilocarpin begin to be seen. If injected in the temporal regions, the effects show themselves very quickly; but if in the external sides of the lower extremities, a much longer interval ensues. At first, a sudden increase in the salivary secretions takes place, which reaches its acme after about fifteen minutes, and lasting generally from about one-and-a-half to two hours, producing from about half a pound to a pound and a half of a thin liquid saliva. Almost about the same time, the pulse-frequency rises about ten to twenty beats in the minute, combined with reddening of the face and a feeling of warmth, which increases to strong perspiration. This begins at the roots of the hair of the head, and extends over the face, neck, chest, body, arms, and lower extremity, and continues about an hour and a half, and may easily be protracted to three hours by wrapping the patient in blankets. The amount in weight of the perspired fluid is about two to four pounds. The lacrymal glands secrete at the same time very strongly. After a few minutes, the pulse beats more slowly, and gradually falls with the ending effects of the pilocarpin until it has reached its former intensity. The temperature, measured in the axilla, rises from about one to two degrees Fahr., falling afterwards with the pulse, and sinking sometimes from two to four degrees Fahr. under the original height. Pilocarpin seems to act by widening and lessening the tension of the arteries, and acting on the nervous centres of the sudoriparous and salivary glands. Atropia is a powerful antidote to pilocarpin. An injection of 1-120th of a grain of atropia arrested all the effects of the common dose of pilocarpin. Even five or six drops of a one per cent. solution of atropia, dropped into the conjunctival sac, completely negated an injection of pilocarpin.

Pilocarpin does not cause the evil after-effects of jaborandi, such as vomiting, vertigo, nausea, etc. Like jaborandi and its class, pilocarpin has no specific therapeutic effects; it merely acts as a powerful diaphoretic and dialagogue. Any evil effects that may be produced by its administration, as vomiting, etc., which rarely occur, can easily be suppressed by the inhalation of a few drops of nitrite of amyl.

LOUIS HENRY, M.D., Manchester.

SURGICAL MEMORANDA.

FOREIGN BODIES IN THE EAR.

As a pendant to the case of Mr. Habgood, the following may be considered worth recording.

In May last, a female patient, aged 38, presented herself at the Central Throat and Ear Hospital, requesting that I would remove from her left ear a piece of black lead, which she stated to have introduced when, as a child aged 8 or 9, she had been playing with a pencil belonging to her father, who was a carpenter. She graphically described the attempts to remove it with crochet-needle, bent hair-pins, etc., by a doctor, and also by her mother; and she had a most vivid recollection of intense suffering. On examining the ear, I found it blocked with impacted wax, but I expressed doubts as to the foreign body being still there. Somewhat to my surprise, however, as well as to that of my assistant, Mr. Douglas Hemming, and others who were present, with exit of the first syringe-full of warm water, something clicked on the bottom of the glass held to receive it. This proved to be a piece of black-lead pencil, such as is used by carpenters. It lies now before me; its edges are quite square, blunted at one end with use, and rough where broken off at the other; it measures three-eighths of an inch in length.

This patient came to the Hospital in consequence of the success which had attended similar treatment of the child of a neighbour, in whom the foreign body had been a glass bead.

LENNON BROWNE, F.R.C.S. Edin., Weymouth Street.

FRACTURE OF OS CALCIS BY MUSCULAR ACTION.

IN December 1876, M. N., a spare healthy woman, aged 42, while leaving a shop, made a false step, forgetting that the shop and street were not on the same level. The street slopes very much, so that the depth of the downstep down into it varies from three and a half to eight and a half inches; and probably the woman strode off a height of not more than six inches. She was sober, and not carrying any weight. She exclaimed, "I've put my ankle out". She did not fall, but without assistance limped home, a distance of about a hundred yards. She had never injured the part before. On examining her shortly afterwards, a fragment of bone, with the skin tightly stretched over it, was seen at the back of the leg, two inches and a half above

the point of the heel. Below this, the cord of the tendo Achillis was wanting. The lower edge of the fragment was a little above the level of the lower end of the internal malleolus. It was about one inch transversely, and had been torn off the posterior surface of the os calcis, where a cavity could be felt. The whole depth of the bone had not been torn away, but only the upper three-fourths; and the inferior edge of the fragment had been tilted backwards so as to project against the skin. This edge could be bent down for a quarter of an inch; but, on leaving off the pressure, it sprang back again. The skin was not bruised, and there was no other injury.

The usual treatment for ruptured tendo Achillis was adopted, and in about eight weeks she was able to walk without limping, and only complaining of some loss of spring. Two days after the accident, there was great swelling, and the skin over the fragment was so tight that tenotomy suggested itself; but there appeared this objection, that, if the tendo Achillis were divided, the torn away piece might be left without sufficient vascular supply. A few days later, a small slough formed, leaving a superficial ulcer of the size of a shilling, which soon healed under red lotion.

The interest of this case is its rarity. A note at page 282 of Holmes's *Principles and Practice of Surgery* states: "It is said that the tuberosity has been torn from the rest of the bone by muscular action; but this seems dubious." In this case, however, no other explanation can be made.

J. W. ANNINGSOON, Burnley.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS.

JANUARY 17th, 1878.—*Multiple Sarcomata in a Boy*.—Mr. HOLDEN brought into the operating theatre the same patient who was exhibited by Mr. Butlin at the Pathological Society on December 4th, 1877 (see BRITISH MEDICAL JOURNAL, vol. 11, 1877, p. 807). Since that date, another sarcoma has developed below the right trochanter major, and a second on the right ulna. The right testicle has become still smaller. Mr. Holden remarked that whereas all the former growths which he had removed were in the subcutaneous cellular tissue, the most recent was, to all appearance, a subperiosteal growth intimately connected with the ulna. He was not in favour of any further operation.—Mr. SMITH remarked that as all Mr. Holden's previous operations had been attended with much temporary benefit, he advised the removal of the now existing tumours if they were growing rapidly.—Mr. WILLETT agreed with Mr. Smith, not deeming partial excision of the ulna to be a desperate operation.—Mr. LANGTON was not in favour of removal of the tumours; and Mr. BAKER did not think operative interference advisable at present.

Swelling on Tibia: Nature Doubtful.—Mr. THOMAS SMITH asked advice in the case of a married woman, aged 26. Four months ago, she struck her knee against some hard substance. Shortly afterwards, a lump appeared just below the right knee to the outer side of the spine of the tibia. It was now red and tender, and there was an indistinct sense of fluctuation on pressure. There was an enlarged gland in the groin. The leg was very painful at night. There was no evidence of syphilis. Mr. Smith wished to know whether the swelling was inflammatory and due to injury, or a new growth. If the latter, it should be at once removed.—Mr. HOLDEN thought that the case should be watched for a few weeks, then an exploratory puncture should be made. He believed that there was deep fluctuation on pressure, and that the swelling was inflammatory.—Mr. SAVORY agreed entirely with Mr. Holden. No good, but much harm, would ensue from interference at present.—Mr. WILLETT was of opinion that the swelling was a new growth, being very well defined.—Mr. LANGTON believed the disease was inflammatory. He recommended an exploratory incision at once, with removal of the tumour, should one be thereby detected. The incision would, on the other hand, do no harm if the affection proved to be inflammatory.—Mr. BAKER agreed with Mr. Langton's suggestion, but advised waiting for a week.—Addressing the students present, Mr. SMITH remarked that the case was most instructive, and hoped that they would watch it, and form their own judgment on the nature of the swelling, which he intended to explore.

Ulcer of Soft Palate.—Dr. LAUDER BRUNTON exhibited a girl, aged 13. Her soft palate was deeply ulcerated, and thus divided into two halves. The edges of the ulcer were ragged, and its surface dull yellow; the pharynx was granular and beginning to ulcerate. Eight months ago, the child had an enlarged gland under the chin. For two months, she suffered from dysphagia and constant hawking. Her father was quite healthy; her mother, phthisical. There was no history of syphilis. Dr. Brunton observed that, had the girl been twenty-three instead of thirteen, he would have believed the ulceration to be syphilitic. He could obtain no history of hereditary syphilis, and believed that the ulcer was strumous. He intended to apply tincture of iodine locally, and give cod-liver oil and iron.—Mr. HOLDEN believed that syphilis must have existed in the parents, possibly in the grandparents.—Mr. SAVORY believed the disease to be strumous.—Mr. SMITH did not believe it due to syphilis, but recommended the administration of iodide of iron, as it was beneficial both for struma and for venereal disease.—Mr. LANGTON had seen a similar doubtful case, which improved under treatment within the hospital, but got worse when discharged.—Mr. BAKER said that he would consider the patient to be strumous, and not syphilitic, even if she were twenty-three.—Dr. BRUNTON intended to administer iodide of potassium for a few weeks, and then, should there be no improvement, he would try the iodide of iron.

Neuralgia of Upper Extremity.—Mr. WILLETT brought forward a woman, aged 47, who for eighteen months had severe neuralgic pains in the right shoulder and upper arm. The pain commenced immediately on the healing of a small axillary abscess, the cause of which was quite unknown. The patient could neither use her arm by day nor sleep at night, on account of the pain. No disease of the humerus or shoulder-joint could be detected, and treatment suitable for rheumatic arthritis had failed. Mr. Willett believed this to be an instance of pure neuralgia. He proposed either to apply the actual cautery over the roots of the brachial plexus, as Mr. Thomas Smith had recommended, or to stretch the nerves of the arm, on Mr. Callender's principle.—Mr. HOLDEN recommended galvanism. Stretching all the nerves of the arm would be formidable, and selecting any would be difficult in the live subject.—Mr. LANGTON was in favour of the actual cautery followed—or substituted, perhaps—by subcutaneous injection of atropine.

Fungating Growth of Forearm.—Mr. LANGTON, in the absence of Mr. Savory, asked for advice in the case of a woman, aged 55. Two years ago, when in perfect health, she noticed a hard swelling on the back of the left forearm, immediately above the wrist. A few months later, she was troubled with obstinate sore-throat. The swelling, at first of the size of a pea, had grown very rapidly. It was now a large fungating mass, of the size of a small cauliflower-head; the skin around was not hardened; the arm was oedematous; but no enlarged glands could be detected. There were horse-shoe shaped tubercular patches on the forehead, legs, and right wrist.—Mr. SAVORY was of opinion that the disease was a sarcoma, and believed that the limb should be removed at once, unless it were thought advisable to wait till the oedema subsided.—All the surgeons were in favour of immediate amputation above the elbow.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE SILBER OIL AND GAS LIGHTS.

THE importance of any great improvement in artificial light is so considerable, not only for purely medical purposes, such as microscopical lamps and reading lamps, but from general hygienic considerations in lighting of wards and living rooms, that considerable interest attaches to the success which has attended the practical study of this question by Mr. Silber, and the undoubted improvements which he has introduced.

The advantages derived from the use of a lamp which, while giving the maximum amount of light, is unaccompanied by the dangers and inconveniences attendant upon the employment of the means of obtaining artificial light in vogue until within quite a recent period, and now by no means effete, are, we think, likely to be universally appreciated.

To obtain this laudable result, Mr. Silber has devoted unwearied attention to the study of the phenomenon of light, and the laws which govern it. So successful have been his labours, that the invention, which bears his name, changes the old blue and yellow lights into a pure white unwavering flame. By reason of the superficial study given to the laws which regulate combustion, till within recent years, lamps were constructed on a system which rendered the union between the hydrogen and carbon of the oil or gas and the oxygen of the atmosphere imperfect; the defective apportionment of these agents resulted in halting combustion, dull red illumination, smokiness, and in the circulation of deleterious chemical compounds in the room. Although means were carefully taken to furnish with regularity the oil or gas to support the flame, insufficient attention was given to the maintenance of the requisite amount of air to aid combustion.

The improvement in this respect can readily be seen by a trial of Mr. Silber's argand lamp. In this there is an exactly measured amount of air to feed the flame, and its temperature is adjusted before it is required. A warm current of air is made to flow to the lower part of the flame, and a colder current to the centre of the burner, thus supplying the exact need for obtaining and continuing perfect combustion. The uniformity of the flame, which is admirable, is caused by dropping a narrow tube of metal, duly proportioned to the argand ring, into the centre of the ring; it acts as a continuous director of the air-draughts to all parts of the flame. In the absence of this ring, the argand yields a poor and unsteady light; with it the flame loses the broad blue colour of the base, and becomes wholly white, and obviates the cause of annoyance experienced by the worker under a flickering light. A further improvement in this lamp is that it allows the oil to be, as it were, volatilised before consumption. As in other lamps of the kind, the wick does not touch the inner metal tube; the mere extremity only perishes, burning for weeks without trimming, it being only necessary to brush the top before applying the match. These lamps do not require any increase in the quantity of oil, and will consume either mineral, animal, or vegetable oils. Preference is, however, given by the inventor to petroleum and colza. The Silber argand gives off no smell, and secures immunity from explosion, even when petroleum is used. It is also cheaper by 40 per cent. than coal-gas. The oil can be laid on like gas to every room in the building from a cistern in the roof.

In the use of gas, the importance of the burner is paramount; experiments have proved that large quantities are wasted by the employment of the common kinds. Mr. Silber's burner has been publicly shown to be the best hitherto invented. It consists in the adaptation of his principle to the argand burner. By means of his properly regulated air-currents, the Silber tubulated gas-burner has, when photo-metrically tested, yielded the highest illuminating power of which gas is capable. The Silber bat's-wing gas-burner is described as being a double bat's-wing burner, the lower one delivering into a small metal chamber a quantity of gas, to be issued by a larger burner of steatite at the top: the issue cannot possibly exceed the amount admitted by a small orifice below. The steadiness, clearness, and softness of light is enhanced by the use of the opaque white or opalesque globes. Lamps and globes are specially manufactured for ships' cabins, marine and railway light signals, carriage-roofs, platforms, etc.

The improvements have been successfully brought to bear upon the moderator lamp, which burns mineral oil, and the common lamps. By affixing Mr. Silber's burners to these, not only is the quality of the light improved, but also a great saving of oil is effected. Lamps of a great variety of kinds are manufactured, as we had occasion to note, at the Silber Light Company's premises, Whitecross Street, London. Among them, we may instance a reading-lamp of admirable design; lamps specially adapted for assisting at microscopical investigations; domestic lamps of all kinds, embellished by every variety of ornamentation. Before concluding, we must mention that the Silber light, when decomposed by a prism, owing to perfect combustion, casts upon a screen the same spectrum of colours as does a ray of the sun; a consequence of this is, that the finest combinations of colour can be discriminated by artificial light, and investigations in which such an object is necessary need not now, as hitherto, be discontinued at the close of the daylight hours.

In conclusion, we would point out that Mr. Silber's lamps are valuable in assisting ventilation, and in other sanitary aspects their advantages are great; for it is of course evident that the minimum of carbonic oxide and vapour is produced, and an absence of injurious chemical agents insured, where there are perfect combustion and a regular pressure. As far as practicable, the sulphuric acid created by deficiencies in the combustion of gas is eliminated. Indeed, in the whole of Mr. Silber's inventions, there is noticeable the only reliable factor of success, a complete attention to, and adoption of, natural laws.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 26TH, 1878.

THE LOST MEDICAL SCHOOL.

WE publish in another column two important contributions to the further discussion of the question whether the profession at large, and the medical graduates of Oxford in particular, the friends of the University, and the believers in scientific progress and culture, ought any longer to stand by quietly and witness unmoved the annihilation of the School of Medicine at Oxford. The letters of Dr. T. K. Chambers and of Dr. Payne respectively may, we suppose, be taken as good typical examples of the view likely to be taken by Oxford graduates belonging to different scientific generations, and under the influence of somewhat differing schools of thought, but each alike representing those opinions with special ability and force. Whatever cause Dr. Chambers may espouse, he is sure to plead it with candour, and to maintain it with vigour. Making due allowances for the energy which is natural to his character, and which betrays itself here rather in the excellent form than in the force of the argument, it is surprising to see how little he has to say in defence of the cause which he advocates, how short is his argument and fragile is its texture. We have unfolded a case of no small weight and magnitude. We enumerated last week a series of offices to provide for medicine its proper place amongst the studies of a liberal and great university. We gave a brief schedule of the endowments which should be the birthright of this generation of medical students in Oxford; and we glanced, only slightly, at the immense advantages which must accrue to medicine, on the one hand, from its natural alliance with the highest teaching of cultured arts and letters; and on the other hand, to the University, from the living force and practical direction which would be given to its biological departments of study by the presence in the University of a body of students in whose work these studies would fructify, for whose use they are mainly intended, and from whose ranks investigators of biological science have always, at all times and in all countries, been mainly recruited. Medicine has always been a poorer sister of the other professions in Oxford, and they have availed themselves of her very poverty and weakness to despoil her scanty heritage, and not only to take from her her rights and to drive her from the field, but, in the last instance, to erase from official publications the very name of the Faculty of Medicine.

All this, Dr. Chambers passes over with a light hand, and sets forth his vindication of the system by informing us that, in his opinion, the Radcliffe Infirmary, containing two hundred beds, is insufficient for clinical teaching, and does not afford adequate materials for the practical instruction of the medical student. Now it is, of course, in one sense, advantageous to an advocate to be able, as is said, to put his argument in a nutshell, but it is well that the nutshell should not be so frail that it can be crushed between the fingers; and never, perhaps, has a more attenuated shell of an argument been presented, or one which should more promptly be cracked by the forces which ought to be at work to preserve, for the benefit of medicine, of science, and of culture, the Medical Faculty of such an university as Oxford. The

answer will, we feel sure, occur to every mind, and it is admirably expressed in the letter of Dr. Payne, when he says, "clinically speaking, it is the school which makes the hospital, and not the hospital the school". Such an objection, indeed, from the mouth of a physician, comes strangely enough; for it must, indeed, be a singularly managed hospital, and existing under strange conditions of totally abnormal states of health, which does not supply a fair amount of medical material in so large a number of beds. The letter of Dr. Glynn Whittle expresses an opposite experience to that of Dr. Chambers. We know of no special forms of medical disease which are not as likely, nay as sure, to appear in a county hospital well administered as in any other; and in respect to surgical cases, Dr. Payne's observation is obviously true, that the character of the surgical cases depends, to a very large extent indeed, upon the importance of the school teaching, upon the reputation, character, and energy of the clinical professors, and upon the stimulus which the school gives, on the one hand, to teachers of reputation, and on the other, to persons in the surrounding county to send thither surgical cases of interest and importance. Dr. Payne points, as everyone will in imagination direct his mind, to such hospitals as those at Halle, with a similar number of beds and with a less surrounding population, which Volkmann has at this moment made illustrious by the extent and importance of its surgical clinic and by the lessons which have been derived from it. Würzburg, Heidelberg, Göttingen, and Halle protest against the validity of the assumption which Dr. Chambers thinks sufficient to justify the despoilment of the profession and the abandonment of the Medical Faculty, which ought to be one of the chief ornaments and one of the highest boasts of the University from which it has been expelled.

We earnestly ask for the careful perusal of the able and exhaustive letter of Dr. Payne. No doubt the prejudice, especially the unconscious bias of personal habits and thought and surroundings, and possibly also the undetected influence of personal interests and associations, may still lead some minds, and especially of men accustomed to take a leading interest in metropolitan schools and hospitals, to very readily accept the self-flattering doctrine that London, or towns such as London, must be the site of great medical schools; and that the one difficulty suggested, which gives to London its superiority, may excuse the crushing of the Oxford school in avowed deference to London schools. Such ideas have always had too much influence in the metropolitan mind; they are likely for a long time to find only too ready an echo in the words and thoughts of influential Londoners. This, however, is, we suggest, a parochial and shallow view. Great masses of population are not essential, although they are advantageous, to great schools. London and other metropolitan cities will never fail to realise the advantage of possessing such a wealth of material, and will never cease to attract the great majority of students. There is no thought of displacing the metropolitan schools; but, on the other hand, no one can doubt, who seriously considers the question, that, did Oxford possess the *personnel*, as it has the funds and material, for teaching of an unapproachably high character in all the theoretical and scientific departments of medicine and its collateral sciences; had the medical school not been despoiled and crushed, knocked with an incomplete organisation which is not available to meet the formal requirements of the examining bodies, and stifled beneath official arrangements which give to it only the form without the reality of medical education,—it would be the natural selection of persons desiring specially to cultivate the higher scientific education which belongs to the first class of medical education, and would attract a considerable and important proportion of medical students. There would probably be necessary arrangements, of which a dozen modifications may be suggested, and which require, indeed, no official help. If men chose to supplement their clinical

experience by a residence in the great centres of population during twelve out of the forty-eight months which are the minimum period of the medical curriculum, this would neither endanger the integrity nor interfere with the course of teaching in the Oxford Medical School. It is, in fact, a question of detail, which would offer no difficulty whatever in solution, and would furnish in practice half a dozen solutions for itself. At any rate, it appears to us in the highest degree presumptuous and unpatriotic to take measures such as that which has been taken to prevent the medical faculty of Oxford from fulfilling the ordinary requirements of the examining bodies, which is of itself enough to drive away all medical students from its doors; and then to justify it on the ground that an infirmary of two hundred beds would be too scanty to complete their clinical experience.

It would be, perhaps, too much to expect that nothing could be urged in favour of any abuse, however flagrant, and we must expect to hear further arguments advanced for the sad maltreatment which has befallen the interests of medicine in the University of Oxford; but, if none other than these can be alleged, the case may, we think, be said to be won before the court of common sense and common justice almost as soon as the pleadings are opened. Dr. Payne has said rightly that this is a question which should on no account be argued on personal grounds. That view we have already expressed, and we reiterate it; and, indeed, we feel that if any personal feelings are to avail, they must tend to arrest the progress of the movement for reform which has, we trust, now been commenced in earnest; for the personal esteem in which we feel sure that the profession at large regard both Dr. Acland and Dr. Rolleston must, up to the present time, have done much to arrest inquiry and to forbid complaint in a case in which it can no longer be doubted that both are urgently needed.

CHOLERA.

THE latest news from Egypt confirm the report that cholera has broken out in Mecca and Jeddah, and gives the information that the deaths from the disease averaged seventy daily in the first named town and thirty in the last named. There is still some uncertainty whether this outbreak is to be regarded as the result of a casual introduction of cholera into the Hedjaz, or whether it is a sequence of the epidemic of 1875-76 in India, and, as such, an incident in the progress of a more general dissemination of the disease. It is known that cholera has been extending in the countries eastwards and northwards of India; but as yet there is too little information to gauge rightly the significance of the extension in these directions. It is discreditable to the Imperial Government, and especially to the Indian Government, that the public information on this subject should be so imperfect, and that not until Europe is actually endangered does it become possible to ascertain the movements of cholera beyond the boundaries of India. The Indian Government seems to regard the faculty of disseminating cholera outside the limits of its dominion without warning as a sacred and withal secret right; and, when the disease begins a world-wide migration, this Government then loudly disavows its responsibility for the movement, and endeavours to shelter itself under certain eccentric opinions as to the nature and mode of propagation of cholera, which are inconsistent with the vast mass of Indian experience on the subject, and totally opposed to European knowledge. The Indian Government, in fact, is acting in this matter like an individual who, having fired a loaded pistol from his room in the direction of the window, protests against being held responsible for the bullet when it has passed into the outer air. We do not forget that the Local Government Board, in its recent annual report, writing from information in its possession, refers to a recent extension of cholera into Afghanistan and Beloochistan as giving it some anxiety; and to this extent the Imperial Government may receive credit for being awake to the contingency of pandemic cholera. But we feel justified in doubting, from the manner of the reference and in face of this outbreak of

cholera in the Hedjaz, whether the information which the Local Government Board may have, and which presumably is derived from the Indian Government, is such as meets the requirements of the Imperial Government in its international relations. It is in these relations that the present outbreak in the Hedjaz has for the moment primary importance. The International Sanitary Conference held at Vienna in 1874 was called together in view of such a contingency, and we are now about to have put to the test—or rather the test is now being applied as to—the practical value of the conclusions of that Conference, in so far as these related to the introduction of cholera into Europe.

It may, perhaps, be well to recall here generally the nature of the Conference's proceedings and the principal conclusions at which it had arrived. Let it be premised that the Conference was a medical one, and that it formed an excellent representative body of medicine in Europe. First, it dealt with certain scientific questions, and affirmed the endemicity of cholera in India, and in India alone; the transmissibility of the disease by man coming from an infected locality, subject to certain local conditions; the transmissibility of the disease also by personal effects which had served for the sick of the disease, and by water. The Conference next proceeded to deal with quarantine as a means for excluding cholera from a country or a locality. In this relation, it condemned land-quarantine as impracticable and useless; and in respect to quarantine as it affects Europe, it made an important distinction. Quarantine, as means of shutting out cholera from Europe when impending from the Red Sea or by way of the Caspian, was approved; but quarantine in Europe, when the disease had once invaded the Continent, was condemned on the same ground as land-quarantine. For European ports, a system of medical inspection was recommended very similar to that which is adopted in English ports; and if quarantine should be carried out by any maritime nation on the Continent, a scheme much modified from the old practice was agreed to.

We are now face to face with one of the contingencies contemplated by the Conference, a new threatened invasion of Europe by cholera along the route of the Red Sea. The Egyptian Government is understood to have founded its measures of protection, not only for its own provinces, but also for the basin of the Mediterranean, on the recommendations of the Conference; and thus it happens that the conclusions of the Conference on this vital question are now being subjected to the test of actual experience. The result is awaited with the deepest interest. The Mecca pilgrimage is over, and the arrival off Suez of the first vessel bringing returning pilgrims is announced. It will not be long, therefore, before we shall know whether the conclusions of the Conference of 1874 as to the arrest of cholera on the Red Sea route—a conclusion which, it should be noted, repeated the conclusion of the Constantinople Conference of 1866 on the same question—will be sustained in practice.

M. FELTZ has submitted to the Paris Academy of Sciences a note, affirming the presence of cryptogamic germs in the blood of patients suffering from typhoid fever. These germs appear to be capable of vegetating in flasks containing pure air alone.

WE are asked by the Secretary to the Subcommittee of the Royal Medical and Chirurgical Society on the relations of diphtheria and croup, to state, on behalf of the Committee, that they are anxious to obtain the notes of any case in which the formation of false membrane in the air-passages has succeeded upon a definite exposure to cold; and they will be greatly indebted to any gentleman who will favour them with such information. They would also be glad of a specimen of the larynx and trachea, or of expectorated false membrane, from such a case, either in a fresh state, or preserved in spirit, Muller's fluid, or other suitable reagent. Cases and specimens may be sent to Dr. Greenfield, the Secretary to the Committee, 95, St. James's Street, W., or at the Society's Rooms, 53, Berners Street, W.

DURING the ensuing year will be commenced a new publication, entitled *Deutsches Archiv für Geschichte der Medizin und Medicinischen Geographie*. The new journal will be published by the house of Hirschfeld, in Leipsic, and will appear in quarterly parts. The first number is announced for March. The list of editors is very extensive, and promises a valuable series of papers, which will undoubtedly possess considerable interest for those cultivated physicians who desire to retain a hold upon the historical progress of medicine, its historical pathology, medical geography, topography, and chorography, and other subjects connected with medical geography and history. The acting editors are Heinrich Rohlf of Göttingen, and Gerhard Rohlf of Weimar.

THE LATE PROFESSOR STOKES.

THE *Deutsche Medicinische Wochenschrift* of last Saturday contains a brief, but highly appreciative, note of the late Dr. Stokes, of which the following is a translation.

"William Stokes, the great Irish physician, whose severe illness we lately reported, died on January 7th, at the age of seventy-four. German medical men know and value his writings, the first of which—*Introduction to the Use of the Stethoscope*—appeared as long ago as 1825. His lectures on the *Theory and Practice of Medicine, on Diseases of the Chest*, and on the *Diseases of the Heart and Aorta* (translated by Lindworm), are complete models. In common with his friend Graves, he was one of the happiest reformers of the treatment of fever. Finally, he was one of the most excellent of teachers; and, as a colleague, he was the model of an English gentleman in the best sense of the word."

THE PREVENTION OF SMALL-POX EPIDEMICS.

DR. COLLIE, in a paper which he read recently at the Epidemiological Society, expressed his disbelief in the compulsory vaccination laws. He would make vaccination voluntary, but would insist that it be efficient; and, in order to accomplish this, he was of opinion that it should be performed by State officers solely, and be held to include revaccination about puberty. On the subject of the vaccination laws, there may fairly be a difference of opinion as to whether they should be compulsory or not; but it seems to us that it would be inadvisable at present to make any alteration of the existing statutes. However, the necessity for revaccination cannot be too strongly insisted on, and we fully agree with Dr. Collie that efficient vaccination should be held to include revaccination about puberty. The experience of every succeeding epidemic of small-pox shows, in the clearest possible manner, the immunity from this disease which those enjoy who have been re-vaccinated; and, although there are one or two cases of small-pox after revaccination on record, the absolute immunity conferred on those engaged in attendance on the sick, when revaccinated, forms the most conclusive proof of its efficacy to ward off this loathsome disease; and we do not think that we are stating more than the facts of the case warrant us, when we say that, were systematic revaccination about puberty enforced with the same care as primary vaccination in infancy is at present, small-pox would be almost unknown among us.

SMALL-POX AT HARWICH.

THE epidemic of small-pox at Harwich still raged up to the 23rd instant. Ten fresh cases had been admitted to hospital, making in all forty-nine received since the 2nd instant. Ten deaths occurred, and eight patients have been discharged. The majority, however, of persons under treatment, we are happy to learn, are convalescent. These figures show that there is scarcely any abatement of the disease. Almost one-half the cases admitted are confluent. The Sanitary Committee meet daily, to receive reports and see that every means possible are taken to combat the disease. The sufferers are removed from their homes to the hospital immediately after dark, and all communication between the hospital and the town is avoided as far as practicable. In the matter of vaccination, there is a reprehensible supineness on the part of the townsfolk. Two cases were brought under the observation of the medical superintendent of the temporary hospital:

one was that of a man forty years of age, taken ill at Christmas, and admitted to the hospital; about sixteen days afterwards, his son, aged six years, was sent in, and the father did not know whether the child had been vaccinated. Examination showed that vaccination had not been performed, and, as might have been expected, it proved a confluent case. There were many other similar cases of people living in the midst of a small-pox epidemic neglecting the only means of security; although people are now presenting themselves more freely for revaccination, and seem to begin to recognise the importance of it.

LONDON HOSPITAL.

It has been decided to increase the medical staff of this hospital by the appointment of an additional Assistant-Physician. The ever-increasing number of out-patients has necessitated this step. We are glad to see that the authorities are alive to the desirability of an adequate staff; for even under the most favourable circumstances, the sick poor who apply to hospitals as out-patients, have many hardships to put up with, and assuredly not the least of these is the great length of time they must often wait in order to be seen. There are two candidates already in the field—Dr. Gilbert Smith and Dr. Francis Warner. The latter gentleman has held the appointment of Medical Registrar for the past twelve months, and was, moreover, re-elected, without the formality of advertising, for the current year a few weeks ago. Such an acknowledgment of his work having been well done, which the House Committee of the Hospital hereby gave him, will, no doubt, exercise a great influence on the decision at which they will arrive when the election to this vacancy is formally considered. The appointments of registrars are now the acknowledged stepping-stones to the higher appointments on the staff. The London Hospital can ill afford, either from a public or from a professional point of view, to ignore the claims which its junior officers make for themselves by careful work in the subordinate posts.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

AT the annual general meeting of this Association, on Wednesday evening, January 16th, at their rooms in Chandos Street, the following gentlemen were duly elected office-bearers for the year 1878, their names having been previously proposed by the Council. *President*: S. J. A. Salter, M.B., F.R.S.—*Vice-Presidents*: W. A. N. Cattlin, Esq.; Samuel Cartwright, Esq.—*Treasurer*: Alfred Coleman, Esq.—*Honorary Secretary*: J. Hamilton Craigie, Esq.—*Council*: Hamilton Cartwright, Esq.; T. Edgelow, Esq.; F. Fox, Esq.; J. Fairbank, Esq.; G. Gregson, Esq.; W. D. Napier, Esq.; J. H. Parkinson, Esq.; N. Stevenson, Esq.

THE NORTHAMPTON INFIRMARY.

THE vacancy, caused by the resignation of Dr. Francis, in the post of Honorary Physician to this institution, has not yet been filled up. Advertisements have appeared informing intending candidates that the election would take place on Saturday last; but although the Governors duly assembled, no appointment was made. The only candidate was the Senior Surgeon to the Infirmary. Preferring medicine to surgery, this gentleman resigned his present office to enable him to compete for the vacant Physicianship. He is M.D. of the University of London, M.R.C.P.Lond., and F.R.C.S.Eng.; so that it is not to be wondered at that no one opposed so highly qualified a candidate. Unfortunately, the Northampton Infirmary is an unreformed corporation, so far as its laws are concerned, and these appointments are still vested in all the Governors, so that a candidate has to undergo the great expense of canvassing all the county. On Saturday, the Governors decided to postpone the election of a physician for six weeks, in the hope, we understand, that some more highly qualified candidate may be induced to come forward. We venture to assure the Governors in question that the authorities of the London hospitals are perfectly satisfied with such qualifications as we have enumerated, probably for the reason that they know not where to look for better ones. Unless there is

something behind, of which we know nothing, the action of the authorities in this case appears unaccountable. Under the circumstances, it is probable no other candidate will offer himself for the vacancy.

THE HOSPITAL SUNDAY FUND.

THE recently appointed Council of the Hospital Sunday Fund met, on January 10th, at the Mansion House, under the presidency of Sir Sydney H. Waterlow, M.P. The members of the committee of distribution were re-elected; and two vacancies occurring in the general purposes committee, by the retirement of the Rev. G. Bowden and Mr. R. B. Carter, were filled by the election of the Rev. J. Baker, as representing the Wesleyan interest, and Dr. J. G. Glover. Sir Rutherford Alcock submitted a motion having for its object the admission of Truss and Surgical Aid Societies to a participation in the funds. In the course of his remarks, he pointed out the claims that such institutions had upon the Fund, and instanced the City of London Truss Society, the National Truss Society, the Surgical Aid Society, and others. The Rupture Society might, perhaps, be excluded from the list, as it possessed an invested fund of £30,000. He claimed for the Societies he had mentioned a share in the Fund, because they were engaged in a meritorious work, and partaking of the nature of the work done at the hospitals. The chairman raised the objection that Rule 4, which guided the distribution, only included hospitals and dispensaries, and, therefore, the Societies referred to in the motion could not be included until the resolution was altered for that purpose. Dr. Glover contended that such institutions were hospitals. He could not see but that institutions which treated hernia were hospitals; they gave mechanical support, without which the patient was in danger of his life; and, in many instances, advice. He could, as a medical man, give testimony to the value of those institutions, and was sure that they could not do better with the Fund than to give a fair proportion to them. A long discussion ensued, in which Mr. Thompson Hankey, M.P., Mr. T. Turner, Rev. T. J. Simpson, Mr. Hampson, Bishop Claughton, with others, took part. Dr. Hamilton suggested that the managers of hospitals should be recommended to distribute instruments. The chairman remarked that he was treasurer of one of the largest hospitals, and knew that the Charity Commissioners would not permit the managers to expend one penny of the funds in instruments; what they did in that respect was done out of the Samaritan Fund, for which they solicited subscriptions. After some further remarks, Mr. Jabez Hogg said the Truss and other such Societies were looked upon in hospitals as an injury to Samaritan Funds, by drawing large amounts that would otherwise find their way to them. Dr. Glover moved an amendment, expressing the opinion of the Council that Rule 4 admitted Truss and Surgical Aid Societies. The Rev. Canon Miller seconded the amendment, which was, however, withdrawn. The same course was pursued in reference to several others, and in the end it was resolved, "That the question of admitting surgical and provident societies within the limits of Rule 4 be referred for consideration to the constituency of the Fund, and that the Lord Mayor be requested to call an early meeting of the Council for the purpose of ascertaining what course it would be desirable to recommend the constituency to adopt with regard to the question".

QUACKERY IN LIVERPOOL.

MUCH regret has for some time been felt by our professional brethren in Liverpool, that the same vigorous measures have not been adopted in that town against the advertising quacks, that have been so successful in Manchester and Birmingham. The largest seaport in the kingdom contains, as might be expected, a great number of these gentry, whose audacity is quite unprecedented. The amount, too, of obscene literature which circulates in Liverpool, under such titles as "A Word with You", "A Treatise on Marriage and Self-control", "Catalogue of the ——— Gallery of Anatomy", etc., is as great as it is pernicious. If one may judge from the style in which these individuals live, the pursuit is a very profitable one, of course at the expense of

the ignorant and credulous. But there is one matter in connection with this subject, which demands instant attention, not so much from the local authorities as from the General Medical Council, the University of Edinburgh, and the Colleges of Physicians and Surgeons of that city respectively. One of the individuals to whom we have alluded, and who takes the lead in brazen effrontery, has been for some time past assisted by a duly registered medical practitioner. There was some difficulty in identifying the latter, the surname being a common one. Recently, however, the individual disclosed his identity by returning to the editors of the *Medical Directory* his address, which was that of the leading quack, and may at this moment be seen posted up in rich profusion on walls, and hoardings, and in urinals. A complaint was sent to the General Medical Council, as also to the licensing bodies whose diplomas had been so much misused; but a higher power intervened, and the individual recently terminated a very discreditable career by a premature and somewhat sudden death. Were this all, it would be enough cause for regret; but, unfortunately, it is not. We are informed, on reliable authority, that a successor has been found, whose name appears on the door underneath that of the quack, with the title of "surgeon" below. The name of the gentleman in question appears in the *Medical Register* for 1877, with the qualifications M.D., L.R.C.P., and L.R.C.S., all of Edinburgh. Information has (we are told) been sent to the General and Scotch Medical Councils, as well as to the University and the Colleges of Physicians and Surgeons of Edinburgh. We trust that a full investigation will be made and prompt justice be administered.

SCHOOL-BOARD PLAYGROUNDS AND OPEN SPACES.

HER ROYAL HIGHNESS THE PRINCESS LOUISE, MARCHIONESS OF LORNE, has signified her willingness to become a patroness of the National Health Society, and his Grace the Duke of Westminster was elected President at the annual meeting of the Society, held on Monday last at its rooms in Berners Street. At the same time, a letter was read from the London School-Board, expressing the willingness of the Board to accede to the representations of the Society on the subject of utilising the playgrounds of the board-schools in London by fitting up eighteen selected playgrounds with suitable gymnastic apparatus, but stating that the Board would expect the Health Society to undertake the payment of caretakers, on the ground that it was proposed to admit not only the board-school children, but also other children, to the use of the playgrounds. The chairman, Mr. Ernest Hart, pointed out that the legal opinion on which this decision was avowedly based, was apparently given on insufficient grounds, and the matter was remitted to the Council for further action. The annual report of the Society was then adopted, and showed an extensive series of operations, by lectures to mothers' meetings and working-men's clubs, the circulation of tracts on health, papers and sanitary directions, the formation of park parties for poor children, etc. It was stated that the Society was prepared to organise sanitary teaching amongst the poor on a much more extended scale, on application from the clergy and others. A deputation was received from the Thirlmere Defence Association, who pointed out that the scheme for supplying Manchester with water from the Thirlmere lake was by no means the best alternative even from an administrative point of view, and was mainly a financial speculation, which ought to be opposed in its present form on the widest grounds of public health.

MEDICINE IN MONTENEGRO.

A LETTER from Dr. Studetzki, a Russian practitioner in Montenegro, recently published in the St. Petersburg *Medicinishe Wochenschrift*, gives an account of the state of medicine in that principality. With the exception of the foreign (Russian) surgeons who have gone thither to render their services during the war, Montenegro has no scientifically educated practitioners. The whole of the medical practice is in the hands of a family named Jlitshkowsitch, whose scanty professional knowledge has been handed down from generation to generation. At the

present time, ten members of the family are engaged in the practice of surgery, which consists chiefly in the application of splints to fractures, frequent cauterisation of recent wounds with nitrate of silver, and drainage of gunshot wounds with tow. Their knowledge of anatomy is weak; and they dread hemorrhages. The only operations which they perform are the extirpation of enlarged glands from the neck, extraction of foreign bodies, and trephining. This last operation is very frequently done; being regarded as necessary in almost every slight injury of the head. Sometimes, the head of the same individual is trephined in four or five places. The private surgeon of Prince Nicholas is a Frenchman; but he is not consulted by the people.

M. REGNAULT.

OUR Paris correspondent writes:—The death of M. Regnault has just taken place (January 21st), after a long and painful illness, in the sixty-eighth year of his age. M. Regnault was educated at the Polytechnic, which he left as civil engineer, and was attached to the mines, of which he rose to become the chief engineer in 1847. He was subsequently appointed Professor of General and Experimental Physics at the College of France, and of Chemistry at the Polytechnic. In 1830, he was elected Member of the Academy of Sciences, and in 1854 was appointed director of the manufactory at Sèvres. But it is as physicist he principally distinguished himself; and to him is due the determination of the numerical elements which enter into the calculation of the effects of heat and compression on the gases and elastic fluids. M. Regnault was author of several elementary works on chemistry and physics, which have been translated into different languages. By a painful coincidence, the death of this eminent man took place on the anniversary of the death of his son, a celebrated painter, who was mortally wounded at Buzenval in the last Franco German war.

THE SPREAD OF DISEASE BY BOOKS.

THE necessity, which we have often pointed out, of adopting measures to prevent the spread of contagion by the agency of books, has been recognised in Kansas. The directors of the public library there have warned the public of this danger, and advised that, in the event of any epidemic occurring in the town, people who may have borrowed books from the library should keep them until it has passed, and expose them to the open air. No further issue to the homes of the townsfolk of books will be allowed while any disease of an infectious character is prevalent. Although but small attention is generally paid to this subject, the means of procuring immunity from this danger are simple. The books borrowed for the amusement of a patient suffering from a contagious ailment may be rendered innocuous by exposure to a high temperature, or even to the open air if the complaint be mild in form. In the ordinary course, it is the reprehensible custom to return a book direct from the infected bed to the library, without a thought as to the large number of readers through whose hands it may pass.

POISONING BY METHYLATED SPIRIT.

DR. VIGER (*Annales Médicales de Caen*) states that he has seen two cases of this form of poisoning in confirmed drunkards. In the first case, a prisoner came to consult him complaining of violent pain in the head and stomach; shortly afterwards, he fell into a state of complete prostration, and died on the following night. Another inmate of the same prison showed at first nearly the same symptoms; he was perspiring, with a stupefied manner; the pupils were much dilated; and he soon fell into coma with complete insensibility. The next day he was attacked with violent delirium, which, however, speedily abated. The pupils were still dilated, and his sight was completely lost for the time. This state only improved very slowly, and twenty days afterwards sight had only partially been re-established. M. Viger found that these two patients had for a long time used methylated spirit, which they found in an unrectified state in the form of varnish in a cabinet-maker's shop belonging to the prison. They first precipitated the gum-lac by water,

and then drank the spirit. M. Viger comes to the conclusion that the symptoms observed in these conditions give warrant for classing methylated spirit among narcotics producing stupefaction and delirium, since dilatation of the pupil, sleep-stupor, as well as complete loss of vision, have been found. These well-defined properties may, perhaps, give a place to this form of alcohol in the list of therapeutic agents.

ADULTERATED GIN.

IN Bristol, following the example of the Metropolitan authorities, numerous prosecutions of publicans have taken place lately for adulterating gin. In cases where the gin was reduced by 35 and 38 per cent. of water respectively, the cases were dismissed, it being shown that that was the normal condition of the gin sold in Bristol; but a fine of five shillings and costs was inflicted on a publican whose gin was 46 under proof and contained a pungent vegetable substance resembling pepper. At Wells, in Somersetshire, a local innkeeper was last week fined £5 and costs for refusing to sell a pint of gin from a quantity he had on sale at his bar.

M. BECQUEREL.

OUR Paris correspondent writes:—Death has been very busy of late among the eminent men of France and other parts of Europe, most of whom, however, had lived to a good old age. I have now to record the death of M. Antoine César Becquerel, the eminent Professor of Physics at the Jardin des Plantes. M. Becquerel was born in 1788, at Chatillon on the Loing, in the department of the Loiret. He was first intended for the Engineers, and was educated at the Polytechnic, which he left in 1808 as an Engineer officer. He served in Spain under the orders of Marshal Suchet, and took part in the sieges of Tortosa, Tarragona, Sagonta, and Valencia. In 1814, after the French campaign, in which he also took part, he left the military service and devoted himself to scientific researches, which acquired for him a world-wide reputation. He applied himself particularly to the study of electricity, on which he had published several works. In 1829, he was elected Member of the Academy of Sciences; in 1837, he was appointed Professor of Physics at the Museum of Natural History; and, in 1874, the Academy of Sciences presented him with a medal to commemorate the fiftieth year of his membership. He was also awarded the Copley Medal of the Royal Society of London. M. Becquerel, who had received from the Emperor Napoleon's own hands, in 1812, the cross of the Legion of Honour, was, about fifteen years ago, promoted to the dignity of Commander in that Order. He leaves a son, who was his assistant, and will most probably be his successor, in the Chair of Physics at the Jardin des Plantes.

THE PUBLIC HEALTH.

DURING last week, 6,001 births and 4,251 deaths were registered in London and twenty-two other large towns of the United Kingdom. The natural increase of population was 1,750. The mortality from all causes was at the average rate of 26 deaths annually in every 1,000 persons living. The annual death-rate was 28 per 1,000 in Edinburgh, 29 in Glasgow, and 28 in Dublin. The annual rates of mortality per 1,000 last week, in the twenty English towns, ranged in order from the lowest, were as follow: Portsmouth, 19; Leicester, 19; Norwich, 20; Nottingham, 21; Hull, 22; Newcastle-upon-Tyne, 22; Wolverhampton, 22; Bristol, 23; Brighton, 23; Leeds, 23; Sheffield, 23; Oldham, 25; Bradford, 25; Sunderland, 26; Plymouth, 27; Birmingham, 27; Manchester, 28; Salford, 28; London, 28; and Liverpool, 28. Whooping-cough continues to show fatal prevalence in Plymouth and Birmingham. The fatal cases of small-pox in London rose to 51, and one death was also referred to this disease both in Manchester and Norwich, whereas not one was returned in any of the seventeen other towns. In London, 2,563 births and 1,903 deaths were registered. Allowing for increase of population, the births were 38 below, while the deaths exceeded by 215, the average numbers in the corresponding week of the last ten years. The annual death-rate

from all causes, which in the two previous weeks had been equal to 27.6 and 25.7 per 1,000, rose last week to 27.8, a higher rate than has prevailed in any week since the beginning of April last. The 1,903 deaths included 51 from small-pox, 77 from measles, 35 from scarlet fever, 5 from diphtheria, 94 from whooping cough, 21 from different forms of fever, and 8 from diarrhoea; thus to the seven principal diseases of the zymotic class 291 deaths were referred, against 292 and 299 in the two preceding weeks. Of the 51 fatal small-pox cases in the metropolis, 25 were certified as unvaccinated and 14 as vaccinated, while in the remaining 12 cases the medical certificates gave no information as to vaccination. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined at the beginning of October last to 137, has since steadily increased to 309, 374, 415, and 468 at the end of the last four weeks; 129 new cases were admitted during last week, against 129 and 124 in the two preceding weeks. The Highbury Small-pox Hospital contained 47 patients on Saturday last; at the end of the three preceding weeks, the numbers had been 26, 36, and 43. The deaths referred to diseases of the respiratory organs, which had been 535 and 464 in the two previous weeks, rose to 541 last week, and exceeded the corrected weekly average by 133; 364 resulted from bronchitis and 118 from pneumonia. The London Fever Hospital contained 70 patients on Saturday last, including 53 cases of scarlet fever, 9 of enteric fever, and 6 of measles. In Greater London, 3,065 births and 2,233 deaths were registered, equal to annual rates of 35.9 and 26.2 per 1,000 of the population.

CORONER'S COURT FOR THE CITY.

THE City Commissioners of Sewers have recently erected a commodious range of buildings in connection with the City mortuary in Golden Lane, Barbican, consisting of a handsome court-room, fitted with every convenience for coroner, jury, counsel, witnesses, and the public, a mortuary chapel, *post mortem* room, and retiring-room for consultation. On Tuesday, Mr. Payne, when presiding at an inquest, expressed the obligations he, the jury, and the public were under to the authorities for their public spirited conduct.

THE MEDICO-LEGAL LECTURES AT THE MORGUE.

THE first of these lectures was delivered at the Morgue, by M. Brouardel, on the 9th instant. M. Devergier, M. Tardieu, many house-surgeons, young medical men, and also many distinguished hospital surgeons, were amongst his audience. After having recommended to his pupils the most careful discretion regarding what they might see and hear in the course of these lectures, M. Brouardel explained his proposed programme, and said that the lectures would be especially practical. Those who attended them would be present at medico-legal investigations, take notes, and, in the interval between two lectures, would prepare medico-legal reports, in reply to questions proposed by the legal functionaries: which reports would subsequently be corrected, as a rule, and discussed.

HYDROPHOBIA.

AN application was made last week, in the County Magistrates' Court, Liverpool, by Inspector Johnston, for an order for the confinement of all dogs within the Kirkdale division of the county, owing to the prevalence of hydrophobia. He instanced several cases of hydrophobia arising from dog-bites recently. An order was granted, to be in force to the end of February.—Another death has occurred from hydrophobia near Tarporley, Cheshire, making the third in the same district within the space of three weeks.

WATER-SUPPLY OF THE METROPOLIS.

THE Subcommittee of Delegates from the local boards of London, appointed to take into consideration the proposals of the Metropolitan Board of Works in reference to the water-supply, have reported to the general body of delegates that, after considering the scheme, they strongly recommend united action on the part of the local authorities

in guarding the ratepayers against the expenditure of an immense sum without most carefully and jealously watching the progress of these measures, and further to impress upon the Board the fact that many members of the Metropolitan Board of Works were shareholders in the water companies; and although they do not infer that this circumstance would influence them in the performance of their public duties, yet the committee feel justified in adding that circumstance as another important reason for combined active vigilance.

SCOTLAND.

A MAN was poisoned last week, at Penicuik, by saltpetre, a quantity of which he had swallowed in mistake for Epsom salts.

DURING the past year, 1,192 patients were received at the Glasgow Convalescent Home at Lenzie, being an increase of 47 over the numbers in 1876. The expenditure for the whole year amounted to only £1,900.

THE annual report of the Glasgow Lock Hospital states that, during the past year, 430 patients, who were in the hospital, on an average, twenty-eight days, had been dismissed cured, leaving 27 under treatment. Of these patients, 242 were admitted for the first time, 110 for the second, and the remainder had been in more than twice before.

ONE of the managers of the Edinburgh Royal Infirmary, Mr. W. Law, ex-Lord Provost of the City, fell down dead in the street, as he was leaving a meeting of the managers, on Monday, 14th ultimo. Mr. Law had taken a great and prominent interest in the new Infirmary, and had contributed £1,000 to the building-fund.

THE death-rate of Edinburgh still remains high. Of the 115 deaths which were registered last week, no fewer than 62 were due to diseases of the chest. The city otherwise is very healthy, no death from fever, small-pox, scarlet fever, or diphtheria having been recorded last week. The only deaths from zymotic causes were eight attributed to measles and two from whooping-cough. The death-rate was equal to an annual mortality of 28 per 1,000.

SOME months ago, the Secretary of the Edinburgh Royal Asylum sued a lady residing near Dunfermline for the sum of £3 13s. 8d., for the support of her husband in the Asylum, from July 1st till August 10th, 1877. Sheriff Lamond then decided that the defender was not liable at common law for the support of her husband as sued for. Last week, the case came before the Sheriff in a new form. The pursuer issued a summons for the recovery of the sum mentioned, with interest, against the lunatic and his wife, "as in possession of and as intermitter with the goods in communion", and also their eldest son as "one of the next of kin". The case was transferred from the Small-debt Court to the Ordinary roll, in consequence of the important legal points involved.

EDINBURGH UNIVERSITY COURT.

AT a meeting, held on Monday last, the following among other business was transacted. Dr. Alexander Keiller was appointed an additional Examiner in Midwifery, in succession to Dr. Angus Macdonald, whose term of office had expired. Dr. T. Lauder Brunton was appointed additional Examiner in Materia Medica, in succession to Professor T. R. Fraser. Mr. John Chiene was appointed additional Examiner in Anatomy for a further term of office. Dr. Thomas Keith was appointed Examiner in Clinical Surgery, in succession to Dr. Dunsmure. The additional Examiners in Botany, Medical Jurisprudence, Practice of Physic, Natural History, Pathology, Surgery, Clinical Medicine, and Institutes of Medicine were reappointed for the current year. It was reported that no appeals had been received in connection with the Register of the General Council for 1878. Intimation was received that the Secretary of State for India in Council had approved of a system,

proposed by the Senatus, for the supervision of selected candidates for the Civil Service of India, who might attend the University of Edinburgh. There were present at the meeting: Sir A. Grant, Lord Curriehill, the Lord Provost, Lord Young, and Professor Campbell Fraser.

A NICE CLIMATE.

THE rainfall at Portree, Skye, during 1877, was 93.26 inches. The least rainfall in any month occurred in April, viz., 1.77 inches. The heaviest was in November, 15.69 inches. On October 14th, 4.98 inches fell within twenty-four hours. Rain fell on two hundred and eighty-three days during the year.

A WARNING.

A PAINFUL case of suicide took place in a railway-carriage of the north-going train, at Blair Athole, on the 18th ultimo. The occupants of a second-class compartment were Mr. R. Young of Elgin and Dr. Mackay, his brother-in-law, both passengers from London. The former was believed to be under the charge of the latter. On arrival at the station, Mr. Young wished to alight, but Dr. Mackay pressed him to remain in the carriage. Annoyed at this, he drew a penknife from his pocket, and, seizing Dr. Mackay round the back with one hand, cut his own throat in a very determined manner with the other. Death resulted in a few minutes. The deceased was forty years of age.

SEWAGE OF GLASGOW.

AN interesting report of the Sewage Committee has recently been received by the Town Council of Glasgow. The report deals with the sewage carried in drains and sewers, the other questions being taken up by the Health Committee. The recommendations of the Sewage Committee were that the system of having water-closets in factories, jails, workhouses, etc., should be prohibited, and that water-closets in small houses should be discouraged. They further recommend that all drain-soil and waste-pipes from water-closets, sinks, and baths should be executed under public supervision. Some of the drains and sewers under the streets had been constructed one hundred years ago, when the proper manner of constructing them was unknown. The sewage leaked, and in a great many districts of Glasgow there were sewage marshes under houses, which were a fruitful source of disease and death. As regards sewage-gas, it was pointed out that there were direct connections from the houses with the worst of the sewers in an enormous number of houses. For the remedying of this, the Committee recommend that all these should be done under the control of the Board of Works, as these connections were almost always imperfect. The report was referred to the Health Committee.

IRELAND.

LAST week, a person named Hare died at Portadown at the advanced age of 108 years.

AT a late meeting of the Committee of the Rush and Lusk Dispensary District, Dr. Charles Fahie was appointed Medical Officer, in the vacancy caused by the decease of Dr. Mahony.

A CASE of small-pox died in Newtownards Workhouse, last week, and two other cases are at present under treatment. The disease has been traced to Belfast, where one of the patients had contracted it unloading a vessel.

MR. ALEXANDER DUKE, L.K.Q.C.P.I., has been appointed an Assistant-Physician to the Rotunda Lying-in Hospital, in room of Mr. W. H. Hart, M.B., resigned. Mr. Duke was formerly Assistant-Physician Accoucheur to Stevens's Hospital.

ZYMOTIC DISEASES IN BELFAST.

DURING the December quarter, fever caused 71 deaths, scarlet fever 43, diarrhoea 36, measles 31, whooping-cough 6, and diphtheria 1; these 188 deaths being equal to an annual mortality of 4.1 per 1,000

of the population. The mortality from fever appears high, and at present the disease is somewhat on the increase, as, during the week ending the 12th instant, there were 103 cases of fever under treatment in the Union Workhouse Hospital, 33 cases having been admitted during the week.

AN INQUEST IN DUBLIN.

WE are requested to publish the following facts in correction of the account, which appeared in the JOURNAL of January 12th, of a recent inquest held in Dublin. The inquest in question was held by Dr. N. White of Dublin, a medical man of no little experience; and our informant states that the jury sworn was one of unusual intelligence and respectability. Several witnesses were examined, including Dr. Brady, who had been called immediately on the discovery of the accident, and whose evidence was by no means limited, as we were then informed, to what he knew of the previous health of the deceased. All the witnesses were examined in the presence of the solicitors of the accident assurance company with whom the deceased was insured, and the solicitors of the family. We are assured that the evidence of death from accident was most conclusive. Both the assurance company, through their Dublin agent and solicitors, and the family of the deceased, through their solicitors, left it to the coroner and jury to say (in order to clear up any doubt they might have as to whether death resulted from disease or accident) whether they considered it desirable to have a *post mortem* examination made. Having heard the evidence, the jury unanimously expressed it as their opinion that such examination was quite unnecessary, the evidence before them leaving no shadow of doubt on their minds. The solicitors for the assurance company did not then ask for a *post mortem* examination, which they would have obtained had they not been satisfied with the evidence. The medical officer of the company had passed the deceased as a good life two years prior to the accident.

A NEW HOSPITAL.

IT is announced that the late Mr. John Berry of Dublin has bequeathed a sum of £26,000 for the purpose of founding an hospital in or near the city of Dublin. The trustees named are: the Roman Catholic Archbishop of Dublin, Cardinal Cullen; David Sherlock, Esq., Q.C., Sergeant-at-Law, and M.P. for King's County; and Theobald Purcell, Esq., Q.C., a Protestant Barrister of high standing and a Chairman of Quarter Sessions. We are at present without full information as to the powers in the hands of the trustees, beyond the statement that the proposed hospital is to be for the benefit of the sick poor, without religious distinction. The existing hospitals in Dublin are believed, by many competent judges, to be already too numerous. In many cases, they are, from pecuniary reasons, unable to maintain occupied the full number of beds they are capable of accommodating. Under these circumstances, it would be a subject of regret if the trustees, in administering this generous bequest, considered it incumbent on them to add another to the already too numerous small general hospitals of the city.

THE SANITARY CONDITION OF CORK.

WE recently drew attention to the inquiry lately instituted by the Local Government Board in reference to the prevalence of fever in Cork, which, it was alleged, was due to the impurity of the water-supply. The Board last week forwarded their report to the Public Health Committee of the Corporation, founded on the evidence obtained at the inquiry held by Dr. McCabe. With reference to the water-supply, although a good deal of the sewage from Macroom and Ballincollig Barracks passes into the river Lee, yet the Inspector does not think this materially increases the number of typhoid fever cases, owing to the small number attacked compared with the population. He alludes to the filtering works which are being erected, but considers that the sanitary authorities should take additional precautions, with reference to the purity of the water, at a place higher up than that from which the water-supply is taken. From the report, it appears that there are

about 20,000 houses in Cork, of which about one-half do not possess ordinary sanitary arrangements, and about one-fourth do not even possess ashpits. Also the main sewers, which discharge into tidal waters, have no ventilation shafts, although twice daily they are filled by the tide, and the street gulleys are all trapped. Fifty-two acres, thickly populated, are liable to be flooded through the sewers and over the quay walls. Overcrowding is shown to prevail, as there are 1,700 houses in Cork let in tenements, and, in about 2,400 cases, whole families occupy one single room. From these facts, it is apparent that the sanitary condition of the town is in need of improvement; and the Local Government Board recommend the appointment of a medical superintendent officer of health, possessing a competent knowledge of public hygiene. This suggestion is a very proper one; and we trust that, under the new arrangement, the evils attendant on imperfect water-supply, overcrowding, defective sewerage, etc., will to a great extent be removed.

THE EXTENSION OF ZYMOTIC DISEASE.

DR. BROWNRIFF, Medical Officer of the Moira Dispensary at Lurgan, lately drew the attention of the Local Government Board to the effect that, in many instances, he was able to trace fever to infection, the parties attacked refusing to go to hospital. He requested advice in the matter, as he could not cope with an epidemic, should such break out in his district, unless supplied with extended powers for enforcing cleanliness of houses and the forcible removal of patients to hospital. The Board, in a recent communication to the guardians, referred to the laws which enabled any justice to issue an order for the removal of contagious cases forcibly to hospital; but, in the discussion which ensued, it appeared to be the opinion of the guardians that a magistrate would not be justified in making such an order; and the matter has been referred to the Moira Dispensary Committee for their consideration.

DR. HUDSON.

WE are glad to announce that Dr. Hudson, the President of the Dublin Branch of the Association, has been appointed to the honourable post of Physician in Ordinary to the Queen in Ireland, vacant by the lamented death of his former colleague at the Meath Hospital, Dr. Stokes. On Dr. Stokes's resignation last year of his seat in the General Medical Council, Dr. Hudson was chosen by the Crown as his successor. His appointment to that position, as well as to the one he now shares with Sir Dominic Corrigan, is as satisfactory as it is deserved.

SMALL-POX.

THIS disease is still prevalent in Dublin. Some cases of a peculiarly bad purpuric type have been under treatment, during the week, in Cork Street Fever Hospital. As a commentary upon the fact we mentioned in the JOURNAL of the 12th instant, relative to the large number of unvaccinated children in the city, we see that three fatal cases of small-pox among young children, all unvaccinated, were reported during the last fortnight from one district in the city. Even the Public Health Committee of the Corporation seems to be getting alarmed; and, in view of the large number of cases of small-pox recently reported, have requested the Local Government Board for a return, showing the number of births for the year 1877 in the North and South Dublin urban districts, the number of children vaccinated, and the number of deaths of children aged one year and under, stating those which have died of small-pox in 1877. What use, if any, is intended to be made of this return, when it is received, remains to be seen.

PATHOLOGICAL SOCIETY OF DUBLIN.

AT the last meeting of this Society, before the proceedings commenced, the Rev. Dr. Haughton, alluding to the loss the Society had sustained by the death of Dr. Stokes, said it would be a work of supererogation on his part to dilate on the well-known qualities of their deceased

friend. He wished only to move, formally, that the Secretary be requested to convey to the family of Dr. Stokes the following resolution: "The Pathological Society of Dublin desire to express the deep sympathy of the members of the Society with the family of their late distinguished fellow-member, Dr. William Stokes—Honorary Secretary and one of the founders of the Society—in their sad bereavement; and that they had endeavoured, very inadequately, to express that sympathy by adjourning their meeting of the 12th January, the next after his decease." The motion was seconded by Dr. Head, and agreed to unanimously.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

THE annual course of Scientific Lectures for 1878 will be delivered in the College Hall, at five o'clock P.M., on each Monday in the six weeks, commencing Monday, February 4th. The following are the lecturers selected by the College: Dr. Walter G. Smith, on February 4th and 11th, "The Principles of Electro Therapeutics"; Dr. J. M. Purser, on February 18th and 25th, "Researches in the Anatomy and Physiology of the Spinal Cord"; Dr. Thomas W. Grimshaw, on March 4th and 11th, "The Present State of our knowledge of the Intimate Pathology of Contagion, and its relation to the prevention and treatment of Zymotic Diseases". All Licentiates in Medicine of the College will be admitted free of charge. All registered practitioners, who are not Licentiates, will be admitted free of charge, on presenting their cards at the door. A limited number of Senior Students will be admitted by admission cards, to be had of the Hospital Physicians.

POOR-LAW RELIEF IN IRELAND, 1877.

THE Local Government Board has recently issued a statement, which has been prepared in anticipation of more detailed information to be given in the next annual report, relative to indoor and outdoor relief during the year ended 29th September last, in comparison with that of the preceding year. From it we learn that the number of persons who received outdoor relief amounted to 72,000, being an increase of 5,884; and indoor relief to 195,000, exceeding the previous year by 11,679. The total poor relief expenditure came to £796,333, or an increase of £33,178 over 1876; whilst the expenses under the Medical Charities and Vaccination Acts cost £141,157, or a decrease of £306, the numbers so relieved being estimated at about 770,000. An increase appears in the expenses under the Sanitary Acts of £5,800 beyond that of the previous twelve months.

HEALTH OF DUBLIN: QUARTERLY REPORT.

DURING the quarter ending December 29th, the number of births registered in Dublin amounted to 2,201, being equal to the annual ratio of 1 in 35.7, or 28.0 in every 1,000 of the population; and the deaths to 2,195, affording an annual ratio of 1 in 35.9, or 27.9 per 1,000. The average number for the fourth quarter of the previous ten years was 1,946; and omitting the deaths (66) of persons admitted into public institutions from localities outside the district, the rate for last quarter was 27.0 per 1,000. The deaths from zymotic diseases during the quarter numbered 430, or 19.6 per cent. of the total deaths, and equal to an annual rate of 5.6 per 1,000 of the population; the average number of deaths from these diseases in the fourth quarter of the previous ten years being 434. One hundred and forty-seven deaths, or more than one-third of the mortality from all zymotic diseases last quarter, resulted from measles and its complications, which proved fatal in 122 instances during the previous three months. Ten deaths from small-pox and one from chicken-pox were registered. Fever caused 56 deaths, whooping-cough 35, scarlet fever 33, diphtheria 13, croup 38, diarrhoea 32, dysentery 11, and erysipelas 6. One hundred and seventy-three children died from convulsions, being 46 over the average number for the corresponding quarter of the ten previous years. Bronchitis caused 365 deaths, pneumonia 89, and lung-disease unspecified 26; the deaths from diseases of the respiratory organs being beyond the average. To heart-disease 100 deaths were ascribed, apoplexy 36, paralysis 30,

jaundice 2, and liver-disease unspecified 32. Phthisis caused 217 deaths, mesenteric disease 38, hydrocephalus 50, scrofula 14, cancer 50, and gout 2.

THE ANNUAL MEETING OF THE DUBLIN BRANCH.

OUR Dublin correspondent writes:—The arrangements for the first annual meeting and dinner of this Branch on Wednesday next, in the King and Queen's College of Physicians, are now complete. A large attendance of members and their friends, both lay and medical, is anticipated. The fact that Dr. Wilkinson of Manchester, the President of the Association, and Mr. Ernest Hart of London, have accepted official invitations to come over from England for the occasion, has given the warmest satisfaction to the Branch. Their doing so, at doubtless much personal inconvenience, will be received by its members as a testimony of the readiness and desire of representative members of the Association to strengthen the new and important bond which the Dublin Branch forms between the members of our profession in England and Ireland. The South of Ireland and the new North of Ireland Branches will also be represented on the occasion.

THE UNIVERSITY OF OXFORD.

WE are happy to learn that a meeting of the medical graduates of Oxford is to be held to-day, to consider the questions which have been raised in the correspondence which has appeared in this JOURNAL under the head of "The Lost Medical School".

THE UNIVERSITY OF LONDON.

BESIDES the business mentioned in the BRITISH MEDICAL JOURNAL of last week as transacted at the meeting of Convocation, held on the 25th instant, the following matters were also considered.

Dr. PYE-SMITH moved, and Mr. W. SHAEN seconded the resolution: "That the questions of other constitutional changes than those determined by the Draft Charter be adjourned until the next meeting of Convocation; and that the subject of such changes be referred to the early consideration of the Annual Committee." The resolution was carried unanimously.

Dr. WEYMOUTH, in introducing his resolution, "That this house desires respectfully to suggest to the Senate the desirableness of moderating the severity of the examination for the degree of Doctor of Literature", remarked that, since the institution of the degree fourteen years ago, nine candidates had presented themselves for examination, eight of whom had failed to attain the degree. The resolution was withdrawn.

Mr. T. TYLER moved, "That certain facts and correspondence which had passed between the Chairman of Convocation and himself, relative to the refusal of the chairman to call a special meeting of Convocation in November last, were worthy of the house". The resolution was negatived by a very large majority.

Dr. P. PURVIS moved, "That it is desirable to reconsider the standing orders, Nos. 30 to 32 inclusive, and that it be referred to the Annual Committee to suggest such alterations therein, so as to bring the method of taking the votes of members of Convocation on amendments in accordance with the practice generally adopted at the present day in all public meetings". This resolution was negatived by a large majority.

Dr. R. P. B. TAAFFE moved, "That it be an instruction to the Annual Committee to consider whether it is not desirable to include Sanitary Science among the branches for the degrees in science of this university". The proposition was carried with one dissentient.

Mr. J. H. TAYLOR moved, "That the Senate be requested to alter the time for holding the D.Sc. Examination to the Midsummer or the Christmas vacation, since the time now appointed (the first twenty-one days of June) is specially inconvenient to those engaged in tuition". This proposition was lost.

Mr. J. H. TAYLOR also moved "That it is desirable that the practice of inserting in school advertisements such entries as 'First B.A., First B.Sc.', to be formally disapproved by the university, as misleading to the general public". This proposition was not carried.

The meeting then adjourned at 9.30 p.m.

CORRESPONDENCE.

THE LOST MEDICAL SCHOOL.

SIR,—I am not sure whether I, for one, should have taken any part in the controversy raised by your correspondent "A Member of Convocation", had not your leading article of this week tended to place the question on its proper basis.

This is not a personal question. With respect to the two Oxford professors who are especially aimed at, no one who knows them can possibly forget the self-denying activity, on the one hand, the impartial public spirit, on the other hand, which they have always displayed. It is a matter for satisfaction that the personal merits and services of these gentlemen (whom I am proud to be permitted to call my friends and teachers) have met with so warm a recognition; and, in all that has been said by their grateful pupils, I beg cordially to concur.

But, in another sense, this is not a personal question. It is of extremely small moment to us whether your correspondent has expressed himself with good taste or good feeling. Let it be granted that his letter was personal, discourteous, and unfair; what has that to do with the question whether medical studies shall be encouraged at Oxford, or whether they shall be crushed? Again, unlike my friend Dr. Champneys, I am quite unable to penetrate the incognito of "A Member of Convocation"; but, even if I did know the authorship of the letters thus signed, I should not regard that fact as of any importance. The questions at issue are simply these. Is the present state of things at Oxford satisfactory? Can it be improved, and, if so, by what means?

I know nothing whatever of the beginnings of the present correspondence, and my only excuse for troubling you with a letter is, that I have taken an interest in the subject for some years; that, during a somewhat wide experience of University life as student, teacher, and examiner, I have always borne the Oxford problem in mind; and that this experience has led me to opinions fundamentally opposed to those which have guided the policy of the Oxford professors.

Will you permit me, in order to show that these views are not of recent date, to quote some paragraphs from a letter which I addressed to one of your medical contemporaries in a discussion on the same subject more than ten years ago?

"Oxford has no medical school, principally because it has not been thought advisable that there should be one. At the time of the Oxford Commission (of 1857), when wide changes were introduced in the University curriculum, the question was often raised whether the attempt should be made to revive the professional studies of law and medicine. In both cases, it was thought useless to interfere with the (supposed) natural process which had transferred these studies to London. The consequence has been that, though the arrangements for teaching physical science in Oxford are in some respects unequalled in England, they have not been adapted to the wants of medical students. To put the matter plainly, men cannot get on their Oxford lectures certificates which are satisfactory to the London boards, and it is understood that the University authorities (in science and medicine) do not wish it to be otherwise. . . .

"The questions at issue are really two:—1. Can you ever attract medical students to the University, unless you provide them with a medical education? 2. Is it really impossible to found in Oxford a medical school not unworthy of a great University? The first question must, I fear, be answered in the negative (for reasons which need not now be discussed). With regard to the second point, the obstacles to the establishment of a medical school in Oxford will be found, on examination, to reduce themselves to one; namely, that Oxford has only about thirty thousand inhabitants. But it is important to remember that the University of Würzburg, one of the most illustrious medical schools in Germany, is in a town of thirty-six thousand inhabitants; and that Halle, which has a great reputation in North Germany for its school of clinical medicine, is not much larger. Further, great medical books, such as Luschka's *Human Anatomy*, Niemeyer's *Text-book of Medicine*, and Henle's classical work on *Anatomy*, have been written in the insignificant towns of Tübingen and Göttingen. These facts are enough to show that good work, both in the science and teaching of medicine, may be done in small towns, and that, especially in the scientific branches, deficiency of material may be more than compensated by the resources of a great University. Now, it is fortunate that these branches are exactly those which come first in the medical programme, and it is not easy to see why a man should not spend some two years at least in serious medical study in such a place as Oxford. The resources of the University in the way of physics,

chemistry, and comparative anatomy are already superior to those of the London schools, and no great changes are needed to make them at least equal in anatomy and physiology. Will the active and liberal representatives of medical and scientific interests in Oxford consider the feasibility of systematising this instruction, so as to make it both formally and actually sufficient for the medical student? Whether it should be attempted also to teach the other branches of medical study would be a matter for subsequent consideration."

Since these lines were written, no change has been made. The study of human anatomy and physiology is not more systematised now than it was then; scarcely more so than when the new museum was opened to students nearly twenty years ago. A very few men have been permitted, by a special act of grace, to present themselves for the Primary Examination of the College without the usual certificates; but this cannot be regarded as a permanent settlement of the question. This question of certificates has been for years the great grievance of Oxford medical students, and so strongly has it been felt, that I believe nearly all who know the system by experience are anxious that human anatomy and physiology should be taught as completely as in the London schools, or as they have been taught of late years in the University of Cambridge.

I am myself convinced, not only that it is necessary, but that such a change involves others, for which all may not be prepared, but for which, nevertheless, a very good case can, on other grounds, be made out.

It seems to me, in the first place, very desirable, for the sake of the medical profession, that a larger proportion of its members should pass through the universities. Without laying too great weight on the much abused name of culture, it is surely an object worth aiming at that the various professions should have had a common education, and some common recollections of the most impressionable period of their lives. If a considerable number of medical practitioners throughout the country had this bond of union with the country gentlemen, the clergy and other professions, surely the legitimate influence of our profession would be considerably extended. This consideration has been felt, I know, rather strongly by many persons in the University, Conservatives not less than Liberals, and they would willingly assist, if they could see the way to do so.

Further, it is surely not unimportant as regards the science of medicine. We are always hearing of the need of endowments for promoting unremunerative science, and the British Medical Association has shown its appreciation of this need by annual grants. Moreover, we know in London that higher medical education suffers from the fact that (as is the case in no other European country) the whole cost has to be borne by the students themselves. We cry out for endowments, and neglect those which we have. Here is a capital producing some thousands a year, which is equitably the property of medical science. Is it not worth an effort to see that it is profitably employed? Perhaps, in an ideal state, things might be better managed. It might be better to carry all the endowments to London, and expunge the only name of medicine from the University calendar; but all our law and custom are against such a transplantation. The endowments must be used where they are; only let them not be diverted to other ends.

Even the interests of independent science, viz., biology, in whose name alone the discouragement of medical studies is defended, would really be served by the encouragement of these very studies. The experience of all Europe seems to show that it is premature to separate the study of biology from the schools of medicine. It is not that we expect anatomists and physiologists to be engaged in practice; science is becoming too complex for that; but it is only from students of medicine (with rare exceptions) that you can recruit your students and teachers of biology. A scientific man is none the worse for having to go through the drudgery of professional training; probably much the better; and it is a great advantage for one who devotes himself to sciences as a career to have some bread-winning profession to fall back upon, should fame and fortune not sufficiently reward his scientific labours. These considerations are, I know, strongly felt by some biological teachers out of Oxford.

This is not the place to dwell upon the bearings of such changes as affecting University education in general; but I believe an alliance of the University with medicine would be a gain to both sides. Medical studies would not interfere with liberal studies; why should they? On the other hand, certain special defects, which are, with some plausibility, attributed to Oxford men, might receive precisely the right kind of corrective. The tone of undergraduate life might gain in seriousness and common sense, without losing any other valuable quality.

Whether moved or not by such reasons as these, there is, as I have

said, a pretty general feeling among younger men that some extension is desirable; but opinions differ widely as to the amount. Some would wish to see only anatomy and physiology taught; others advocate a partial curriculum, such as would occupy about the first two years of medical study; and others would create, as has been lately proposed, a complete Faculty.

It appears to me impossible to stop short of the last proposal; but the question can only be discussed by examining the existing machinery and considering how it should be changed, and what results these changes would have.

The chief medical office in Oxford is, of course, the Regius Professorship of Medicine. The position of the Regius Professor is like that of a general without a staff. If he gave lectures on medicine, he would not have any auditors prepared by their preliminary training to understand him. You cannot give men, profitably, a course on medicine till they know something at least of anatomy, physiology, and materia medica.

The Linacre Professorship of Anatomy and Physiology is, in startling contrast to the last, overburdened with subjects, which would, in a well organised university system, be divided among at least four professors; viz.: 1. Zoology; 2. Comparative Anatomy; 3. Physiology, including Histology; 4. Human Anatomy. The professor has, in addition, the charge of a large museum, the care and enlargement of which occupy a great deal of time.

It is evident, then, that the duties of such a post are anything but a sinecure, and it is not surprising if even the immense energy of Professor Rolleston cannot do justice to so wide a field. If he devote most of his teaching to the first two subjects named, take up some branches of physiology, and allow the study of human anatomy to be carried on under his direction to a certain extent, he will be fully occupied. No one can doubt that the original mistake was in attempting to combine a multiplicity of subjects in a single Professorship. This might once be excused by the proverbial wisdom of cutting your coat according to your cloth, but the incongruity has become more glaring every year, and now that abundant cloth may be had if it be only called for loudly enough, probably no one will defend so preposterous an arrangement. What can be expected of the holder of such a chair as this is certainly not that he should do more than he does, but that he should actively and cordially co-operate in transferring some of his burdens to the shoulders of others. You seem to imply that the Linacre Professorship is a medical chair, and has duties to the medical profession as such. This may be the case, and doubtless it was so intended by the illustrious founder, but the duties are now limited by the new statute framed by the former Commission and accepted by the University. What the precise provisions of that statute are I cannot say, not having access to the original.

The existing arrangements for supplementing the Linacre chair must just be mentioned. There is a Hope Professorship for Invertebrate Zoology, but this was chiefly destined by its founder to promote the study of entomology, and cannot at present be taken into account as a part of the teaching power of the University. Physiology will, there is every reason to believe, be the subject of a new Professorship. It is only to be hoped that the Commissioners will see the necessity of providing such a Professor with adequate assistance and laboratory accommodation. The department of Experimental Physiology, which receives little attention from the Linacre Professor, is already taught in the laboratory of Magdalen College by Mr. Yule. The cabinet of physiological apparatus is only in its commencement, but is already quite in advance of anything belonging to the University, and the laboratory has received warm eulogiums from several English and continental Professors of Physiology. There is a fair number of pupils, and it is hoped the subject may in time receive due recognition in the University examinations. But this is not in any sense a medical appointment.

The Lee's Readership was meant undoubtedly to be a medical appointment, and before its present occupant no one but a medical graduate was ever elected, but the teaching of human anatomy was greatly interfered with by the Anatomy Act. It is greatly to be regretted that it was not devoted to human anatomy or physiology at its last vacancy, which would have relieved the Linacre Professorship of one of its subjects.

It is clear, then, that anatomy and physiology cannot be provided for except by the foundation of new chairs. With regard to anatomy, it may, perhaps, be a question whether a Readership paid directly by the University, and tenable for a period of five years at a time, would not be preferable to a Professorship for life on a subject so strictly limited and so liable to be treated in a spirit of pedantry.

Those who are willing to allow this measure of advance must inevitably go further. It is a wasteful expenditure of time for a medi-

cal student to give two years to anatomy and physiology without learning any other subjects at the same time. Materia medica and botany are absolutely necessary. Why should there not be a Professor of Materia Medica and Therapeutics? Considerable ingenuity would be required to show why materia medica at least could not be studied as well in Oxford as in London. Moreover, would not a Professor of Therapeutics and Materia Medica in Oxford supply that deficiency, which we are told every day is so much to be regretted, of competent investigators in a position to make original researches? Botany would, no doubt, be well looked-after by the present Professor, especially when he would have the stimulus of an adequate class.

While working at these subjects, it is not to be supposed that students have much time for clinical work. Nevertheless, it is highly desirable that they should not defer too long attending medical and surgical practice. This is a point on which there is, of course, difference of opinion, but it would be generally agreed that minor surgery at least can be profitably learnt in the first two years, and that surgery illustrates anatomy too well to be safely deferred till the study of anatomy is finished. We must, then, have a Professor of Surgery, and secure admission for his pupils to the practice of the Radcliffe Infirmary. This could no doubt be effected by such a compact as is usually made when a medical school and hospital are connected.

Were the system thus far complete, a class would be prepared for the Regius and Clinical Professor of Medicine. We should not then see the incongruity, now too frequent, of an Oxford man, comparatively mature in age, and desiring to take the position of a second or third year's man at a London hospital, yet far more ignorant of the most familiar details of medicine and surgery than the average first year's man.

The subjects now sketched out form a distinct group, and some who are in favour of this degree of change may think it undesirable to include any of the "later" subjects, such as midwifery, forensic medicine, pathology, state medicine. But a careful following out of the same principles would show that in many cases it would be highly desirable that there should be the opportunity of learning these subjects, and in all there would be the clear gain of placing competent men in positions of comparative leisure and scientific opportunities. The career of the late Dr. Parkes of Netley is an admissible instance of what might be achieved under such circumstances.

There would, of course, be no law compelling students to pass their whole time at Oxford, and their own interests, or the foresight of their friends, might be trusted to guard them against any possible disadvantage incurred by doing so. As a matter of fact, it is probable that most men would spend some years at a London hospital, even if Oxford offered them a complete medical course.

The one objection of most weight likely to be made is simply that founded upon the small size of the Radcliffe Infirmary. Not that it is really smaller than the hospitals which have supported flourishing schools, such as University College or King's College, or than the university hospitals in the smaller German towns; but it may be supposed that a little country hospital will have less grave and less varied examples of disease. To this the answer is simple enough. It is (clinically speaking) the school which makes the hospital, not the hospital the school. The Radcliffe Infirmary is or used to be too much under the tyranny of Governors' letters, and many cases were admitted which would hardly be received in one of the smaller London hospitals. But if it became a medical school, no one can doubt that the effort would be made to select cases more suitable for clinical teaching, and that, like all hospitals similarly situated, it would, by relieving more serious disease, discharge its functions with increased benefit to the city and county. Among the advantages of medical education in Oxford would be the wider utility (I do not say the greater efficiency within its present sphere) of the Radcliffe Infirmary.—I am, yours, etc.,

J. F. PAYNE, Fellow of Magdalen College, Oxford.

Wimpole Street, January 22nd.

SHALL OXFORD TEACH MEDICINE?

SIR,—I have assisted in building up two medical schools in London, that at St. Mary's Hospital and that at the Royal Free, and have also watched the demise of several strugglers; and I have found the utility and ultimate success of each of these institutions is closely proportioned to the excellence of its clinical teaching, and its popularity among students to the opportunities afforded them of bedside study. Without this, none can be even moderately prosperous. It is, therefore, not without serious alarm that I hear the idea broached of attempting to start a medical school at Oxford, with the Radcliffe Infirmary as its

basis of clinical instruction; for I say advisedly that I never saw a hospital containing the legal number of beds which supplies such scanty material for the purpose as this. When the examiners for the M.B. degree take up half a dozen candidates to be tested in the wards, it always has to be made a matter of prearrangement and forethought to get together suitable cases for the purpose. And it is several years since the performance of an autopsy by the candidate (which is on the programme) has been possible. In strong contrast, when examining for the University of Durham at the Newcastle Hospital, which exceeds Oxford in beds only by about one-fifth, I have found my choice actually embarrassed by the number of well marked examples of disease. The reason of the difference is not far to seek. Newcastle is the manufacturing and commercial centre of a neighbourhood teeming with a struggling superabundant population. Oxford is an agricultural city, affording a placid home to the University among green pastures, where, as far as the eye can reach as the railroad approaches it, the main object of life seems to be to produce as many head of beasts and as few of men as possible. Nobody is to blame; the Radcliffe Infirmary was intended to be, and is, a model of what a county hospital should be: admirably managed and officered, and quite large enough for the population; in fact, it is larger than a population of equal amount is considered to require in other counties; and the consequence is, that there is not a succession of typical cases, such as are absolutely essential to clinical teaching, especially at the earlier parts of a student's course in the wards. The beds are filled, indeed, but necessarily with obscure, chronic, and convalescent cases, who doubtless are proper objects for charity, but not useful for illustration. Advanced pupils may often with advantage puzzle out these enigmas, but to juniors they are insoluble.

On these grounds, it may be held for certain that Oxford never can be a complete medical school, and pretending to be so would be positively injurious to education by holding forth a bad model. This was not so obvious to our forefathers, and their liberality has, therefore, supplied the University with considerable funds for the foundation of a clinical school. Nevertheless, salaries and teachers will not make pupils, and these have not come, with the exception of a few local surgeons, apprentices in former times. Nor will they ever, so long as the metropolitan hospitals continue attractive. Can we expect to succeed in the face of giant rivals, where Harvey, Boyle, Willis, Aldrich, Lee, and Acland have failed with the coast comparatively clear? Surely, the University Commissioners would not advise us to persevere in the experiment. They know too well that those who have never made a mistake never grow wiser.

Is there no way of attaining by a *cypres* method what the benefactors you have mentioned had at heart, the promotion of clinical knowledge? The plan that commends itself most to my mind is the conversion of the Aldrichian and other clinical professorships into fellowships, to be allotted for short terms of years, but renewable at discretion, to carry out definite subjects of clinical research, to be reported on and made public from time to time. Residence would be needless, and there are numerous Oxford graduates on hospital staffs who would be eager for the task of adorning the University and themselves with conspicuous honours, without being out of the way of more permanently remunerative employment.

I am unwilling to protract this letter by discussing the use to be made of other professorships for medical education; but a very easy arrangement would enable human anatomy to be taken as an honour subject in the physical science schools. I think the present broad standard of teaching in physiology and chemistry should be maintained; for it is essential to the class of candidates who alone seek the Oxford degree. To lower it for those who are contented with more easily obtained diplomas would be ruinous.

As to the Regius Professorship, it is held, as a Crown appointment should be, not for the benefit of this or that privileged profession, but of all Her Majesty's subjects. The widest discretion must be allowed to the holder as to how he may best make it available to the country's advantage. The untiring activity of the present occupant, and the numerous objects which his tenancy of the post has enabled him to attain, and which he could not have attained unless so placed, may make us cautious of laying a helping hand upon the ark.

Excuse a remonstrance against your adoption from a correspondent of the term "Lost School". He must know very little of the history of Oxford to suppose the school ever advanced beyond conception.—I am, sir, yours faithfully,

THOMAS K. CHAMBERS,

Consulting Physician to St. Mary's Hospital.

London, January 21st, 1878.

SIR,—If the charges brought against Dr. Acland by a "Member of Convocation" are true, the Professor has virtually said "Here is a

medical school; come let us destroy it, and the emoluments shall be ours". But to suppose that Dr. Acland has laid himself out to pocket the stipend and convert his office into a sinecure, is too ridiculous to be seriously entertained even by the most cynical of your readers. I, therefore, hope that the Professor's liberality will allow him to reply to his anonymous assailant; for there is much room for explanation and reform, as the following facts will show.

Wishing to spend part of my student's life in Oxford, about two years ago I entered at the University. I then called on Dr. Acland, and told him that I wished to be admitted a student of the Radcliffe Infirmary. The Clinical Professor raised no objection to my studying at the Radcliffe Infirmary, but said that he had never given certificates of such study, and that he would give none to me. When I asked why, the Professor said that they did not undertake to give certificates, and that they would not do so at the Radcliffe Infirmary; but this seemed to me to be a repetition of his statement, rather than an explanation of it. Imagine the consternation that would be caused at Cambridge or Trinity College, Dublin, by a similar discouragement on the part of the Regius Professor of Physic from clinical study within the walls of his own hospital!

Thinking that, if Dr. Acland seriously doubted the competence of the staff to undertake clinical teaching, the Radcliffe Infirmary should no longer remain a hospital recognised by the College of Surgeons, I wrote to the Secretary in order that the Council of the College might strike it off the list, or take what other steps they might deem necessary.

However, I must refrain from further comment on the Professor's refusal to give me a certificate for any medical study I might pursue at his hospital, as the question is still *sub judice* at the College of Surgeons, and is now occupying the attention of the Court of Examiners at Lincoln's Inn Fields.

I may state that, subsequently to the Professor's refusal, during the Trinity term 1877, I worked in the surgical wards of the Radcliffe Infirmary (not, however, with the view of obtaining a certificate), and there seemed to me to be just as good opportunities for clinical work as in any other hospital of the same size.—I am, your obediently,

GLYNN WHITTLE, M.D.

Parliament Terrace, Liverpool, January 23rd, 1878.

PHYSICIANS' FEES.

SIR,—It seems to me that there need not be any lengthy writing on this subject, as the remedy lies in a nutshell. Skilled labour and experience from long practice demand adequate reward, whether in trade or profession. An opinion from counsel at the top of his profession is not to be had under a sum three or four times that which a junior counsel would charge. Let, therefore, the heads of our profession boldly take the place which their professional brethren and the public already accord to them, and refuse to go anywhere for a less fee than, say, five or ten guineas. They would get all their money at less labour, and leave some still good fees for their juniors.

No patient who really desired a consultation with one of the leaders of the profession would mind the extra cost; and, as there are gradations of pockets among patients, so there should be variety in the scale of consultants' fees. No patient or practitioner will call in an ordinary consultant if, for the same fee, he can obtain the opinion of some great man.—Yours faithfully,
M.D. Oxon.

January 1878.

SIR,—I shall be glad if you will allow me to say a few words on this subject, now under discussion in your pages. To make my letter the clearer, I will ask to begin with a definition, and that of the word "consultation". I take a consultation, then, to be "the careful taking into consideration, by two or more members of our profession, of the case of some person, the subject of injury or disease". This consultation, again, may be demanded from various reasons; e.g., the gravity of the illness, the obscurity of the symptoms, the momentous interests involved, or the wish or caprice of the sick man.

Under any of these conditions, the professional persons concerned will most commonly be the usual medical attendant of the invalid and some one of equal or of higher professional standing; whether this conferring takes place in the patient's house or in the physician's room, whether it be conducted by personal interview or by careful correspondence between the experts engaged, are points quite immaterial to my argument. This, too, is or should be implied in the word consultation: that the past history shall be clearly stated by some one who has for himself observed the conditions of which he speaks; and that moot or doubtful points in the case shall be put forward for solution by

a second authority, whose acumen, intelligence, or work shall enable him to speak *ex cathedra* with the weight of a superior knowledge.

I would further advance that those only who adhere to such lines of daily work and procedure can properly be entitled to call themselves "consulting physicians and surgeons".

The unanimous voice of the medical profession testifies to the value of careful inquiries and comparisons so instituted and carried out; and there are but few in our ranks who have not at some time or other, for themselves or those dear to them, gladly asked for, and thankfully acknowledged, skilled help so rendered. It is not, therefore, too much to maintain that consultations have grown to be accepted as often most desirable, often absolutely necessary, and that, in some way or other, they must be provided for; in other words, for such legitimate professional work there is constant requirement, and, therefore, for men who deservedly hold high position, there is to their hands a continual and adequate source of income.

But the answer will at once be made, that this is far from being the case; that the work is not forthcoming to the extent named; and that the incomes are not so readily made, even by men of world-wide reputation. I am unwillingly compelled to believe that this is the case; but I do not hesitate to maintain that the fault lies with the profession, not with the public; and that the great leaders of the profession are the most to blame in the matter.

In only two special lines of work is the public asked for adequate remuneration by the profession; viz., in capital operations performed by leading surgeons, metropolitan or other, and in distant country journeys undertaken indifferently by physicians or surgeons of emirance. Let the reader contrast the sums paid, and not unwillingly, by sufferers in either of the above classes, with the honorarium of one or two guineas given as a matter of course for a consultation at the home consulting-room: those comparatively unfrequent, these of hourly occurrence.

It is not possible to justify the daily tacit consent to the same standard of value for a medical opinion, whether the dictum come from the physician grey with years and rich in clinical knowledge, or from the man but just a few years in practice and fresh from the benches of the senior's lecture-room. If the latter be worth but the guinea, on what ground of fair dealing can the public expect to have the ripe knowledge of the teacher for the same return?

Consulting practitioners far too commonly declare themselves the competitors, not the allies, the antagonists, not the helpers, of the general practitioner. Witness the mixed practice in which many engage themselves. Let the letter of your first correspondent F.R.C.P. give evidence on this point. "He sees in his daily work one patient with another practitioner; later on, he is summoned into the country, by himself, it would seem; for no mention is made of any consultation. In other cases, he attends alone, and the visits run on." What is this but to be the general, not certainly the consulting, practitioner?

Take, again, the waiting-room of any practitioner of high reputation: the large majority of his morning visitors will probably have come for "an opinion", and the data presented for his guidance are confessedly of the slenderest; for no accurate professional statement is, as a rule, forthcoming either in writing or by word of mouth. Contrast this hasty perfunctory "simulacrum" of a careful decision with the plan followed out a few hours later at the hospital visit, with the details gleaned by the clerk of history, examination, and symptoms, and then cease to wonder if some of the observant public stigmatise the former as a something little short of an absolute farce.

Yet, even more than this, the bulk of the profession do not favour consultations properly so called, but rather decry and shrink from them: the consequence of the attitude which many leading London practitioners take up towards their brethren; an attitude of cold neglect, if not (and this it often has been to my own knowledge) of active depreciation.

The remedy for this unsatisfactory state of things, unjust to the profession in that much good work is very poorly remunerated, unjust to the suffering public in that, as a rule, the possible perfection of accurate inquiry is far from being ensured, is, I venture to assert, not far to seek. It simply needs that the office-holders in our colleges, the presidents of medical societies, and the senior officers of our hospitals decline to take any other than consulting work properly so-called, or, in other words, that they do not see the patients, except when they are introduced by some other practitioner; that they accept nothing below a minimum fee for such services of five guineas for each consultation; and that they do not take patients under their own personal care.

The absolute daily work of such men would, to their great relief, diminish, while their incomes would as certainly increase; for they would at once enlist the active assistance of the mass of general practi-

tioners, and, by so doing, very much improve the status of the whole profession. Some such plan as this would at once give to our seniors their well earned positions without fear of the unseemly rivalry now existent, and would carry many contingent advantages in its train.

I recommend the suggestion to the notice of your readers.—I am, sir, your obedient servant,
M.D., F.R.C.S.
January 14th, 1878.

SIR,—Permit me to add a brief contribution to the presently debated question of the fees and position of consultants. As a rule, I object to the reopening of ugly wounds when once cicatrisation has begun, so that at present I would fain keep aloof from the introduction of personalities; yet, no explanation having been given by the gentleman referred to by your correspondent "Not a Court or Club Surgeon", in the JOURNAL for December 29th, we may be allowed to infer that none can be given. As I also know something of consulting practice in the North, I wish to further illustrate some of our northern customs. One leading consulting surgeon, to which position, from his years, large experience, and acknowledged ability, he is well entitled, also arrogates to himself the primary place as consultant in medical cases, or at least readily undertakes such duties when called on; he further attends midwifery, going, in some instances, into the country and staying at the patients' homes for some days, at a less fee than the local practitioner could afford to do, presumably to form connection with the families. He has on more than one occasion visited country families, although another medical man was in attendance and ignorant of his so doing; and, but lately, the following incident occurred, which may be given as a sample of consulting tactics. "A patient who, sent from the country to get advice from this said gentleman, had to stay a few days, very properly, till a just opinion was formed of the case; but he returned in a few weeks, to remain for some time under his care as an ordinary patient, and, on leaving, was directed to come back again to repeat the same plan of consultation after the lapse of a few weeks." How long this might have gone on it is impossible to say, had not the sense of the patient been acute enough to discover the peculiarity of this consultation system. Now, it seems to me that such conduct on the part of seniors of the profession does great injury to their own and their junior relationships with the public; it destroys professional confidence, and must necessarily weaken the faith reposed in the ordinary medical attendant. People are but too apt to take advantage of such disharmony, and, therefore, it is that they not only feel inclined to dispute the modest bill of the general practitioner, but demur to the higher scale of fee expected by consultants. In short, if consultants do not keep themselves purely as such, and abstain from grasping the just belongings of their less eminent brethren, they have themselves to blame for being ranked as no better than what they are: general practitioners. If the general practitioner have confidence that his patient will be returned unprejudiced into his hands, he will have more willingness to advise the consultation, which, under the too frequently abused system referred to, he is often justly anxious to avoid. If the consultant, on the other hand, behave honourably to his brethren, he will seldom find his pecuniary interests injured thereby; it will be for the advantage of his clients, as well as their usual attendants, that the recognised fee of one, two, or three guineas shall be forthcoming.

"By outward show let's not be cheated;
An ass should like an ass be treated."

January 1878. Yours obediently, ABERDEENSHIRE.

EXTENSION IN HIP-JOINT DISEASE.

SIR,—I confess to having read with surprise Mr. Adams's statement in your number of January 5th, to the effect that the application of extension by means of a weight for the purpose of relieving the pain of hip-joint disease is the greatest discovery of modern times in the treatment of that affection, and that the originality of that discovery is claimed by Dr. Henry G. Davis of New York. I have used and seen used this method of treatment for, I should say, at least twenty-five years. I claim no originality in the method; for it was certainly used by my predecessor, at the Hospital for Sick Children, Mr. Athol Johnstone; and, in Mr. Marsh's paper, to which Mr. Adams gives a reference, there is a quotation from Sir B. Brodie's first edition very clearly recommending it. The plan of tying the weight on by means of a stirrup of strapping is, I believe, an American idea. In Mr. Marsh's paper, it is attributed to Professor Pancoast. Whether this be so or no, I think I am justified in saying that it was in use long before the year 1855, which Mr. Adams fixes on as that of Dr. Davis's supposed discovery. But, though a convenient and very practical idea, this can hardly be called a great discovery. There is no question at all

that we now know the value of continuous extension much more clearly than our predecessors did; but this seems to me to be the consequence, not of any grand discovery by any individual, but of the continued use of a very easy method of extension, which, as far as I know, was first practised by Brodie, though very probably devised by some one else, and was probably suggested by the difficulty of applying and keeping applied the long splint in childhood. I may safely say that I never heard of Dr. Davis's name in connection with the matter.

With regard to the value of motion in combination with extension in the treatment of diseases of the joints, I should very much like, if possible, to obtain some trustworthy evidence. Sayre's splint, as it is called (though the invention of this also is claimed by Dr. Davis or some other American surgeon), has been known and used in this country for a great number of years. I think it must be over fifteen years since I first used it at the Hospital for Sick Children. Some years afterwards, when Dr. Sayre visited England, he spoke so confidently about the benefits of the apparatus, that it was much more extensively used, and, since that time, I believe, has been always procurable at the chief instrument-makers'. Yet I cannot meet with anyone who continues to use it. My own experience of it has been that, though it seems to answer at first, and often sufficiently for the purpose of a temporary display, so that a child who has been quite unable to move is thereby enabled to walk a few steps easily, yet afterwards it does harm by becoming displaced, and so allowing painful and injurious contact and movement of one bone on the other. I am speaking now, of course, of cases in which the disease is really in an active stage, and not of such as those of Mr. Adams's patient, who was free from pain before the instrument was applied. In a case recently under my care, I thought I could trace the exacerbation of the symptoms leading to abscess in the joint to the use of Sayre's splint. The fact is, that we want much more definite accounts of cases, extending over a considerable period of time, before we can say whether such treatment does harm or good, and whether it prevents or favours ankylosis.—I am, yours, etc.,
T. HOLMES.

London, January 14th, 1878.

THE PREVENTION OF HYDROPHOBIA.

SIR,—Will you allow me to ask the attention of your readers to a suggestion, which has, I think, some practical bearing on the prevention of hydrophobia? Would it not be well, in crowded communities like ours, where dogs are but little needed for the chase, to compel, by law, the removal of the canine teeth? The small number of dogs in which these teeth are required for special purposes might be exempted. It is the formidable canine tooth which, in nine bites out of ten, does the damage; without it, few dogs would be able to bite through clothing, for instance, and, in their attacks on each other, they would probably usually fail to break the skin. There would be but little suffering involved in the extraction, and the dogs themselves would be great gainers, not only in the diminished risk of rabies, but also in that they would not inflict on each other nearly so much pain in their ordinary quarrels.—I am, sir, yours, etc.,
JONATHAN HUTCHINSON.

15, Cavendish Square, W., January 22nd, 1878.

ASSOCIATION INTELLIGENCE.

DUBLIN BRANCH.

The first annual meeting of this Branch will be held in the Hall of the King and Queen's College of Physicians, Kildare Street, on Wednesday, January 30th, at 4 P.M. The President, Dr. HUDSON, will deliver an address.

The annual dinner of the Branch will also take place at 7 P.M. the same evening, in the College.

GEORGE F. DUFFEY, M.D., *Honorary Secretary*.
30, Fitzwilliam Place, Dublin, January 8th, 1878.

BATH AND BRISTOL BRANCH.

The third ordinary meeting of the Branch will be held at the York House, Bath, on Wednesday evening, January 30th, at a quarter past Seven o'clock: H. MARSHALL, M.D., President.

The evening will be devoted to the discussion of Hospitalism, which will be opened by R. W. Tibbits, M.B.

R. S. FOWLER, } *Honorary Secretaries*.
E. C. BOARD, }

Bath, December 31st, 1877.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

A SPECIAL general meeting will be held in the Queen's College on Thursday, January 31st, 1878. The Chair will be taken at 4 o'clock P.M.

Business.—"To consider the position of the profession in reference to the establishment of Provident Dispensaries in Birmingham", and to adopt such resolutions on the subject as the meeting may deem advisable.

JAMES SAWYER, M.D., }
EDWARD MALINS, M.D., } *Hon. Secretaries.*

Birmingham, January 24th, 1878.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, January 18th, 1878.

Intemperance.—The Earl of CORK, in the absence of the Duke of Westminster, moved the appointment of a Select Committee for the purpose of inquiring into the prevalence of habits of intemperance, and into the manner in which those habits had been affected by recent legislation and other causes.

Monday, January 21st.

Intemperance.—The following peers were appointed as the Select Committee on intemperance: The Lord Archbishop of Canterbury, the Lord Archbishop of York, the Duke of Westminster, the Earl of Shaftesbury, the Earl of Belmore, the Earl of Onslow, the Earl of Morley, the Earl of Dudley, the Earl of Kimberley, the Earl of Aberdeen, the Earl of Donoughmore, the Lord Bishop of Peterborough, the Lord Bishop of Exeter, the Lord Bishop of Carlisle, Lord Henniker, Lord Penrhyn, Lord Aberdare, Lord Cottesloe.

HOUSE OF COMMONS.

NOTICES.—The following notices have been given.

Colonel Beresford: To ask the Secretary of State for the Home Department whether he will use his influence to postpone the consideration of the Bill promoted by the Metropolitan Board of Works for the purchase of the Water Companies, at a cost of many millions sterling, until that Board have, in accordance with the spirit of his recent reply to the Board, taken the necessary steps to prevent the recurrence of floods on the Surrey side of the water.—(Monday, January 28th.)

Mr. Edward Howard: Select Committee to inquire into the supply of water to the manufacturing districts of Lancashire and the West of Yorkshire, and any deficiencies likely to arise therein; and whether it is necessary or expedient to resort to the Westmorland and Cumberland Lakes to make good any deficiencies in such supply; and, if so, to what extent, and under what conditions, such resort should be sanctioned.—(Tuesday, January 29th.)

BILLS.—The following Bills have been introduced during the past week.

To consolidate and amend the Law relating to Factories and Workshops; brought in by Mr. Secretary Cross and Sir H. Selwin-Ibbetson; to be read a second time on January 24th.

To amend the Medical Act (1858); brought in by Dr. Lush, Sir Trevor Lawrence, Mr. Samuda, and Mr. Ritchie.

To facilitate the Control and Cure of Habitual Drunkards; brought in by Dr. Cameron, Mr. Clare Read, Mr. Ashley, Sir H. Jackson, Mr. E. Jenkins, Mr. W. Holms, and Mr. R. Smyth; to be read a second time on July 3rd.

To amend the Public Health Act (1875); brought in by Mr. A. Brown, Dr. Playfair, Mr. Ryder, and Mr. J. C. Cowen; to be read a second time on January 31st.

To consolidate and amend the Acts relating to Public Health in Ireland; brought in by Sir M. Hicks-Beach and Mr. Attorney-General for Ireland.

To amend the Law relating to County Infirmaries and to the Relief of the Poor in Ireland; brought in by Mr. Meldon, Mr. Shaw, and Mr. Errington; to be read a second time on May 15th.

For the repeal of the Contagious Diseases Acts, 1864, 1866, and 1869; brought in by Sir Harcourt Johnstone, Mr. Stansfeld, Mr. Whitbread, and Mr. Mundella; to be read a second time on May 22nd.

To amend the Law relating to Public Baths and Washhouses; brought in by Mr. Forsyth, Sir T. Chambers, Mr. Ritchie, and Colonel Beresford; to be read a second time on January 30th.

To make provision for the purchase by the Metropolitan Board of Works of the undertakings of the several Water Companies supplying

Water to the Metropolis, etc.; brought in by Sir J. McGarel-Hogg, Sir A. Lusk, Mr. Grantham, and Mr. Rodwell; referred to Examiners of Petitions on Private Bills.

To amend the Law relating to the Qualifications required for holding certain Medical Appointments; brought in by Mr. Errington, Mr. J. Mailland, and Mr. Blennerhassett.

To make provision for the more effective prevention of Cruelty to Animals; to be read a second time on July 10th.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

THE Great Berkhamstead Guardians and Rural Sanitary Authority have received the sanction of the Local Government Board to their borrowing a further sum of £1975, making altogether £2400, the estimated cost of a site and building for an infirmary for infectious and contagious diseases.

BROMYARD No. 1 DISTRICT.

WE have heard it said that some men are better than their creeds; but in some things, at least, our beliefs are better than our practice. We believe, or profess to believe, that our Acts of Parliament go forth clothed with authority; and that, as provided for by these Acts of Parliament, the districts of the Poor Law Medical Officers are such that they can be worked. But the case of No. 1 District, Bromyard Union, shows that the Act of Parliament on the subject of Poor Law Medical Districts is conveniently ignored. That district, it seems, has an area of 32,979 acres. Considerably more than double what the legislature thinks any man can reasonably be expected to work. Thus Parliament thinks, and has fixed the total acreage to be confided to the care of any one man, for medical purposes, at 15,000 acres; and that area, if fairly peopled, will tax the energies of any man to attend to properly. Yet here is a case in which the Board of Guardians of Bromyard thinks differently, and has given effect to its thinking by assigning as one medical district to one man considerably more than double that allowed by law. Can it really expect that it can be efficiently attended to? Meanwhile, we would suggest that the Local Government Board may fairly call upon it to show cause for its opinion; and, failing proper reason assigned, see that the law be carried out, and the district broken up into two, with a remainder of 2,979 acres towards the formation of a third. Then there might be some hope that the poor would be seen to. As it stands, these immense districts simply render Poor Law attendance a farce, because the distance to be traversed, over hilly roads, and often in bad weather, is prohibitory both of the pauper's sending and of the doctor's attending. In this particular district we think the poor are fortunate in having such an indefatigable medical attendant as Mr. Powell.

MILITARY AND NAVAL MEDICAL SERVICES.

THE ROYAL VICTORIA HOSPITAL AT NETLEY.

THE nomination of Colonel R. C. Stewart to be "Governor and Commandant of the Royal Victoria Hospital at Netley" was notified in the *Gazette* a few evenings ago. The appointment of an officer who was not long since adjutant-general of the Madras army to the command of a hospital seemed strange enough, on reading the announcement, and none the less so that the principal medical officer of the hospital, a surgeon-general, ranking as a major-general, and evidently a distinguished officer, as the decoration of the Bath has been conferred on him, might well seem to be the natural head of such an establishment, under the general officer commanding the district in which it is placed. The posting of combatant officers in local command of hospitals has the advantage of affording opportunities of patronage, and perhaps also of rendering a few additional commanding officers available in case of war for service of a more legitimate kind; but, after all, it seems a questionable mode of attaining such ends. Until, however, some reformer springs up who will undertake the laborious and unenviable task of mastering details of military economy, especially of studying the instances in which costly appointments exist for the sakes of the officers holding them, and not from any need of their employment, neither the numbers of such "fifth wheels", nor the money outlay for officering the army are likely to be much lessened.

OBITUARY.

C. M. THOMPSON, M.R.C.S.Eng., SEVENOAKS.

WE have to record the death of one of our oldest members, Mr. C. M. Thompson, who died, after a few days illness, at his residence at Sevenoaks, on January 14th, at the advanced age of 81.

He was the youngest son of the Rev. M. Thompson, rector of Mistley, Essex; received a good education at Dedham School; was apprenticed to his brother, then a practitioner at Manningtree; entered at St. Bartholomew's in 1814, and in 1817 became M.R.C.S. and L.S.A. He shortly afterwards settled at Westerham, and for nearly fifty years did a considerable practice, retiring from active work at the age of 70, to devote the evening of his life chiefly to works of benevolence and public usefulness.

A man of quick and ready penetration, of great energy and activity; of perfect self-reliance and confidence, based on accurate knowledge; of warm sympathies and charitable disposition, he was eminently calculated to fill and uphold the position of a country doctor; and, outside his strictly professional duties, was a powerful influence in all good work in his neighbourhood.

Mr. Thompson was an active member of the Association, and filled the office of President of the South-Eastern Branch twenty years ago. He was a skilful surgeon, and an accomplished practitioner; ever ready to accept all new aids in the treatment of disease, and retaining those he found to be true. His long experience dies with him; his only published work being some few interesting cases in the medical journals. His good qualities were warmly appreciated by his neighbours, who presented him with a handsome testimonial on his retirement, and showed him respect and attachment by attending in large numbers at his funeral.

JOHN LANG, M.D., SOUTHPORT.

DR. LANG, who was unfortunately killed by an explosion of gas at his residence in Southport on January 5th, was born at Accrington, where he received his early education. He afterwards entered at University College, London, where he filled the post of house-surgeon at the hospital. He became M.R.C.S. and L.S.A. in 1855, and took the degree of M.D. in 1864. After having qualified in London, he was for two years House Surgeon to the Manchester Infirmary. He then practised in Accrington for a few years with marked success; but, preferring a larger and more central field, he returned to Manchester, where he became surgeon to the Hospital for Sick Children; and for some years carried on a considerable practice. He removed to Southport ten years ago. Here he was appointed Honorary Medical Officer to the Convalescent Hospital and Sea Bathing Infirmary. He was chosen Medical Officer of Health for Birkdale, and was elected to a seat in the Town Council of Southport. He took an active interest in the improvement of the sanitary condition of Southport, and he had the satisfaction in time of seeing his views adopted.

Dr. Lang was a Vice-President of the Lancashire and Cheshire Branch of the British Medical Association, and took great interest in the meeting held last year in Manchester, and in the visit to Southport of a part of the members. He was interred in the family vault at St. James' Church, Accrington. The Mayor and Town Councillors of Southport, the members of the Birkdale Local Board, and many of his professional brethren and others attended the funeral, which was joined at Accrington by many old friends from a distance.

NATIONAL HOSPITAL FOR CONSUMPTION.—The annual meeting of the governors of this hospital was held on the 22nd instant, at the offices, 12, Pall Mall, under the presidency of Lieut.-Colonel Atherly. Letters were read from Viscount Eversley (the President), the Duke of Grafton, the Earl of Powis, etc., regretting their inability to attend. The report of the Board of Management stated that the institution, which is situated at Ventnor on account of the superior salubrity of its climate, having now been finally completed, the whole one hundred and two bedrooms were occupied by patients. The number of patients had greatly increased, the mortality being only five per cent. The sum of £9,256 : 19 : 10 had been received during the past year; and on the 31st of December last there remained only £103 : 16 : 4 in hand towards the present year's expenses, after allowing for liabilities due. The Earl of Carnarvon will take the chair at the biennial dinner to be held at Willis's Rooms on the 20th of February next; and the Board rely mainly on the subscriptions then received to maintain the institution, there being no endowment. Votes of thanks to the officers and to the chairman brought the proceedings to a close.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 17th, 1878.

Deakin, James, Sole, Manchester
Lambert, John Speare, St. Leonard's Crescent, Exeter
Pearce, John Puckey, Biscovy Par, Cornwall
Thomas, David Edward, Cummam, Carmarthenshire

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the ordinary monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, January 8th, 9th, and 10th, 1878, the following candidates were successful.—For the Licences to practise Medicine and Midwifery.

Aherne, John Leonard
Armstrong, Henry
Arthur, Thomas Francis
Barker, Annie Reay
MacLigan, Bartholomew
Redmond, Joseph Michael
Spowart, William Ribton

For the Licence to practise Medicine.

Owen, Richard Foster

Roe, Arthur Legge

For the Licence to practise Midwifery.

Woodroffe, John Fitzhenry

MEDICAL VACANCIES.

THE following vacancies are announced:—
CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Assistant-Physician. Applications to be made on or before the 26th instant.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 26th instant.

IPSWICH BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.

KENT COUNTY LUNATIC ASYLUM.—Assistant Medical Officer and Dispenser. Salary, £165 per annum, with furnished apartments, milk, vegetables, washing, and attendance. Applications to be made on or before February 6th.

LIMERICK UNION.—Resident Medical Officer of the Workhouse. Salary, £200 a year, with apartments, rations, etc. Applications up to the 30th instant.

LIVERPOOL ROYAL SOUTHERN HOSPITAL.—Two Honorary Surgeons. Election in February. For particulars, apply to Honorary Treasurer.

LOUGHBOROUGH DISPENSARY AND INFIRMARY.—Resident House-Surgeon. Salary, 100 guineas per annum, with furnished rooms, fire, lighting, and attendance. Applications to be made on or before the 26th instant.

NEWCASTLE-UPON-TYNE INFIRMARY.—Senior House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before February 4th.

QUEEN'S UNIVERSITY IN IRELAND.—Examiners for 1878 in the following subjects, at the salaries stated. Medicine, £100; Surgery, £100; Midwifery, £75; Materia Medica, £75; Medical Jurisprudence, £75. Applications to be addressed to the Secretary, at Dublin Castle, up to the 15th February.

RADCLIFFE INFIRMARY, Oxford.—Surgeon. Applications to be made on or before the 29th instant.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Two Junior Resident Medical Officers. Applications on or before the 30th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

ABBOTT, C. E., M.R.C.S.E., appointed House-Surgeon to the Liverpool Infirmary for Children, *vice* R. Clapp, L.R.C.P., resigned.

BARR, James, M.B., appointed Assistant-Physician to the Stanley Hospital, Liverpool.

DAVIES, Hugh Walter, M.R.C.S.Eng., appointed Surgeon to the Memorial Hospital, Jarrow-on-Tyne.

LLOYD, Edward J., M.D., appointed Medical Officer to the Normal College, Bangor, *vice* Lewis Jones, L.R.C.P.Ed., deceased.

*MURPHY, James, B.A., M.D., appointed to the Chair of Botany in Durham University College of Medicine, Newcastle-upon-Tyne.

*STOWERS, James H., M.D., appointed Physician to the St. John's Hospital for Diseases of the Skin, Leicester Square.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

FOX.—On January 22nd, at Clarence Street, Victoria Park, Manchester, the wife of Dacre Fox, F.R.C.S.E., of a son.

HARVEY.—On January 21st, at South Petherton, Somerset, the wife of *Walter A. Harvey, M.B., of a son.

DEATH.

DAWSON.—On January 21st, at Hunmanby, Henry Lawrie, infant son of *Dr. Dawson, aged 8 months.

VACCINATION.—Mr. J. W. Harrison has received a grant of £100 : 12 for efficient vaccination in his district, No. 1, Ecclesall Union, Sheffield. This is the third gratuity which he has received.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Leared, "Death in Typhoid Fever averted by the free use of Stimulants"; Dr. Dowse, "On Hereditary Syphilis as it affects the Brain and Nervous System".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

THE "MEDICAL DIGEST".

DR. NEALE, of 60, Boundary Road, St. John's Wood, the author of the *Medical Digest*, writes to say that he proposes to issue a list of errata with the last volume of the New Sydenham Society for 1877, so that all the members may be able to correct their own copies, and will be obliged for any notes which may be sent to him of such errors. The *Medical Digest* was compiled in the midst of busy practice in a distant colony, which certainly increases the merit of the author, and explains some of the deficiencies to which we pointed in our notice of the book.

SIR,—I beg to state, in answer to "Inquirer" in your last issue, that Mr. John Bowie, 98, Lauriston Place, prepares gentlemen for the examination of the College of Physicians, Edinburgh.—I am, sir, yours truly, L.R.C.P.E.

MEDICAL ETIQUETTE.

SIR,—I am somewhat glad that we have made a step forward at last, and that Dr. Beresford has admitted that the radius was well and thoroughly united, and could not have been bent or in any way interfered with by his manipulation, and also that the ulna was uninjured opposite the fracture of the radius. Will he now go on, without introducing any further irrelevant matter, to describe what he found wrong about the arm, what he did to remedy it, and how he did it?

What Dr. Beresford says about my letters requires no answer from me: the letters are before the readers of the *JOURNAL*, and they will judge for themselves; but about the certificate which he mentions, and which was written by Mr. Wood, and signed by him and Messrs Harries and Davies a few days after the Shrewsbury examination, I will just say it was intended for the managers of the colliery and not for the profession, but that it shall be forthcoming in my final statement.

I am sorry, sir, that we have occupied so much time and space, but I hope Dr. Beresford will now make a plain statement as to what was done for the man Morris in the Oswestry Cottage Hospital, and say what he has to say about the arm, and then I will reply at once.—I am, sir, yours very obediently, W. H. BOX.
Chirk, North Wales, January 20th, 1878.

FILTERS.

R.—Would you kindly tell me the best description of filter to get for home use, just to filter a gallon or two of water daily—one easy to keep clean and in order?—am, your obedient servant, J. BURROWS.

*. Two very excellent filters are the Bischoff filter and the Silicated Carbon Filter.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a Post Office.

DR. DRYSDALE AND THE POPULATION QUESTION.

WE deeply regret to see the reports of a meeting at Notting Hill, at which Dr. Drysdale addressed an assemblage of mixed constitution on the population question, in company with Mrs. Besant. During a speech of upwards of an hour, he urged the "limitation of families" as a method of restraint upon population. Such doctrines are contrary to the purity of thought and manliness of life which are the characteristics of this nation. Dr. Drysdale's doctrines are wholly discountenanced by the medical profession; and we only mention this painful subject in order to utter a protest, lest by passing over the public aberrations and the course which that sincere but misguided physician is pursuing in this matter, it should meet with anything else than general disapprobation. In expressing that disapproval, we believe we are expressing the almost unanimous opinion of the profession in this country. The promulgation of such doctrines is not only mischievous but degrading, and we earnestly hope that Dr. Drysdale will, in his future public course in this matter, be guided rather by what is unquestionably the general feeling of his profession than by his own mistaken impulse.

DIPHTHERIA.

SIR,—In reply to Dr. Semple's letter in the *JOURNAL* of the 19th instant, I would say I believe that I clearly comprehend the views expressed by Dr. George Johnson and himself on the subject of diphtheria, membranous croup, and acute catarrhal laryngitis. In my communication in the *JOURNAL* of the 12th instant, the word "croup" referred to membranous croup; and in speaking of croup and diphtheria being the same, I meant that they had the same origin, and were the same disease, without reference to the part attacked. I would now ask your indulgence to enter into the subject a little more fully. A particular specific blood-poison, when introduced into the system, gives rise, among other symptoms, to the formation of a peculiar membranous product, generally situated on the tonsils or upper portions of the air-passages. Now, after some years of observation, I am inclined to think that this same blood-poison may affect the system and yet the membrane not be produced. I regard the blood-poison as the essence of the malady, and look upon the membrane as a product and a symptom, and, as such, subject to variations and modifications. During diphtheria epidemics, I have frequently observed that the appearances on the tonsils, etc., of persons members of the same household, and suffering from the complaint at the same time, have varied in every degree; some having perfectly formed pellicles, while others would have a few specks, or only have the parts covered with what is usually described as glairy mucus, but which, I think, may be allied in composition to the fibrin of which the membranes are formed, some circumstance preventing it from coagrating. I have further observed that the pellicles often become detached at a very early period. Applying these considerations to the larynx and trachea, why may not diphtheria in these positions be subject to the modifications found in more visible parts? and how would it be possible to draw a distinction between such modified cases with a specific origin and cases of so-called acute catarrhal laryngitis, supposed to have been caused by cold? I am somewhat sceptical as to how far cold, *per se*, is liable to produce catarrhal symptoms, attended with fever. In places where there are cases of diphtheria, colds (as they are called) are apt to become epidemic; whereas, with a much lower temperature and no diphtheria, the general health may in all respects be good; and if certain atmospheric conditions favour the spread of disease-germs, it is probable that those of diphtheria would be no exception. The amount of mortality depends upon the conditions of exudation, and these again upon the systemic affection: the amount of mortality is therefore a secondary result, and hardly to be relied upon in making a differential diagnosis.—I am, etc.

Southam, February 21st, 1878.

WALTER LATTEY.

SIR,—Under this heading, Mr. Lattey kindly draws my attention to a point upon which I had not commented in the communication printed in the *JOURNAL* of the 5th instant. As I intended simply to record a method of treatment, the point raised as to the distinction between "simple acute" and "specific" inflammation of the larynx is obviously a side issue; at the same time, I am glad of an opportunity of stating my impression that diphtheria, croup, and catarrhal laryngitis cannot be considered manifestations of the same blood-poison. In only one of these (diphtheria) can there be said to exist any blood-poisoning beyond that due to impeded respiration. I am further of opinion that all blood-poisoning is a consequence, not a cause, of the intensity of an affection—as, for instance, in vaccinia, in puerperal septicæmia; and further still, in the acute specific contagious diseases—order, Miasmatic (Aiken)—such as small-pox, scarlatina, measles, and so forth.

To specialise and point out the distinction between simple acute inflammation of the larynx and trachea (laryngo-tracheitis, "croup") and "specific" inflammation of the same (diphtheria), I should say that the former tends to a mucopurulent, perhaps somewhat tenacious, secretion, whilst the latter is characterised by the formation of a distinct coherent membrane on the mucous membrane of air-passages, œsophagus, and so forth. This membrane is not always to be detected during life; and as the symptoms in both cases are somewhat the same (especially amongst children and in the early stages), a satisfactory diagnosis cannot in all cases be arrived at until some progress has been made in the disease. It is obvious, under these circumstances, that treatment applicable to the one is not necessarily equally efficacious with the other.—I am, sir, yours very truly, J. MAUNSELL.

Sheffield Road, Barnsley, Yorkshire, January 16th, 1878.

SORE NIPPLES.

SIR,—A patient of mine, who suffered much after her last confinement from sore nipples, is anxious that the recurrence of her trouble shall be prevented. I shall feel obliged if any of your readers will suggest a good application to use now and during lactation. She is in her sixth month.—I am, etc., E. R. S.

DR. THOMAS S. PORRY (Chester).—Personally, we sympathise with our correspondent; but as the matter is one on which there exists a marked division of opinion, not unaccompanied by heated feeling, and as an official decision has been taken, it is better to avoid fruitless discussion.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

THE TITLE OF DOCTOR.

THE question raised by Mr. George Blackman has been so often, and for the last time quite recently, very fully discussed, that we can see no advantage in again raising it; as the answer must always be the same. There is no legal right for any one not possessing the diploma of M.D. to use the title of "Dr.," on the other hand, members and licentiates of the various colleges of physicians are very largely in the habit of doing so, and consider themselves entitled by courtesy to the appellation, on the strength of the fact that their diplomas describe them as physicians; and that in the dictionary definitions and in the ordinary parlance of society, not only are "physician" and "doctor" held to be equivalent descriptions, but the term "doctor" is applied to medical practitioners of all grades. The term "doctor," originally strictly indicative of an university degree, has at some remote period obtained an extended vernacular application, as if from the want of any other single word in the language to express the practitioner of medicine. The presence in the English language of some such word as the Saxon *læce* (which is now represented by *leech*=*kirudo*), the Danish *Læge*, or the German *Arzt*, would have saved much confusion.

DOCTORS OF PHYSIC AND PHYSICIANS.

THE following remarks, made more than a hundred years ago by a President of the London College of Physicians, will interest some of our readers. Boswell was engaged as advocate for a corporation which was being prosecuted by a physician because they had, in some public document, styled him "Doctor of Medicine" instead of "Physician." Boswell wished Dr. Johnson's opinion "whether Doctor of Medicine is not a legitimate title, and whether it may be considered as a disadvantageous distinction." Johnson replies under date February 7th, 1775: "I consulted this morning the President of the London College of Physicians, who says that with us 'Doctor of Physic' (we do not say 'Doctor of Medicine') is the highest title that a practitioner of physic can have; that 'Doctor' implies not only 'Physician,' but teacher of physic; that every 'Doctor' is legally a physician; but no man not a Doctor can practise physic but by licence particularly granted. The Doctorate is a licence itself."—*Boswell's Life of Johnson*.

MEDICAL FEES.

SIR—The subject of medical practitioners' fees being now upon the carpet of public opinion, I have deemed it necessary to submit to the profession, through the JOURNAL, the following points for ventilation, with the view of their being improved upon.

A. B. has been sent for to visit a patient eight miles distant from his residence during the day. Whilst A. B. is in the village, C. D., not feeling quite well, consults the former about himself, when he would not have sent for him, and A. B. charges both patients the full journey. I submit this to be unfair and unjust to both individuals, and were the separate charge taken into court, the plaintiff would be nonsuited. My practice is to charge only the actual party sending for me the journey, and all other patients on the spot, for services rendered or medicine supplied. This might be considered too liberal, and that I should rightly charge a small fee for my visit to all parties not fetching me. This plan applies also to any cases requiring my attendance without a messenger being specially despatched for me. Again, supposing that A. B. has to take a journey eight, ten, or fifteen miles distant, calling on his way, to or from, at several houses to see patients, he is not justified in charging every individual the fee for the full journey, but only a reasonable fee for his visit. My practice is only to charge a visit fee it takes one mile (not under) off my road, the same as at home under that distance during the day.

Perhaps your readers will favour me with their views upon the following scale of charges, which I always make. Day visit in my own village, *nil*; night visit in my own village, 5s.; one mile distant from my residence, 1s. 6d.; day visit; if exceeding one mile, and under three, 2s. 6d.; day visit; if three miles, or exceeding, day visit, 1s. per mile; double charges at night, not being less than 5s.; for labour cases, if engaged, one guinea; for labour cases, not engaged, two guineas; for 5ss draughts, 1s. 6d.; 3iv mixtures, 2s.; 3vi mixtures, 2s. 6d.; 3viii ditto, 3s.; for 3xii mixtures, 4s. 6d.; for each powder, 6d.; for consulting with another practitioner about any patient, *nil*.

I am informed that if A. B. be fetched ten miles distant from his residence, to a village with a good road thereto, his fee is one sovereign, whereas my fee to the same place is eight shillings for eight miles of travelling over bad mountainous and marshy ground by day. I think that some fair and reasonable scale of fees should be arranged immediately, either by the General Medical Council or by the British Medical Association, and that steps should be forthwith taken for their universal adoption by the profession, compulsorily or voluntarily. I also suggest that classes and examinations should be established for the purpose of studying professional etiquette for students, before receiving their qualifications to practise.—I remain, sir, yours faithfully,

Great House, Llanbister, January 17th, 1878.

T. J. EAMES BROWN.

THE TREATMENT OF SCURVY.

WITH reference to our article on the above subject on the 5th instant, Dr. W. H. Taylor (Anerley) writes to call attention to a paper of his, contributed to the *Lancet* in 1859, a reprint of which he has forwarded. It consists of an abstract of the observations of Mr. J. W. Taylor in the Arctic regions, at Evigtok, in Greenland, in 1854-5, and again at Exeter Sound in 1855-8. On both those occasions Mr. Taylor found fine oxalate of potassium, with a little free oxalic acid, made both a pleasant drink and an efficient antiscorbutic; and he further asserts that it was efficacious when lime-juice, pickles, preserved meat and vegetables, and whatever else may be included under the head of "other remedies," failed. Dr. Taylor, therefore, proposes to issue bioxalate of potassium with oxalic acid to the navy instead of lime-juice and preserved meat and vegetables. On this point we have to remark that the statements are much too vague to be accepted without more strict investigation, and that we should hesitate to believe that scurvy occurred where a "fair supply of preserved meat, vegetables, lime-juice, pickles, etc.," were given, and was then cured by means of bioxalate of potassium. The salts of oxalic acid are certainly known and admitted to be good antiscorbutics, but there is no proof that they are so much more so than lime-juice as to be effectual where the latter failed. It is one thing to say that lime-juice was supplied, but quite another to see that it was actually drunk by each individual. Dr. Taylor comes to the conclusion that albumen, in the form of white of egg, was also highly beneficial; but the only reference to it in his paper is a footnote, in which he states that: "Mr. J. W. Taylor found that, after eating eggs for a short time, the pliable nails [of the scorbutic pa-

tients] were soon restored to their natural tone, and other symptoms improved." This statement is most vague, for it gives no information as to the other articles taken at the same time; for if the men got bioxalate of potassium at the same time, how were they able to say that the albumen had any effect? It is such want of precision that renders so many so-called observations useless for instruction, or for the solution of any *quæstio vexata*. We also doubt very much if Dr. Taylor's plan of preserving white of egg in its original condition, by merely adding a little salt, would answer.

In conclusion, we may say that the paper proves nothing new, as the value of oxalates was already known; but one grave objection to their issue is their intensely poisonous character: an objection which does not hold good with citrates, tartrates, or the other remedies usually employed.

M. B. will find the information he seeks in Gant's and Norton's recent works.

A QUERY AS TO ITALIAN MEDICINE.

SIR,—I notice a very interesting letter in last Saturday's *BRITISH MEDICAL JOURNAL* from a correspondent at Rome respecting the case of the late King of Italy. Much prejudice prevails still amongst people who have travelled on the Continent against the professional ability of the Italian medical practitioner. This has not been removed, but rather increased, by the unfortunate result of Victor Emmanuel's illness, followed so rapidly by the premature and unexpected death of Sir William Stirling Maxwell, Bart., of Perthshire. He had gone to Italy for the winter on an antiquarian and literary investigation, was not ill in health when he left, and fell ill in Venice, where he was heard of last, and died within a fortnight of his arrival there, on January 16th last. I should be obliged, therefore, if means could be taken, through the extensive correspondence of your JOURNAL, to ascertain some medical particulars respecting the fatal case of this eminent Scotch historian and politician from any of the faculty at Venice. In the obituary notices in the Edinburgh papers on January 17th, it is stated he died from a fever, contracted in some of the capal-girt palaces of the old city; and it is supposed he had no English servant with him, and probably not the services of an English doctor.—I remain, yours sincerely,

W. T. BLACK.

Edinburgh, January 20th, 1878.

WE are indebted to correspondents for the following periodicals, containing news reports, and other matters of medical interest:—The Birmingham Daily Post; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Burdon Sanderson, London; Mr. Jonathan Hutchinson, London; Dr. B. Foster, Birmingham; Mr. W. S. Savory, London; Dr. Collie, Homerton; Dr. J. B. Bradbury, Cambridge; Mr. Rushton Parker, Liverpool; Dr. J. Milner Fothergill, London; Dr. Sawyer, Birmingham; Mr. Tweedy, London; Dr. H. Macnaughton Jones, Cork; Mr. Berkeley Hill, London; Dr. Newman, Stamford; Dr. J. Braxton Hicks, London; Dr. Grimshaw, Dublin; Dr. Napier, Fraserburgh; Mr. T. Holmes, London; Mr. Lowndes, Liverpool; Dr. R. H. Semple, London; Dr. MacLagan, Dundee; Mr. F. Mason, London; Mr. Reginald Harrison, Liverpool; W.; Dr. H. Charlton Bastian, London; Mr. Balmain Squire, London; Mr. Grant, Birmingham; Mr. J. Farrar, Morecambe; Dr. Gairdner, Glasgow; Mr. C. M. Johnson, Lancaster; Mr. C. R. Thompson, Westerham; Dr. Pye-Smith, London; Dr. Heywood Smith, London; Dr. Gowers, London; Dr. D. R. Alcock, Waterford; M.D.; Dr. Marcet, Cannes; Dr. T. M. Pollard, Dunkineely; Mr. J. W. Annington, Barnsley; Dr. James Clark, Lichfield; The Secretary of Apothecaries' Hall; M.; Mr. C. S. Lock, London; Dr. Greenfield, London; Dr. Althaus, London; Dr. Wicks, Newcastle-upon-Tyne; Mr. Alban Doran, London; Dr. Brabazon, Bath; The Secretary of the Medical Society of London; Dr. Tripe, Hackney; Dr. G. H. B. Macleod, Glasgow; Dr. Bacon, Fulbourn; Our Liverpool Correspondent; Dr. A. K. Irvine, Glasgow; Mr. J. Hamilton Craigie, London; Mr. Walter Lattey, Southampton; Dr. G. R. Barnes, Ewell; Mr. Wm. Stokes, Dublin; Dr. Josiah Williams, Sheffield; Our Paris Correspondent; Dr. T. K. Chambers, London; Mr. R. Smith, Heckfield; The Registrar-General of Ireland; X.; Dr. R. H. Carpenter, Stockwell; Mr. C. W. Dawson, Humberby; K.; Mr. W. H. Box, Chirk; Dr. Duffield, London; The Registrar-General of England; Dr. Edis, London; Mr. Pugin Thornton, London; Dr. James Russell, Birmingham; Mr. J. Knowsley Thornton, London; Mr. James Startin, London; Dr. Gray, Castlewellan; Mr. Thomas McLaughlin, Londonderry; Our Edinburgh Correspondent; Surgeon-Major Martin, Netley; Our Dublin Correspondent; Dr. Bourneville, Paris; Dr. Pye-Smith, London; Dr. Hughlings Jackson, London; Dr. T. Birt, Leamington; Mr. C. Hunter, Hastings; Dr. J. W. Hamill, Winchester; Mr. W. N. Edgehill, Manchester; Dr. J. Maunsell, Barnsley; Mr. G. F. Rossiter, Weston-super-Mare; Mr. T. J. Eames Brown, Llanbister; etc.

CLINICAL LECTURE ON PHLEBITIS.

By WILLIAM S. SAVORY, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

I HAVE chosen the subject of Phlebitis for consideration to-day, because of late there has been an unusual number of instructive examples of it in our wards, and because it is a disease on the nature and character of which wide difference of opinion—I may venture to say, even much confusion of thought—still prevails. It must be confessed, too, that many of its causes, and among these perhaps the chief, are still obscure or altogether in the dark.

I need not tell you that our views of the pathology of this affection have, within the last quarter of a century or so, undergone a radical change. The old distinction between adhesive and suppurative phlebitis is now no longer held. Adhesive phlebitis is no longer recognised, because it is now known that the inflamed vein is rendered solid, its channel is blocked up, not by the effusion of plastic lymph from its wall, but by a coagulation of the blood which it contains. There is thrombosis. Suppurative phlebitis, in the old sense, is now no longer recognised, because we know that the fluid substance found in some cases in the interior of the vessel is not pus, in the proper acceptance of the term, but blood-clot, which has softened and become fluid from degeneration: puriform, but not purulent. That pus, however, or a fluid which at least cannot be distinguished from pus, may occasionally be found in the interior of a vein, cannot be denied. The coats of a vein, with more or less of the surrounding tissue, may inflame and suppurate, the integrity of the coats of the vessel may be destroyed, and the canal and space around may form a common cavity filled with pus; or, a vein may be wounded or opened by ulceration, and then some pus may enter from the outside. But, of course, events like this are not to be confounded with the old doctrine of suppurative phlebitis. The former of the two cases just mentioned is, of course, truly one of suppurative phlebitis; but, nevertheless, it is not the formation of pus in the canal by suppurative of its lining membrane. Yet here I cannot refrain from pointing out to you an instance of the extreme value of clear and sound observation, even though the interpretation of the facts recorded be at fault. Read the lecture on Phlebitis in the earlier editions of Sir Thomas Watson's great work. Read it again carefully, for even now it will more than repay you. It is, indeed, a sketch of the affection from the old view, but, study it now, by the light of modern pathology, and see how true the master's hand has been to nature.

Then, in phlebitis there is inflammation of the coats of the vein; and this is associated with the coagulation of the blood in the canal: thrombosis. This clot may be disposed of in various ways, of which more anon. The inflammation of the walls of the vein may lead to thickening from lymph, or to suppuration more or less extensive between the coats, which may, and perhaps usually does, extend into the surrounding cellular tissue. Here is an example. William E., aged 44, stout and rather florid, a clerk in a newspaper office, was admitted into the hospital in the following circumstances. Twelve days previously, being, he believed, in perfect health, he tripped on a stone and twisted his right foot and leg. Two days afterwards, he felt a pricking pain in the thigh in the course of the saphena vein, and the next day there was a red and painful swelling in the upper part. On admission, there was considerable swelling, not well defined, for about six inches in the course of the vein at the upper part. It was firm, painful, very tender, and hot, with a blush on the surface. The foot and leg were œdematous. He declared that he felt well, and there was no rise of temperature or other sign of constitutional disturbance. But the local signs of inflammation and suppuration increased, and, on the fourth day, fluctuation to some extent being obvious, a free incision was made, and about two ounces of sanious pus evacuated. The portion of vein in the midst of this was to a great extent evidently destroyed. From this time, the swelling and induration rapidly subsided. The wound continued to discharge pus, which soon became quite healthy, for about a fortnight. During this time, he made no complaint, but at the end of it he had a sudden and decided attack of gout in the foot, and he was in the hospital for another month. When he left, the vein could be traced, prominent and hard, from the wound down nearly to the knee; but, three or four weeks afterwards, it had become much less distinct.

First among the causes of phlebitis may be mentioned thrombosis;

and this at once opens the important question of the relation of thrombosis to phlebitis. As already mentioned, the two states are usually found together, and the thrombosis is regarded as included in, or a part of, the phlebitis; but let us ask whether thrombosis is always a part of phlebitis. Does phlebitis ever exist without any coagulation in the canal? If we turn to our museums, or to the records of examinations, I think we shall fail to obtain satisfactory evidence of the presence of actual phlebitis without any thrombosis. At all events, as a rule, veins which bear marks of inflammation contain fibrine; and the evidence thus obtained by dissection is borne out by clinical observation. I do not think there is good evidence of veins remaining free from plugging in the course of inflammation of their walls. Nay, there is for the most part very decided evidence that the canal is plugged. I say advisedly, in the course of inflammation; because, granted that thrombosis is associated with phlebitis, the further question comes: In what relation to each other do these states stand? Which is cause? which is effect? Or, more cautiously: If they are not invariably simultaneous at the outset, which of these two precedes the other? Are the signs of phlebitis ever present without any evidence of thrombosis? Rarely, I should say. More rarely, I venture to think, than is generally believed; but exceptionally, sometimes at the commencement, a superficial vein will exhibit plainly the signs of inflammation, and yet be comparatively soft and compressible, and admit apparently of being so emptied that it would seem as if it still contained nothing but fluid blood. Therefore, we may believe that phlebitis is sometimes a cause of thrombosis. Much more frequently the two conditions appear together. Thrombosis is found simultaneously with the evidence of inflammation of vein-walls. But, now, thrombosis may occur without phlebitis. This is undoubtedly far more common; and in such cases the thrombosis may or may not be followed by phlebitis. It is sometimes the apparent cause of phlebitis; but it sometimes exists for long periods without evidence, either during life or after death, of inflammation.

If, then, thrombosis is to be reckoned among the causes, and I should say it was one of the principal, of phlebitis, we ought next to inquire into the conditions under which thrombosis is likely to occur, that is, when it precedes or is not associated with phlebitis. And here it must be confessed that, in seeking any kind of answer to this question, we pass into a region of pathology singularly obscure.

In certain states of the constitution, or conditions of the system, thrombosis is likely to occur. We all know how the blood slowly coagulates in the great vessels after death, and that this change in some cases precedes death. It occurs during the act of dying, more especially perhaps when this process is prolonged or marked by extreme exhaustion, or when it forms the closing scene of long-continued and exhausting disease. And with reference to this, I may here remind you that much discussion has arisen on the question: whether clots, which are found in certain cases, have been formed during life or after death. The question is, after all, not a very profitable one; and it cannot, from the very nature of the case, admit of a definite answer. The process of dying is oftentimes very gradual. Molecular death is not synchronous with systemic death; and the coagulation of the blood, which is the visible sign of its dying, is in the body oftentimes a very ill-defined change. It is more satisfactory to inquire the age of blood-clots; whether these are quite recent, or bear evidence of change subsequent to their formation, in their degree of contraction, their dryness, density, and corrugation; in their colour and construction, whether laminated, or in minute structure fibrous; or—and this is usually most marked in the centre—showing signs of degeneration; or adherent to the lining membrane of the vessel which is more or less affected or destroyed. Only one word further with regard to their colour. These clots are generally described as becoming paler with age. But this holds good in one respect only. When clots are formed in the living vessels, and have at first the colour of the blood, undoubtedly, as time goes on, they gradually grow paler. The hæmatine is absorbed, they come to consist of fibrine only, and this at length assumes a pale yellow or buff tint, and so it may remain. But we all know very well that, after death, clots are frequently found in the cavities of the heart and larger vessels, which are so soft and uniform that we have no doubt they have been rapidly and recently formed—little or no doubt that they have been formed after death—and which are, nevertheless, very much paler; in fact, almost white. Of course, the immediate explanation of this is obvious enough. It results from the mode of their formation, and the difference is due to the relation which the fibrine holds to the cells during its production. I need not dwell upon this any further.

But, again: "The great veins are very liable to become obstructed by clots forming in them when the patient is greatly debilitated, and when the circulation is enfeebled—by inflammatory affections, by discharging abscesses, difficult labours, and other causes." I have quoted

here from Professor Humphry's thesis, "On the Coagulation of the Blood in the Venous System during Life", which, although written now nearly twenty years ago, is yet so faithful an account of the affection that I can very strongly advise you to study it. It is singularly clear, considering the subject of which it treats, short but full, and requires very little addition, and still less correction, to bring it up to the present day. Yes. This thrombosis is an insidious affection, stealing upon convalescence from fevers or other exhausting diseases; and though but seldom directly destroying life, yet causing much tedious trouble, and sometimes permanently interfering with the free and full use of a limb.*

In such cases, it would seem that the origin of the mischief is in the blood or its circulation; but still we must seek for an explanation of the fact that certain veins, those of the lower extremities, are far more liable to become plugged than others. And here, again, I cannot add anything worth your attention to what Professor Humphry has already set forth in the thesis referred to; and, therefore, to his pages I very gladly refer you. Note particularly his remarks on the arrangement of the veins, and on the structure of the internal surface of the popliteal.

But sometimes simple thrombosis appears to be determined by causes which are more purely local. Thus pressure on veins, producing obstruction of the circulation, may lead to the formation of clots.

For instance: a man about seventy, rather thin and vigorous for his years, had been laid up three months with simple transverse fracture of the patella, when, his health having been all the while good, the internal saphena vein of that limb, a few inches above the knee, became painful, tender, thickened, and solid. This was apparently due to slight pressure thereabout from the edge of a leathern splint which he wore. Some œdema of the limb soon followed. The trouble lasted some weeks, but did not extend, and his general health remained good, he throughout insisting that it was of no consequence.

So also, and with far more probability, will injury, such as laceration of the walls, or the presence of adjoining mischief. Thus inflammation or its products may coagulate the blood. But in the last case, the thrombosis is usually associated with and forms part of phlebitis; and to the causes of phlebitis I now return.

Phlebitis, then, may result from wounds of various kinds and other injuries of veins. But opinion on the liability of veins to inflame from traumatic causes, such as wounds, has been greatly modified in recent years. Formerly, wounds of veins were regarded with the utmost fear by the surgeon; for of all structures the veins were believed to be the most intolerant of injury, and it was only under pressure of most urgent need that a surgeon could be induced to apply a ligature to a bleeding vein—as, for instance, in an amputation. I remember when Mr. Skey stood, I think, alone among leading surgeons in exception to this view. But how remarkably has practice changed in this respect! Now-a-days, we very frequently see veins tied in various circumstances, and sometimes otherwise far more roughly treated, with comparatively little anxiety for the event; and it must be admitted that this confidence is largely justified by the experience of surgery. To what is this striking revolution in doctrine and practice due? Partly to extended observation, to deeper clinical experience, and partly to the advance of pathology, to the separation of simple thrombosis from phlebitis, and to the distinction drawn between them; and I believe also, though this is not acknowledged, to sounder and larger views of the pathology of pyæmia. On this point, however, I shall have something more to say presently.

Still, no doubt traumatic causes play a very important part in the production of phlebitis, and very often it is provoked by an extension of mischief in the neighbourhood of the larger veins, which become implicated. Take the following case. A spare active man, about forty-five, fond of and accustomed to what is called "free living", fell down on a skating-rink and struck his elbow violently. There was no fracture, but considerable bruising of the olecranon and adjacent parts. The arm was disabled for two or three weeks, and he went about during that time carrying it in a sling. I believe, however, that he submitted to no restraint so far as eating and drinking were concerned. A month after the injury, he came to me, complaining of more pain about the elbow, which now extended up the arm, and of the somewhat sudden accession of acute tenderness and considerable swelling. I found a line of tenderness, corresponding to the basilic vein, from the elbow to the middle of the arm; and here the vessel was unduly prominent and apparently plugged. With difficulty, I induced him to give heed to the mischief and to take more care. For some days, the symptoms, especially the swelling and tension, increased, suppuration seemed imminent, and I fancied that he felt more ill than he was willing to

admit; but there were no obvious signs of much constitutional disturbance, and never any œdema of the forearm. At length, but very slowly, the parts regained their normal condition, and even the vein itself ceased to be conspicuous.

Thus phlebitis may complicate gangrene, ulceration, erysipelas, and other affections, as in the following case. Elizabeth W., aged 38, was admitted into the hospital on March 27th, 1877. In the spring of 1876, this woman's descending colon was opened in the loin for intestinal obstruction, consequent on malignant disease of the uterus and rectum; and ever since the contents of the bowel had passed through the wound. More recently, she had been much troubled by prolapse of the colon, and the day before her admission it protruded to a far greater extent than ever. She had been unable to reduce it, and nothing had passed since. An everted portion of the colon, more than a foot in length, was outside. This was reduced under ether with considerable difficulty, and retained by a pad and bandage, which were removed daily to allow of defæcation. She was very weak, and occasionally suffered much from pain and sickness, which were relieved by opium. There was constant tendency to prolapse of the bowel. A month after admission, she complained of great pain in the left leg. It swelled rapidly, and the œdema soon reached the knee. The skin was pale. The superficial veins of the leg were distended and tortuous, and the internal saphena obviously plugged. There was great tenderness along its whole course. Temperature, 99.8 deg. A flannel bandage was applied. The limb remained in this state for a fortnight. Then the pain and distension slowly abated, and, three weeks from the commencement of the attack, she was tolerably comfortable, with some thickening only in the course of the saphena vein.

In this class may be reckoned that form of phlebitis which sometimes occurs after delivery: puerperal phlebitis. There is, indeed, much to account for thrombosis or phlebitis in the conditions which exist after parturition. A large surface of the uterus, left denuded by the separation of the placenta, and, opening freely upon this, large blood canals, which pass directly into veins. The formation in these of clot, as the inevitable consequence of the process; and, most perilous of all, the rapid changes of decomposition to which the fluids in the interior, and even in the walls, of the uterus are oftentimes liable.

Then there are causes of phlebitis which is more common in men than in women, that may be termed idiopathic. The rheumatic diathesis was formerly supposed to be a predisposing cause; but now, perhaps, for rheumatism we should substitute gout, and speak of the gouty diathesis as among the most prevalent of its causes. You all know what Sir James Paget has written on this subject—gouty phlebitis; and I shall not venture to add any touches to his picture.

Then phlebitis often exists in the course of blood-poisoning in its various forms. And much has been said and written, and great difference of opinion still prevails, on the relation which these affections hold to each other. For my own part, I believe that, when phlebitis is associated with blood-poisoning, in the majority of cases the phlebitis either intervenes as one of the local effects of the mischief, or, if it appear at the outset, it owes its origin to the same cause that produces the more universal disturbance. That, in such cases, phlebitis is the local and pyæmia the general effect of blood-poison. But, for the evidence upon which this opinion is founded, I must refer you to our hospital reports. Of the effects of phlebitis, I will speak presently.

Phlebitis is not common in childhood. It is not often seen so early as in the following case. Frederick V., aged 15, pale and delicate, a wine porter, complained of inability to flex fully his left knee and of pain in the ham. The saphena veins of both legs, chiefly at the outer and back part, were rather varicose. Those on the left side were especially filled and tender. The popliteal space was unnaturally full, tense, and tender on pressure. There was no œdema. He told us that the veins of the leg had always been conspicuous, but until recently had given him no trouble. Three or four weeks before admission, he fell when alighting from a train, and sprained his left leg; but of this he took no notice, and his present symptoms did not commence until a fortnight afterwards. There was no obvious disturbance of his health. By rest in bed for a few days, the fullness and tenderness in the ham abated, and then pressure detected a deep ill-defined mass, which was believed to be the popliteal vein. About a week after his admission, the left calf became swollen and tender, and then a small, firm, very tender spot was discovered about the middle of the left leg, just behind the fibula, which was taken for a plugged vein. At this time, the temperature in the axilla was 99 deg.; pulse, 64 to 72. But no further mischief appeared. He generally complained, when asked, of aching pain either in the ham or calf, or both, but he could flex the leg much better. At the end of a fortnight, he left the hospital with the veins of both legs still varicose, but with no material tenderness in any portion of them. Ten days afterwards, however, he was readmitted with more

* You will find a case of thrombosis, due to debility, without any previous definite disease, admirably described by Dr. Tuckwell in the *Medical Times and Gazette* of February 13th, 1864, p. 170.

fulness and tenderness in the left ham; and then the femoral vein in Scarpa's triangle was tender, prominent, and distinctly hard, and the change could be traced beyond Poupart's ligament. But there was very little oedema of the limb. He was kept at rest in bed. The mischief in the left limb gradually subsided; but, in the course of the third week, he complained of his right thigh, and the right femoral vein was found to be tender, swollen, and evidently plugged also, up to or even above Poupart's ligament; but no further mischief could be discovered in that limb. During the next week, he frequently complained of headache and heat, and his appetite failed, but there was no rise of pulse or of temperature. He was in the hospital nine weeks, during which time this evidence of fresh mischief slowly passed away; and, when he was discharged, hardly any abnormal condition could be discovered, either in the popliteal space or in Scarpa's triangle.

To what cause should the mischief be attributed in the following case? A young woman, aged 20, rather stout but of delicate aspect, was admitted into the hospital, complaining of much pain in the right leg. The whole limb was very slightly swollen, but the internal saphena vein stood out prominently, and could be distinctly traced with the eye almost from its commencement in front of the ankle to the middle of the thigh. To the touch, it was firm and cord-like throughout its entire course, and very tender. She told us that the limb had become painful a fortnight before her admission, and that the pain had gradually increased until she was hardly able to put her foot to the ground. Five months since, she was in the hospital suffering from the same affection of the same vein, with weakness and palpitation of the heart; but she recovered from this, the vein resuming its natural condition, and remained well until the present attack. Nothing amiss in the heart or elsewhere could be discovered. By rest in bed and warm fomentations the pain, which never appeared to be very severe, and tenderness gradually subsided, but the prominence and hardness of the vein remained. After being confined to bed for about three weeks, a bandage was applied to the limb, and she was allowed to sit up, and then to move about the ward. In another week, she was free from complaint, and able to walk without discomfort, but with a hard and prominent saphena vein. In the course of another week or two, however, before she was discharged, the vein apparently quite recovered its healthy state. Nothing unnatural could be detected by examination. During the time she was under observation, there was no perceptible derangement of her general health.

[To be continued.]

LOCALISATION IN SPINAL DISEASE:

ILLUSTRATED BY (1) A CASE OF "ATROPHIC PARALYSIS" IN AN ADULT; (2) A CASE OF CENTRAL MYELITIS;
(3) A CASE OF ALCOHOLIC PARAPLEGIA.*

By JAMES RUSSELL, M.D.,
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THE two remaining cases are introduced for the contrast they present with the one just narrated. The loss of power and atrophy of muscular tissue in the patients were as pronounced as in the subject of the foregoing case; but, in addition, the function of sensation was seriously involved, indicating an extension of the morbid process to the region of the posterior horns. The two cases, though occurring from different causes, appear alike in their nature so far as the spinal symptoms were concerned. The second of the two is one of those melancholy instances described by Dr. Wilks (*Med. Times and Gaz.*, 1868, vol. ii, p. 470; and *Lancet*, 1872, vol. i, p. 320), and also referred to by Dr. Lockhart Clarke in the latter volume (p. 427), under the title of alcoholic paraplegia, which they have observed more particularly among females. On the Continent, Dr. Wilks ascribes the malady specially to imbibition of absinthe. In this form of paralysis, the lower extremities are especially liable to be affected, as is illustrated by my patient.

Both cases have much in common with the form of central myelitis described by M. Charcot, in which the entire grey tract is implicated, and the sensitive function which is related to the posterior horn suffers with the motor. The patients, however, were free from the more formidable phenomena of paralysis of the bladder and rectum, and the tendency to rapid production of sloughs, described by that observer as often connected with this particular disease. In the second case, the cerebral disorders of chronic alcoholism were added to the evidence of spinal disease. In the first case, the early symptoms undoubtedly point to the membranes as being affected at the outset, and probably

some of the pain complained of by the patient was due to irritation of the posterior nerve-roots. These pains in the limbs, especially in the region of the joints, which constituted a prominent subject of complaint in both of my patients, are noticed by Dr. Wilks. They have no small importance in reference to diagnosis, from the danger to which they give rise of the case being mistaken for rheumatism by a hasty observer. M. Charcot has, however, added fresh interest to the subject, in connection with the localisation of disease, by calling attention to the peculiar character which certain of these pains present, clearly observable in the first of my two patients; viz., that of their occurring in paroxysms, and presenting a peculiar lancinating character, recalling forcibly the distinctive nature of the pains of locomotor ataxy. From these considerations, M. Charcot suggests that the presence of pains answering to this description points to the probability of the disease having reached that district of the posterior columns in which certain fibres from the posterior root of the nerves pass to the grey matter. This region M. Charcot distinguishes by the designation "*la zone radicaire postérieure*". This zone is distinguished from the remaining portion of the posterior column (the column of Goll) by being developed at an earlier period, and is the seat, as M. Charcot demonstrates, of those changes which produce the phenomena of locomotor ataxy. It is worth adding that Dr. Wilks observes that the symptoms in alcoholic paraplegia are sometimes confined to the legs, and resemble in character the symptoms of locomotor ataxy.

CASE II.—A. R., aged 38. She presented a good family history. She had never been rheumatic. The account she gave of herself disclosed the fact that she had probably suffered in early life from an attack similar to her present one, but followed by a still more protracted recovery. She stated that, when seventeen years of age, she was in Gloucester Infirmary for nine months with symptoms like her present ones. She had severe pains in her limbs, and her legs wasted even more rapidly than they did on the present occasion. She was in bed for nine months, and even at the end of that time "had no use in her joints". She could raise her limbs in bed, but was unable to stand or walk, or even to feed herself. It was two years before her recovery was complete. She also had sharp pain in the occipital region and over the eyes, and could not see to read. She married when twenty-three years of age, and has had five children and two miscarriages. She is free from any evidence of syphilis. She is much employed in carrying heavy bundles of catalogues to and from the printer's, and is often wet through. She refers to one particular occasion, when she got her feet wet with snow-water. An attack of bronchitis was the consequence, for which she kept her bed for five weeks; and it was during the course of this illness that the first symptoms of her present complaint appeared, about four months before her admission into the Birmingham General Hospital. Her complaint began with pain of great severity, apparently meningeal, across the loins, reaching round the lower part of the abdomen and in the flank, which often prevented her from rising after having seated herself. Her appetite left her; but she was not aware of having had fever, though she was subject to attacks of burning heat, which came over her suddenly three or four times a day, accompanied by a sense of great weakness. Then came on severe pain in the feet and ankles; and afterwards she felt pain in the hands and arms and in the shoulder-blades. These pains were entirely without swelling; she describes them as being like cramps. They would attack her shoulders unawares, and shoot down the arms, so as to make her drop anything she had in her hand. She also spoke of formication in the soles of the feet and in the calves. She also had pain through the head from side to side, which caused her to forget everything for the time. She was treated for rheumatism; but in a month after the beginning of the illness she began to lose power in the legs, the feebleness steadily increasing. At the same time, "the flesh of her legs fell away rapidly". For the month preceding her admission into hospital, she was quite unable to walk, and for the last fortnight she kept her bed. The muscular atrophy increased with the paralysis; but in time her arms shared in the loss of power, and for a month before she came under my care she could not hold her needle in sewing. Her breath, too, became short, probably from deficient power in the inspiratory muscles. Whilst able to walk, want of breath often compelled her to stop. It does not appear that the sphincters were weakened. Whilst in the hospital, she complained of some urinary irritation, probably accounted for by descent of the uterus.

At admission, four months after the beginning of her complaint, she presented the appearance of a sound constitution, though she was thin. She had a remarkably apathetic melancholy manner. When talking, she often shed tears, and spoke in a very low tone. I may at once state that this peculiarity of manner was very prominent through the greater part of her illness, but underwent a striking change when improvement set in. She was unable to stand or to raise her feet from the

* Concluded from page 122 of last number.

bed. Muscular power in the upper extremities was low. Both legs and thighs were greatly wasted, as will appear from the measurements to be given below. Faradic contractility was very low; in the arms, it was normal. The chest expanded less than three-quarters of an inch on forced inspiration. Sensibility in all its forms, including electro-sensibility, was greatly lowered in the lower extremities and abdominal parietes. It required a sharp thrust of the compasses to make their points felt; but the power of discriminating between heat and cold remained. Anæsthesia existed also in the upper extremities, but in a minor degree. The temperature in the axilla was normal. All her functions were performed naturally, excepting that menstruation had ceased since her illness began.

During the first six weeks of her residence, her symptoms showed no sign of improvement. The anæsthesia became more profound; muscular power still further lessened in the upper extremities, so that she could not retain anything long in her grasp without tremor in her arm and the certainty of dropping what she was holding. The deltoids also participated, and she could not raise her arms above the horizontal. Atrophy of the muscles increased, and the palmar eminences wasted, disclosing the metacarpal bone in the thenar eminences. Cutaneous sensibility was decidedly deadened in the fingers. She continued to make great complaint of darting pain in the blade-bones, shooting from shoulder to shoulder; and had constant paroxysms of pain starting from the fingers and darting to the wrists, leaving the hands numb. In addition, her feet and legs were numb, and she was kept awake by pains in the knees and ankles and up the leg-bones. She never presented any evidence of the exalted reflex irritability nor of the spasmodic movements of meningitis; nor was there any pain in the vertebral region. She was remarkably intolerant of the impression of cold, and "could bear any quantity of clothes". Her appetite continued defective, and her spirits depressed. Her bowels were costive.

The treatment had consisted of blisters on the spinal region; the full administration of iodide of potassium for some time, combined with the liquid extract of ergot; afterwards, of bichloride in small doses, which affected her gums. She was then placed on tincture of belladonna up to doses of twelve minims. At the end of the sixth week, the progress of the disease seemed checked. Improvement first showed itself by commencing return of sensation in the lower extremities. The various pains lessened in severity and became less frequent. Then the patient became able to grasp more steadily. Contemporaneously with these signs of amendment, the lower extremities became stronger; and in the tenth week of her residence in the hospital she was able to creep along, but it was not until the end of the third month that she could cross the ward on foot. With improvement in other respects, a marked change occurred in her general demeanour; she became cheerful, and her voice in talking lost its feebleness. The following observations on the girth of her limbs will illustrate the course of the malady through the muscular atrophy by which it was attended. The patient was admitted on February 17th. (The measurement of the thigh was taken seven inches above the patella.)

March 10th. Right thigh, $14\frac{1}{2}$ inches; left thigh, 15 inches; right calf, 9 inches; left calf, $9\frac{1}{2}$ inches.

April 16th. Right thigh, $12\frac{3}{4}$ inches; left thigh, $13\frac{1}{2}$ inches; right calf, 8 inches; left calf, $8\frac{1}{2}$ inches.

May 31st. Right thigh, 16 inches; left thigh, $16\frac{1}{2}$ inches; right calf, $9\frac{1}{4}$ inches; left calf, $9\frac{1}{2}$ inches.

August 2nd. Right thigh, $17\frac{1}{2}$ inches; left thigh, 18 inches; right calf, $9\frac{3}{4}$ inches; left calf, $10\frac{1}{4}$ inches.

March 10th. Expansion of chest by forced inspiration, under three-quarters of an inch.

May 26th. Expansion of chest by forced inspiration, over an inch and a half.

During the course of her recovery, a fresh symptom appeared: paroxysms of profuse perspiration, soaking her clothes and pouring off her face. Some of these paroxysms lasted through a day or a night; otherwise for two or three hours. The nurse stated that she became scarlet all over when the perspiration occurred. The temperature of the axilla was from 98 to 97 deg. during the perspiration. On one occasion, the temperature of the hand was tested, and found to be 92 deg. As stated, she was admitted on February 17th. She left the hospital cured on September 1st.

CASE III.—The history of this case is, unfortunately, very defective, as my colleague in attendance had not seen the patient during the first part of her illness, and she had been removed from her own home. The patient had been addicted to habits of intemperance for an unknown period. She had certainly taken spirits; probably other liquids also. She had been compelled to keep her bed for a month on account of loss of power in the lower extremities. For how long power had been

failing, was not known. There was also an account of severe pain in the legs, and especially in the feet. At the time of my visit, her state of mental disorder prevented her from giving any clear account of her symptoms; but the nurse stated that she complained much of "chilblains" in her feet, and that she begged her to take off her boots, as they hurt her feet. There was also some indefinite account of pain in the lower part of the abdomen. When I saw her, there were much mental feebleness and some delusion; but, when her attention was roused in some special manner, she answered rationally for the moment, and obeyed directions with a fair degree of promptitude. When left to herself, she talked without reference to the reality of her position, and often tried to get out of bed. She had only sufficient power in her lower extremities to enable her to drag them about in bed. Muscular atrophy in the lower limbs was extreme. Sensation was so much impaired that a pin could be plunged deeply in the substance of the leg without eliciting any evidence of being felt. Her upper extremities were probably unaffected. She retained full control over the sphincters. Three days before my visit, her temperature was 104 deg.; it had declined to 100 deg. Her face had a healthy aspect; her appetite was good. There was no enlargement of the liver, and no albumen in the urine. The organs within the chest were healthy.

Two months after my visit, my friend writes me word that the patient remained with little change for five weeks. Her pulse averaged 110. Morning temperature was 100 deg.; evening, 102 deg. The temperature is now normal in the morning; 100 deg. in the evening. She was very talkative and excited, and manifested various delusions; she then became depressed, frequently crying. Her mind now is in a more healthy condition, though she never asks about her home. Sensation is restored in her legs; but atrophy of the muscles remains, and the flexor muscles appear to be acquiring preponderating power. She lies with her knees bent, and has pain in them. Her appetite has remained good; she has taken food well. Her bowels have been very costive. She has full power over her evacuations.

POSTSCRIPT.—I have had the opportunity of again seeing the patient the subject of Case I (page 121), three months after the last note of his case was taken. The condition of the limb has undergone no further change; but the young man now possesses some power of independent movement in the different segments of the lower extremity whilst walking. This statement confirms Meyer's observation that the disease in the adult disables less than in children.

PHYSICIANS' PRESCRIPTIONS AND THE SALE OF POISONS ACT.

By JULIUS ALTHAUS, M.D.,

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AT the last meeting of the Clinical Society of London, I drew attention to a case of chorea, in which the patient had done himself a great deal of harm, and apparently killed himself, by the immoderate use of the hydrate of chloral, for which I had given him a single prescription in 1870, and which he continued, contrary to my advice, to take incessantly until his death in 1874. This case suggests an important question, which must, at various times, have occupied the professional mind; viz., whether the custom obtaining in this country, that patients may, at their own discretion and for years, procure from dispensing chemists any amount of certain powerful medicines, such as strychnia, opium, arsenic, etc., for which only one prescription has been given, is a proper one. In the case to which I allude, the patient had been in the habit of ordering wholesale supplies of the chloral mixture at a time from a leading West-End establishment, and showed me, at one of my visits, to my horror, a box full of twelve bottles of this medicine, which he had just received.

This custom, which has recently grown to excessive dimensions, is evidently a reprehensible one, inasmuch as it renders it impossible for the physician to regulate the dose which he wishes to be taken, and likewise opens the door to crime. Opium-eating and chloral-drinking may thus be readily induced, and a medicine which was intended to benefit becomes a curse to the patient. Again, secret poisoning, which remains undetected and unpunished, would appear to be by no means uncommon in this country, where the provisions of the Sale of Poisons Act are rendered to a great extent nugatory by the unlimited use which may be made of a formula, not only by the patient to whom it was originally given, but also by his friends, for whom, as is well known, the chemist frequently copies a prescription. Thus the would-be poisoner may go with a receipt for a small quantity of laudanum to twenty different chemists, put the supplies received together, and give the dose

to his intended victim. That this is no mere fancy picture, will be readily conceded by men of large experience in the profession.

I have taken some trouble to ascertain the custom which obtains in other countries in this respect, and have found that, with the only exception of Germany and Austria, complete liberty of the subject seems to exist everywhere as far as this point is concerned. In Holland and Belgium, there is no law restricting the chemist from again and again compounding the same prescription. Dr. J. Morel of Ghent tells me that, in Brussels and some other large towns, chemists' shops are hardly anything but magazines for the sale of patent medicines, which anybody may procure without trouble. In the smaller towns, there is less of this; but the doctors are in the habit of telling their patients to keep their prescriptions and have them made up again and again, if found useful. The consequence is, that the patient gains confidence in a prescription, instead of in the judgment of the doctor; he labels certain receipts as good for certain diseases or symptoms; thinks himself, after a time, perfectly able to judge as to what ought to be given in a special case, and, when a friend is ill, takes some formula out of his pocketbook and advises him to have it made up.

In Spain, patients can do exactly as they like. Dr. Jelly of Madrid says, however, that less mischief is done by Spaniards in this respect than by others, because Spanish doctors generally only write prescriptions for some simple infusions, or a small quantity of some advertised French nostrum, just sufficient to last for a day, and order their patients to come back to the doctor every day until they are cured. Dr. Jelly has, however, found many English travellers come to him with a pocketful of receipts from London physicians, and a plan of treatment laid down sufficient to last them a lifetime, and he thinks that the profession are as much to blame in the matter as the patients.

As for Italy, Dr. Erhardt of Rome tells me that prescriptions may be made up again and again without the sanction of the prescriber; but it sometimes occurs that, if they be very frequently asked for, the chemist will refuse to make them up again without receiving the doctor's assent. Italians, like Spaniards, take, as a rule, very little medicine, and Italian practitioners rarely order potent medicines, so that less harm is done in that country in this respect than elsewhere.

Dr. Frank of Cannes says that the same evil of which I complain here exists in France, and that he has no doubt that a great deal of harm is often done in consequence.

I understand from Dr. Marion Sims that, in the United States, there is absolute liberty to procure any quantities of powerful drugs from a single receipt, given perhaps many years ago, and that to his personal knowledge patients have ruined their health by the indiscriminate use of medicines at a time when these were no longer required.

Legislation on this subject exists, as far as I have been able to ascertain, only in Germany and Austria. Professor Westphal of Berlin says that, in Prussia, as long ago as 1801, a law was enacted requiring that all prescriptions written by either physicians or surgeons, and containing drastic purgatives, emetics, remedies used for bringing on menstruation and increasing urinary secretion, opiates and similar powerful drugs, shall, after having once been made up again, not be prepared a second time without the knowledge and approval of the prescriber, in consideration that such means may have been beneficial at the time they were ordered, while they might cause the death of a person at another time. As some inconvenience has arisen from too frequent applications to the prescriber for renewal, it has become of late years the custom in Germany for the prescriber, in case he thinks renewal desirable, to add the word *reiteretur* at once, and he may add to this the words *bis*, *ter*, etc., at his discretion. Unless this appear on the prescription, no good chemist will renew an old formula; and, if he did so, he would be punishable.

Professor Benedict of Vienna states that, in the Austrian pharmacopœia, the more powerful medicines, more especially the narcotics, ergotine, etc., are marked with a cross, and that the chemist is legally bound to give no more than one supply for a prescription containing any such drugs. Some physicians add at once the word *repetatur* or *bis*, *ter*, etc., where they consider it proper. All prescriptions have to be stamped by the chemist who makes them up, and who is also bound to put down the price he has charged for the medicine. Opium-eaters endeavour in all possible ways to circumvent this law; but the chemist who supplies them to excess lays himself open to an action at common law, and, where real harm has been done, even to criminal proceedings. Professor Benedict has mentioned to me, as an instance of the conscientious manner in which chemists in Austria generally discharge their functions, that, quite recently, when a physician, suffering from a painful affection, prescribed large doses of hydrate of chloral for himself, the chemist sent word back to say that he must request a prescription written by another doctor, as the prescriber might, under the influence of pain, take poisonous doses.

In talking this matter over with eminent members of the profession in London, I have been met with the reply that England is a country of free trade; that, when the patient has once given a fee for a prescription, it belongs to him; and that, in endeavouring to bring about a change, we should lay ourselves open to the suspicion of wishing to multiply our fees. Such objections, however, seem to me utterly untenable. Ours is not a trade, but a profession; there can be no earthly objection to a patient continuing as long as he likes the use of compound rhubarb pills or of simple tonics and alteratives, which, even when taken in excess, can produce no serious damage. As soon, however, as poisons come into play, the matter assumes an entirely different aspect, not only with regard to the individual, but also to the community. It seems to me the duty of the state to carry out the principle of the Sale of Poisons Act, not simply in the letter, but in the spirit; and to this end a legal check must be placed upon the indiscriminate supply of medicinal poisons. The public, if fairly reasoned with, must understand that it would be absurd to charge us with mercenary motives in such matters; and I have never experienced the slightest difficulty in convincing intelligent laymen, before whom I have occasionally laid this subject, that the change which I advocate is really desirable and proper.

It will be for the profession to give such an expression of their opinion on this matter as to induce the Royal College of Physicians, or the General Medical Council, to take action upon it in the proper quarter.

NOTES ON A CASE OF EMPYEMA FOLLOWING PLEUROPNEUMONIA IN A CHILD, TREATED BY INCISION AND DRAINAGE-TUBE.

By WILLIAM CAIRNS WICKS, M.B.E.M.,

Honorary Physician to the Newcastle-on-Tyne Dispensary; Assistant-Physician to the Newcastle Hospital for Sick Children.

E. J. M., A GIRL aged 7, came under observation on September 30th last, suffering from pleuropneumonia affecting the right side. She continued to progress satisfactorily till October 12th, when I found that she had passed a very restless night, and complained of pain in the affected side. On the 14th, a physical examination revealed the presence of an effusion in the right pleural cavity. On the 21st, as the fluid had accumulated in spite of ordinary treatment, I intimated the necessity for operative interference. The parents were not anxious that anything should be done, and it was with difficulty I got permission to operate on the following day if there should be no improvement. The right side measured nearly an inch and a half more than the left side. She had a distressing cough and great dyspnoea.

On the 22nd, I was called to see the child, as she was thought to be dying. She had had a "fainting fit", but was somewhat pallid when I arrived. The dyspnoea was urgent, and she was extremely weak. Some brandy was given, and I went for Mr. Angus, who kindly came to perform the necessary operation. The aspirator was used, the puncture being made in the seventh interspace in the infra-axillary region. About four ounces of thin inodorous pus escaped when the needle became occluded. A large one was carefully introduced; but in a short time the flow stopped, and it was completely blocked up by shreds of fibrine. Altogether about nine ounces of pus were evacuated; but, as the greater part still remained, we determined to make an incision and insert a drainage-tube.

On the 23rd, an incision was made, and about a pint of pus escaped, mingled with large shreds of fibrine. A drainage-tube was introduced, a pad of "tenax" applied, and over all a broad bandage.

October 24th. She had passed a good night. The discharge was free. The drainage-tube was removed, and the cavity syringed out with warm carbolic lotion (1 to 100); the punctures dressed as before.

October 25th. She was going on well. Pulse 100; temperature 98.8 deg.; respirations 34. Previously to the operation, the temperature was 103 deg., and the pulse varied from 120 to 150. The discharge was considerably less.

October 28th. Pulse 90; respirations 32. The cavity was washed out daily with warm carbolic lotion (now 1 to 80), and the drainage-tube gradually shortened. The discharge had almost entirely ceased. The appetite, which before the operation was lost, had daily improved, and she was now taking chop, beef-tea, milk, and eggs.

November 1st. There was no discharge on the dressings. The drainage-tube escaped from the pleural cavity, and the opening closed up (ninth day). The percussion-note was good anteriorly, and respiratory murmur was heard distinctly as low down as the wound anteriorly and posteriorly. There was evident flattening of the right side.

November 8th. The child had been up daily since the wound closed. The right side measured three-fourths of an inch less than the left. She was rapidly improving, and gaining in flesh and strength.

November 23rd. There was still a marked flattening of the right side. The percussion-note was good, and the respiratory murmur was heard as low down as the eighth rib anteriorly; but there were dulness and feeble breath-sound at the lower and posterior part. Her general health was good.

REMARKS.—In the above case, though carbolised lotion was used to wash out the cavity, no antiseptic spray was used at the time of operation, nor at any of the subsequent dressings. The patient is a stumorous delicate child, with a bad family history; and the home surroundings were very unfavourable. The short time during which it was necessary to use the drainage-tube is also worthy of remark; the only similar instance I have noticed being recorded in the *Lancet* of December 6th, 1873, in which case it was removed on the ninth day. That case, however, had been treated antiseptically from the first. The treatment after operation consisted of quinine and tincture of iron, with a liberal diet; and, after the wound closed, of syrup of iodide of iron and cod-liver oil, with tincture of iodine externally.

Since writing the above, I have again seen the child, now eleven weeks after the operation. The area of dulness at the base of the lung is considerably less, and the respiratory murmur is more distinct. Her condition is most satisfactory, and the friends say "she never was so well in her life as she is at present".

THE MARKET HARBOROUGH FASTING GIRL.

By FREDERICK GRANT, L.R.C.P., M.R.C.S., etc.,
Market Harborough.

I SEND the following notes of this remarkable case, which has lately gone the round of the London and many of the country newspapers, as well as having been the subject of interest and curiosity to the neighbourhood for some years.

The patient, Martha White, who was the daughter of highly respectable working people in this town, had always been healthy, and was a good-looking fresh-coloured girl up to seventeen, who had menstruated pretty regularly for a year and a half. She first became ill in the early part of 1872, with symptoms of disturbed digestion, which soon subsided under treatment, when she complained of inability to swallow, which gained such ground that for a few days she took no food; but, on the stomach-pump being produced and its use threatened, she swallowed some liquid nourishment. This convinced the parents that the supposed inability arose from nervous disorder; and, no further indulgence in the idea being allowed or encouraged by them, she rapidly recovered, and returned to her work at a coffee-manufactory.

All went well till Whitsun week in 1873, when she was again ill with pain in the bowels and sickness, which were evidently principally, if not entirely, hysterical; but on this occasion moral force was futile, and all we could do was of no avail. After this had been going on for some weeks, I had the advantage of a consultation with Dr. Shaw of Leicester, who recommended the hypodermic injection of morphia and nutritive enemata, as the girl seemed sinking for want of food. At this time, she took nothing excepting butter-candy, of which she sucked nearly a pound daily. Even with this, her chosen diet, she was frequently sick.

This state of things continued until April 1874, when violent convulsions set in, the patient biting and hurting herself, and damaging the bedclothes and furniture. From this time, according to her friends, she took absolutely nothing, with the exception of one occasion, when I persuaded her to attempt to swallow a few drops of water in a teaspoon. She willingly tried; but, as soon as the food entered the pharynx, the most violent convulsions supervened, which continued throughout the day.

About the end of 1874, she became insensible and lost her sight. This continued for a year and a half, consciousness and sight returning at the same time, after a more than usually severe convulsion, which she described as excruciatingly painful. From this time, the convulsions occurred at regular intervals; namely, at 6.20, 6.50, 7.20, and 7.50 every evening, and continued in this succession until the day before her death (December 14th, 1877), when she complained of stiffness of the muscles of the face and constriction of the roof of the mouth and throat, dyspnoea increasing until she died.

At the *post mortem* examination, we found the body greatly emaciated and one mass of scars, produced by the continued injection of morphia; the legs tightly flexed on the hips, and the arms firmly crossed over the body. These required considerable force to displace

them, before we could make the necessary incisions. The stomach was very small and contracted, containing about half an ounce of dirty mucus. The oesophagus was small, but patent throughout. The bowels were natural, with slight congestion in some parts, probably *post mortem*. In the small intestine were from four to six ounces of the same material as contained in the stomach; and in the rectum a few small hard lumps of faeces, covered over with whitish mucus. The lungs were natural, as was the liver, which weighed forty-five ounces. The gall-bladder was full. The spleen weighed five ounces, and appeared healthy. The kidneys were congested, weighing three ounces and a half each. The urinary bladder was so completely atrophied as to be scarcely distinguishable, and was with great difficulty made out, even when aided by the ureter at one end and the blowpipe in the urethra at the other. The uterus was very small, and the ovaries very rudimentary. An examination of the brain and spinal cord was not permitted.

Throughout the whole of this long and troublesome case, there was no difficulty of diagnosis; for, although the disease simulated many disorders and implicated sooner or later nearly all the organs of the body, there could be no doubt that it was hysteria and nothing else. The prolonged starvation is, of course, its singular point; and I must leave to others to decide whether it is possible for a person to be kept alive for a period of three years and a half by morphia alone. To me, I confess, it seems incredible. But, although I have visited her at all times of the day and night; my assistants, my former partner, and many medical friends, have also watched and examined the case; no one has been able to detect any imposture, or to discover how food was given; and, from the contracted state of the patient's limbs, it was impossible for her to have helped herself. Nor, since the time when the mother states the last secretion passed (twelve months ago), have I been able to detect signs or smells of urine or faeces about the bed and body-linen of the patient.

The mother is one of the most energetic, straightforward, and useful women in the place, and, when unencumbered by nursing, could add largely to the family income. This has, of course, all been lost by the illness. They have steadfastly refused to let the girl be seen, except by medical men; and, with the exception of a water-bed which was procured by subscription raised independently, I believe I may safely say they have not made a single penny by the case; and of course the expense even for morphia alone, to persons in their position, has been a very serious matter.

ON THE ETIOLOGY OF AURAL EXOSTOSES: OSSEOUS TUMOUR FOLLOWING EXTRAC- TION OF POLYPUS.

By GEORGE P. FIELD, M.R.C.S., Aural Surgeon to St. Mary's Hospital; etc.

M. W., A LITTLE girl aged 3, was brought to the hospital on July 25th. Her mother stated that she had suffered from a severe attack of measles twelve months previously, and that she had since had an offensive discharge from the left ear. I had a few months since removed a polypus. About a fortnight ago, she noticed a hard substance in the ear, causing the child much uneasiness. When she came to the hospital, a small pedunculated osseous tumour about the size of a pea was discovered, almost filling up the meatus. This case well illustrates the etiology of aural exostoses, as seen by the light which modern pathology has thrown upon inflammation of bone and resulting new growths of this tissue, and which Dr. Cassells has recently very correctly described in the *BRITISH MEDICAL JOURNAL* for December 15th, 1877. This, however, is only one form of the disease. Such tumours are frequently pedunculated, and might, indeed, be removed by the wire, as he has suggested. On the other hand, there is another and far more serious form of exostosis of ivory consistency (still less frequently met with), partaking of the nature of a new growth, and quite independent of inflammatory changes. Such growths of bone in other parts of the body would be called hyperostoses, and as such I presume Dr. Cassells would class them. Their development is insidious, and they occur in apparently healthy organs. Their very existence is not suspected until the patient discovers that his hearing is rapidly failing him; while the absence of pain might lead him to regard it at first as a trivial matter. Such a case I have at present under my own care, in whom many hours of patient work with the American drill while the patient was under chloroform have been necessary to perforate the thick mass of ivory-like bone completely filling each external meatus. Indeed, had it not been for the kindness of Dr.

Athur Mathewson of Brooklyn, New York, who sent me his pamphlet suggesting this ingenious treatment some eighteen months ago, I should have been at a loss to know how to penetrate this most dense tissue of almost adamantine consistency.

CLINICAL MEMORANDA.

PUERPERAL SCARLATINA.

IN the JOURNAL of December 29th, 1877, Mr. Haines gives an account of a case of puerperal scarlatina, in which the usual eruption and sore-throat of this exanthem were well marked. The reason of my alluding to it is that, in a remark at the conclusion, he says: "It bears out the opinion of Drs. Snow Beck, Meadows, and others, 'that scarlatina does not change and produce only malignant puerperal fever, but that it retains its specific characters in the parturient woman'." Now I think, in all discussions, it is always of paramount importance that we should have a clear idea of the points on which disagreement arises. I am not aware (though in this point I am under correction) that any one has stated that scarlatina could *only* give rise to "malignant puerperal fever". Certainly no one whose opinion was worth receiving could say so, for his experience must have frequently shown a puerperal woman suffering from scarlatina expressing itself as usual. The question, as I comprehend it, is whether the rash and sore-throat of scarlatina can be so far suppressed in the puerperal person as to be not noticeable, or scarcely so. In the case cited by Mr. Haines, if we exclude the rash and sore-throat, the symptoms are like those of puerperal fever. Now, it is by no means very rare that, in non-puerperal persons, the specific symptoms of scarlatina are absent more or less altogether; so it is argued that there is no *a priori* reason to deny the possibility of such a suppression of the specific symptoms in a puerperal person. Others seem to think that the presence of the exanthem, although not producing the specific symptoms, yet produces a general depression of the conservative forces of the body; that it renders it more exposed to the inroads of septic matter, etc. To whichever opinion we incline, or, indeed, whether we hold the concurrence to be a mere coincidence, we want narration of cases where delivery has occurred in connection with scarlatina, and the exact account of the progress to recovery, or the contrary.

The following case will show the difficulty of ascertaining the exact influence at work. The child of a multipara in her seventh month of pregnancy was scalded severely, requiring much nursing, which its mother carried out. During its recovery, the father and another child were attacked with scarlatina, from which they recovered as usual. The child was, however, then taken with typhoid fever, and was convalescent, when the mother was suddenly delivered prematurely. It had been recommended by the medical attendant that she should go into another house; but she refused, saying she was never better in her life. Before she could be persuaded, she was delivered. Within eighteen hours afterwards, violent symptoms of acute pyæmia arose, and went on to a fatal termination with a rapidity seldom exceeded; large patches of erythema occurring on her legs, but no specific symptom besides.

J. BRAXTON HICKS, M.D., F.R.S.

DIPHTHERIA.

THOSE who consider that croup is a local disease caused by exposure to cold, and that its diagnostic feature is the presence of false membranes in the larynx, which have formed upon an inflamed mucous membrane, should by this time have been able to bring forward cases in which the existence of such membranes had been verified during life or after death. Should undeniable proof be forthcoming that such membranes can exist, then let it be shown that their existence is unaccompanied by constitutional disturbance, as is stated to be the case in croup.

Without entering into the various points of clinical history which may or may not be present in diphtheria, I would suggest a method which, I think, if tried in a reasonable number of cases, would prove satisfactorily that the so-called "croup" cannot exist as a separate disease. The method I propose is that, in a case of croup, a small blister should be applied to some part of the body; for, should there be a deposit of false membrane on the raw surface of the blister, then no further proof would be wanted to show that the disease supposed to be distinct from diphtheria was one and the same disease. But, until a false membrane can be shown present in an inflamed larynx, it must, it seems to me, be granted that membranous croup is no other disease than diphtheria solely affecting the larynx; and therefore the

term "croup" had better be used only in its proper signification, viz., a symptom peculiar to some laryngeal diseases.

W. PUGIN THORNTON, Devonshire Street, Portland Place, W.

THERAPEUTIC MEMORANDA.

JABORANDI AND ITS ALKALOID PILOCARPINE IN HYDROPHOBIA.

IN the BRITISH MEDICAL JOURNAL of January 26th, there is an interesting therapeutic memorandum, by Dr. Louis Henry of Manchester, on pilocarpine, the alkaloid or the active principle of jaborandi, which, he says, was discovered by Merck, and named *pilocarpium muraticum*. Dr. Henry observes that this would be a more elegant and effective way of introducing the more active properties of jaborandi into the system than that proposed by me. He seems to have overlooked the following observation, which occurs towards the end of my communication in your issue of the 5th instant, suggesting jaborandi as a remedy in hydrophobia, viz.: "If the active principle could be obtained, it would be much more easily managed in the form of a concentrated solution for hypodermic injection." I was not then aware that the active alkaloid of jaborandi had been separated. Since then, however, I have had information from two separate sources on the subject. Mr. Gerrard of University College Hospital writes to inform me that he discovered the active principle of jaborandi in 1875, of which he has kindly sent me a specimen in the form of a nitrate of the alkaloid. This, he tells me, can be obtained either from Messrs. Morson and Co. of Southampton Row, or Messrs. Hopkin and Williams of Hatton Garden. Messrs. Savory and Moore also inform me that they have prepared discs of pilocarpine for hypodermic use; and, from the well-known reliability of their preparations in this form, I think nothing can be more convenient and trustworthy for use. The physiological analogies of rabies and hydrophobia point so strongly to jaborandi or its alkaloid pilocarpine as its antidote and remedy, that I again urge most strongly that it should be speedily put to the test. The patient cannot possibly have either his sufferings increased by the experiment, or his chances of recovery diminished, as no remedy or treatment yet employed has either gone far to alleviate, much less to cure, the symptoms of this terrible malady. The more reason, then, for extending our search, especially in the direction that apparently presents physiological indications for selection.

J. G. SINCLAIR COGHILL, M.D., F.R.C.P.,

Physician Royal National Hospital, etc., Ventnor.

EXTERNAL USE OF TINCTURE OF BELLADONNA IN NIGHT-SWEATING.

FOR some little time past, I have employed the common pharmacopœial tincture of belladonna for sponging the body in cases of phthisical and excessive sweating, and invariably with marked benefit. So far as my experience goes, I have found it very much better than anything else; if applied before a sweating comes on, it prevents it; if during the sweating, it almost immediately controls it. Two teaspoonfuls of the tincture mixed with an equal quantity of whiskey are quite sufficient (applied with the hand) to cover the whole body and produce the desired effect. I have adopted this method of treatment in my last cases of scarlet fever, which have all done well; but they have not been numerous enough to justify any definite opinion of the value of belladonna applied in this manner.

J. STUART NAIRNE, Surgeon, Glasgow.

TREATMENT OF DELIRIUM TREMENS.

MY attention has been arrested by an account of the treatment of a case of delirium tremens in its early stage, reported on page 127 of the JOURNAL of January 26th. It is, I believe, a generally accepted fact that opiates in delirium tremens do more harm than good, except occasionally in very protracted cases; and even then, only the amount of a full dose should be given in the twenty-four hours.

In chloral-hydrate and capsicum, we have two powerful remedies. The latter I have used for more than twelve years with unvarying success; it has never failed, no matter how violent the patient may have been, and I have had a man under treatment who required six strong men to hold him in bed. After four doses of the capsicum (thirty grains every hour in bolus), he fell into a calm sleep, and awoke a rational being. This was an extreme case, but milder cases simply require smaller doses of the capsicum.

C. S. WILLS, Surgeon-Major, A.M.D., Chester.

REPORTS OF MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

UNIVERSITY CLINIC, BERLIN.

CASE OF CARCINOMATOUS TUMOUR BETWEEN THE PHARYNX AND LARYNX.

(Under the care of Professor LANGENBECK.)

[Reported by BEDFORD FENWICK, M.B.]

THE patient was a male about sixty years old. He had suffered from dysphagia, occasional dyspnoea, and hoarseness of voice, of some standing; the first being now chiefly complained of.

On examination, a soft tumour could be felt on the right side of the neck, at the level of the thyroid cartilage, and over the carotid, which communicated a slight heaving impulse to it. The laryngoscope showed that the parts above the vocal cords were inflamed, and the larynx slightly compressed. The epiglottis was healthy. A bougie could be passed down the oesophagus, but with some difficulty.

The patient was put under chloroform, but rapidly became asphyxiated; the pupils were widely dilated, and the face livid. He was restored by artificial respiration. Tracheotomy was performed, and a tampon cannula inserted. The head being now bent back, with the neck horizontal, an incision was made on the right side from a point level with the great cornu of the hyoid bone, and about $1\frac{1}{2}$ to $1\frac{3}{4}$ inches from the median line, extending downwards and slightly inwards for about 4 to $4\frac{1}{4}$ inches. All the muscles which hindered rotation of the hyoid to the left were then cut through in turn, and numerous vessels were ligatured; and a tumour of cauliflower-like appearance was found between the pharynx and larynx. Professor von Langenbeck then removed it with its attachments (having rotated the larynx); viz., half of the cricoid cartilage, partly right, partly posterior; the right arytenoid cartilage; and nearly the whole of the right half of the thyroid, the first and last being ossified.

The tumour was flattened, nearly circular in form, two inches in diameter and rather more than half an inch thick, pale yellow in colour, with a flat toadstool-like pedicle. Microscopically, it was found to be carcinomatous.

The patient went on well for two days; then lung-mischief (pneumonia) appeared, and he sank rapidly, dying on January 13th. No necropsy could be obtained; but Professor Langenbeck attributed death to the retention in the bronchi of mucus, discharge, etc., which the patient had not the strength to expectorate.

REMARKS.—The operation, I believe I am correct in saying, is quite novel in conception. Its execution, though dangerous, was most safely performed. That it was most skillfully performed, it is unnecessary to say. We have, then, the after-danger, say, of accumulation in the bronchi, as in this case, setting up fatal pneumonia, to prevent. Could not this be done by the employment of artificial respiration, giving the patient thus the all-necessary power of expelling this accumulation, which he would not himself possess?

CITY OF GLASGOW FEVER HOSPITAL.

CASE OF SCARLET FEVER, FOLLOWED BY RHEUMATISM AND URTICARIA.

(Under the care of JAMES W. ALLAN, M.B., Superintendent and Physician.)

JEANIE S., aged 18, was admitted April 6th, 1877. The patient stated that the first symptom was sore throat. The presence of scarlatina rash is noted in the ward journal. The spray was employed for the throat, and she had milk-diet and scarlatina mixture.

April 27th.—The patient was up for eight days; but, taking a sore throat, went back to bed. She had now an attack of rheumatism (sharp), affecting the knees and ankles. The shoulders, elbows, and wrists were free. The tongue was moist, with a light coloured fur. There were herpetic patches about the mouth. Pulse, 100. The pain in the joints came on suddenly on the previous day. The affected joints were wrapped in cotton-wadding, and half a drachm of compound jalap powder was given in gruel at once.

On April 28th, the powder had operated. The patient had had a restless night, and said that the joints were not better, but she did not

seem to be in such suffering as on the day before. She perspired during the night. She still had pain in the knees and ankles; these were the only joints affected. Desquamation was taking place on the hands. The joints were ordered to be kept wrapped in cotton wadding, and five grains of Dover's powder to be given every four hours. Milk-diet was ordered.

April 29th.—The pain was much less; in the feet it was gone; but she had an attack of urticaria; no itching. She had taken four of the powders altogether—three yesterday and one to-day.

The cases in this ward subsequently passed under the care of my friend Dr. Dunn, assistant medical officer, and he dismissed this patient well on May 30th.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 25TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

A Case of Spina Bifida successfully treated by the Injection of Iodine.

MR. A. PEARCE GOULD read notes of this case. The patient was born with a tumour of the size of a hen's egg, situated over the last lumbar and the upper sacral vertebra; this slowly increased in size, whilst the skin over it thinned. When eighteen months old, he was brought to the Hospital for Sick Children. The tumour was then of the size of a cricket-ball, sessile, with all the usual characters of spina bifida; an opaque band was seen along the middle line of the lower three-fourths of the tumour. There was no paralysis or other deformity. The head was large; the fontanelle was widely open, becoming bulged when the tumour was compressed. September 18th, 1877, the tumour was tapped with a small hydrocele trocar at the upper part just to one side of the middle line; six drachms of fluid were removed, and half a drachm of Morton's iodo-glycerine solution was injected, the opening being closed with collodion. For the first few days, all promised well; the tumour appeared to be firmer, smaller, and less translucent; but at the end of a fortnight it had returned to its former condition. October 5th, the operation was repeated, one drachm of the iodine solution being injected. But this was attended with the same result. On November 5th, it was injected for the third time, two ounces and a half of fluid being removed, and two drachms of the solution injected. The sac became very tense, red, hot, and tender; fluctuation persisted for a week, but on the ninth day a marked change was noted; the tumour was smaller, flaccid, elastic, but not fluctuating, and it did not become tense when the child cried. The wall of the sac became gradually firmer and thicker, and the tumour shrank. On December 14th, there being still distinct fluctuation in the now thickened cyst, it was again tapped and emptied by the removal of six drachms of a yellow viscid highly albuminous fluid; it was evident that the communication with the spinal canal was completely obliterated. One drachm of the iodine solution was injected into the sac, and well manipulated, and then allowed to escape. The tumour had since then gradually shrunk, and now presented a thick pad of skin, quite dense at the lower part, softer above, where there was a small spot which still fluctuated; from this Mr. Gould withdrew about half a drachm of yellow turbid fluid two days ago. There was no paralysis. The fontanelle was closing up. After each operation, the temperature rose to 101 deg. to 102.8 deg., and continued above the normal from two to six days; there was no convulsion or other sign of interference with the nervous system. The after-treatment consisted in thickly smearing the tumour with collodion each morning, and supporting it with wool and a bandage. The tumour evidently communicated very freely with the spinal canal, and most probably contained the spinal cord or nerves. Mr. Gould had examined twenty-three specimens of spina bifida, and had found nerves in the sac twenty times, two cases in which they were absent, and one case in which their presence was doubtful. The nerves or cord generally occupied the middle line—the position of the opaque band seen in this case. The absence of paralytic symptoms by no means favoured the opposite view. The fluid removed at the first three operations was colourless, becoming slightly turbid on standing, of specific gravity 1011, faintly alkaline, containing a trace of albumen, chlorides, and phosphates. With Fehling's copper solution, it gave no reaction; but Dr. Dupré analysed it, and after concentration was able to get distinct evidence of the presence of sugar. Because sugar could not be detected in the fluid of spina bifida, and in that escaping from the skull in cases of fracture, it must not therefore be supposed to be absent, unless the tests be applied to the fluid after evaporation. Dr. Morton's treatment had now been employed several times; and in twelve out of fifteen published cases with success. As

to the value of the glycerine, Mr. Gould stated that on pouring some of the "iodo-glycerine" on some of the cerebro-spinal fluid in a narrow glass, it was found to sink to the bottom at once and not to mix with it; and he was of opinion that the same thing occurred in injecting the tumour, for the fluid that oozed from the puncture after the injection was quite unstained with iodine, and the action of the injection had been much more potent at the lower part of the sac. Although the mode of cure resembled that seen in the radical treatment of hydrocele, there was an important difference in the two conditions, the one being a closed sac, the other communicating with a canal full of fluid. As to the fear that the inflammatory material would press injuriously on the contained nervous material, it was noted that in none of the published cases had consecutive paralysis been noted, and a specimen of Sir A. Cooper's in St. Thomas's Hospital Museum, described in his paper in vol. 11 of the *Medico-Chirurgical Transactions*, showed that the radical cure might take place in this way when the cord was in the sac without nervous symptoms. Mr. Gould had considerable difficulty in stopping the oozing of the cerebro-spinal fluid, which was so dangerous if allowed to continue.

The PRESIDENT said that an important subject had been brought before the Society by the full and exhaustive narration of a case by Mr. Gould. With reference to the mode of operation, he might suggest that it would be found useful to introduce the trocar and cannula through and beneath the skin some little distance to the side of the tumour. In this way, direct puncture of the sac was avoided, and the valvular puncture permitted subsequent compression (after the removal of the cannula) to prevent the escape of fluid. Whilst discussing the subject of the treatment of spina bifida, it would be of interest if members would give their experience as to the age to which patients might live, despite the deformity. For some years, a gentleman had been under his care, who had been originally attended by Sir Astley Cooper. He wore to the last a protecting case, removed from time to time, after the model suggested by Sir Astley Cooper. In this instance, there was bladder trouble, the rectum acted imperfectly, and innervation of the lower extremities was incomplete. Yet, this patient lived an active professional life, and reached the age of seventy-four years. The President added that he believed this to be the greatest age ever attained by anyone afflicted with a spina bifida.—Mr. HOWARD MARSH thought Mr. Gould's case very valuable as an illustration of the excellent results of Dr. Morton's method of treatment. He saw the patient in the Children's Hospital, and well remembered that it was suffering from a formidable variety of spina bifida such as, under former methods, commonly ended in the loss of the patient's life. He believed Morton's plan would prove a very important addition to the surgery of childhood.—Mr. THOMAS SMITH expressed his thanks to the author of the paper for bringing the subject before the Society, and his conviction that Dr. Morton had given the very best method of treatment for spina bifida that was possessed. The injections of watery solutions of iodine were very rarely successful. If sufficient irritation were excited in the sac to procure its obliteration, the inflammation was almost sure to spread to the spinal canal, as he had too often ascertained by examination. It was interesting to learn that the difference in the result of the iodo-glycerine solution was probably due to its remaining in the lowest part of the sac when injected, and, therefore, its effects were more limited.—Mr. SMITH had employed Morton's method successfully in four or more cases. He was, as yet, doubtful what effect this method of cure had on the innervation of the parts below. On this subject his colleague Mr. Baker would give some information. With regard to the President's remarks, Mr. SMITH referred to a case mentioned in Mr. Holmes's *Diseases of Children*, of a man with spina bifida aged 23, who survived an operation for stone. In his own experience, he had been consulted by a gentleman of middle age with spina bifida, who, though inconvenienced to some extent by the malady, yet was able to discharge responsible professional duties, to fulfil the functions of a husband, and who suffered from no deficient innervation of the lower parts of the body. The disease in this case had not been treated. Sufficient time had not yet elapsed to judge of the condition of patients in later life cured by Dr. Morton's method; but, as far as his own experience went, he was bound to say that, in estimating the value of the result in such cases as he had cured by other means, it would have been better for the patients had they not survived the treatment.—Mr. MORRANT BAKER said that he had employed Morton's solution for the injection of a spina bifida in an infant two months old, who was under his care at St. Bartholomew's Hospital about eighteen months ago. The solution had been prepared according to the usual formula, and was injected with the usual precautions. The local effect was good; the sac becoming thickened after the second injection, and giving no further trouble. But, at the same time, loss of power of movement and of sensibility was noticed in the lower extremities; and this had remained

to the present time. Mr. Baker thought the case should be mentioned, as it might elicit the experience of others on the subject; and would show that the injection of the iodo-glycerine solution, even when locally successful, was not without its dangers.—Mr. GOULD briefly replied.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 22ND, 1878.

CHARLES WEST, M.D., President, in the Chair.

A CASE OF RODENT ULCER. BY C. HIGGINS, F.R.C.S.

THE patient was a married woman aged 45; her health had always been good. The rodent ulcer commenced thirteen years before admission to Guy's Hospital, at the remarkably early age of 32, as a pimple on the left side of the nose, which, however, showed but little tendency to ulcerate until five years after its first appearance. During the progress of ulceration, a second pimple, of apparently the same nature as the first, made its appearance in the angle between the right side of the nose and cheek; it did not, however, ulcerate. The eyeball, which was quite healthy, was excised, and the ulcerated surface destroyed with a paste of chloride of zinc and starch applied on strips of lint. After the separation of the sloughs, some cicatrization took place. The disease soon commenced again; and, eighteen months later, the surface of the ulcer and adjoining infiltrated tissue were destroyed with the galvanic cautery, and chloride of zinc paste was applied. The second pimple, which was enlarging, was also burnt out. After separation of the sloughs, cicatrization again took place to a great extent; but, four months later, the disease was again spreading rather rapidly. The whole of the thickened margin and base of the ulcer, together with a large amount of adjoining healthy structures, including skin, mucous membrane, muscles, and bone, were cut away with a scalpel; the bleeding was stopped with a thermo-cautery; and chloride of zinc paste was applied all over the cavity left. The wound finally healed entirely; but subsequently some recurrence of the ulceration took place, and the diseased tissues were again removed with knife, cautery, and caustic, and cicatrization again took place; and, with the exception of a small part of its outer margin, the wound has since remained firmly healed. (The patient was examined by the members present.)

Mr. GASKOIN said that he had brought to the Society a man, aged 52, who had a large oval sore, about four inches long by three wide, on the vertex. It appeared to have some of the characters of rodent ulcer. The glands were not affected. The surface of the sore was uneven, and there was a sanious discharge from it. There was no attempt at healing. The family history gave no guide to the origin of the disease. (The patient was examined by the members.)—Mr. HULKE said that he had placed on the table some specimens of rodent cancer prepared by the late Mr. C. H. Moore, who was the first to attack the cases of rodent cancer. In these and in other cases occurring in the practice of Mr. Hulke and Mr. Lawson at the Middlesex Hospital, the practice had been not to apply the caustic before cutting away as much as possible of the diseased mass with the scalpel. He had for some time given up the use of the galvanic cautery; because, if the platinum-knife were thin, it bent easily, and a thick one was not easily managed; moreover, the sense of touch became unavailable as a guide to the nature of the substance cut. Rodent cancers should be dealt with sweepingly at first, all measures being avoided which could tend to worry any remaining portions into increased activity. With regard to Mr. Gaskoin's case, he would doubt whether it was one of rodent cancer. He could not remember any case in the Middlesex Hospital in which the disease began in the hairy scalp.—Mr. GASKOIN said that he himself had some doubt whether his case was one of rodent ulcer; but Colles had described a case in which the disease commenced in the scalp. He had been struck with the remark that lupus is a disease of early life, and that rodent ulcer mostly occurred after the age of thirty. He thought, however, that lupus and rodent ulcer overlapped each other in respect to time. He had certainly seen tubercular ulcer of the face in persons beyond thirty years of age. A woman aged 65 had lately been under his care with something very like lupus in the ala and tip of the nose. He had seen the diseases in the early stage, and found that the first manifestation was not always definite; it might be felt before it was seen.—Mr. NETLESHIP thought that it was said that rodent ulcer always began as a pimple; but probably it would be useful to have more information on this subject. He had seen a case at the Moorfields Hospital in which rodent ulcer seemed to commence in a deposit under the skin.—Mr. MORRANT BAKER said that, while it was difficult to recognise Mr. Gaskoin's case as one of rodent ulcer, it was still more difficult to give it another name. He thought he recognised

exact resemblance in the two cases in every particular, and they differed only in sex, in age, and in the duration of the disease. In the case brought forward now, the disease was in its earliest stage; in the previous one it had existed for six years, and had nearly brought the patient to the term of his existence. Both of the patients were shown.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, JANUARY 17TH, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Puerperal Septicæmia.—Dr. FITZPATRICK exhibited the uterus from a primipara, who died a few days after delivery. She had been attended by a midwife, and a small portion of the placenta and a shred of membrane were found in the uterus at the *post mortem* examination.

Unsuspected Typhoid Fever.—Dr. FITZPATRICK exhibited a piece of ileum with a perforation in it. It came from a woman who died after aborting. The presence of typhoid fever had not been suspected; but Dr. Fitzpatrick suspected it, and the *post mortem* examination demonstrated the surmise to be correct.

Retroverted Uterus in the Anal Orifice.—The PRESIDENT read a letter from a practitioner illustrating a section of his Harveian lectures. The case occurred in an old lady aged 67. The bowels were obstructed, and it was found that the retroverted uterus was plugging the anal orifice. The replacement of the womb was followed by immediate relief of the symptoms.

The Pulse-rate considered in Relation to Post Partum Hemorrhage.—Dr. ASHBURTON THOMPSON read a paper on this subject. The author began by referring to the well-known assertion that, if after delivery the pulse beat at or about a hundred, the patient cannot be considered safe from hemorrhage, which, on the contrary, is in that case to be apprehended. He then remarked that this assertion, which, if true, is of great value, rests upon the opinion only of a number of writers who do not offer any series of precisely recorded observations in support of it. The object of the present paper was to ascertain from a number of records of the pulse-rate in various cases, beginning immediately after delivery, what is the behaviour of the pulse in uncomplicated cases, and what its behaviour in cases of *post partum* hemorrhage. The total number of cases dealt with was sixty-three. Fifty-four of these were cases uncomplicated by hemorrhage, and nine were cases of hemorrhage of different degrees of severity, which were classified by Dr. George Johnson's method, and moreover showed the exact amount of blood lost in each. The observations, beginning within three minutes of delivery, were taken at short intervals during thirty minutes. At every observation, the watch was used, the pulse counted during not less than thirty seconds, and the result written down at the time. In cases of hemorrhage, the observations extended over a longer period. The fifty-four uncomplicated cases resolved themselves into three classes, as follow. In the majority, or thirty-nine, the pulse fell by from 3 to 29 beats (average $13\frac{1}{2}$) within a few minutes—a reduction which did not always bring it below 100. In six cases, it remained absolutely steady at the rate first observed, which was not always less than 100. In nine cases, a rise from the initial rate was noticed; and if, as sometimes happened, this rise brought the rate above 100, the pulse remained at that rate for several hours. The author concluded that the pulse may fall below, rise above, or remain steady at its initial rate; that it may fall to, rise above, or remain steady at some point above a hundred; that it is very commonly irregular; and that it may intermit in cases uncomplicated by hemorrhage or by any constitutional disorder. A table showing the pulse-rate and other particulars in nine cases of hemorrhage was then shown; and the author said that for his present purpose he preferred to refer to them as cases of *post partum* inertia of the uterus, since that is the essential condition of this kind of hemorrhage, and since he wished to exclude all cases of hemorrhage from parts other than the placental site. From this table, it appeared that degrees of hemorrhage requiring active interference may co-exist with steady pulse-rates of 60 (first degree), of 70 and 76 (second degree), or with a rate varying between 96 and 108, as in one case of the third degree. It was then asked whether the causes of *post partum* inertia are always such as to influence other parts of the system as well; and observed that the condition is known to occur under a variety of circumstances in which no common element can be detected. He also observed that shock to the system is sometimes accompanied by inertia; and from five other cases (of extreme exhaustion suddenly manifested after delivery; of laceration of the uterus; sudden laceration of the perineum, and concealed accidental hemorrhage) he showed that the pulse then follows a characteristic course, increasing in frequency with great regularity as the depression progresses; and decreasing again as re-

covery sets in. Here a coincidence might be observed between the degree of inertia and the pulse-rate, which is very closely maintained, but it was coincidental, merely being the result of a systemic condition to which the inertia also is owing. This description of a characteristic behaviour of pulse in cases of hemorrhage originating in systemic depression, the author believed to be original.—Dr. CLEVELAND thought uterine inertia and *post partum* hemorrhage not so closely associated as was asserted. Some women were known as "flooders".—Dr. ARTHUR EDIS had noted that publicans' wives often flooded. Did the alcohol have something to do with it? Often *post partum* hemorrhage was due to a rent in the cervix.—Mr. CRIPPS LAWRENCE, Mr. MALCOLM MORRIS, and Dr. STEVENSON spoke; after which Dr. THOMPSON replied.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 2ND, 1878.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

Rupture of the Uterus.—Dr. ROPER showed a ruptured uterus. The patient was attended by a midwife. When the os uteri was fully dilated and the head nearly on the perineum, a dose of ergot was administered, and symptoms of rupture appeared an hour and a half afterwards. The child escaped into the peritoneum, and delivery was effected by version. The laceration extended through the cervix uteri and upwards as far as the right round ligament.—Dr. J. WILLIAMS had seen a case in which a similar rupture had occurred spontaneously when ergot had not been administered.

Effect of Perchloride of Iron on the Uterus.—Dr. HERMAN showed the uterus of a woman who had died of *post partum* hemorrhage. Her medical attendant had injected the organ with a solution of perchloride of iron—one part to four of water. This was effective for a short time only; and then a rag soaked with the saturated solution of the perchloride was pushed into the uterus. The specimen showed well the difference in the effect of the weaker and the saturated solution. The upper part of the organ, which had been bathed by the weaker solution, was, on section, unaltered to an extent appreciable by the naked eye, though it was ascertained by chemical tests that the iron had come into contact with it. The lower part of the uterus, which alone had come into contact with the saturated solution, was black, hard, and corrugated; this change extending through the inner three-fourths of its thickness.—Dr. BRAXTON HICKS said that the case showed the truth of the view generally held with regard to the effect of perchloride of iron. Healthy tissue resists the tincture, but not the strong solution.—Dr. CLEVELAND asked what was meant by the term "saturated solution". He had used the strong pharmacopœial preparation diluted with three parts of water, and thought it effective. The undiluted solution might act as an escharotic.—Dr. EDIS referred to a case of secondary *post partum* hemorrhage where a solution of iron (one to four) had been employed without permanently arresting the bleeding, in which two drachms of the strong liquor ferri perchloridi were injected into the uterus about the tenth day after delivery and allowed to remain in. The bleeding was arrested at once. The patient made an excellent though a tardy recovery. There was no sloughing or untoward symptom.—Dr. ROUTH said the case brought up the whole question of injection of perchloride of iron. He had used it twice, and both patients died. When injection into the uterus is made, there ought to be a free exit. In the case before the Society, a solution (one to four) was used; it proved inefficient, so that it is a bad plan to use a weak solution.—Dr. CORY had used it in several cases with success and without bad result; the strength of the solution being one to four.—Dr. HAYES said that the specimen showed that very little of the injection had reached the fundus, from which the blood flowed. In all cases of *post partum* hemorrhage where perchloride of iron was used, the whole of the bleeding surface should be bathed by the fluid. In order to ensure this, the uterus should be emptied of clots, and the injecting pipe carried on the hand, and the injection directed against every part of the surface. By introducing the hand into the uterus and retaining it there while injecting, a free exit was obtained for the fluid. He used equal parts of liquor ferri perchloridi and iced water, and had most satisfactory results.—Dr. BARNES said the point of the syringe should be carried to the fundus. This could only be insured by introducing the hand into the uterus. Clots should be removed before injecting. One to four was a good strength, but a stronger solution might be used, if necessary; but it should not be escharotic. This means of arresting hemorrhage had stood the test of experience, and had saved many lives. The test for its use was the possibility of exciting reflex action. When this could not be done, perchloride of iron should be used.

Extra-uterine Pregnancy.—Dr. HEYWOOD SMITH showed part

illustrating extra-uterine foetation.—The specimen was referred to Drs. Madge and Aveling for report.

Malignant Uterine Disease.—Dr. SMITH showed a specimen of malignant disease of the body of the uterus. The patient suffered from menorrhagia and an uterine tumour. The cervix was incised, and carbolic acid was applied. She rapidly got worse, and died.

The result of the ballot for election of officers for the ensuing year was declared; and the PRESIDENT delivered his annual address.

PATHOLOGICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 18TH, 1878.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

Dermoid Cysts along Branchial Fissures.—Mr. WAGSTAFFE gave an account of these growths in three patients. In one, they grew at the inner angle of the orbit; in the other two, at the outer angle. These last were situated beneath the orbicularis and the temporal artery, and were attached to the bone beneath. They were developed along the line of the branchial clefts. In two, they were situated at the suture of the frontal and malar bones; in the third, at the juncture of the lacrymal bone with the nasal portion of the frontal. Dermoid cysts were not always along the lines of the branchial fissures.—Mr. HULKE said such dermoid cysts, clinically, were quite distinguishable from the cystic tumours which resembled them. He had not hitherto thought of them as related to the branchial clefts. Many tumours along the embryonic clefts were not dermoid, as the common sublingual cysts for instance. Dermoid cysts were found elsewhere, too, as in the anterior mediastinum and in the ovary. In old cases, the bone underneath was dimpled by the presence of the tumour, and in one case it was even perforated.—Mr. ALBAN DORAN stated that there was one argument against one and in favour of the embryonic origin of the cutaneous cysts frequently found close to the external angular process of the frontal bone. That region lay out of the line of the clefts dividing the visceral arches, which contained the cartilaginous basis of certain bones, and such cysts lay in front of the membrane-formed frontal and malar bones. On the other hand, Professor Kowalewsky had shown that, in the embryo amphioxus, the visceral laminae completely united along the line of the mouth; then the embryonic layers at that point became fused, and the disc thus formed presented ultimately a perforation—the oral cavity. Dermoid cysts in the human face might arise in the same manner by an abnormal fusion of the epiblast with the deeper layers at one point, and the formation at that spot of a structure more complicated than the cellular tissue normally found there.—Mr. BRYANT had seen a number of such cysts, but had not thought them related to the branchial fissures. They were found in irregular positions, chiefly in the orbit. They presented no difficulties in diagnosis. He questioned if the hypothesis had anything to support it.

Case of Paralysis Agitans.—Dr. DOWSE said that, even at the present time, there was a difference of opinion as to the signs particularly characteristic of paralysis agitans. The patient was a woman aged 57; her age when the palsy began was 41. The agitations commenced in the head; then extended to the right arm, then to the left arm, and finally to the legs. Before her death, she was unable to stand or help herself in any way; the body was bent forward, and both the arms and legs were flexed and devoid of any voluntary power. The muscles of the calves of the legs stood out like iron bands. The intellect was clear, but the memory was failing. For three days previous to her death the tremors ceased, and she sank apparently from nervous exhaustion. At the *post mortem* examination, twenty-four hours after death, there was no cadaveric rigidity. The right lung was partially collapsed, and contained some hard nodular cheesy masses at the apex. The left lung was completely collapsed and lay flat on the inner and upper part of the pleural cavity. The heart was fatty, and the left ventricle somewhat hypertrophied. The valves were healthy. The aorta was atheromatous. The liver, kidneys, spleen, and abdominal viscera had undergone no especial gross change. The brain weighed fifty-three ounces. The convolutions and grey matter were normal. The arteries at the base were atheromatous. The nerves were remarkably firm. Upon section, the substance of the hemispheres was pale, tough, and glistening. The parts entering into the formation of the motor tract felt unusually hard. The spinal cord was equally as firm, and weighed ten drachms avoirdupois. Mr. Kesteven kindly noted the following microscopical changes. At the decussation of the anterior pyramids, the nerve-cells had undergone atrophic granular pigmentary degeneration. There was cortical sclerosis of the posterior and right lateral columns, and military as well as colloid degeneration; and these morbid appearances were more marked in ascending in the examination of the medulla. The nerve-cells of the olivary bodies were atrophied

and undergoing fuscous degeneration. Some few of the cells in the nucleus of the ninth nerve appeared to be hypertrophied. In the nucleus of the eighth nerve the cells were deeply pigmented, and in many the processes had quite disappeared. The fibres of the auditory nerve were in some places almost displaced by military degeneration, and also the middle of the lower portion of the nucleus of the fifth nerve. The nerve-cells of the corpus dentatum and folia of the cerebellum abounded in spots of fuscous degeneration. The corpora striata were honeycombed with military degenerations. In the thalami optici, some military changes were met with; but these were slight when compared with those in the striate bodies. The microscopical appearances presented by the spinal cord showed similar degenerations to those found in the brain and medulla. The cells in the anterior horns were particularly the seat of various forms of fuscous degeneration. The vessels were in some places thickened, in others sacculated, with well-marked perivascular spaces.—The PRESIDENT said that, in the case of paralysis agitans recorded by him, the typhus fever, of which the patient died, might have modified the appearances. The congestive appearances were probably due to the fever. Probably few of the Fellows had had the opportunity of examining the changes in paralysis agitans.

Colloid Cancer of the Rectum.—Mr. LYELL showed the rectum and adjoining parts from a woman who died in the Middlesex Hospital. She had been ill for several years when admitted. At first, there was a swelling by the side of the anus, with but little pain. Then there was a discharge, with pain; the growth increasing, but very slowly. Then the woman fell downstairs, and after that grew rapidly worse. The local distress was so great that Mr. Hulke performed colotomy, which gave great relief. The woman died eighteen months afterwards. The disease during that time had spread over the buttocks. At the *post mortem* examination, the other organs were found healthy. The channel of the rectum was quite destroyed, and the coats were glued together for two inches. The disease extended three inches further up the posterior and outer wall. It quite filled the ischio-rectal fossae. The extension over the buttocks was more marked over the left than the right side. There was a large ulceration. The skin in some parts peeled off easily. Much of the mass was soft and gelatinous; other and later portions were firmer. It was a rare form of rectal cancer, and was interesting clinically from its long duration. Colloid cancer ran a longer course than other cancers. This woman had had the disease for more than five years. No other parts were implicated, except two large glands in the inguinal region.—Mr. BRYANT had had a like case in a female aged 50, who had rectal stricture for two or three years. The obstruction was so great that colotomy was performed. A large mass, of the size of the closed fist, existed at the left side of the pelvis. The woman lived eighteen months afterwards, without any pain. The mass in the pelvis grew into a large projecting fungating mass, which ulcerated. A little fecal matter appeared through the ulceration. She sank ultimately from exhaustion.—Dr. MAHOMED said that, as to the duration of colloid cancer, he knew of a case where malignant disease of the œsophagus existed for nineteen years. At last, colloid cancer of the spermatic cord set in and spread, leading to a fatal issue.—Mr. HULKE said that colloid cancer was slower in progress than other forms affecting the rectum. He knew of a man who had such cancer, and yet worked for two or three years. Four or five years previously, he had been cut for fistula. The disease quite filled the ischio-rectal fossae. The unequal manner in which the skin was implicated might be useful in diagnosis.

Diaphragmatic Hernia.—Dr. GARLICK related a case of this lesion in a child, whose mother was consumptive during her pregnancy. The child was always weakly. When six months old, it had a severe cold; and at eighteen months, severe vomiting, with obstinate constipation. It had pains in its belly. At two years, it ran about without obvious dyspnoea. It was two-and-a-half years old when severe vomiting came on. It was very thirsty. Screaming preceded the vomiting. At last it became collapsed, with a retracted abdomen. On *post mortem* examination, it was found to be pigeon-breasted, mostly on the right side. In the right pleural cavity, there was what appeared to be a tumour. It consisted of diaphragm, peritoneum, and the pyloric end of the stomach. The liver was tilted forward. The right lung was hollowed by the tumour so that there was no heart displacement. If not congenital, it was evidently of long standing. The viscera were drawn in by inspiration.

Phosphatic Diabetes.—Dr. RALFE exhibited some urine from a patient admitted into the Seamen's Hospital last November. The patient was much emaciated, and was suffering from slight bronchitis; this, however, passed off in a few days, and no other definite symptoms were present to account for the emaciation and continued debility. The urine was carefully examined, and found to contain no albumen or sugar.

The urine was then collected for twenty-four hours, and was found greatly increased in quantity.¹ The urea and phosphoric acid were determined by Dr. Murphy with the following results :

	Quantity.	Sp. grav.	Urea.	Phos. acid.
December 3rd	.. 4470 grm.	.. 1.011	.. 67.1 grm.	.. 5.3 grm.
December 4th	.. 4900 "	.. 1.016	.. 116.4 "	.. 9.1 "
December 5th	.. 1400 "	.. 1.018	.. 103.0 "	.. 7.0 "
December 7th	.. 3100 "	.. 1.017	.. 61.2 "	.. 4.2 "

The observations were confirmed by Dr. Ralfe in a subsequent analysis, made December 13th, with standard solutions distinct from those used by Dr. Murphy. The patient remained more than a month in hospital, and regained somewhat in weight and strength. During his stay in hospital, the patient suffered considerably from boils. Dr. Ralfe said the case corresponded with those originally described by Prout and subsequently by Roberts : of diuresis, accompanied by an increased elimination of urea. These observers, however, had not noted the increase of phosphoric acid, which had first been done by Dr. Dickinson in 1875 ; subsequently, Dr. Tessier of Lyons, in a pamphlet entitled *Du Diabète Phosphatique*. Dr. Tessier, however, contended that these cases were distinct from the azoturia of Prout. Dr. Tessier divided these cases into three clinical groups : those (1) in which nervous symptoms are prominent ; (2) those which precede or accompany pulmonary affections ; (3) those which alternate with or are followed by true saccharine diabetes. Whether a closer connection between the "azoturia" of Prout and the "phosphaturia" of Tessier could be established, further observations must determine. The present case showed that both might exist together.—In answer to a question from the PRESIDENT, Dr. RALFE said he was not acquainted with the termination of any case of polyuria.—Mr. NUNN remarked upon the large amount of urea present in these cases.

Aneurism of Cerebral Arteries.—Dr. GREENFIELD exhibited five aneurisms. One was an aneurism of the basilar artery at its bifurcation. The patient died with symptoms of cardiac disease. The brain was healthy on the upper surface, but there was a large quantity of fluid present. A firm coagulum enclosed the circle of Willis. The nerves were not implicated. The arteries at the base of the brain entered the mass. There was a bulging in the left ventricle, which was the sac of the aneurism. In the circle of Willis was a circular sac. The vessels were not adherent to it. The sac was thick-walled, and in its centre was some blood, nearly coagulated. The sac did not compress any important part. The aortic and mitral valves were both diseased, having prominent vegetations : some filiform, some club shaped. There were no fibrinous deposits. The second aneurism occurred on a branch of the internal carotid, in the cavernous sinus. It was found in a female aged 22. It was of the size of a pea and was completely curved. The patient had hemiplegia and heart-symptoms. There was calcified vegetations on the mitral valve. Numerous infarcts were found. The third case was that of an aneurism in the brachial artery, at its bifurcation. There was double aortic disease. Pain, with swelling, appeared suddenly at the bend of the elbow. The brachial artery was ligatured ; but the man died of pneumonia. The operation was successful, and a firm clot was found covering the arteries. The ulnar nerve was stretched. The walls of the artery were thinned, and an extensive rupture of a crescentic form was found. There were traces of a sac. The aortic valves were diseased, and a long vegetation from them had caused an aneurism in the mitral flap, at the point of contact with this vegetation. The fourth specimen was a miliary aneurism, which ruptured in a man aged 40, who was brought to the hospital in a comatose condition, and of whom there was no history. On *post mortem* examination, there was found an effusion under the arachnoid and also at the base. The convolutions of the left hemisphere were flattened, and there was some hemorrhage in the cerebellum. A mass of blood was found in the left ventricle ; it extended into the left corpus striatum. It arose from a branch of the left middle cerebral artery, and there was a hard mass at that point. The effused blood had ploughed a track like a bullet track in the line of least resistance. The fifth case was that of a miliary aneurism in the left corpus striatum. It occurred in a man with cirrhotic kidneys. There was an old clot in the right corpus striatum.

LEEDS.—The births were at the annual rate of 41.1 and the deaths 22.9 per 1,000 in October, and from zymotic infectious diseases 3.2 per 1,000, which is above the average. Dr. Goldie reports an outbreak of scarlatina at Hough End, in consequence of an infected family moving into the village, and afterwards through children attending the schools whilst still peeling. The drainage of some houses is described as very bad, giving rise to a case of typhoid ; and what makes the matter worse is, that they have been recently constructed, and are not fit for human habitation.

BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 2ND, 1878.

THE LOST MEDICAL SCHOOL.

THE present discussion of the causes which have led to the despoilment, degradation, and ultimate banishment of the Faculty of Medicine of the University of Oxford, the diversion of its endowments, and the destruction of its school, has hitherto been conducted without the benefit which would undoubtedly have been derived from the direct intervention of Dr. Acland, and the statement of his views. The case, as it has been stated thus far, is a very remarkable one. Our correspondents have pointed out that the abolition of medical teaching has proceeded by slow steps, which have recently been somewhat hastened and appear to have now reached their climax. The three offices of Regius Professor of Medicine, Aldrichian Professor of Medicine, and Lord Lichfield's Medical Professor, have been combined for the first time in the person of one accomplished physician, Dr. Acland himself, with definite duties of lecturing in accordance with the endowments, but with the net result, according to the statements which have been made to us and which have not yet been contradicted, that these duties have never yet been performed, and that the three offices thus combined have practically contributed nothing to the medical teaching which they were intended to afford. At the same time, the Linacre and Lee endowments, for the teaching of human anatomy and physiology, have equally been diverted from the science of medicine, to which they were specially dedicated by their founders ; and by these means the Oxford School of Medicine has been effectually stifled, and the name of the Faculty erased from the official publications. We have found it difficult, in the first instance, to accept as credible the remarkable history of which the outline has been sketched in the letters of our correspondents to which we have on previous occasions adverted. Still more difficult is it, it would appear, to understand the reasonableness of any theory by which such a course of action could be explained. The only defence yet attempted here has been the singularly fragile suggestion of Dr. Chambers, that the Radcliffe Infirmary, with its two hundred beds, not to speak of other medical resources of a city of thirty thousand inhabitants in the centre of a populous county, was incapable of affording that clinical material such as could nourish a practical medical school. Against that hypothesis we quoted at once the University of Göttingen, in a population of seventeen thousand ; the University of Heidelberg, in a population of twenty-two thousand ; the University of Bonn, in a population of twenty-eight thousand ; and the University of Würzburg, one of the most famous in the world for its medical school, in a town which has a population of only forty-five thousand. We might have also referred to Trinity College, Dublin, which has reached so high a standard of reputation in its medical school, and in which the medical school has added no little to the greatness and reputation of Trinity College, although its clinic hospital could never yet boast more than a hundred beds. Stokes and Graves both taught in a hospital of a hundred beds, and made the teaching of their school celebrated throughout the world. The more, indeed, the argument is investigated, the more shallow and perfunctory it will be seen to be ; and it is hardly conceivable that it should be seriously put forward as a basis of justification for the perversion of the endowments of medicine in Oxford, and for the destruction of the birthright of this generation of medical students and of their share in the great teaching powers and great influence for culture of the premier University of Great Britain.

We publish, however, to-day, in another column, a document, of

which we have only lately received a copy, but which is included in the papers issued at the University in March 1877. We have there a summarised statement by the Regius Professor, Dr. Acland, of what, in his opinion, is "most needed" at the present time in the department of medicine in Oxford. There is another fuller paper of a preliminary kind to which we may subsequently revert. Meantime, this is the latest statement of which we have cognisance expressing Dr. Acland's views, and we have ground for treating it as setting forth what he really considers to be the immediate necessities of that which is described as the "Department of Medicine". The faculty having been abolished and the school crushed, there remains apparently a nominal department of medicine. After reading that document, we believe that most medical men will look with something like bewildered astonishment, bordering on despair, at the prospect that lies before them. Here we have a Regius Professor of Medicine and a Clinical Professor of Medicine, who, during the whole term of his office, extending over nearly twenty years, has never, as far as we can find, given either a course of lectures on medicine or a course of clinical instruction in medicine; whose notices to students that he would meet and confer with them, with the view of making arrangements for such course, have never resulted in anything but vacuous emptiness; and whose office of triple professor exists apparently only in derision of what the teaching of medicine is generally understood to mean. The first paragraph of his statement as to what is most needed runs: "I should retain the office of Regius Professor of Medicine as at present." Of course, Dr. Acland means this to have no personal application, nor do we. He only means that he should advise the office of Regius Professor being retained; but when he advises that it should be retained as at present—that is to say, as a combination of offices, to neither of which do any active duties apparently belong, nor are any fulfilled, he strikes at the whole root of the matter, and there we are compelled to differ from him, and so will, we believe, the whole profession of medicine differ from him *toto celo*. The subsequent paragraphs throw a not less curious light on the fantastic and aberrant scheme which Dr. Acland gravely sets before the commission as constituting the most pressing needs of the department of medicine in the University of Oxford. Here is a department of medicine, so called, in which the Medical Professor gives no medical lectures, in which the Clinical Professor gives no clinical lectures, in which the Professor of Physiology teaches no human physiology, in which the Reader in Anatomy teaches zoology and biology, and in which there is no professor of surgery, of histology, or of human pathology; and the most pressing needs of that department Dr. Acland considers to be that the Regius Professor shall have the assistance of a person whom he describes as an analyst and demonstrator of medical and sanitary chemistry and microscopy; second, that a professor should be added for comparative pathology, and that funds should be provided for an occasional lecturer on such subjects as the combined results of mathematics, physics, physiology, pathology, and therapeutics, in the investigation of the organ and function of vision. Now, of course we all know that Dr. Acland has given attention to the subject of national health, and he gave lately a popular lecture on rabies, which has since been printed in a lay review; and that some years since he delivered an interesting lecture on the subject of vision at the College of Physicians in the presence of Royalty; but it passes imagination that, in such a state as the medical department of Oxford has fallen into, he should seriously propose that permanent teaching in these three fancy subjects of his leisure moments should be considered as among the most pressing needs of the department of medicine in the University of Oxford. We speak with great respect both of Dr. Acland's acquirements and of his objects in making these propositions, but we cannot help regarding them as aberrations of a man whom the consideration of the external collateral relations of medicine has diverted altogether from the main points at issue.

When the department of medicine at Oxford becomes really worthy of the name of a department of medicine, in the sense in which it is understood in any university in the world, or in any medical school in the world, there may be time to think of and reason to carry out such suggestions; but with the medical department, so called, which is deprived of all the essential character and endowments of a medical department, which teaches neither medicine, clinical medicine, anatomy, histology, pathology, nor any of the fundamental scientific groundworks of medicine, to talk of international hygiene, and the pathology of animals, as the most pressing needs of the University of Oxford, is to depart from every known standard of reasonable requirements, and take the most effective means which could be devised for perpetuating the existing abuses. This is the mere fringe of medicine; and the proposition is as wise as it would be to suggest supplying costly and elaborate decorations of a garment which does not exist, or for which no means of fashioning are provided. Dr. Acland might as well present a shirt-frill and a set of gold studs to a naked lay figure as institute these outside professorships in a department of which the very backbone of scientific medicine is wanting, and which has not yet been clothed with a rag of the requisite drapery for its stately figure.

In the earlier document, however, Dr. Acland sets out "three strong arguments" which apparently form the basis of these suggestions. They are, "1. That a purely scientific school of biology, in the widest sense of the word, is a national want; Oxford has entered on providing it, and has yet very much to do towards the completion of it; 2. That the opportunities for the practical study of medicine in our great metropolitan hospitals are unsurpassed in the world, and that similar opportunities cannot be found in Oxford; and 3. That the University cannot afford to incur the danger to its science school of having to adapt itself to imperfectly trained pass students in medicine, whose interest it would be to drag down the teaching of its science classes to the minimum of professional requirement. For this reason alone, the University should free itself of all responsibility with regard to 'applied' departments, which it cannot entirely regulate." Fairly analysed, what does all this mean? Is it a fact, that having to train pass students drags down the requirements of an university school? Let all great universities which do undertake the training and examination of medical students answer. Has it dragged down the Faculties of Edinburgh, of Dublin, or any of the great foreign universities which we have named? or has it dragged down the requirements of the University of London? Is it not rather the fact, that the existence of the Oxford School, with high acquirements and with magnificent collateral endowments and opportunities for study in all directions, would elevate the whole tone of medical teaching, would bring to Oxford a considerable contingent of students who would prepare themselves to follow the highest paths of medical science, and from whom would be recruited a race of calm scientific thinking men, students, demonstrators, teachers, and professors, to whom we should look to maintain the highest standards of philosophic thought and studious exercise of their art? Has the necessity of training a vast proportion of mediocre pass students in abstract subjects for the Arts Degree at Oxford dragged down the character of the honours classes in other subjects, such as classics and mathematics? What a poor trembling suggestion is this, of annihilating the faculty and evading the whole duty of medical training for fear that Oxford, of all bodies, should be unable to resist the temptation of lowering its standard. How strange an excuse to allege for having already lowered the standard for teaching in anatomy, in physiology, and in medicine, to a point below the requirements of any examining bodies, so that no student can now obtain at Oxford the certificates which will avail at any examining body for any department of medicine, or for the preliminary scientific medical studies.

Then, as to the "strong argument", that the opportunities for the

practical study of medicine in our great Metropolitan Hospitals are unsurpassed in the world, and that similar opportunities cannot be found in Oxford; what does this mean if analysed? Let it be granted that, at some great hospitals and schools, the clinical staff and the clinical facilities will always be of a higher class, in some particulars, than would be probable or possible at Oxford; but, not only are London schools most unequal in this respect, not only is it apparent to every one that no London school approaches in completeness of its teaching power the *ensemble* which might be collected at Oxford; but, of course, in respect to many minor London schools, any comparison would be absurd. London schools have their strength; but from their very multiplicity, and from the fact that the offices are largely filled by busy practitioners who look not to science, but to fees, for their career, a large proportion of lectureships are always in every school notoriously imperfectly filled by teachers who accept them temporarily, not because they are the special subjects of their predilection or of their knowledge; not because they afford the staff on which they might rest in their scientific career; but as mere temporary stepping-stones on which they tread, passing hurriedly, as occasion serves, from one to another, until they reach successful practice. As to clinical practice, Oxford, with its two hundred beds, could probably never expect or desire to have more than one student for every two beds; while, at many of the London hospitals, there are three or four students to each bed. Every one, of course, recognises the fact that, however perfect the Oxford Medical School were made, however perfect, we hope we may add, it may yet be made, there will be left in the career of the student ample time to supplement his clinical experience by a year's residence in any of the great clinical centres.

Meantime, the Department of Medicine at Oxford has been bitterly described by its own sons, in the letters which we have published, as a shame and a derision; and we cannot think that, if the proposition, which we have printed elsewhere, of Dr. Acland, as representing the fulfilment of its most pressing needs, were carried out, it would then be nothing more or anything better than it now is. Such additions would only depart still more widely from the recognition of the real needs of the Medical Faculty at Oxford; they would do nothing to provide the basis of the first scientific teaching of medicine, which, at least, is the most pressing duty of Oxford to supply in a complete form; they would do nothing to attract medical students, or to satisfy them when attracted. We again repeat that, even in the interests of the purely scientific department of biology, the presence of a class of medical students affords at once the only probability of sufficiently stimulating the energies, or justifying the existence, of a complete staff of teachers of biology. Without a class of medical students, the biological department and the medical department of Oxford will only remain the fanciful toys of academic taste. With it, they would acquire solidity, firmness, and vital force. Medicine, and medicine alone, crowns the edifice of biology. The systematic divorce of biological study can only lead to nullity, and in the perpetuation of the simulacrum of teaching which is now known as the Medical Faculty of Oxford.

M. RANVIER'S LECTURES AT THE COLLEGE OF FRANCE.

THE lectures delivered last year by M. Ranvier, Professor of Histology at the Collège de France, Paris, have just been collected and published by Dr. Weber, his assistant and collaborator. The subject of the course is the histology of the nerves. The mode of termination of the ultimate nerve-tubes in the striped muscular tissue, and in the electric apparatus of the torpedo, has been more particularly the object of M. Ranvier's researches; but he also treats, in an exhaustive and original manner, of the intimate structure of the medullated nerve-tubes, of the connective tissue and vessels of the nerves, of Re-

mak's fibres, and of the degenerative and regenerative changes that occur on the section of nerves. These lectures are critical as well as practical; and M. Ranvier not only gives the results of his long and patient labours, and indicates in a precise and practical manner the methods by which the same studies may be pursued, but also passes in review, with judicial and scientific acumen, the researches of his predecessors in the same field of inquiry. It is this lucid explanation of what he himself sees and thinks, combined with a profound knowledge of the views and researches of others, that make M. Ranvier's lectures peculiarly interesting both to hear and read.

This year, the professor is treating, in his course, of the nervous system of the heart, and will proceed to that of the unstriped muscular tissue and of the glands; and also, if time permit, he will explain the termination of the nerves of the skin. *A propos* of this last, M. Ranvier has lately made an important communication to the Académie des Sciences. In studying the tactile corpuscles, he has found that, in the beak of the duck, the nerves which enter these corpuscles do not terminate in a single cell, as many observers have affirmed, but by a sort of disc of a nummular form, rounded at the edges, situated between two cells which are cartilaginous in appearance. In the most simple form, there is one disc between two cells; but there are also groups of three cells and two discs, four cells and three discs, and so on. "Sometimes the nerve-tube which is distributed to a tactile corpuscle sends out at each cellular space a branch which is attached to a special disc; at others, it passes into an intercellular space, becomes enlarged so as to form a tactile disc, and reconstitutes itself on the opposite side to form the next disc. The disposition is not without importance to the physiology of the sensitive nerves: a nerve-tube which has already furnished a lateral ramification to a tactile corpuscle will divide and give a secondary branch to terminate in a neighbouring corpuscle." The tactile disc, stained by osmic acid and double chloride of gold and platinum, and viewed under every variety of section, seems to M. Ranvier to be an expansion of the fibres of the cylinder-axis. "From this description", says M. Ranvier, "it results that the tactile disc, truly a nervous and sensitive organ, is protected from mechanical irritation from without by the special cells which surround it. On this account, it cannot receive an impression except in an indirect manner. I think even that the contact of external objects acts at first upon the cells of the corpuscle, and, by a mechanism unknown to us—perhaps by the production of electricity, heat, or a chemical substance irritating to the nerves—reacts in its turn on the tactile disc. This is an hypothesis of which the only value is, I acknowledge, that it may lead to new researches."

In conclusion, M. Ranvier remarks that the tactile corpuscles in the human finger, although much more complicated, are similar to those in the beak of the duck; and that he hopes soon to communicate to the Academy of Sciences the results of his investigations on this subject.

These interesting and minute researches are not without their practical and medical value; for it is probable that, when the normal anatomy of the tactile corpuscles is known, and the methods for studying them shall have become the common practice of histologists, many of those curious forms of perverted or abolished cutaneous sensation may receive a rational explanation, and their treatment, instead of being purely empirical as at present, may be based on an intimate knowledge of the morbid processes undergone.

DR. THOMAS J. ROWELL of Singapore has been appointed Principal Civil Medical Officer in the Straits Settlements by Lord Carnarvon. The office is one of the most valuable in the gift of the Minister for the Colonies.

MR. ERICHSEN, F.R.S., Surgeon-Extraordinary to the Queen, has consented to preside at the annual festival in aid of the funds of the University College Hospital, to be held at Willis's Rooms, on Tuesday, the 21st of May next.

OUR correspondent in Rome writes :—Scientific men in Great Britain will learn with deep regret that Padre Secchi is affected with cancer of the stomach.

DR. E. SYMES THOMPSON has been elected Physician to the Equity and Law Life Assurance Society, in the room of the late Dr. R. Payne Cotton. There were thirty-eight candidates for the appointment.

To the three Universities of Leyden, Utrecht, and Groningen in Holland, a fourth has lately been added by the formation of the Atheneum at Amsterdam into an University. Among the professorships in the Faculty of Medicine is one of History of Medicine, to which Dr. Abraham H. Israels has been appointed.

CLAPTON ASYLUM FOR IMBECILE CHILDREN.

ON Thursday, January 24th, the annual new year's entertainment was given to the patients in this Asylum. It consisted of a concert, in which the children alone took part; a novel feature being a musical performance by the inmates' fife and drum band. Then followed a burlesque, acted by the staff and inmates under the direction of Dr. Fletcher Beach, the medical superintendent. This seemed to afford great amusement to the children. The proceedings closed with the playing of the National Anthem by a very skilful stringed band.

ROYAL FREE HOSPITAL.

THE new Victoria wing of the Royal Free Hospital, Gray's Inn Road, which provides accommodation for fifty additional beds, was opened on January 24th, in the simplest manner, by the Committee of Management of the Hospital. Mr. James Hoggood, the chairman, declared the new wing to be formally opened; a prayer was offered by the chaplain of the Hospital, the Rev. Robert Maguire, D.D., and the simple ceremony finished. When the other new works for the enlargement of the Hospital, which will be proceeded with immediately, are completed, a more ceremonious opening of the whole will, it is understood, take place; and for that reason the proceedings on Thursday week were conducted in the quiet form described. The Victoria wing consists of three new wards and a spacious out-patient department. Each ward is one hundred and five feet long and twenty-two feet wide, and contains sixteen beds, thus affording two thousand cubic feet of air to each patient. Two handsome drinking fountains have been presented by two ladies for the out-patients' waiting-rooms. The new wing has been erected from designs and under the superintendence of Mr. William Harvey, architect, Whitehall, at a cost of about £13,000, which has been defrayed out of legacies recently bequeathed to the hospital. The estimated cost of the proposed new additional buildings, which will provide accommodation for the nurses, and also isolated wards for the reception of contagious and infectious cases, is £8,000; and contributions towards this object will be thankfully received by the treasurer, Mr. Edward Masterman, 27, Clement's Lane, E.C.; by any of the London bankers; and by the secretary at the hospital.

DEATH UNDER CHLOROFORM.

WE have made inquiries as to the death from chloroform, reported last week to have occurred at the Devon and Exeter Hospital. From a communication kindly made to us by Mr. H. Gordon Cumming, House-Surgeon to the Hospital, we gather the following outline of the facts. The patient, a well-developed and healthy-looking lad, aged about eighteen, was about to undergo the ordinary operation for the removal of an elongated and indurated prepuce following soft sores. The administration proceeded satisfactorily for two or three minutes, and the boy was becoming anaesthetised. A severe spasmodic stage then supervened; a change being noticed in the patient's appearance, the chloroform was at once withheld. This change consisted in a sudden lividity of the countenance and sudden dilatation of the pupils. Every effort was at once directed to restoring the patient: cold water was dashed on the face and chest, air freely admitted into the room, and artificial respiration kept up for a long period. Only about one drachm

of chloroform was found to have left the drop-bottle, and the portion sprinkled on the mask, just before its removal, still remained, so that the lad could not have been exposed to the vapour of one drachm. The heart had been previously examined, and nothing found to contraindicate the anaesthetic. No *post mortem* examination could be obtained, in spite of much persuasion with the friends.

DEATH FROM SELF-ADMINISTRATION OF CHLORAL.

ON Saturday last, Dr. Diplock held an inquiry at Sutton, near Hounslow, touching the death of Mr. Thomas Edward Lucas, aged 48, of Sutton. Mr. W. J. Lucas, a brother, stated that deceased was of no occupation, but formerly practised as a solicitor. Deceased had for some time been suffering from illness, and was depressed in spirits. He also complained of want of sleep. He had never made an attempt on his life. On Thursday, deceased did not come down from his bedroom, and witness, going up, found the door locked. He obtained a ladder, and got in at the window, when he saw the deceased lying dead in his bed. Dr. Henry Bullock, of Spring Grove, said he was called to the deceased, whom he found dead. There were two bottles in the room, and they had recently contained chloral. Deceased had been in the habit of taking it, and witness was now of opinion that he had taken an overdose. Deceased's death was caused by the quantity of chloral taken. After some deliberation, the jury returned a verdict of "Death from an overdose of chloral".

THE DISTRESS IN SOUTH WALES.

THE reports of Mr. E. W. S. Davis, Medical Officer of Health of the Aberdare district, for the quarter ending December 31st, is of interest as showing the state of health in the district in which there is at present a great deal of want and distress, although not, we understand, to the extent which was reported. At this time of the year, there is commonly much want and suffering amongst the poor in this district, which is now much aggravated from the terribly depressed state of trade. It is satisfactory to see that the district is perfectly free from fever, and to note the absence of any deaths from typhoid fever since the Board of Health has been established there. The mean death-rate of the year is 19.4; less than half the birth-rate, which stands at 39.2. Mr. Davis mentions the marked frequency of the occurrence of semi-epileptic attacks among the poor wanting food. Many such cases have occurred among Lady Aberdare's poor clients. These attacks, which seem to have some relation to the effect of the nervous symptoms of want of food, have, it is suggested, a certain clinical interest in relation to the somewhat similar symptoms noticed in the Penge case.

THE MEDICAL REGISTER.

IN the Queen's Bench Division of the High Court of Justice, on January 28th, before the Lord Chief Justice and Mr. Justice Manisty, an application was made by a medical man, who had been struck off the *Medical Register*, for an order on the Medical Council to restore him, the ground of his application being that his name had been removed on some charge of misconduct without a hearing. Mr. Pope, Q.C., and Mr. Pollard, were for the appellant; Mr. J. Brown, Q.C., and Mr. C. Bowen, were for the Council. The Lord Chief Justice, in the course of the discussion, in which it was urged by the counsel for the Council that they had a discretion as to removing or restoring names of medical men on the *Register*, observed that he did not think there was a power to remove the name of a medical man on representations of professional misconduct without a hearing. If a medical man were to have his name struck off the *Medical Register* for professional misconduct, he ought to know what the charge was, and have an opportunity of making a defence. The Council, therefore, ought, in the opinion of the Court—assuming the proper qualification and on proper inquiry—to entertain the application for restoring the applicant's name. Upon this intimation of opinion, the counsel for the Council declared that they would act in accordance with it. The counsel for the applicant pressed that a *mandamus* should be issued to the Council, and that there should be no condition as to inquiry; but as to this, the Court

observed that it might be a question whether a *mandamus* could lie issued to the Council to put any person's name on the *Register*, as they were to insert the names of those they thought fit and had a duty to discharge.

LEGISLATION ON THE OFFICE OF CORONER.

IT is with great satisfaction we perceive that the Government has already taken this important subject in hand. The first instalment of reform refers to the antiquated mode of electing coroners by the votes of freeholders. This is to be entirely abolished, and a new method of appointment substituted. Mr. Sclater-Booth introduced a Bill into the House of Commons on Monday last, for constituting County Financial Boards. These Boards will consist of a certain number of members for each county, representing both owners and occupiers, and they will be empowered to survey and direct the general interests of the county. Among other changes, it was proposed that the "time-honoured institution" by which coroners were now elected should be abolished, and that, in future, the selection and appointment of these officers should be committed to the new County Boards. This was described by Mr. Sclater-Booth as one of the most radical of all the provisions of the Bill, but he believed it was one which would meet with but little opposition on either side of the House. This change will necessarily lead to another, namely, that certain qualifications will in future be required of those who offer themselves for the coronership. House-agents and retired tradesmen will be excluded under this system, and there will be an end to that bribery and corruption which have hitherto marked some contested elections for coronerships.

THE PUBLIC HEALTH.

DURING last week, 5,669 births and 4,017 deaths were registered in London and twenty-two other large towns of the United Kingdom. The natural increase of population was 1,652. The mortality from all causes was at the average rate of 25 deaths annually in every 1,000 persons living. The annual death-rate was 24 per 1,000 in Edinburgh, 27 in Glasgow, and 29 in Dublin. The annual rates of mortality per 1,000 last week, in the twenty English towns, ranged in order from the lowest, were as follow: Portsmouth, 15; Hull, 16; Leicester, 17; Nottingham, 17; Oldham, 17; Bradford, 19; Bristol, 19; Salford, 21; Leeds, 21; Norwich, 21; Sunderland, 21; Sheffield, 23; Wolverhampton, 24; Birmingham, 24; Newcastle, 24; Manchester, 26; and the highest rate, 27, in Brighton, Plymouth, Liverpool, and London. The deaths from small-pox in London declined to 34, and no death was referred to this disease in any of the nineteen provincial towns. In London, 2,430 births and 1,864 deaths were registered. The annual death-rate from all causes, which in the two previous weeks had been equal to 25.7 and 27.8, was last week 27.2. The 1,864 deaths included 34 from small-pox, 63 from measles, 39 from scarlet fever, 6 from diphtheria, 117 from whooping-cough, 32 from different forms of fever, and 13 from diarrhoea; thus to the seven principal diseases of the zymotic class 304 deaths were referred, against 299 and 291 in the two preceding weeks. Whooping-cough caused 117 deaths last week, against 69 and 94 in the two preceding weeks. The fatal cases of measles, on the other hand, further declined to 63, from numbers which had decreased from 109 to 77 in the four preceding weeks. The deaths referred to fever, which had been 33 and 21 in the two preceding weeks, rose again last week to 32, and were but 2 below the corrected average; 3 were fatal cases of typhus, 23 of enteric or typhoid, and 6 of simple continued fever. The deaths from small-pox, which had been 26, 35, and 51 in the three preceding weeks, declined to 34 last week. Of the 34 fatal small-pox cases, 13 were certified as unvaccinated and 11 as vaccinated, while in the remaining 10 cases the medical certificates gave no information as to vaccination. The number of small-pox patients in the Metropolitan Asylum Hospitals, which at the beginning of October last had declined to 137, has since steadily increased to 415, 468, and 505, at the end of the last three weeks; 126 new cases were admitted during last week, against 124

and 129 in the two preceding weeks. The Highgate Small-pox Hospital contained 55 patients on Saturday last; in the four preceding weeks, the numbers had steadily increased from 26 to 47. In Greater London, 2,958 births and 2,139 deaths were registered, equal to annual rates of 34.7 and 25.1 per 1,000 of the population. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 11.6 hours, the sun being above the horizon during 60.4 hours. The recorded duration of sunshine was, therefore, equal to 19.2 per cent. of its possible duration.

PRISON DISCIPLINE AND DISEASES OF CONVICTS.

THE inquest which took place on the 16th instant on the body of Ex-Colour-Sergeant M'Carthy, one of the released Fenian prisoners, who died at Morrison's Hotel on the previous day, involves several points of considerable importance, especially in its bearing upon gaol discipline and upon the diseases of convicts. The report, in the *Daily Express*, shows abundant evidence of local political excitement, and of a certain degree of personal sympathy in the circumstances of the deceased, which is hardly likely to influence general public opinion. We have nothing whatever to do with this matter in its political aspects. Every impartial reader of the evidence must, we consider, agree with us in thinking that the evidence, as reported, was almost absolutely *ex parte*, consisting, as it did, of the medical testimony to the effect that M'Carthy, a man aged 44, who had been imprisoned in various gaols for twelve years, died of cardiac and pulmonary disease (dilatation of a fat or fatty heart, some tuberculosis, and considerable pleuritic effusion); and of the statements of certain of his fellow-prisoners—released Fenians—who declare that he was ill-treated, ill-fed, and overworked. On the part of the prison authorities, whose system this verdict seriously impeaches, we have not a syllable of evidence. We understand that the case has become the subject of official inquiry and report; and, until the publication of such report, we must refrain from concurring in the very decided opinion attributed in the newspaper report to one of the medical witnesses, "that the disease of the heart in this case was so marked and so intensified that perfectly satisfactory evidence must have been present to satisfactorily demonstrate to any medical man carefully examining the heart of the deceased two years ago, that he was utterly unfit to undergo prison discipline; and from 1876, as sworn to, if true, that he had to approach the ventilator for want of air—want of breath, as he would feel—from that moment commenced a slow death but sure [*suppressed applause*]. He would say, also, that the condition of the lung and the extreme fatty degeneration of the heart must have been apparent to the medical eye and to the unprofessional eye such as to excite the greatest sympathy." Newspaper reports of medical evidence are so proverbially inaccurate, that we cite the above only as representing the present aspect of the question at issue. We consider that, quite apart from the merits of the present case, a full inquiry by the Inspector-General of Gaols will be useful in its bearing upon a point which has considerably exercised the thoughts of many interested, as physicians and philanthropists, in gaol management, viz., the proper mode of dealing with persons advanced in life or not habituated to manual work, who are sentenced to hard labour in gaols or subjected to like discipline in workhouses. Of course, the law humanely permits the gaol and union authorities, and especially the medical men, considerable judgment and latitude in all such cases; still we doubt, upon considerable personal knowledge and direct experience, whether the operation of this humane system of check is absolutely sure, even, and adequate. We know three countries in which, not many ages ago, criminals were systematically flogged to death; we should be glad to feel satisfied, as we are not at present, that our law had rendered it impossible that any criminal or pauper in the United Kingdom and its Colonies should, however undesignedly, be subjected to the still more terrible penalty of being gradually worked to death. We know it to be a fact, that when, thirty years ago, the prisoners in a London house of correction were worked on

the treadmill and inadequately fed, cases of dilatation, or more strictly speaking of stretching of the chambers of the heart, became very frequent among them. We shall watch the progress of the M'Carthy case with considerable interest, but from an exclusively medical point of view.

THE HEALTH OF PIUS IX.

FOR a week or ten days before the death of King Victor Emmanuel, the Pope had been able to leave his bed-room, and to hold receptions in the private library adjoining. He seemed to gather strength, and rapidly to regain his vivacity. There is no doubt, however, that he is most susceptible to atmospheric changes, as there were again alarming rumours about his state towards the middle and end of last week. He really, however, seems only to have suffered from a slight exacerbation of the rheumatic pains, which keep him wakeful and retard his recovery from the serious illness in the end of last year.

IMMEDIATE RELIEF OF BURNS.

WE have already referred to the evidence afforded in American medical journals of the value of very strong solutions of bicarbonate of soda in the treatment of burns. In the *Louisville Medical News* for September 29th, Dr. Coleman Rogers records his experience in the treatment of burns by the application of soda, which is of value as corroborating the results claimed for such applications during the past year in the *Boston Medical and Surgical Journal*; and in the number of December 29th Dr. McClellan reports that, early in October of this year, a young female child was carried to his hospital suffering from a severe scald, which involved the hand and forearm of the right side. This child, when brought to the hospital, was in a terror of agony, and almost unmanageable. The injured arm was carefully wrapped in soft cotton cloth, which was soaked with a saturated solution of the bicarbonate of soda, and in a few moments the pain was entirely relieved and the child was sleeping. The use of the solution of soda was continued, no other treatment being necessary, and the convalescence was rapid.

MEDICAL MICROSCOPICAL SOCIETY.

IN accordance with a resolution passed at the special meeting of this Society on December 21st, 1877, the final meeting, for winding-up the Society's affairs, was held on January 18th, 1878; H. Power, Esq., President, in the Chair. The Committee's report was read by Mr. Groves, one of the secretaries; and the treasurer, Mr. T. C. White, presented the balance-sheet. The balance, which was but a small one, and to which were added the proceeds of the sale of the property of the Society, was unanimously voted to be equally divided between the two secretaries and the treasurer, in the form of a testimonial to each of these officers. The President then vacated the chair, and the Society ceased to exist.

PROFESSOR RANIERI BELLINI.

WE regret to learn, from a paragraph in *Lo Sperimentale* for January, that Dr. Ranieri Bellini, Professor of Toxicology and Forensic Medicine in the Royal Institute of Florence, committed suicide by poisoning on January 12th. The motive is said to have been an overwhelming fear that he had committed an act which would disgrace the honourable life which he had always led. Dr. Bellini, who was sixty years of age at the time of his death, had attained a high reputation as a teacher, and as a scientific investigator of the action of toxic substances. He published a valuable series of experiments on poisons in *Lo Sperimentale* for 1876. In conjunction with Dr. Filippi, he was the author of a *Biblioteca Medico-legale*, the third and concluding volume of which has just been completed.

THE USE OF DISINFECTANTS.

DR. W. O. BAYLIS, the accomplished Medical Officer of Health for West Kent, has issued some plain instructions for preventing the spread of infectious diseases, in a revised edition, as a little tract published by Knight and Co. On the vexed subject of the choice of

disinfectants, Dr. Baylis, who has, we believe, devoted much attention to this subject, gives detailed directions. He remarks that powdered green copperas, Condry's fluid, and chloralum, may be substituted for chloride of lime, ounce for ounce. For those, the stronger mixture No. 3 would be two ounces to the pint of water, and the weaker, as in No. 6, four ounces to the gallon. For carbolic acid, he says, Burnett's fluid may be substituted, the stronger solution only requiring one ounce to the pint; and the weaker, three ounces to the gallon. A good disinfectant, properly managed, is sulphur fumigation. For floors, walls, ceilings, etc., carbolic powder is "useful, and equally so are chloride of lime, carbolic powder, and powdered charcoal, for the outside of buildings. For mud ponds, or other wet foul masses, Ledger and Co.'s "Universal Disinfecting Powder", containing salts and metallic chlorides, Dr. Baylis is of opinion, promises the most effectual result.

LIQUEFACTION OF HYDROGEN.

ON January 10th, M. Pictet of Geneva performed, in the presence of many persons, the experiment of liquefaction of hydrogen. The process consisted in the decomposition of formate of potash by caustic lye, by which pure hydrogen was produced. Thirty-five minutes after the commencement of the experiment, a pressure of 650 atmospheres was reached, at which point it remained for some minutes. The tap of the apparatus being now opened, a bluish jet escaped with a crackling sound, like that produced by the contact of water and red-hot iron. The jet then suddenly ceased; and it appeared as if a hail of solid bodies was thrown violently with a rattling noise on the ground. The tap having been again closed, the pressure fell from 370 atmospheres to 320, at which it stood for a few minutes, then rising to 325. When the tap was again turned, a jet again escaped, which underwent interruptions, showing that beyond doubt crystallisation had taken place in the interior of the tube. This was proved by the escape of the fluid hydrogen when the temperature was raised.

ITALIAN MEDICAL JOURNALS.

FROM a table published in the January number of the *Annali Universali di Medicina e Chirurgia*, we learn that there are twenty-nine medical journals in the kingdom of Italy. Of these, five are published in Milan, five in Naples, three in Rome, two in Bologna, one in Pisa, two in Palermo, one in Padua, one in Genoa, three in Turin, one in Venice, two in Florence, one in Forli, one in Reggio Emilia, and one in Modena. The oldest journal is the *Annali Universali*, which has completed its sixty-third year. Next come the *Bulletino delle Scienze Mediche*, published by the Medico-Chirurgical Society of Bologna, which has attained forty-eight years; the *Giornale della Reale Accademia di Medicina* in Turin, and the *Raccoglitore Medico* (Forli), each forty years old; Professor Polli's *Annali di Chimica applicata alla Medicina*, which is thirty-four years old; and *Lo Sperimentale*, which has completed thirty-one years. The youngest is the *Commentario Clinico* of Pisa, which first appeared in 1877.

SCOTLAND.

IT has been decided to enlarge, by the addition of a new wing, the Home for the Relief of Incurables in the west of Scotland, at an estimated cost of £8,000. The Home has only been open a year or two, but it is found far too small to accommodate the increasing numbers of applicants.

THE Glasgow Eye Infirmary continues to do good work, as shown by the fifty-fourth annual report, which has appeared lately. During 1877, nearly eight thousand patients were treated, of whom upwards of two thousand remained under treatment at the end of the year. The number of indoor patients was five hundred and seventy-six, an excess over the previous twelve months of sixty-eight; the average number of beds occupied daily was forty-eight.

It is announced that the Marquis of Hartington, Lord Rector of the University of Edinburgh, has intimated a subscription of £530 towards the fund for extending the University buildings.

MILK-SUPPLY AND TYPHOID FEVER.

ATTENTION has recently been called in Glasgow, in a very striking manner, to the milk-supply, by the outbreak of typhoid fever which, as we stated a short time since, was most conclusively shown by the medical officer of health for the city to have been due to the use of polluted milk. This epidemic is now subsiding, no new case having appeared for a fortnight; this result being undoubtedly due to the energetic measures taken by the authorities. Last week, a largely attended meeting of influential persons was held, under the presidency of the Lord Provost, to consider what steps should be taken to secure a supply of pure milk for the city and suburbs. Dr. McCall Anderson, Dr. Fergus, and others, took part in the meeting. It was resolved, "That it is desirable that a general measure of legislation should be passed with regard to the regulation of milk-supply". In the view of the meeting, it was desirable that all dairies which directly or indirectly supply milk to towns, should be bound to register themselves with the local authority, and that shops for the retail selling of milk should be required to take out licenses. These dairies and shops should be regularly and frequently inspected. A committee was appointed to carry out the object of the resolutions.

THE LIVINGSTONE MEMORIAL.

THE Livingstone Medical Missionary Memorial Institution in Edinburgh was inaugurated last week, in the presence of a large and influential company. The entire building is not yet quite complete, but the part of it which is to be used in connection with medical work is fully equipped and ready for occupation. The medical part of it consists of a consulting-room and dispensary, a house for a resident surgeon, and bed-rooms for a number of students. The dispensary work has been carried on for the past twelve months, while the new buildings have been in progress, in an adjacent building. The Institution has been erected and furnished at a cost of £10,000, raised by voluntary subscriptions.

THE HEALTH OF FORFAR.

At a meeting of the Forfar Police Commissioners held last week, there was produced the report of Dr. Murray, the Medical Officer to the Board of Health, which stated that the total number of deaths registered during 1877 was 288, or at the annual rate of between 16 and 17 per 1,000: the lowest death-rate since the Registration Act came into force. Towards the end of the year, scarlet fever appeared in two families, causing one death; but no fresh cases had been reported. About the beginning of December, a case of fever was reported to have occurred in a dairy in Dundee Loan. The medical attendant informed the reporter that the case was not one of infectious fever, and no precautions were taken to prevent the sale of the milk. Since that time, the reporter had been called to five cases of continued fever of a typhoid type in the same locality, and it turned out that all the five families were supplied with milk from that dairy. Other cases occurred at that dairy, and the milk supply had been stopped. The medical officer recommended that precautions be taken similar to those adopted in Glasgow.

LECTURES ON COOKERY TO MEDICAL STUDENTS.

On Saturday last, Miss Dodds, of the Edinburgh School of Cookery, delivered a demonstration lecture on Sick-room Cookery to over a hundred medical students, in the Extranatural Class-room, Nicholson Square, Edinburgh. Mr. Chiene presided, and in introducing the lecturer, impressed upon the students the importance of a knowledge of sick-room cookery to medical men. Miss Dodds then proceeded with her lecture, during which she demonstrated the process of making beef-tea, white wine whey, restorative jelly, and a number of other foods for invalids. The lecture was attentively and closely followed,

and most of the students took notes. On the motion of Mr. Chiene, a hearty vote of thanks was accorded to the lecturer, whose first lecture had, he said, been a gratifying and unqualified success.

SANITARY PROTECTION ASSOCIATION.

A MOVE in the right direction has lately been taken in Edinburgh by the starting of a Sanitary Protection Association. This Association, which is being formed under the auspices of many of the leading professional men and citizens, has for its objects the following: "1. To provide its members, at moderate cost, with such advice and supervision as shall ensure the proper sanitary condition of their own dwellings; 2. To enable members to procure practical advice, on moderate terms, as to the best means of remedying defects in houses of the poorer classes in which they are interested; 3. To aid in improving the sanitary condition of the city by following such course as, in the opinion of the Council, may seem calculated to promote this object." The Association is not intended as a substitute for municipal inspection, and will not conflict with the public authorities, but will supplement their action; and it is not proposed that it should undertake the superintendence of houses while they are being built, or interfere in any way with the public system of sewers. To effect these objects, members are invited to enrol themselves, paying a guinea a year as contribution. For this they will be entitled to (1) a report by the engineer of the Association on the sanitary condition of a dwelling or property, with specific recommendations, if necessary, as to the improvement of drainage, water-supply, and ventilation; (2) the supervision of any alterations in the sanitary fittings, which may be carried out by the advice or with the approval of officers of the Association; (3) an annual inspection of premises by the engineer of the Association, with a report. The Association will secure the services of a consulting engineer and one or more resident engineers, whose whole time is to be devoted to the work of the Association. Both the consulting and the resident engineers are required to declare, on their appointment, that they have no interest in any patent or manufacture connected with sanitary appliances.

IRELAND.

DR. FITZGERALD, Surgeon-Oculist in Ordinary to the Queen in Ireland, has been appointed Examiner in Ophthalmic Surgery in the University of Dublin.

At a recent meeting of the Clonmany Dispensary Committee, Dr. McCullough of Gortin was elected, by a majority of votes, medical officer to the district.

LAST week, in Belfast, a lady, whilst walking in her sleep, fell a considerable height, and died shortly afterwards from the injuries she had received.

DEATH OF DR. FLEETWOOD CHURCHILL.

WE regret to announce the death, on Thursday last, of Dr. Fleetwood Churchill, the late distinguished Professor of Midwifery in the School of Physic of the University of Dublin, and ex-President of the King and Queen's College of Physicians. Dr. Churchill retired from practice three years since, living in comparative retirement at the residence of his son-in-law in the County Tyrone. His illness was only of a few days' duration.

BELFAST HOSPITAL FOR SICK CHILDREN.

THE fifth annual meeting of the friends of this institution was held on Friday, the 25th ult., at Belfast. The report of the Committee showed that a satisfactory balance, close on nine hundred pounds, existed to the credit of the charity; and that more than £4,000 had been obtained for the construction of the new hospital, leaving about £860 to be collected in addition. Twenty memorial cots have been promised, and the Committee trust that, before the new building

is opened, as many more will be given as will completely furnish it. During the twelve months ending December 31st last, two hundred and seventy-seven in-patients and six thousand three hundred and sixty-three out-patients were prescribed for at the hospital; several serious operations were performed, none of which were attended with fatal results. The mortality among those admitted was very trifling, but four deaths having taken place. The amount realised by the late bazaar held in aid of the funds, after paying all expenses, was £1,512 16s. 8d., and a vote of thanks was passed to the Ladies' Committee for their efforts in connection with making the bazaar so successful. A vote of thanks was also accorded to the medical staff for the skilful and conscientious discharge of their onerous and responsible duties, after which the proceedings terminated.

TESTIMONIAL TO DR. GORDON OF BELFAST.

IT is intended by a number of this gentleman's former pupils and friends to present him with a testimonial, which, it is proposed, shall take the form of a portrait in oil. Subscriptions to the amount of nearly one hundred pounds have already been acknowledged towards the fund formed for this purpose. Dr. Gordon is Professor of Surgery in the Queen's College, Belfast, and is well known as an eminent surgeon. We may add that he is the inventor of the "keel"-shaped splint, which has proved so successful in the treatment of Colles' fracture.

THE ADELAIDE HOSPITAL.

MR. ALBERT WALSH, senior surgeon to this institution since its foundation, has resigned. Among the names of probable candidates for the vacant post, we hear mentioned Dr. C. B. Ball, at present chief surgeon to the Blaenavon Iron and Steel Company, South Wales; Mr. C. H. Robinson; Mr. William Stoker; Mr. H. J. Tweedy; and Mr. Montgomery A. Ward, the assistant-surgeon of the hospital. Owing to the extensive additions at present being made to the hospital, and the reduced numbers of beds consequently occupied during the progress of the necessary alterations in the main building, it is probable that the election of a surgeon in Mr. Walsh's room will not take place until next summer, when it is expected that all the works will have been completed. Her Grace the Duchess of Marlborough visited the hospital last Monday.

SLIGO WATER-SUPPLY.

AN important inquiry has been recently held by the Local Government Board into the mode of supplying water to this town, under the Public Health Act, 1874, promoted by the corporation to obtain a provisional order for that object. It appears that the corporation scheme was devised by Mr. Hassard, C.E., and promoted by them in 1867-69, being sanctioned by the Sligo Borough Improvement Act. For want of funds, the corporation did not carry it out, and allowed their powers under the Act to expire; and now sought for an order enabling them to borrow £40,000, to be paid in fifty years by a borough rate. The evidence for the corporation was to the effect that at present there was an insufficient supply of water to the town, and that that obtained from the pumps and wells, the only present available supply, was impure. The river Sligo could not be utilised, owing to its foul condition, it being contaminated by sewage and other causes. Mr. Hassard's scheme consists in impounding the waters of three streams which rise in the mountains about four miles from the town, at a height of from four hundred and fifty to nine hundred feet above the sea-level; collecting it in a reservoir covering thirteen acres, with an embankment and flood-courses annexed for carrying away the heavy floods, with waste-sluiques and other adjuncts. The water is then brought to a smaller reservoir about one hundred and sixty feet above the level of the sea and then delivered to the town. The water, being very pure, will not require filtering, and can be supplied at about one halfpenny per head of the population per week, at an estimate of £24,000. Those who opposed this scheme objected, first, to the site of the reservoir, as the strata in the beds of the streams and the valleys, being

fissured, would be likely to permit the escape of the water stored up; and that the estimate was much higher than necessary, as a very much cheaper plan could be adopted by which water could be pumped up from Lough Gill, with a reservoir close to the town, at a cost of £8,000, the annual expense of steam-engines, coals, etc., being under £300. The inquiry lasted for four days, and the inspector's report has been forwarded to the Local Government Board for their consideration.

THE REGIUS PROFESSORSHIP OF PHYSIC.

CONSIDERABLE interest is felt among the members of the profession in Dublin as to the probable future occupant of this important chair in the University of Dublin. There are now three candidates for the appointment; viz., Dr. Hudson, the ex-President of the Dublin Branch of the Association, and Physician-in-Ordinary to the Queen in Ireland; Dr. Banks, the late King's Professor of the Practice of Medicine in the School of Physic; and Dr. William Moore, the present occupant of that chair. The election, which lies between Dr. Hudson and Dr. Banks, is virtually in the hands of the University Council. This body consists of sixteen members; and at their meeting on the 13th instant it will nominate to the Board of Trinity College the candidate on whom it may decide for the professorship. The emoluments of the office are, we believe, about £200 *per annum*.

CORK STREET FEVER HOSPITAL, DUBLIN.

DR. GRIMSHAW, having nearly completed his term of seven years' office as permanent physician to this hospital, retires, according to rule, on the 31st of March next; and Dr. J. W. Moore, one of the two temporary (honorary) physicians, becomes a permanent physician. An election of a temporary physician, *vice* Dr. J. W. Moore, was held last week. Dr. William Stoker was the successful candidate.

ST. MARK'S OPHTHALMIC HOSPITAL, DUBLIN.

THE bazaar held last week in aid of the building fund of this hospital was a success; a sum of, we understand, nearly £200 being realised. Mr. Arthur H. Benson, M.B., has been appointed resident surgeon to the hospital.

DR. STEEVENS'S HOSPITAL.

We are informed that Dr. Freke, senior physician to this hospital, has resigned. He will probably be succeeded by Dr. Bookey, who for many years has assiduously worked in connection with the hospital. Dr. Grimshaw, at present lecturer on *Materia Medica* in the medical school of the hospital, will, it is believed, succeed Dr. Freke as lecturer on the Practice of Medicine.

SANITARY CONDITION OF KINGSTOWN.

FROM the report of the Commissioners of this township, for the past year, it appears that the provisions of the Public Health Act, 1874, continue to be carried out. During that period, 3,121 houses and yards were inspected; 676 persons were noticed to make sanitary improvements; 445 nuisances were abated by service of notices; 241 persons were summoned to abate nuisances; 223 privies and ashpits were cleansed; 228 pigstyes and yards were cleansed, and the manure removed; 229 houses were lime-washed by the owners; 56 privies were put into proper repair; 22 branch sewers were constructed, and 26 were cleansed; 10 parties were fined for disobeying the orders of the magistrates; 9 notices were served upon the sanitary medical officers to inspect common lodging-houses; and the slaughter-houses were inspected weekly. During the past year, the extensive system of internal drainage, previously commenced, has been carried on without interruption and now approaches completion. The great outfall sewer, for a distance of 3,000 feet along the slopes of the west pier, for the purpose of conveying the sewage of all the western part of the township, and of an extensive district of the adjacent township of Blackrock, is nearly finished. A modification of the plans for this work has, with the approval of the Board of Works, been adopted; and a tender for the execution of this design, for the sum of £14,100, has been received.

DUBLIN BRANCH: FIRST ANNUAL MEETING.

THE first annual meeting of the Dublin Branch was held on Wednesday last, January 30th, in the Hall of the King and Queen's College of Physicians; ALFRED HUDSON, M.D., Physician in Ordinary to the Queen in Ireland, President, in the Chair.

Election of Members.—Twenty-one gentlemen were elected members of the Association and of the Branch; and six members of the Association were elected members of the Branch.

Report of Council.—The following report was read by Dr. DUFFEY, the Honorary Secretary.

Your Council, in submitting their report to the first annual general meeting of the Dublin Branch of the British Medical Association, congratulate the members on the progress the Branch has made since its formation, and on the position it now occupies in the parent Association.

It has long since been recognised that a complete organisation, and a power of united and simultaneous action, were elements of the highest importance in furthering the interests of the medical profession. Only by the weight of such an organisation, at once extended and united, can expression be given on any necessary occasion to the common sentiment and opinion of the profession. Only thus can the public or the State be brought to feel the influence of professional judgment or opinion; for views entertained by isolated individuals remain unheard and unfelt, but, when expressed by united organisation, tell with overpowering weight. Such an organisation of our profession, beginning from a small and local origin, has within the last few years advanced to gigantic proportions. In its central unity and its local independence, it presents an agency which is most calculated to serve the common interest of our profession.

But in this organisation we, in Ireland, have hitherto had but little share. In this city—the capital and professional centre of the country—numerous as were the members of the British Medical Association, there has heretofore been no collective organisation in connection with it; and, hence, no common voice, no united weight in its management, not even individual representation on its Council. It seemed desirable that this should be changed. Accordingly, on the 15th of May last, starting from so small an origin as a private meeting at the house of the Honorary Secretary of the Association for Ireland, of less than a dozen members, the Dublin Branch was established, and on this day, under the most favourable auspices, holds its first annual general meeting.

The Branch was formally recognised by the Committee of Council of the Association, and its by-laws approved of, on July 11th, 1877. The following resolution, a copy of which was forwarded to your Honorary Secretary, was passed on this occasion:

“Resolved—That the warm congratulations of the Committee of Council be offered to the members in Dublin and the province of Leinster upon the successful formation of a Branch of the Association in the metropolis of Ireland. The Committee of Council trusts that it may be the means of strengthening the voice of the profession in Ireland, and of bringing the Irish members of the Association into closer connection with their Scotch and English brethren.”

Your Council would take this opportunity of thanking the leading members of the Association for their courteous recognition of the Branch, and especially the President of the Association, Dr. Wilkinson of Manchester, and Mr. Ernest Hart of London, the talented and able editor of the BRITISH MEDICAL JOURNAL, who have honoured us on this occasion with their presence and support.

It is a matter of much gratification to your Council that, in so short a time as seven months since its formation, the Dublin Branch now numbers one hundred and thirty-two members, and that no fewer than forty-four new members have been added to the Association through the instrumentality of our Branch. Our members include the leaders of the profession in this capital; while the interest taken by the professional corporations as such in the welfare of the Branch is evidenced by the fact that we are permitted to hold our meeting in this hall.

Three meetings of Council have been held since the formation of the Branch. At its first meeting, it provisionally appointed, as your representatives on the Council of the Association, your President Dr. Hudson, the Rev. Professor Haughton, Dr. McClintock, and Mr. Stokes. As the present number of members in the Branch entitle it to have seven representatives, your Council recommend that the same gentlemen, and, in addition, Mr. Porter, Dr. Hayden, and Dr. Ashe, be elected. Your President, three of your representatives on the Council, the Honorary Secretary, and several members of the Council and of the Branch, attended the annual meeting of the Association at Man-

chester, and were received with the greatest courtesy and hospitality by our English fellow-members. Your Council desire it to be emphatically understood that neither the British Medical Association, nor its branches, enter into rivalry or competition with the Irish Medical Association, to whose energy, zeal, and watchfulness the practitioners of Ireland owe so much. The objects of both Associations, though harmonising, are yet distinct. The special circumstances, conditions, and relations to the public of the profession in Ireland, render it essential that an Irish Association, specially conversant therewith, should specially act therein. The aim of this Branch is rather to co-operate with the profession in England and Scotland, as regards those National and Imperial interests which bear on the welfare of the profession in the three kingdoms alike—or rather throughout the entire British Empire, embracing at once also the Army, Navy, and Civil professional services, in its comprehensive consideration. Neither do we propose to interfere with the line of working of the various professional scientific societies of this city, but to confine ourselves to the general interests of the profession, and the cultivation among our members of a spirit of kindly intercourse, fraternity of feeling, and recognition of our common aims and interests. Our brethren in Cork have, through the energy of Dr. Macnaughton Jones, been before us in taking the step of organising a Branch of the British Medical Association for the South of Ireland, and have in gratifying terms expressed their pleasure at our following their good example. But we are pleased to find that our own example has been speedily followed by the formation of a Branch in Belfast, the commercial capital of the country, which embraces the important province of Ulster in its organisation; and we welcome with cordial gratification the presence of the Presidents of both these Branches with us to-day. The three most important and influential cities and provinces of Ireland have now accordingly obtained due weight and influence in that vast professional organisation, numbering at present over 7,000 members, the ramifications of which extend into every district of our United Empire. The influence of the British Medical Association, in uniting our profession for the furtherance of their common welfare and the interests of Medical Science, is only now beginning to be felt and understood. We cannot doubt but that it will widen and increase in extent and weight with each succeeding year, including alike the profession, and with it of necessity the public also, in its beneficent operation.

The adoption of this report was moved by Dr. JAMES LITTLE, Vice-President of the King and Queen's College of Physicians, and seconded by Mr. P. C. SMYLY, Vice-President of the Royal College of Surgeons in Ireland.

President's Address.—Dr. HUDSON delivered an address, which will appear in the next number of the BRITISH MEDICAL JOURNAL.

Officers and Council.—The following officers and Council for the ensuing year were balloted for and duly elected. *President:* George H. Porter, M.D. *President-elect:* Samuel Gordon, M.D. *Vice-Presidents:* Robert McDonnell, M.D., F.R.S.; Thomas Hayden, F.K.Q.C.P.I. *Council:* Isaac Ashe, M.B.; Lombe Athill, M.D.; Edward Bennett, M.D.; Thomas Darby, F.R.C.S.I.; T. W. Grimshaw, M.D.; Edward Hamilton, M.D.; Rev. Samuel Haughton, M.D., F.R.S.; Henry H. Head, M.D.; Alfred Hudson, M.D.; Edward Mapother, M.D.; Alfred H. McClintock, M.D.; William Stokes, M.D. *Honorary Secretary and Treasurer:* George F. Duffey, M.D.

Votes of Thanks.—A warm vote of thanks to Dr. Hudson, for his admirable address and for his services in the office of President, was proposed by Dr. GORDON (President of the King and Queen's College of Physicians), seconded by Dr. McCLINTOCK, and carried by acclamation.

A vote of thanks was also given, with much warmth and cordiality, to Dr. Duffey, the Honorary Secretary, to whose services in organising the Branch a just tribute was paid.

Dinner.—In the evening, a dinner was held at the Hall of the King and Queen's College of Physicians, under the presidency of Mr. Porter, Surgeon to the Queen in Ireland, at which a numerous and influential company was assembled, and at which speeches of great interest were delivered in connection with the status and development of the Association in Ireland.

Our Dublin correspondent telegraphs: The dinner following the meeting was a highly successful and interesting event, and cannot fail to exert an important influence on the interests of the Association in Ireland. Mr. Porter, Surgeon to the Queen in Ireland, was in the chair; and eighty members and visitors sat down, including leading representatives of all departments of medicine and surgery and of the official bodies; the President of the British Medical Association (Dr.

Eason Wilkinson); the Editor of the BRITISH MEDICAL JOURNAL; the Presidents of the Northern and Southern Branches of Ireland and of the Irish Medical Association. Congratulations and favourable anticipations were expressed on all sides.

We hope to publish next week a full report of the event, which auspiciously renews and consolidates the bond of connection of the Association in Ireland.

The Board of Trinity College invited the President, the Honorary Secretary, and the leading visitors to dinner in the Hall of the College on Thursday. This recognition of the Branch is highly appreciated.

PROFESSOR HUXLEY ON WILLIAM HARVEY.

ON Friday, the 25th ult., Professor Huxley delivered a lecture, to a very large audience at the Royal Institution, on William Harvey. The lecturer commenced by saying that on the 1st of April next exactly three hundred years would have elapsed from the birth of William Harvey, who, he imagined, was best known to his hearers as the discoverer of the circulation of blood; although, in truth, this was only one of several claims which he had to the consideration and reverence of his successors. In popular repute, however, there was much diversity of opinion as to the precise share of merit attributable to Harvey in regard to this most important discovery. So much obscurity had been thrown about that question, partly by design and partly unintentionally, that he could possibly render no better service than by endeavouring to clear up the question to some extent, or at any rate adding his mite to that end. Were he fortunate enough to be dealing with an astronomical subject, there would be there few who did not know something of the earth's movements round the sun; but he must not suppose them to be familiar with the elementary facts of the circulation of the blood. It would, therefore, be expedient for him to place before the audience briefly the facts which constituted what was known and understood of the doctrine of the circulation of the blood, afterwards to consider the statements he made, and finally to add a few words respecting the method which led Harvey's predecessors and Harvey himself to make their investigations successfully. The doctrine of the circulation of the blood had four main elements: first, knowledge of the structures in which that circulation takes place; secondly, a knowledge of that which is contained in those structures; thirdly, a knowledge of how that which is contained moves; and lastly, a knowledge of the cause of the movement.

The lecturer then proceeded, by the aid of explanatory diagrams, to describe the heart, its organisation and its function. Treating of the gradual advance which human knowledge had made, he observed that, in tracing back the history of this doctrine, the student was led back to Grecian learning. Turning to the works which were published under the name of Aristotle, in the fourth century before Christ, and which formed a sort of encyclopædia of extant scientific knowledge, it was found that the structure of the heart was understood, and what were sometimes stigmatised as blunders were really mere errors of description. About 300 B.C., in the famous school at Alexandria, there arose a body of scientific anatomists, amongst whom there were two (Hierocles and Aristippus), the amount of whose knowledge that had come down to us was very considerable; the last understood the mechanical operation of the valves. Reference was then made to the extraordinary genius of Galen, and Professor Huxley pointed out that his mistake in assuming that there was a perforation between the right and left sides of the heart led him away from the track of the discovery of the circulation of the blood, and threw physiology wrong for a great number of years. For thirteen hundred years from the death of Galen, no advance was made. Political and social troubles caused the works of Galen and his school to take refuge among the Arabians; they were brought back into European learning through the agency of the Moors, who settled in Spain and elsewhere, and by people who had travelled in Moorish countries. The next advance was that made by Servetus, who was judicially murdered by John Calvin, who, being a thorough-going man, burnt Servetus's works as well as himself, and thus the real worth of any claim to the discovery which might be made by Servetus would never be known.

After touching on the theories of Rualdus Columbus and Ambrose

Paré, and the claims of Spigelius, who, he said, must have been a fellow-student of Harvey, and who did not get as far as Galen and Columbus, he described the propounding of Harvey's theory in 1619, and the publication of his pamphlet in 1638. This, he said, caused a perfect revolution. So far as the anatomy of the organ was concerned, it left matters where they were; but, as regarded the motion of the blood, Harvey gave the most complete demonstration; and the lecturer pointed out that to Harvey alone could be given the credit of the discovery. One thing Harvey could not do, because the instruments of the time would not enable him to do it: he never gave the exact channels by which the blood passes into the veins. The evidence of the magnitude of Harvey's discovery would be seen by looking into contemporary literature. They would there find, in the persistence and virulence of the attacks made upon him, that he was introducing some considerable new truth. Riolan, a Parisian professor of anatomy, was quoted as an example of this. Within thirty years of the promulgation of Harvey's views, all had come round to his side. Thomas Hogg said Harvey was the only man who had the good fortune to see the doctrine which he propounded accepted in his own lifetime. He (the lecturer) could not but be struck, in looking at those old documents, to find how history in our days repeats itself. There was another controversy familiar of late years in regard to Darwin's views, in which the same things were said; but he thought Darwin would be the second man living long enough to see the doctrine now so abused and derided accepted by the leaders of science throughout the civilised world.

He had promised to say something as to the methods of investigation. Englishmen had sundry superstitions; among them, none more curious, more wide-spread, more deeply rooted, than that which led them to speak of Sir Francis Bacon, some time Lord Chancellor of England, as the father of modern science. Bacon was a contemporary of Harvey, who is said to have attended him in a medical capacity. Harvey's work was done by the year 1619; but the *Novum Organum* was not published until 1630. That was something against Bacon's being the father of that particular branch of science. Nor was there in Harvey's work the smallest trace of the writings of Bacon. If there was one thing which distinguished Harvey more than another, it was the invariable respect and reverence he paid to his predecessors in scientific discovery. Bacon's works were characterised by contrary traits; he saw nothing of importance either in the discoveries of the ancients or in those of his contemporaries. Harvey's method was the method of any man who did any good scientific work; it was simply common sense refined and made exact. For three thousand years, scientific investigation had gone off the track for no other reason than neglect of observation and experiment. By no possibility could the action of living things be inferred from the action of dead parts. It followed as a necessary consequence, that the only basis of physiological science was observation and direct experiment on the organs in the living state. There was no more instructive history than the history of the circulation of the blood in that respect. It would be found that the progress of discovery had been in exact proportion to the practice of experiment and observation on living objects. It must be so; there was no other way in which the necessary facts could be ascertained. The whole of history taught us that the advance of knowledge was only possible and practicable by direct observation; and there could be no doubt that Harvey's discovery was made by observing the course of the blood in the living animal. The observation was a simple one, and could be repeated, with all possible care that the animal should be insensible. Nevertheless, if any English subject at this time should repeat it, and if it so happened that such a monstrous state of things should exist that the affairs of the Home Office passed into the hands of a minister less wise and less steady in resisting all sorts of pressure, both legitimate and illegitimate, than the present one, the person who made that experiment might be punished as a common malefactor.

He did not propose to trespass upon the burning question of vivisection; he had already expressed his views upon it where he was responsible for them. There might be some who thought it would be better that the whole human race should perish than that a dog should suffer. It might be said, on the other hand, that those who would not save a human life by the destruction of a whole hecatomb of animals were guilty of constructive murder. He wished to make one or two observations, not to trench upon a dangerous neighbourhood, but to clear the ground. He begged his audience to look into the history of physiological science as they had investigated the history of the circulation of the blood; and, when they had investigated it, to tell him of any cardinal truth in physiology which did not rest upon, and had not been established exactly as Harvey's was established by, repeated experimentation. The lecturer was quite aware that it was said, on

the authority of Robert Boyle, that Harvey made the discovery of the circulation of the blood, reasoning deductively by the action of the blood in the veins. He replied, that the words of Robert Boyle did not bear out his conclusion; that the words of Harvey did not bear out the statement; and, if they did, nevertheless it was an error, for it was logically impossible to discover from the action or from the structure of the dead valves, what the functions of those parts might be when in a state of activity. He would not trouble his audience by reading the extracts which he had prepared from Harvey, which gave an interesting account of the course that led him to establish the doctrine of the circulation, but would ask them to take his word for it that there was not a word to bear out the statement of Boyle.

Another consideration which he would suggest was possibly one personal to himself. He had been credibly informed that there was no more thorough sign of approaching senility than to be a "laudator temporis acti" [*laughter*]; yet he would like to suggest that the things which happened in the seventeenth century were somewhat different from what happen now: the contrast was worthy of consideration. Harvey was the favoured friend of his sovereign; he was the honoured Nestor of his profession; he was a man who was looked up to by all of his countrymen as a person of whom they had every right to be proud. That was what happened in the seventeenth century. But if Harvey lived in these days, and had made the mistake of conferring the same vast benefit on mankind as he did then, he assuredly would receive no such marks of favour. Probably, to its honour be it said, his profession would honour him as much now as it did then; but he would find that a very considerable proportion of the general public would not give him marks of favour, but would make him a mark for quite another sort of thing, a mark for envious vituperation and abuse. He would find a considerable proportion of all classes of the community, whose sole object in life would be, if possible, to confer on him the legal status of a burglar. [*Laughter.*] The time of Harvey was, he need not tell them, one of the most remarkable periods in English history. Harvey might have conversed with Hobbes, Locke, Newton, with Strafford, and with Cromwell. Now, in that day those men illustrated the power of the English race in a manner like which it has never been illustrated before or since; and he would just suggest whether it was possible that their judgment on the moral and social question might possibly have had as good foundation as that of the people in this refined, enlightened, and, he might add, softly sentimental time.

THE LATE DR. WILLIAM STOKES.

WE have the satisfaction of presenting to our Associates this week a portrait of the late eminent and esteemed Regius Professor of Physic in the University of Dublin. It is taken from a photograph in the possession of Dr. Samuel Gordon, kindly lent by him for the purpose. The engraving will be recognised by all who knew Dr. Stokes as a faithful representation of his features; and we have no doubt that it will be valued by very many members of the Association as a memorial of one of the greatest masters in medicine and one of the brightest ornaments of his profession.

Two interesting notices of Dr. Stokes lie before us. One, from the pen of Dr. J. W. Moore, appears in the *Dublin Journal of Medical Science* for this month, and ably reviews his professional life and works. His character is thus summed up at the end of the article. "A model and diligent student, he in time became a painstaking and successful teacher—the sympathising friend, the prudent counsellor, and the ardent well-wisher of every one of his 'fellow-students', for so he called his pupils. But he was more than this. Those who have seen Dr. Stokes at the bedside of the sick know how gentle, how refined, how kindly was his bearing towards the patient. Amid all the ardour of clinical observation and research, he never for one moment forgot the sufferer before him; no thoughtless word from his lips, no rough or unkind action, ever ruffled the calm confidence reposed in him by those who sought his skill and care. In many eloquent lectures delivered in the Meath Hospital, he inculcated these Christian lessons of charity and thoughtfulness; and so by precept and example, he strove to teach the duties of a true and God-fearing physician."

The other article to which we have referred is one in *Macmillan's Magazine* for February, entitled "Dr. William Stokes of Dublin: a Personal Sketch: by the Rev. J. P. Mahaffy." In it the author speaks of Dr. Stokes as he appeared in his extraprofessional life, and shows how this hardworking and grave physician was one of the most pleasant and genial of companions.

An interesting memoir of him was also published in the *Dublin University Magazine* for August 1874, with a portrait; which, however, represents him in younger days.

We commend all these memoirs to our readers for attentive perusal.

UNIVERSITY OF OXFORD.

A "STATEMENT of the Requirements of the University, adopted by the Hebdomadal Council on the 19th of March 1877, with the Papers upon which it was founded", contains the following document by Dr. Acland, dated May 11th, 1876.

1. I assume that we are only to undertake at present the preliminary scientific studies at the foundation of medicine, and not to found now a complete practical school. The reasons are stated in a former communication.

2. For this purpose, I should retain the office of the Regius Professorship of Medicine as at present. (Though I should not advise limiting or defining his department of study, he might, in the present state of knowledge, study with advantage the results of observations on national health in the various countries and races of the world. I have begun a collection of books on this extensive subject in the Radcliffe Library, as the groundwork of comparative study of the health-conditions of nations. This subject is but "hygiene" in its widest sense.)

3. The Regius Professor should have the assistance of an analyst and demonstrator of medical and sanitary chemistry and microscopy. (Mr. Denkin, Dr. Pöde, and Von Bose have filled this office for several years in the Sanitary Laboratory of the Museum, wholly unpaid by the University.)

4. I would add a professor or lecturer on general and comparative pathology, *i.e.*, the fundamental laws of abnormal change in man and animals. This is complementary to the teaching of normal physiology, and is closely allied to the department of hygiene as described above. (He need not be resident, and should be appointed for not more than five years. The funds of the Clinical Professorship would be a foundation for this.)

5. The Professor should have a sum of money at his disposal, subject to the approval (say) of the Vice-Chancellor, to engage an eminent lecturer on special subjects, to illustrate the connection of the fundamental sciences with medicine; as, for example, the combined results of mathematics, physics, physiology, pathology, and therapeutics in the investigation of the organ and function of vision.

HENRY W. ACLAND.

HYDROPHOBIA AND RABIES.

THE Committee recently appointed by the Scientific Grants Committee of the British Medical Association "to organise an inquiry into the Causation, Pathology, and Treatment of Rabies and Hydrophobia", consisting of Mr. Callender, F.R.S., Dr. Burdon Sanderson, F.R.S., Dr. T. Lauder Brunton, F.R.S., Mr. Ernest Hart, and Dr. Gowers, desire to announce that they will feel favoured if any medical gentleman having under his care a case of hydrophobia will kindly communicate with them. In any cases of hydrophobia or of rabies in which a *post mortem* examination is made, they will be glad to receive for investigation the following parts; namely, the spinal cord, medulla oblongata and pons Varolii, a small piece of the cerebellum, corpus striatum, convolutions of the middle third of the brain, one of the salivary glands, the nerves leading to the part bitten, portion of the liver and of the kidneys, and the scar. These should be at once placed in a mixture of equal parts of spirit and water (or, if the organs be at all softened by commencing decomposition, in a mixture of three parts of spirit to two parts of water), and forwarded with as little delay as possible, together with a report of the *post mortem* appearances, to the Office of the British Medical Association, 36, Great Queen Street, London, W.C.

The members of the Committee are also anxious to have the opportunity of visiting cases of hydrophobia under treatment, or of attending any *post mortem* examinations in fatal cases.

MR. W. WATERS, Deputy-Coroner for Hants, conducted an inquiry on Saturday at Kingsley, near Alton, on the body of a boy aged seven years, named Aaron Dawes. It appeared from the evidence that, whilst playing with two other boys in a meadow, a sheep-dog bit him in the right hand. The dog subsequently strayed to a neighbouring village, where it bit a man, who at once shot the animal. The mother of the deceased washed the small wound which had been made by the bite,

and it soon healed. The deceased went to school until the 23rd ult., when he was taken ill. His symptoms became so alarming that Dr. Woods of Headley was called in, and he at once pronounced the case one of acute hydrophobia. The deceased died on the following morning in convulsions. The jury returned a verdict of "Death from hydrophobia".

THE BRITISH MEDICAL ASSOCIATION MEDAL FOR DISTINGUISHED MERIT.

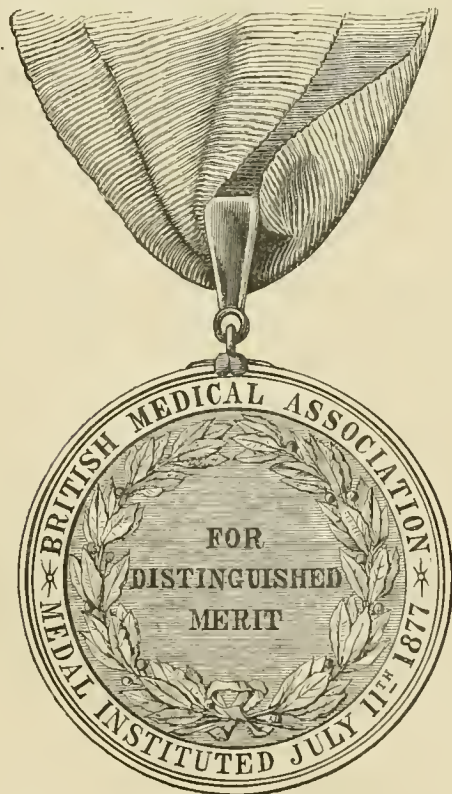
As was stated in the JOURNAL of January 12th, the distribution of the medals of the British Medical Association to the medical men who had assisted in the rescue of the miners at the colliery accident near Pont-y-pridd last year, took place at the Grosvenor Restaurant in New Bond Street on January 9th.

The President and many members of the Committee of Council, with several invited guests, including all the medallists but one, having assembled before dinner, the presentation of the medals was made, after a few appropriate remarks, by Dr. EASON WILKINSON, President of the Association; who, as each gentleman was called up to him, placed the blue ribbon suspending the medal round his neck. The recipients of the medals were:

Gold Medal: Henry Naunton Davies, L.R.C.P., Cymer, Pont-y-pridd.

Silver Medals: Edward W. S. Davis, M.R.C.S., Mountain Ash, Aberdare; W. Washington David, Esq., Guy's Hospital; and Edgar Dukes, Esq., Cymer.

Bronze Medals: Rees Hopkins, L.R.C.P.Ed., Pont-y-pridd; Philip James, Esq., Guy's Hospital; Charles J. Jones, L.K.Q.C.P., Pandy, Pont-y-pridd; Ivor Ajax Lewis, L.R.C.P.Ed., Llantrisant; Edward Lloyd, M.D., Miskin Manor, Llantrisant; George Neal, Esq., Pen-y-graig, Pont-y-pridd; Thomas W. Parry, L.R.C.P.Ed., Ferndale; and Francis H. Thompson, M.R.C.S., Gilfach-Goch, Llantrisant.



The medal is represented of the exact size in the accompanying drawings.

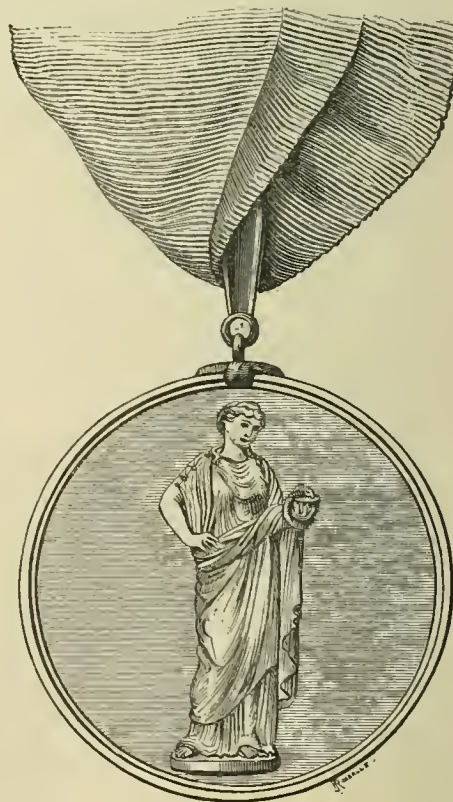
At the dinner, the chair was occupied by Dr. R. W. FALCONER, President of the Council of the Association. Besides the medallists, several guests, including Mr. Ernest Hart, Mr. Sibley (President of

the Metropolitan Counties Branch), Dr. Andrew Clark (President-elect), Dr. Henry (Secretary of the Branch), and other gentlemen, were present by invitation of the Committee of Council.

After the dinner, the CHAIRMAN proposed "The Queen", which was loyally received.

The CHAIRMAN then proposed the health of the medallists. He referred to the circumstances which had led to the institution of the medal by the adoption of a proposal made to the Committee of Council by Dr. Sieveking and Mr. Callender. The medical men were the only persons actively concerned in the rescue of the miners at Ty Newydd whose services had not received public recognition; and the medal of the Association was instituted to remedy such omission, and to show the value which their medical brethren set on such labours as those of Mr. Davies and the gentlemen associated with him. He congratulated the recipients of the medal on the recognition that they had met with from the Association; and trusted it would be an encouragement to them in the labours of their calling. He understood that, among the silver medallists, were two gentlemen (Messrs. Dukes and David) who had not yet entered on the active duties of the medical profession, being still students in medicine; and he congratulated them on receiving the medal thus early in their professional life. He hoped that the medal would not be given too often, but that it would be reserved for deeds of high merit such as that which had called it into existence. Its value would be endangered by too frequent award.

Mr. H. NAUNTON DAVIES said: I thank you most cordially for the honour you have conferred upon us, and for your kind invitation to be your guests this evening. At the memorable inundation of the Ty Newydd Colliery, we were called upon during those days and nights of deep anxiety and peril to share the dangers incident to the position; and we only claim to have done what I have no doubt every member of the profession would have done under similar circumstances—our duty. Her Most Gracious Majesty the Queen, sympathising as she always does with the affliction of even the meanest of her subjects, and desirous of marking her special favour to those who, at the risk of their



lives, had striven to extricate those poor men from their living tomb, caused the Albert Order to be extended from perils by sea to perils by land. We alone, the members of this profession, were excluded. The Council of this influential and powerful Society has rectified the omission; and the noble way in which you have done this deserves the warmest

thanks of the whole profession. For myself and those who are with me, and from whom I received the heartiest co-operation, I can only say I shall ever esteem it an honour, and I hope to hand this medal to my children, as a token of the honourable recognition of my profession for discharging the duties that fell to my lot. I again thank you for the high compliment you have paid me.

Mr. E. W. S. DAVIS said: I have to offer you, on behalf of myself and the other silver medallists, our most sincere thanks for the kindness you have shown us in drinking our healths, and the distinguished honour you have conferred upon us in the presentation of such handsome medals. I can safely say that, in following our professional duties at Ty Newydd, neither of us dreamed of being so highly distinguished. I had myself never been down a coal-pit before, nor slept all night in a shed waiting for action; but it was my duty to do both, and the reward has been too great. That my brother medallists worked with a will and in danger, sparing themselves nothing, I had ocular proof in the mine; for one, when I could recognise his features, had the aspect of the very dirtiest scarecrow I ever saw; while another had the appearance of an Ethiopian at St. James's Hall. Yet all worked nobly and well. Before leaving home to attend this meeting, it was my privilege, as medical attendant in the family of my distinguished neighbour and kind friend Lord Aberdare, to have the opportunity I desired of ascertaining from his lordship the relation in which the medical men stood with regard to the recipients of the Albert Medal in his lordship's most careful and scrupulous report to Her Majesty's Government. Lord Aberdare kindly read to me this report, and explained to me that the investigation required the utmost circumspection and care to be used in carrying out the specifications of the Royal Warrant. His lordship had been most desirous of its being made public, but the governing powers had considered it inexpedient, and that great inconvenience would accrue from such a precedent having been made. But it was permitted his lordship to embody any of his suggestions made in his address at Pontypridd when distributing the Albert Medal. In this address, Lord Aberdare makes honourable mention of several engineers and others (who, although working heroically and well, yet did not come within the particular desiderata of the Royal Warrant), and adds as follows: "In the same class I may fairly include Mr. Dukes, assistant-surgeon to Dr. Henry Naunton Davies, who went to the barrier at half-past five A.M. on Friday, when the danger was at its highest, in order to convey food to the imprisoned men." Gentlemen, I think the profession will be glad to know how near the Albert Medal one of us was. On behalf of myself and the other medallists, I return you our grateful thanks for the honour you have done us. This honour has come to me in the decline of my professional life, and in the commencement of it in others; but all are suitably impressed by the kindness and honours conferred on us by you this evening.

Mr. EDGAR DUKES said: I will not detain you a moment beyond expressing my deep sense of the honour done me in the presentation of this ever-to-be-prized medal, and the compliment paid by your kind invitation of this evening. I should like, in addition to the remarks of Mr. Edward Davis, to say that there was no Edgar Dukes in that mine; it was Wm. Washington David and Edgar Dukes. Where the one was the other was. We went together, we came together; we were together from first to last. Hence, whatever the one merited surely the other equally did. Thanking Mr. Edward Davis for coupling my name with the Albert Medal, I will only add that its value would have been very greatly deteriorated had not my friend shared the honour with me.

Dr. E. LLOYD said: I rise with great diffidence, blushing from my new-made honours—[a laugh]—to return you my best thanks for the distinguished honour you have conferred upon us, not only by enrolling us on your newly created order of merit, but also for the medals we have received at your hands, and for this handsome entertainment which you have so hospitably provided.

Sir, we are all interested in the recognition of merit wherever it may be found; and, in conferring the gold medal of your distinguished Association on my esteemed friend and former pupil, Mr. H. Naunton Davies, you have bestowed it on one who, from his earliest years, has distinguished himself by his devotion to his science, and who has raised himself to a very high position in the profession in South Wales, not only by his industry, skill, and judgment, but also by his modesty, courtesy, and conduct.

In the performance of the duties which fell to the lot of Mr. Davies and ourselves, on the occasion of the entombment of the colliers in the Ty Newydd Pit, we simply claim to have done our duty under the trying and dangerous circumstances in which we were placed; and I see before me two gentlemen, his assistants (Mr. Dukes and Mr. David), who, day by day and night by night, shared all the dangers

incident to the situation, in common with the colliers, engineers, and other workmen. But, gentlemen, they only did their duty; they expected no rewards; they only hoped to be of service to their poor suffering entombed fellow-creatures, as each of you would have done had you been in their place.

Gentlemen, we are all baptised into the service of humanity; but in our profession there are no rewards. Perhaps, in the term of a generation, five baronets may be made, selected chiefly for their attendance on important members of the Court or other distinguished personages. The State does nothing for our profession. In the sciences of chemistry, electricity, and hygiene, vast benefits have been conferred on the whole human race. Has our profession done nothing in these three departments, that it has received no rewards? Are there no names dear to science and to us that deserve recognition? Where are they to be found in the rolls of the orders of merit?

We have the satisfaction of knowing that our profession, whether in the battlefield, the sea-fight, or the bedside—in plague, pestilence, and death—has done its duty. The State recognises the services of the law by judgeships, baronies, and earldoms. Engineers, soldiers, sailors, diplomats, expect their well-deserved rewards and honours. For us there is no blue ribbon! Our consciences are our own rewards. It has been left to your noble Association, composed of 7,000 fellow-members of the profession, to establish an order of merit to which you have this day admitted us, and for this initiative you deserve the thanks of the whole profession. I desire to speak with every respect of those venerable bodies the Colleges of Physicians and Surgeons; but I would ask how long should we have waited before they would have recognised the humble merits of a few remote surgeons, who, in a deep pit in South Wales, spent eight days and nights waiting to assist some poor buried colliers? No, sir: "Palmam qui meruit ferat". To you belongs this honour, and for this we humbly return our thanks; and, for being made members of the order of merit, an honour which you have established, we shall ever esteem as the greatest we have received, except only from the fountain of honour itself—Her Most Gracious Majesty the Queen.

Dr. HOPKINS said that, suffering from travelling all night to attend the meeting, he could but express his thanks for the honour done him, and regret he was not well enough to say as much as he desired.

Dr. LLOYD proposed the health of Dr. Sieveking, to whom, with Mr. Callender, the institution of the medal was due.

Dr. SIEVEKING returned thanks for the honour done him. He said that the foundation of the medal for distinguished merit inaugurated a new era in the history of the profession of this country and of the British Medical Association. Public honours were rarely awarded to medical men, who did more work without fee or reward, and who had a larger share in the advancement of modern civilisation, than any other class of men. The case of the medical men who assisted in the Pont-y-pridd accident was a glaring one of public neglect and slight. Without the moral aid given by the medical men, and by the encouragement afforded by their presence in the gloom of the mines, the labouring men would never have persevered in their arduous endeavours. The medical men, led by their brave chief, Mr. H. N. Davies, animated them to endure to the last, and success was mainly due to the doctors—to men who had no other motive to prompt them but that of the highest and most unselfish duty.

The health of the Chairman having been proposed and responded to, the proceedings terminated.

THE HEALTH OF THE NAVY.

THE annual statistical report of the health of the navy has just been presented to the Board of Admiralty by the Director-General of the Medical Department, Sir Alexander Armstrong, K.C.B.; and its most encouraging feature is that, although on the total force employed during the year 1876 there was an increased sick-rate, yet in the death-rate from disease alone there was a reduction of 1 per 1,000, while the total death-rate was 1.44 below the average of the past thirteen years. The sick-rate, or number of separate entries on the sick-list, although higher than in 1875, was much below the thirteen years' average, there being a reduction of 41.81 per 1,000 of force. The invaliding-rate was rather higher than the thirteen years' average. In the introductory statement, which bears the signature of Deputy Inspector-General T. R. Pickthorn, as the successor of the late Deputy Inspector-General Mackay, testimony is borne to the continued advantages derived from the operation of the Contagious Diseases Acts on the Home Station as seen in the maintenance of a reduced sick-rate from those diseases; and a very important series of tables is given in the appendix to the report, contrasting the state of affairs in Her

Majesty's ships at five home ports where the Acts are in force with five home ports where they are not in force, the tables being spread over a period including three years before the Acts were passed. "These tables," the Deputy Inspector-General says—and the figures amply bear out his assertion—"show conclusively the benefits resulting from the legislation of 1864, 1866, and 1869, even in its present limited application". As regards the general medical history of the navy during the year under review, it appears that the force employed in the service afloat numbered 45,010, of whom 23,620, or 52.47 per cent., were between fifteen and twenty-five years of age; 14,430, or 32.09 per cent., between twenty-five and thirty-five; 5,640, or 12.53 per cent., between thirty-five and forty-five; and 1,320, or about 3 per cent., over forty-five. Of the total persons invalided, 50 per cent. were under twenty-five; 30 per cent. between twenty-five and thirty-five; 15.58 in the next decennial age period; and 4.27 above forty-five. The percentage of deaths in the first age period of service (fifteen to twenty-five) was lower than that of the invaliding; but still out of every hundred deaths, 40 per cent. were between fifteen and twenty-five, 31 per cent. between twenty-five and thirty-five, 21 per cent. in the third period, and 7 per cent. above forty-five. Of the total invalidings, more than one-fifth were due to diseases of the nervous system, and the loss of service from these diseases is stated to be increasing. Diseases of the digestive system caused 12 per cent. of the invalidings; phthisis or consumption, 11 per cent.; diseases of the circulatory system, 10 per cent.; and wounds and injuries, 9 per cent. Of the deaths at all periods of life, wounds and injuries were as usual the most prolific cause; but in 1876, the mortality was exceptionally heavy, the explosion in the *Thunderer* causing no fewer than thirty-five deaths in persons belonging to the service afloat; while there was also an increase in the deaths from accidental drowning. The disease which formed the most fatal factor in the death-rate was phthisis. No disease appears to have been epidemic either at home or abroad during the year, except small-pox at Bombay, the spread of which was checked by preventive measures. There were several cases of scarlet fever in a single ship in the Mediterranean, three cases of yellow fever in a ship lying at Barbadoes, an outbreak of influenza on the Pacific station, dysentery on the China station (during the operations on the Perak river), and scurvy was present on the Arctic expedition. A brief but succinct account is given under the head of the Irregular Force as to the health of the crews of the Arctic vessels, the opinion expressed by the Deputy Inspector-General being that "in considering the origin of this serious outbreak, it is not possible to escape from the conclusion that its primary cause was the omission from the dietary of the sledging parties of a sufficient supply of the antiscorbutic elements of food. No limejuice was included in the dietary, and the quantity of preserved potato and other vegetables carried was very small". It is further added, in confirmation of this view, that "the antiscorbutics with which the ships had been supplied were amply sufficient to effect a rapid cure of the disease after the men's return, and on September 8th, when the ships left the ice, there was not a single person on the sick-list of the ships".

AMENDMENT OF THE MEDICAL ACT.

DR. LUSH has reintroduced into the House of Commons the Bill of last year for amending the penal clauses of the Medical Act. We understand that Government has consulted the General Medical Council, and will probably introduce a measure having a wider range, including provision for uniform minimum examinations by conjoint boards in the three divisions of the Kingdom; amendment of the penal clause; provision for registering foreign and colonial degrees under the supervision of the Medical Council, etc. The outline of this Bill is to be found in the report of the proceedings of the Medical Council during the session of last year.

HOSPITAL AND DISPENSARY MANAGEMENT.

PROVIDENT DISPENSARIES IN BIRMINGHAM.

THE Committee of the Birmingham Provident Dispensaries have discovered at last the impossibility of establishing a dispensary without consideration to the wishes of the profession. At a public meeting held in the Town Hall in July last, a Committee was appointed, "with power to add to their number, to establish provident dispensaries in Birmingham and the district". This Committee consisted of forty-one members, and included eight aldermen or town councillors, nine clergymen or ministers of religion, but only three members of the medical profession, each of whom was a hospital surgeon engaged in consulting-

practice. At the annual meeting of the Birmingham and Midland Counties Branch of the Association, held on June 28th last, the following resolution was carried unanimously: "That, in the opinion of this meeting, the introduction of the provident dispensary system offers the best means of checking the excessive increase of the amount of gratuitous medical advice dispensed by our local charities; and that the Council of the Branch be requested to take steps for promoting the formation of provident dispensaries in the town." A copy of this resolution was conveyed to the Mayor, who was the convener of the Town Hall meeting, and a member of the Committee there appointed for the establishment of dispensaries, in a courteous letter written by the Secretaries of the Branch, of which the following is an abstract: "Our Society is the largest representative body of the medical profession in the midland counties, and a very general feeling prevails amongst its members that the provident dispensary system of medical relief, which is already in existence here, can only be fairly remodelled and prudently extended after very careful inquiry. The interests and position of existing provident societies, the customs, necessities, and means of the artisan population, and the legitimate requirements and views of the medical profession are equally deserving of consideration. Our Council, while pursuing the task entrusted to it, will be happy to give their best attention to any suggestion for co-operation which may emanate from any society or committee having the same objects in view." This opportune and considerate offer of co-operation was acknowledged, but it has never been acted upon. The lay committee on provident dispensaries went on with their work, without taking counsel with the medical profession; and they published about a fortnight ago their scheme of rules for the Birmingham dispensaries. This scheme is embodied in a pamphlet of ten pages. Among other regulations, the scheme proposes that "all persons", without regard to their means or state of health, "shall be entitled to be registered as members"; and, further, that "no stipendiary officer", that is, the surgeons amongst others, "of the dispensary shall be eligible, either as a member of the general committee of management or of the local committee". The Town Hall Committee decided that the first dispensary should be established at Hockley, and that it should begin with a staff of four surgeons; the honorary secretary of the committee, an Unitarian minister, thereupon visited three members of the Birmingham Branch of the Association, and proposed that they should become surgeons to the projected dispensary. Those gentlemen declined to accept office under the existing scheme, and they and some of their medical brethren requested the Council of the local Branch to convene a special general meeting "to consider the position of the profession in reference to the establishment of provident dispensaries in Birmingham". That meeting was held on Thursday last, January 31st; and we doubt not that such resolutions were passed as will lead to such conjoint action between members of the Branch and the Provident Dispensary Committee, as will result in a complete rectification of the scheme in accordance with "the legitimate requirements and views of members of the medical profession".

CHEAP CONSULTATIONS.

A PAMPHLET which Mr. W. H. Alger has recently published, with regard to the amalgamation of the free and provident dispensaries at Plymouth, contains the following statement.

"A striking illustration of the unwise prodigality of the medical profession is to be found in the Plymouth Public Dispensary. At this institution, four physicians and four surgeons gave, during the past year, their best advice to nearly four thousand (3,928) patients. Each of these persons might have had advice and medicine for six weeks; and, supposing that ten interviews took place between each ticket-holder and his medical attendant during the six weeks, either at the patient's house or at the Dispensary (and I understand from one of the staff that this number is below the real average), this will represent about forty thousand (39,280) interviews or visits. Now, what is the sum paid for this enormous amount of mental and physical wear and tear? Six of these gentlemen get absolutely nothing, whilst the other two, who do most of the home visiting, receive £120 *per annum* between them; and, dividing this sum by the figures just quoted, it will be found that the medical profession was paid at the preposterous rate of less than *three farthings* for each consultation or actual home visit."

THE BATTERSEA PROVIDENT DISPENSARY.

IN submitting their report for 1877, the committee state that the results of the year's work are very encouraging. The number of benefit members shows a marked increase, and the balance divisible among the medical officers is greater than last year. As our readers are aware, this dispensary was converted from the free to the provident system in 1875. This report, therefore, includes only the second year of its existence as a provident institution. During the first year of the dispensary

in its reorganised form, 3,634 benefit members entered their names, of whom apparently about 2,150 continued to subscribe. During the year just ended, 4,006 persons have been entered, and apparently about 2,460 are permanent members. The proportion of the receipts finally payable to the medical officers was £112 9s. 4d. in 1876. It would have amounted to £143 0s. 5d. if there had not been a necessity to use part of the subscriptions in completing the fitting up of the dispensary. For the past year the amount divisible is £242 8s. 10d. The payments by members in 1876 amounted to £312 16s.; consequently the proportion of this sum payable to the medical officers would have been 45.7 per cent., if no part of the subscriptions had been spent in fittings. This year the receipts from members have been £399 11s. 6d., and of this £242 8s. 10d., or about 60 per cent. is payable to the medical officers. With the increase of numbers has come greater economy, because the arrangements of the dispensary were made with a view to an extended list of members. The committee say they "cannot close their report without expressing their strong feeling of the value of the services given by the medical officers. In one sense those services may be properly spoken of as 'given'; but, if so, they are given in the best possible way, so as not to cramp or limit the entire freedom of the benefit members. It may be truly said that a gift judiciously made is often doubled in value to the receiver; and this expression may be appropriately applied to the care and attention of those officers whose services the committee desire to acknowledge."

A YEAR'S WORKING OF A PROVIDENT DISPENSARY.

AT the meeting of the Committee of the Royal Victoria Dispensary at Northampton, held on January 25th, Mr. Becke, the honorary secretary, reported that the net amount due to the three medical officers for their year's services was upwards of one thousand eight hundred pounds, after payment of drugs and all other expenses. The sum payable to the senior medical officer was nearly one thousand pounds. Mr. Becke believed this is the largest sum ever paid by any provident or charitable institution to a medical officer for a year's services.

ASSOCIATION INTELLIGENCE.

SHROPSHIRE AND MID-WALES BRANCH.

A QUARTERLY meeting will be held at the Salop Infirmary on Tuesday, February 12th, at 6.30 P.M.; J. RIDER, Esq., President, in the Chair.

The Secretary will feel obliged to those members who intend to read papers if they will signify the same to him before the day of meeting.

HENRY NELSON EDWARDS, *Honorary Secretary*.

Shrewsbury, January 30th, 1878.

LANCASHIRE AND CHESHIRE BRANCH.

THE first intermediate meeting of this Branch will be held at the Town Hall, Oldham, on Tuesday, March 5th, at 3.30 P.M.

Dr. W. H. Broadbent (London) has kindly consented to read a paper on the Mechanism of Speech and Thought as illustrated by Pathology.

Members wishing to read papers or to exhibit specimens are requested to communicate with the Honorary Secretary as soon as possible.

Dinner will be provided at 6 o'clock.

D. J. LEECH, M.D., *Honorary Secretary*.

96, Mosley Street, Manchester, January 31st, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE fourth ordinary meeting of the session 1877-8 was held in the Queen's College on January 10th, 1878: present, SAMPSON GAMGEE, Esq., President, in the Chair, and thirty-six members and visitors.

New Members.—The following gentlemen were elected members of the Branch: Dr. Chown and Dr. J. Wood, Birmingham; Mr. G. Holloway, Cannock; Mr. H. B. Walker, Kidderminster.

Communications.—1. Mr. Sampson Gamgee showed a modification of Sayre's Apparatus which had been constructed, on his suggestion, by Messrs. Salt and Son.

2. Dr. A. H. Carter read a paper on a New Method for the Quantitative Estimation of Urea in Urine.

3. Dr. Balthazar Foster read a paper on Sudden Death in Diabetes Mellitus.

CORRESPONDENCE.

PHYSICIANS' FEES.

SIR,—You have opened your columns to what, I fear, you may find a rather overwhelming flood of correspondence on the above subject. It does seem strange that some physicians should only now commence to complain of the injustice dealt to them by an indiscriminating public, to whose sense of honour it has been their pride and privilege to entrust the amount of honorarium expected by them for services rendered. While Fellows of the College of Physicians are bound down by the restrictions as to recovery of fees at present imposed on them, there is no help out of it, as far I can see, and the dishonest portion of the public will always be ready to take advantage of these circumstances whenever it is possible to do so.

I cannot but think that, if there were proper accord between those practising as pure consultant physicians and those gentlemen who practise in a less restricted manner, some mode of distinguishing the "black sheep" would be soon found out, at least as far as regards provincial towns of sufficient importance to give scope for consultation practice. "Consulting physicians" are occasionally apt to draw a broad line of distinction, socially and professionally, between themselves and others who may choose to practise in a different way, but who are as well born, as well educated, and as well qualified as themselves; men who will not brook professional dictation or social snubbing; the ranks of our profession are rapidly being filled with such men, totally different from the general practitioner of past days. If consulting physicians were more anxious to greet such men rather as their equals than as their inferiors, and to cultivate the goodwill of the profession in preference to the *vox populi*, I have little doubt that professional combination would be found sufficient protection against public dishonesty.

Beyond all doubt, the improvement in professional education during the last quarter of a century, and the generalisation of knowledge thereby, have considerably diminished the numerical amount of consultations, excepting in certain specialties; the greater, therefore, is the necessity for the consulting physician of the present day to be a man *sans reproche*, as regards professional conduct.

Diminution of consulting business has possibly forced some and tempted many to try to make up the deficiency by family practice, on terms which place them in direct competition with those gentlemen whom they should expect to call them in as consultants. Surely, such men cannot expect to have the pull both ways; they must choose between the profession and the public, or they will undoubtedly fall "between two stools." If a humble representative of the "working bees in the professional hive" might venture to advise the *Dii majores* yclept consulting physicians, I as such would advise them as follows. 1. By social and professional conduct, make yourself worthy of the eminent position which you would hope to retain, and which, by pursuing an undeviating course of professional integrity, you will assuredly retain through the good will of your professional brethren. 2. Fix such a price on your opinion, if founded on attested scientific and practical knowledge and enhanced by the corroborative opinion of your professional brethren, as will place you above suspicion of competing with those whose lot may be cast in rougher, though not less worthy, lines: gentlemen who, in their professional intercourse with you, will take care that no pecuniary disadvantage accrues to their esteemed friend the "real consultant physician."—I remain, sir, yours faithfully,

January 26th, 1878.

VERITAS.

P.S.—I trust that the term of "general practitioner" will soon be completely extinguished. In its original meaning, the term is almost professionally obsolete, and I am fully convinced that, in a social point of view, with the public it is not a term likely to elevate professional status.

SIR,—I am sure each of your correspondents who writes on this subject has in view the honour and wellbeing of our profession. If, in this spirit, the subject can receive a complete reconsideration, with a view to improved arrangements, in accordance with present conditions and the altered value of money, I think the time for doing so has fully come. But the whole subject should be taken together. House-rent, wages, hire, the cost of living, etc., have all become much more expensive; the members of many occupations combine to keep up their charges; the medical profession is one of the few which does not do so, its members too often outbidding one another in offering their services to the public. And the public has come to think it granting a favour to the medical man to allow him to inspect disease

to suggest a remedy. We must all have noticed this again and again. Our services are made much too common, partly by the injudicious or self-interested action of some of us, partly by the circumstances under which we work, among which the most notable point is the custom of giving our services gratuitously. This, which ought to be the exception, only done in special cases, has come to be the rule and the system. There ought now to be an end to it. The public ought now to be made aware that medical men are no more to be called on to work for nothing than solicitors, barristers, clergymen, or those of any other profession. Each of us, in his own place, remembering that he represents the profession in that place, should so manage as to let this be understood; it may be discreetly done, and each would find himself a gainer while helping all. And fees, whether physicians' or any other, should always be regarded as due at the time, and should be obtained at the time, whenever practicable. By doing this, each practitioner will gain considerably, and will often retain for himself patients who, if allowed to run up an account, will leave both account and doctor and go elsewhere. I speak from actual and long experience. It is a very common notion that medical men need not be paid at the time; that anyone may come and consult them without present payment; and that an account is to be sent in some time or other. This should never be permitted. Strangers and chance patients should always pay at once. Those following fee-practice should not allow the rule of their practice to be infringed. Those who must send accounts should view the doing so as an exception, only granted to known and settled residents; the rule of cash payment being applied to all others. Accounts should be punctually sent in, and at intervals as short as possible, either as soon as attendance ceases, or monthly, quarterly, or half-yearly, but certainly never less than annually. Those who never send in their accounts do great injury both to themselves and the profession. I know of one who, with a limited practice, has owing to him about £1,000, simply because he never sends in his bills. Such conduct fosters the prevalent notion that it is not very necessary to pay a medical man. There seems a good deal, both in the profession and out of it, that wants to be set to rights. Such things as visit's near home, charged *nil*; consultations with another practitioner, *nil*; vaccination, *nil*; night-visits, half-a-crown; powders, sixpence; charts, half-a-crown a head, with ten shilling and fifteen shilling midwifery, need immediate revision. The leaders of the profession, too, ought to charge higher fees. But nothing hurts the profession more than unfair charges made to a patient, or the least approach to dishonesty therein, or even the appearance of it. Medical men ought to be trusted; that is their rightful and due position. But any doctor who so acts as to make him not to be trusted inflicts on the whole profession a grievous injury, and ought to be turned out of it. In every possible case, payment for service rendered should be sought as a fee at the time. In certain cases, for instance, always in venereal cases, and with strangers and lodgers, this should be insisted on. I quite agree in the suggestion that "some fair and reasonable scale of fees should be arranged immediately, either by the General Medical Council or by the British Medical Association; and that steps be forthwith taken for their universal adoption by the profession".

I formerly addressed to you a letter on the subject of fees, and am glad to see the subject at length taken up.—Your obedient servant,
January 28th, 1878. A COUNTRY SURGEON.

THE CORONER'S COURT.

SIR,—Your readers should feel obliged to Dr. A. S. Taylor for his kindness in giving them, in his most exhaustive memorandum on the appointment of coroners, the benefit of his great experience on the subject.

It is satisfactory to see that Dr. Taylor insists on the importance of the examination-test of competency, and I hope he will see the advisability of refusing to give to county or borough magistrates the power of selecting the coroner. Scientific gentlemen should not be subjected to the expensive and humiliating ordeal of canvassing the magistracy or any other body of men. I venture to think that the army and navy medical examinations, with the interim of study, would form good models on which to base the examination of students and applicants for the coronership. I would have the candidates to pass at the outset a competitive examination to determine the eligibility of each, after which the successful candidates should be referred to appropriate legal and medical courses of study, which might be pursued at the Temple and London medical schools, and then, after a certain time, these candidates should undergo a pass examination, when each man's marks should be carefully noted, and the value and priority of the appointments given according to merit.

In reference to the present coroners, it is proposed, in paragraph 17, to retain them in full possession of their offices and emoluments. I do not think it would give public satisfaction to retain men in office whose inefficiency has given rise to so much dissatisfaction. Of course, there are several clever and estimable men among them, but, as a class, they have been weighed in the balance of public opinion and found wanting. I would beg to suggest, then, that in order that the proposed new state of things should come quickly into operation after the passing of the Bill, provision should be made that the present coroners should resign their posts after a stated time. If they be retained in office, posterity, of course, will be the chief gainer by the reform.

The memorandum refers, in paragraph 26, to medical coroners holding inquests on their own patients. A system which permits a coroner to hold inquests on his own patients is indefensible, and is, I believe, as injurious to the majority of the medical profession as it is viewed with dis-favour and suspicion by the public at large. A little time ago, I read in a newspaper of a coroner, when holding an inquest on a patient of his own who died suddenly under peculiar circumstances, making it the occasion for delivering to the jury some laudatory remarks on his own and his partner's high professional abilities; but this same coroner, when holding an inquest on a woman who had been attended by a neighbouring brother general practitioner, was so severe in his remarks towards him, that a leading medical journal took the coroner to task for it. Medical men and solicitors in practice should not be allowed to hold the coronership; for, with the best intentions, they can hardly act independently, for fear of giving offence to their patients and clients, by whom they have for the most part to live.—I remain, sir, your obedient servant, WILLIAM O'NEILL, M.D., M.R.C.P.
Lincoln, January 26th, 1878.

THE ORGANISATION OF CHARITY IN HOSPITALS.

SIR,—As I trust the valuable letters of your correspondent, "A Member of the Charity Organisation Society", will be republished in a form in which they will be readily accessible to the subscribers to our hospitals and the public generally, I hope you will allow me to indicate a few points touched on in the letter published in the JOURNAL for January 5th, on which it seems to me a little additional information might be given. And, first, as to St. Bartholomew's Hospital, which is classed among those that have resisted every appeal, and have refused to make the smallest attempt at reformation: I have recently been informed, on the highest authority, that an endeavour is being made by the treasurer, Sir Sydney Waterlow, to diminish what we reformers consider to be the evils of the casualty out-patient system at that institution, by strictly cautioning each student who is admitted to the post of dresser not on any account to treat any patient on his own responsibility, and to regard himself merely as the mechanical agent of the qualified medical man who is present; also that there is a lay officer of the hospital constantly present in the casualty-rooms to see that these directions are carried out, and, if necessary, to prevent the charity from being used (or rather abused) by those well able to pay. As it was for bringing forward some cases treated by students before these regulations were thought of that I was subjected to some annoyance, a few years ago, I may be permitted to congratulate the profession on this tacit admission on the part of the hospital authorities that some change was needed in the former system, and to suggest to your correspondent that, after all, St. Bartholomew's is not quite so impenetrable to reasonable appeals as might be inferred from his letter.

Next, as to the London Hospital, I hardly think your correspondent has done justice to the very full discussion of the subject of out-patient reform which took place there in 1873-74. A committee of eighteen gentlemen, including among its members such well-known names as Sir T. Fowell Buxton, Mr. (now Sir Edmund) Currie, Mr. Baring, M.P., Dr. Herbert Davies, Dr. Andrew Clark, and Mr. Jonathan Hutchinson, presented, in July 1874, as the result of their discussions, a very elaborate report, in which, after denying the existence at their hospital of any such evils as overcrowding of out-patient-rooms, deficient medical attendance, or improper issue of medicines or prescriptions by unqualified persons, they addressed themselves to the question whether there was any abuse by persons obtaining medicine and advice gratuitously who could afford to pay, and this evil they were obliged to admit did exist, but, in their opinion, to but a limited extent. The mode in which the committee set themselves to prove the "strictly limited" extent of this abuse was as follows. Taking the hospital statistics as they had hitherto been published, it appeared that between sixty thousand and seventy thousand out-patients were reported to be treated every year. From these, the committee subtracted twenty-five thousand patients who received a supply of medicine only, but appa-

rently got no medical advice whatever. The remainder, whom they considered the genuine out-patients, they divided into three classes: 1. Twenty-four thousand, consisting of accidents, minor casualties, etc., which "hardly come within the scope of this inquiry"; 2. About three thousand renewals; 3. Only sixteen thousand and ninety-four about whom the committee was doubtful whether they were entitled to gratuitous relief or not! This report is in every way a remarkable one, and your correspondent will find it quoted in a paper in *Fraser's Magazine* for November 1874, should the original not be available. It concludes by recommending the trial for a year of what the committee termed "a compromise between the out-patient system as now organised and that total abolition, both of the department and of governors' letters, which to some appears desirable": very remarkable words truly from a committee such as this, and worthy of being pondered over at the present time, when the hospital is notoriously in difficulties for want of funds.

Then, again, as to the Great Northern Hospital; previously to the closing of the out-patient department at that hospital, the number of out-patients treated was said to be over sixty thousand. Since then, it has been as low as twelve thousand in 1874 and twenty-three thousand in 1876, according to the *Medical Directory* of the following years. Has anybody at the hospital ever heard of any injury to the poor of the neighbourhood in consequence? Has a single necessitous person been obliged to do without medical assistance in consequence of the temporary closing of the out-patient department there? The answers to these questions ought to be readily obtainable from the officials or medical staff, and they would, I venture to think, if added as an appendix, render your correspondent's letters still more valuable.—Your obedient servant,

H. NELSON HARDY.

London, January 1878.

ADMISSION OF LADIES TO THE MEETINGS OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—I have to ask that you will kindly insert the following letter addressed by me to the Secretary of the British Medical Association, together with the resolution forwarded to me, in reply, from the Committee of Council of the Association.

"December 21st, 1877.

"My dear Sir,—After some consideration, I have resolved to ask you to bring the following question before the Council of the British Medical Association, and to favour me with a reply. The question which I desire to put is this: Are women to be permitted in the future to attend the meetings of the Medical, Surgical, and other Sections of the Association, and to take part in the discussions at such meetings? I had believed that this question was answered in the negative by a large majority of the Association a few years ago. At the last meeting held at Manchester, a lady was present, and spoke in a discussion in the Section of Medicine.

"As I do not intend to be a member of any society where medical topics are debated in public between men and women, I shall be glad to learn the decision of the Council in this matter, reserving to myself the right to publish this inquiry, and the reply which I may receive."

"To Francis Fowke, Esq. (Signed) WILSON FOX."

In reply, I have received from Mr. Fowke the following resolution:

"That Dr. Wilson Fox be informed that the Committee of Council have no power to prevent ladies who are members of the Association from attending the meetings of the Association."

I have to add that, on the receipt of this resolution, I have written to the Secretary of the Association, stating that the decision of the Committee of Council has left me no option but to request that my name be removed from the list of the members of the Association. The matter is one for individual opinion; but I think it right to call the attention of the members of the Association to a question which appears to me of considerable importance; viz., how far public discussions on medical topics at which men and women are present, and on which no restrictions are placed, are consistent with the rules of propriety and delicacy which have hitherto been generally held to obtain in the relations between the sexes.—I remain, sir, yours faithfully,

London, January 1878.

WILSON FOX.

A CENTENARIAN.—A man named Anton Miktancic is reported to have died lately in Trieste, being within three months of completing his 114th year.

DONATIONS.—The Building Fund of the Belfast Hospital for Sick Children has received £30 from Mr. Carlisle and £25 from Mr. Richardson. The Right Hon. W. Tighe has given £100 to the Convalescent Home, Stillorgan.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

ANALYSTS' REPORTS.

MR. E. W. T. JONES, public analyst for the county of Stafford, in his report for the quarter ending Michaelmas last, states that he examined two hundred and seven samples, of which thirty-two, or 15.45 per cent. were adulterated. These included four samples of coffee adulterated with chicory; thirteen of gin, varying from 37 deg. to 54.4 deg. under proof; one of milk, adulterated with 19 per cent. of added water; two samples of mustard contained wheat flour; six samples of oatmeal contained sharps and barley-meal; one sample of whisky was 47.4 deg. under proof, and five samples of pills were not what they were sold as.

MR. A. J. M. EDGER, public analyst for the county of Durham, reports that, during the quarter ending Michaelmas last, he analysed two hundred and eight samples, seventy-four of them being adulterated—viz., fifty samples of various spirits, two of oatmeal, eight of pepper, five of soda-water, one of mu-tard, one of cider, and seven of milk.

ACTION AGAINST A MEDICAL OFFICER OF HEALTH.

AN action of some importance to medical officers of health has lately been tried in the Auckland County Court. It was brought by a fisherman against Mr. Manson, the medical officer of health, and also against the inspector of nuisances, for illegally seizing fish (herrings) as unsound and unfit for food which were alleged by the plaintiff to be perfectly wholesome and good. The plaintiff had been summoned before the local magistrates for offering the fish for sale, but the case was dismissed. The plaintiff gave evidence to the effect that the fish were good, their gills being red; and also that they were bright and fresh. This statement was supported by several witnesses, who testified to having eaten some of the herrings on the same night the seizure was made. The assistant-inspector to the rural sanitary authority, the market keeper, and Mr. Jobson, who ordered their destruction next day, as well as the medical officer of health, gave evidence as to their unsoundness. The judge gave a verdict for the defendants, with the expenses of one witness only. At the next meeting of the local authority, Mr. Manson made application for the expenses he had incurred and remuneration for the time he had lost in attending at the police and county courts. Only one guinea, however, was voted, because the case was lost at the police-court; which, considering he lost three days in attendance, is but a poor *solatium*. The case is, however, of greater importance than the mere question of loss of expenses, as it is not generally known that an action will lie against a medical or other officer who shall seize any article as unfit for food while it is in a wholesome state. Actions have been commenced against more than one metropolitan medical officer of health, not only for the value of the articles seized, but for injury done to the business of the owner thereof; but they were either settled in some way or abandoned, as they never came to trial. Under these circumstances, it may be somewhat dangerous to seize carcasses of animals which have been killed when suffering from lung disease, unless the flesh be changed in colour and consistency. Every officer must, therefore, be prepared to carry out his duties at his own risk, in the same way as he carries on his private practice subject to actions for malpractice. The defendants were represented by Mr. Proud; but whether or not he was the clerk to the local authority is not stated; and we do not, therefore, know whether or not Mr. Manson was properly supported by his board.

PREVENTION OF SMALL-POX IN LEICESTER.

DR. JOHNSON, the medical officer of health, successfully adopted the plan of removing all the inhabitants of the poorer houses in which a case of small-pox occurred to a quarantine establishment in the hospital, and retaining them there for at least fourteen days. He removed in all twenty-two persons, who were apparently in good health at the time; and three of these sickened at the following periods after their removal; viz., one in forty-eight hours, another in seventy-two hours, and the third on the twelfth day; so that all these must have been infected before removal. The disease had appeared in six places before these families were removed; but not one case had occurred at the date of the report, viz., fourteen days after the occurrence of the case last taken in at the hospital. Dr. Johnson seems to think that

his plan is novel; but in this he is in error, as it has been practised in the metropolis and elsewhere, not only for this disease, but also for cholera.* It is undoubtedly very useful at the commencement of what might otherwise have been an epidemic, and is worthy of being more extensively carried out, especially as Dr. Johnson says he had no difficulty in inducing the families to remove to the quarantine establishment. He does not say whether or not the fathers of the families, if any, accompanied them; because, in the cholera epidemic, considerable opposition was invariably made, except when the fathers were out of employment; and then at least equal difficulty was experienced, at any rate in some places, in inducing them to leave the comfortable quarters provided for all. This point is not mentioned by Dr. Johnson, and is one which must be taken into consideration if the plan should be largely practised. He does not state also how the "home" was kept together whilst the families were in quarantine.

INTERMITTENT WATER SERVICES.

WE have often pointed out the dangers associated with intermittent water services, and we have specially noted the outbreaks of enteric fever, which have occurred in various towns, such as Lewes and Cambridge, where, with an intermittent system, water-closets have been supplied direct from the mains; and, with a view of obviating these dangers, we have strongly urged that all services should be constant, and that the supply to a water-closet should invariably be broken, as by the intervention of a supply cistern. We have also incidentally referred to the probable saving of water, which would be effected by the adoption of these measures; but actual facts on this point have hitherto not been forthcoming. We therefore note with gratification the results which have been obtained in Rugby in this respect. During the course of last year, Dr. George Wilson, in urging upon the Town Council of Warwick the necessity for dealing with their intermittent water supply, and with the branches to water-closets, which were so arranged as to admit of suction of sewer air into the mains, gave the result of his experience of the adoption of similar measures at Rugby. The number of water-closets which were there found to be directly connected with the mains amounted to about two hundred and fifty; and, since they had been disconnected, there had been a saving of waste in water equal to nearly ten gallons per head of the population per day. After some of the closets had already been disconnected, the water supply of the town was, by way of experiment, made constant for a term of three months, and a careful record was kept of the amount daily pumped. From this record it appeared that the average daily quantity supplied during that period amounted to thirty gallons per head. Subsequently all the remaining closets were disconnected, and it was ascertained that, as the result of a month's pumping in the constant service system, the quantity had been reduced to 21.3 gallons per day. In short, so much waste had been prevented that the water supply, which formerly was intermittent, has now been made constant; and that without any increase in the amount delivered.

POOR-LAW MEDICAL APPOINTMENTS.

DREW, Clifford Luxmore, M.B., appointed Medical Officer and Public Vaccinator for the Dunchurch District of the Rugby Union.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, January 28th, 1878.

The Medical Profession.—In answer to Mr. Mills, Viscount SANDON said he was not at present able to inform his honourable friend whether the Government was prepared to bring in a Bill for providing a uniform test of admission to the medical profession in England, Scotland, and Ireland.

Small-pox in the Isle of Man.—Sir J. LAWRENCE asked the Secretary of State for the Home Department whether information had reached him of an outbreak of small-pox in the Isle of Man; if it be true that the Vaccination Laws are not in force in the Isle of Man; and if any steps have been, or are about to be, taken to remedy this defect.—Mr. RITCHIE asked whether there was the slightest foundation for the rumour that the Governor of the Isle of Man and his family had left the island on account of the prevalent character of the disease.—Mr. CROSS was quite sure that anybody who knew the character of the Governor would not think for a moment that he was capable of deserting his post at a time of danger. It was utterly untrue that he had left the island. With regard to the outbreak of small-pox, it was quite true there had been a violent outbreak of that disease. The disease was spread owing to the Vaccination Law not being in force in the island. But a Bill

had now passed through the local legislature, and it would have received the Royal Assent at the present but for a small technicality which he hoped to correct. Papers connected with the question of vaccination in the Isle of Man would soon be laid before Parliament.

Tuesday, January 29th.

Small-pox in the Isle of Man.—In answer to a question from Mr. Adam, Mr. CROSS said I am happy to inform the House that the Isle of Man is now practically free from small-pox, the disease being limited to two or three convalescent cases.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received certificate to practise, on Thursday, January 24th, 1878.

Clark, James Richard Andrew, 16, Cavendish Square, W.

The following gentleman also on the same day passed his primary professional examination.

Midwinter, Edward James Henry, London Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

BRECON INFIRMARY—Resident House-Surgeon. Salary, £100 per annum, with apartments, attendance, fire, and lights. Applications to be made on or before the 11th instant.

CHORLTON UNION—Workhouse Medical Officer. Salary, £250 per annum, with firing, light, attendance, and furnished apartments. Applications to be made on or before the 5th instant.

CLIFDEN UNION—Medical Officer for the District comprising the Islands of Inishboffin and Shark. Salary, £90 per annum, exclusive of Registration and Vaccination Fees. Applications to the 13th instant.

DENTAL HOSPITAL OF LONDON—Dental Surgeon. Applications to be made on or before the 13th instant.

GENERAL INFIRMARY, Northampton—Surgeon. Applications to be made on or before the 27th instant.

IPSWICH BOROUGH LUNATIC ASYLUM—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.

KENT COUNTY LUNATIC ASYLUM—Assistant Medical Officer and Dispenser. Salary, £165 per annum, with furnished apartments, milk, vegetables, washing, and attendance. Applications to be made on or before the 6th instant.

LIVERPOOL ROYAL SOUTHERN HOSPITAL—Two Honorary Surgeons. Election in February. For particulars, apply to Honorary Treasurer.

LONDON HOSPITAL—Assistant-Physician. Applications to be made on or before the 4th instant.

METROPOLITAN FREE HOSPITAL—Assistant Physician. Applications to be made on or before the 12th instant.

NORTHAMPTON GENERAL INFIRMARY—Physician. Applications to be made on or before the 20th instant.

QUEEN'S UNIVERSITY IN IRELAND—Examiners for 1878 in the following subjects, at the salaries stated. Medicine, £100; Surgery, £100; Midwifery, £75; Materia Medica, £75; Medical Jurisprudence, £75. Applications to be addressed to the Secretary, at Dublin Castle, up to the 15th instant.

ST. GEORGE'S HOSPITAL—Surgeon and Assistant-Surgeon. Applications to be made on or before the 13th instant.

SLIGO UNION—Medical Officer of Carney Dispensary District No. 1. Salary, £120 per annum as Medical Officer, and £20 yearly as Sanitary Officer, with the usual Registration and Vaccination Fees. Applications to the 4th instant.

TOBERCURRY UNION—Medical Officer of Coolaney Dispensary District. Salary, £120 yearly, with Registration and Vaccination Fees. Applications to the 11th instant.

WEST HERTS INFIRMARY—House-Surgeon and Dispenser, who shall also be Assistant-Secretary. Salary, £100 per annum, with board, furnished rooms, fire, lights, and attendance. Applications to be made on or before the 7th inst.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

EVANS, C. W., M.R.C.S., appointed a Clinical Assistant at the Royal South London Ophthalmic Hospital.

*FLETCHER, George, M.D., appointed Medical Officer to the Albert Memorial College, Framlingham, Suffolk.

HOBBSON, Lewis John, M.B., appointed Senior House-Surgeon to the Newcastle-on-Tyne Infirmary.

*HUMPHREYS, Henry, M.D., appointed Senior Physician to the Hospital for Sick Children, Pendlebury.

*NEILL, Channing, M.D., appointed Junior Physician to the Hospital for Sick Children, Pendlebury, *vice* A. Humphreys, M.D., promoted.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

JONES—BLACKBURN.—On January 3rd, at Chicago, U.S.A., by the father of the bride, assisted by the Rev. W. C. Young, *Percy Owen Jones, M.R.C.S.E., to Alice, eldest daughter of the Rev. W. M. Blackburn, D.D.
WESTMORLAND—YOUNG.—On January 23rd, at the Cathedral, Manchester, by the Rev. Minor Canon Clement Smith, M.A., assisted by the Rev. Thomas Charles Westmorland, M.A., Vicar of Shipton Thorpe, *Joseph Westmorland, Surgeon, Cheetham, Manchester, to Mary, eldest daughter of the late John Hindle Young, of Crumpsall Old Hall, Manchester.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Lettsomian Lecture by Francis Mason, F.R.C.S.; subject, "The Surgery of the Face".

TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. Veo: Heart and Aorta—Sequel to Case of Rupture of Aortic Valve. Mr. T. Bryant: 1. Prostatic Tumours removed in Lithotomy; 2. Impacted Fracture of the Shaft of the Femur. Mr. Nunn: Sequel of a Case of Recurrent Sarcoma. Mr. Morgan: Case of Congenital Obstruction to the Common Bile-duct. Mr. Lennox Browne: 1. Cancer of the Tongue involving the Tonsil (living case); 2. Cancer of the Tonsil; 3. Encephaloid Cancer of the Larynx. Mr. K. Thornton (for Mr. Taylor): Tumours of both Ovaries. Mr. K. Thornton: Cysts from the Peritoneum. Mr. Wood: Cystic Disease of the Thyroid. Dr. Samuel West: Thrombosis of the Vena Cava and Portal Vein. Dr. Legg: 1. Aneurysm of the Right Auricle; 2. Melanotic Liver; and other specimens.

WEDNESDAY.—Royal Microscopical Society, 8 P.M. Anniversary Meeting. President's Address, etc.—Obstetrical Society of London, 8 P.M. Dr. MacCallum, "Report of the University Lying-in Hospital, Montreal"; Dr. Greene, "Case of Puerperal Convulsions"; and other communications.

THURSDAY.—Harveian Society of London, 8 P.M. Mr. Hornsey Casson, "Gun-shot Injury of Elbow-joint"; Dr. Fitzpatrick, "On the Defective Drainage of West End Houses, and Cases of Zymotic Disease arising therefrom".

FRIDAY.—Clinical Society of London, 8.30 P.M. The President, "Specimens of Tendon Ligatures"; Mr. Nunn, "Two Cases of Cancer"; Mr. Hutchinson, "Reinitis Hæmorrhagica: its connection with Gout and probable dependence upon Thrombosis of the Vein"; Mr. Balmanno Squire, "Severe Psoriasis treated by daily Immersions"; and a "Case of Psoriasis treated by Chrysophanic Acid" (living specimens).

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 35, Great Queen Street, W.C., London.

ANIMAL VACCINE.

A MEMBER.—The establishment in Brussels is the Institut Vaccinal de l'Etat, the director of which is M. Evariste Warlomont. Our correspondent will find information on the subject in a letter from Dr. Warlomont, published in the *BRITISH MEDICAL JOURNAL* for January 27th, 1877.

FILTERS.

SIR.—Mr. J. Burrows wishes to know of a filter easily kept clean and in order. In August 1871 I bought one of Spencer's magnetic iron filters. It has been in daily use from the day it was bought to the present time. It has not been cleaned, neither does it appear to require cleaning. The water that comes from it is very clear, very agreeable, and is largely consumed by my family and myself. The theory of its dirt-consuming power may be read in the prospectus issued by Mr. Spencer, the inventor of the filter, who resides at 32, Euston Square, where there is, or was, a depot of them. I enclose my card.—Very faithfully yours,
January 1878.

E. H. R.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the *Post-Office* do not allow letters to be addressed to initials and directed to any *Post Office* in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a *Post Office*.

SORE NIPPLES.

DURING the last month or so of pregnancy, wash the nipples with equal parts of brandy and water morning and evening; and, if there be any cracks, apply a lotion of sulphurous acid, about 1 to 8, on lint. Proved.

A. E. MUNRO, M.D., C.M.

157, Otley Road, Bradford, Yorkshire, January 26th, 1878.

SIR.—If E. R. S.'s patient will bathe her nipples twice or thrice daily from this time till her confinement with a lotion of tincture of arnica and water (1 to 7), and take care that there be no pressure from corsets or dress, she will, I believe, be free from sore nipples afterwards. During lactation, a lotion of brandy and water (1 to 8) may be applied to the nipples between the infant's feeding hours, if they are inclined to be tender, taking care to bathe them with warm water immediately before the child is put to the breast.—I am, sir, your obedient servant,
Chester, January 28th, 1878.

C. S. WILKS.

SIR.—I notice that one of your correspondents has some difficulty with the treatment of the nipples. As I had the same experience, I was led to examine the whole subject, and the results of my investigation are published in the *Obstetric Journal* for the present month. If E. R. S. have not access to that journal, I shall be glad to send him a reprint of my paper should he communicate his address to me.—I am, yours very truly,
4, Newton Terrace, Glasgow, January 29th, 1878.

SAMUEL SLAAN.

VILLOUS DISEASE OF THE BLADDER.

SIR.—In the *JOURNAL* of January 19th, there is a letter from "L.R.C.P. Lond.", in which he states that my case of "villous disease of the bladder" is open to doubt, and questions the propriety of the treatment. These are, however, matters of opinion. It was not to discuss the diagnosis or treatment that I reported the case, but to show how slight an injury to the urethra could give rise to alarming symptoms. I wish to inform L.R.C.P. that we did not, at our consultation, come to any decided diagnosis; but we agreed that the hæmorrhage came from one of two sources—*i.e.*, the prostate gland, or from a villous growth involving the neck of the bladder. In trying in a catheter, we hoped to check the bleeding, if coming from the former; whilst it would prevent the severe and painful straining which caused so much distress. This it did, to the great relief of the patient. L.R.C.P. could not have read the case, or he would have seen that the patient injured his own urethra through getting out of bed some hours after my visit. The patient is now tolerably comfortable, but occasionally passes a little blood with his urine. He has also pain at the neck of the bladder, with frequent micturition; but there has been no retention.—I am, sir, yours, etc.

WM. STAMFORD, L.R.C.P. Lond.

SIR.—In Mr. Stamford's communication on a "case of villous disease of the bladder" in the *JOURNAL* of January 5th, he makes this statement, "The feature of interest, however, in the case is the occurrence of the rigor following a misplacement of the catheter, which he had worn without hindrance for four days. To what may that rigor be referred? That it was not the precursor of any febrile symptoms, puts the view, I think, of its being due to septicaemia from the seat of disease out of the question". But are not a temperature of 105 deg. and a skin which was "very dry", with a defervescence accompanied by a skin "acting profusely", febrile symptoms? And are not the words I have italicised in the above quotation somewhat inconsistent with Mr. Stamford's subsequent expression, "the remarkable severity of the transient pyrexial state". In the *JOURNAL* of January 20th, 1877, he will find a detailed account of what, I think, was an undoubted case of short-lived septicaemia after the prolonged use of an urethral bougie, which lasted thirty-nine hours, counting from the rigor, until the normal temperature was restored. I am disposed to think his case was similar both in cause and nature to my own, but more transient, as we may conclude that it lasted about ten or twelve hours. There is a great similarity between the two cases, but there is one striking difference: in his case there was profuse perspiration, and in mine there was absolutely none, but it terminated with continuous vomiting and a herpetic eruption: the cases thus showing a remarkable contrast in the route (apparently) taken by the poison for its elimination.—I am, sir, your obedient servant,
Ennisorthy, January 26th, 1878.

THOMAS DRAPE, M.B.

SURGEON-MAJOR FERGUSSON (Camp Hagar).—We have made further inquiry on the subject of our correspondent's letter, and we are informed by Mr. Pillscher that the calculation of the magnifying powers of the objectives of his international microscope was made independently in every case by an accomplished expert. Five hundred of them are, we believe, in use in the London medical schools and in the medical colleges of Bombay and Calcutta; and these instruments, of which we have had occasion to speak favourably in the first instance, have not in any case been the subject of any complaint. We have reason to believe that the powers are some fractions under rather than over the figures stated, and we believe that, if our correspondent again tests his objectives, he will find the calculations to be correct.

TREATMENT OF SCURVY BY THE BINOXALATE OF POTASSIUM.

SIR.—Permit me to make a few remarks with reference to your able arguments on the above subject in last week's number of the *JOURNAL*. It is stated, in the information furnished to me by Mr. J. W. Taylor, that out of fourteen men suffering from scurvy in its most severe form, and treated solely by the binoxalate of potassium, only one died, and he after exposure for seventy hours in an open boat. I venture to submit that this great percentage of cures warrants a more extended trial of the remedy, whether it be an old one or not. If it could be used as a substitute for lime-juice it would be invaluable to Arctic sleigh parties, where weight and space are a great consideration—two ounces and a half of binoxalate of potassium being about equal, as an antiscorbutic, to one gallon of lime juice; and if small doses be given, is neither poisonous nor injurious.—Your obedient servant,
Anerley, January 28th, 1878.

W. H. TAYLER, M.D.

HOW TO EMERALD A BODY.

SIR.—Would any of your readers answer this question, or advise as to the best source of information? and oblige,
ARMENIA.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

EXTIRPATION OF THE LARYNX.

SIR,—In the highly interesting case which Dr. Foulis exhibited at the Medical Society of London on Monday last, there are a few points, which, I think, if he will kindly mention them, may be of advantage in future operations. 1. Barometrical and thermometrical observations; 2. Whether the operating-room was artificially heated with dry or moist atmosphere, and its temperature; 3. Previous preparation of the patient; 4. The anæsthetic used, and description of apparatus; 5. Whether any vomiting during or after operation; 6. The condition of the pulse before and after operation, and body temperature. I trust, however, Dr. Foulis will not take it amiss by my making these suggestions, or in any way disparaging to his most carefully worked out paper. Might not anæsthesia be administered in the following manner: A ten-ounce circular bottle, with a small brass stopcock, situated about half way in its body, to which Dr. Richardson's hand-bellows could be attached, and an exit stopcock at the top of the bottle, to which a piece of India-rubber-tubing could be attached, and this could be fitted into the leaden trachea-tube by means of a piece of brass tubing accurately fitting it? Now, if the bottle be one-fourth filled with chloroform (or if this be used, a modification of Clover's apparatus might be used), and the hand-bellows worked, a current of air would be driven into the bottle, and so charged with chloroform or vapour, and carried into the trachea.—I am, yours truly,
GEO. CHAS. COLES.

PROFESSIONAL OBLIGATION.

SIR,—May I ask for a reply in your next issue to the following? Does professional etiquette require that I should give medicine and attendance gratis in the following case? A Mr. T., a M.R.C.S., settled down here a few years ago and kept a *bona fide* chemist's shop, his health preventing him from entering upon regular practice. He had on his bill-heads, "Surgeon and Chemist". His name is in the *Medical Register*, but he made no use whatever of his degree as surgeon in practice. Whatever attendance he required, I always freely gave him, his wife, and family, without charge. He has recently died, after a long illness, and his wife has been confined since with her fifth child. Previously to his last illness, whenever I attended Mr. T. or his family, he dispensed his own medicines, but for the last five weeks of his life I had to do it myself at my surgery. I may add, that before settling down here, Mr. T. went several voyages to India for his health, as surgeon to merchant vessels. I merely wish to be informed whether, according to medical etiquette, I should be expected to give my attendance free in such a case. I enclose my card, and with many apologies for troubling you, remain, yours truly,
January 29th, 1878.
A. P. SCFFOLK.

* As our correspondent gave his professional attendance freely to Mr. T. during his life, we think that, as a matter of good feeling, and in accordance with what we believe to be the general usage of the medical profession, he should continue to act in the same way towards the widow and family. He must, however, be guided to a great extent by the circumstances in which they have been left.

MEDICAL FEES.

SIR,—I am sorry to see from Mr. Brown's letter that he still keeps up the bad practice of charging for medicine and not advice. What is the difference between a druggist and a medical man? I should have answered, one charges for physic, the other for brains. Here, I am thankful to say, the practice is to charge for the visit or consultation, whether or not medicine is given; only charging for medicine when a patient sends for a bottle, etc., of mixture when not being otherwise attended. This, certainly, is a much more dignified position, as the other plan induces the public to think you unduly dose them with physic. I must confess that from Mr. Brown's own letter I think A. B. does much more to keep up the dignity of the profession than he (Mr. Brown) does. When any medical man, whether consultant or otherwise, visits a place at some distance from his residence, it is often customary for him to see others at a less fee than he charges for the ordinary visit; but surely Mr. Brown carries this too far in visiting three or four patients on a round at some distance from home. He may, when first called in, only charge a consultation-fee; but afterwards, if he would have been obliged (if visiting no other patient in that district) to have come specially to see each patient, surely he is entitled to the full fee for each visit. Of course, in country practice, some cannot pay the full fees, and I conclude Mr. Brown would charge the squire more than the village carpenter.—Hoping soon to see the advice gratis system a thing of the past, I am, yours truly,
Eaeter, January 28th, 1878.
F.R.C.S. (by Exam.).

DR. DRYSDALE AND THE POPULATION QUESTION.

SIR,—With all due respect to your editorial remarks on the above question in today's JOURNAL, allow me to remark that the views advocated by Dr. Drysdale and by all modern Malthusians have been suggested as remedies for the miseries resulting from the pressure of population on the food-supply by the great political economists, of whom the world may well feel proud for their labours in the cause of humanity—viz., J. S. Mill in England, Bertillon and Garnier in France, and Sismondi and Mantegazza in Italy. Which, I may ask, is the most moral, putting a limitation on the number of a family, or bringing into the world a greater number of helpless beings than can be clothed, fed, and educated? Which is the most degrading, giving to the public that knowledge of the population question, in all its aspects, which will cause health, domestic happiness, freedom from care, and the banishment of clandestine sexual abuse, or withholding information, and thus allowing prostitution, onanism, disease, poverty, divorce, and death to flourish in our midst? You say "Dr. Drysdale's doctrines are wholly discountenanced by the medical profession". I may refer you to a discussion on the "Happiness of the Community as affected by Large Families", held at the Dialectical Society on July 1st, 1868, Lord Amberley in the chair. The paper was read by James Laurie, Esq., formerly inspector of schools, who advocated the French system of limitation. Several medical gentlemen took part in the debate; among whom, Dr. Roberts supported Mr. Laurie. The Malthusian league has medical men enrolled in it. I may also remark that Professor Bain of Aberdeen agrees in the work which Mrs. Pesant advocates. All new schemes for the amelioration of the sufferings of the people are at first opposed and then adopted: notice the temperance question, vaccination, etc.

I believe Dr. Drysdale has undertaken a noble work, and I may say that the people as a class are as one with him. Surely there is sufficient poverty and evil in the world, without bringing in more to share it than can be provided for.

Trusting I have not intruded too much on your space, I am, etc., yours,

Leeds, January 26th, 1878.

H. A. ALLDUTT, L.R.C.P., etc.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

THE TITLE OF DOCTOR.

SIR,—I hope you will excuse my writing to you on this much vexed question of "Doctor". I am a L.R.C.P. Lond., and do not take the title of Dr., but content myself with physician-surgeon, as the enclosed card will show. I believe the by-laws of the London College of Physicians do not allow its licentiates to take the title of Dr.: why the Edinburgh College should do so I am at a loss to know. Perhaps when we get the conjoint scheme, this anomaly will be done away with.—I remain, yours, etc.,
C. E. HERON ROGERS, L.R.C.P.L., etc.

Retford, Notts, January 26th, 1878.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Essex Advertiser; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; The Western Mail; The Bath Chronicle; The Bolton Chronicle; The Lincolnshire Chronicle; The Chippenham Chronicle; etc.

* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. W. S. Savory, London; Mr. Reginald Harrison, Liverpool; Dr. J. Burdon Sanderson, London; Dr. H. Macnaughton Jones, Cork; Dr. J. B. Bradbury, Cambridge; Mr. Jonathan Hutchinson, London; Dr. Balthazar Foster, Birmingham; Dr. Falconer, Bath; Mr. Walter Rivington, London; Mr. Husband, York; Dr. H. Charlton Bastian, London; Dr. Thomas S. Parry, Chester; Mr. W. Stamford, Tunbridge Wells; Dr. Thin, London; Dr. James Barr, Liverpool; Dr. Segar, Southport; Mr. W. L. Emmerson, Newcastle-upon-Tyne; Dr. John Moore, Belfast; Mr. McCarthy, Harwich; Mr. J. W. Harrison, Sheffield; Dr. Sawyer, Birmingham; Dr. Bucknill, London; Dr. A. S. Taylor, London; Mr. S. J. Burrows, Witheridge; E. R. S.; Mr. Berkeley Hill, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. Edis, London; The Secretary of the Royal Microscopical Society; Dr. Norman Chevers, London; Mr. Christian, Carlisle; Mr. Alban Doran, London; Mr. R. Middlemore, Birmingham; Dr. H. F. Parsons, Goole; The Secretary of the Medical Society of London; Dr. Pye-Smith, London; The Secretary of the Harveian Society; Mr. McGill, Leeds; F.R.C.S.; Dr. Tebaldi, Padua; Mr. R. H. S. Carpenter, London; Dr. Wm. Irvine, Liverpool; Mr. C. W. Evans, London; Mr. E. Almack, London; Mr. Clement Walter, Dover; A Member; Dr. R. T. Cooper, London; Mr. James Martin, Portlaw; Mr. C. E. H. Rogers, Retford; Dr. A. Frasei, Aberdeen; Dr. Brabazon, Bath; Dr. C. O. Baylis, Tunbridge Wells; Mr. Bedford Fenwick, Berlin; Mr. G. P. Field, London; Dr. Arlidge, Stoke-upon-Trent; Mr. Clendinnen, Stafford; M.D.; Dr. F. Ogilvie Will, Aberdeen; Dr. Drapes, Enniscorthy; Mr. E. W. S. Davis, Mountain Ash; Dr. W. O'Neill, Lincoln; Sir Harcourt Johnstone, London; Mrs. Howgrave Graham, Enfield; Dr. Wilson Fox, London; Dr. G. Leeper, Dublin; Dr. Rossi, Rome; Mr. Percy Wilde, London; Dr. B. Roth, London; Mr. Golding-Bird, London; Country Surgeon; L.; Dr. Rabagliati, Bradford; Dr. Taylor, Anerley; M.B.; The Secretary of Apothecaries' Hall; Dr. Wynn Williams, London; Dr. Channing Neill, Manchester; Mr. Becke, Northampton; The Registrar-General of Ireland; Mr. H. A. Allbutt, Leeds; Surgeon-Major Wills, Chester; Mr. Henry Sewill, London; The Registrar-General of England; Dr. J. Milner Fothergill, London; Dr. Fletcher Beach, London; M.D. Edin.; Dr. Symes Thompson, London; Dr. J. G. S. Coghill, Ventnor; Dr. J. Williams, London; Our Edinburgh Correspondent; Dr. Robert Saundby, Birmingham; Mr. J. Stuart Nairne, Glasgow; E. H. R.; A Rural Practitioner; Our Dublin Correspondent; Dr. Ogle, Derby; A. P.; Mr. G. W. Wigner, London; Dr. Prosser James, London; Dr. S. Sloan, Glasgow; Mr. V. Jackson, Wolverhampton; Mr. Howard Marsh, London; Dr. McCarthy, Harwich; Mr. W. J. C. Miller, London; Dr. Clement Dukes, Rugby; Dr. Jas. Murphy, Sunderland; A General Practitioner, but no Advertiser; Dr. Leech, Manchester; Our Roman Correspondent; Mr. H. W. Kiallmark, London; Mr. S. M. Bradley, Manchester; Dr. W. V. Lush, Weymouth; C. R. F.; etc.

LECTURES ON THE INFECTIVE PROCESSES OF DISEASE.

Delivered in the Theatre of the University of London.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College; and Superintendent of the Brown
Institution.

LECTURE IV.—*The Germ-Theory, Contagium Vivum, Specific Infections.*

THE task I have set myself for to-day is one of considerable difficulty. I have two pathological theories to discuss, each of which has been the subject of much contention—the theory of contagium vivum and the germ-theory. In many persons' minds, these two theories are so closely associated, that they sometimes seem to be regarded as identical; yet, in reality, they have no necessary connection with each other.

By the expression *contagium vivum*, I mean to designate the doctrine that, when a contagious disease is communicated by the atmosphere, by personal intercourse, or in any other way, that conveyance takes place by specifically endowed organisms, which stand in a similar relation to the disease to that in which the seed does to the plant. For, just as the seed is at once the origin and offspring of the plant, so, according to this view, the morbid germ produces the disease, and is in its turn produced by it. This being understood, it is evident that the term *contagium vivum* relates exclusively to specific diseases, and therefore belongs mostly to medicine.

For a similar reason, the *germ-theory*, which relates to the inflammatory and other consequences of injuries, involves questions which are almost exclusively surgical. That theory teaches that certain organised and living particles of extreme, if not ultra-microscopical minuteness, which are always suspended in the atmosphere, are in such sense the causes of the suppuration and other destructive changes which interfere with the healing of a wound, that (1) if these organisms are excluded, the wound must enter at once on the processes of reparation, and (2) that if these organisms are present, it cannot so heal; and consequently that the whole secret of the successful treatment of wounds consists in the exclusion of that finest form of atmospheric dust which, whatever be the size of its particles, has been identified, as well by physicists* as by mycologists,† with the contaminating agents in question.

Let me begin by expressing to you, with all due respect, but not the less decidedly, my own personal conviction as to the value of the method of treatment of wounds which is, or professes to be, founded on the germ-theory. It may be said that it is no part of the business of a mere physiologist or pathologist to have any opinion on a practical question. But the present case is entirely an exception. The results are so patent, so conclusive, that it would be as reasonable to doubt of the utility of vaccination as of that of the anti-infective treatment of wounds. The fact that infective action can be prevented in a wound is established with as much certainty as any other pathological fact of which we have gained knowledge by experience. Indeed, if it had been possible to contrive and carry out a series of experiments for the mere purpose of testing it, we could not have had better proofs than have actually been afforded by hospital practice. We are able to compare what is under the improved methods, not only with what *was* before they were introduced, but with what still presents itself, where that "clinical precision", which is the soul of what I may venture to call the new surgery, has not as yet asserted itself.

I have recently been in Germany, and have had the opportunity not only of hearing the opinions of the leading pathologists in that country, but also of seeing some of the practical benefits which the adoption of what they call the "*Listersche Behandlung*" is accomplishing in that country. It is little more than three years since Professor Volkmann of Halle was led to try the antiseptic method. The results of his first experience of it were brought together in the form of a discourse which was delivered before the Surgical Congress at Berlin in 1874. In this dis-

course, he pointed out in the clearest way that the question whether the germ-theory was true or false ought not to have the slightest influence on their minds; that the question was one to be settled merely by experiment—and by experiments of the most agreeable kind—those, namely, in which the subject experimented upon himself derives his principal benefit. Is it the case or is it not the case that, in a wounded surface or an exposed serous surface, the reparative process will, under the influence of the antiseptic treatment, take place without the intervention of suppuration, and to the absolute exclusion of the subsequent destructive and infective processes? This was the question; and the affirmative answer which Volkmann gave, founded on the experience of fifteen months in the hospital of Halle, has been abundantly confirmed since. "In presenting these observations", he says, "I ask myself once more whether, in forming my opinion, I have kept myself uninfected by the prevailing fever" (by which he means what another great pathologist has called the bacterium craze—the tendency to attribute everything to bacterial influence). "I ask myself, and think I can answer, exclusively on the ground of clinical experience." It is quite unnecessary for my purpose, and it would be out of place here, to bring before you the details of Professor Volkmann's results, which can be read in the clinical lecture to which I have referred and in the author's more recent surgical contributions. I may, however, endeavour to communicate to you some impressions which I received in a recent visit to Halle. It is impossible to conceive a more favourable locality for making an experiment of such a nature; first, because the extraordinarily rapid progress of the manufactures of the town has rendered the hospital too small for its requirements, and consequently the proportion of severe cases (as I was able to observe in going round the wards) was very large; and secondly, because the hospital itself is not, perhaps, the worst, but *one* of the worst, that I have ever seen. Situated in the very centre of the town, overshadowed by a huge ecclesiastical building, and having for wards low rooms, each of which communicates with a latrine, and has its beds so close that there is scarcely more than room to pass between them, the hospital presents every circumstance likely to lead to the development of the worst traumatic affections. It is in such wards as these that compound fractures, amputations, and resections have been treated with a success which is up to the best results of London surgery. In a word, the influence of the most unfavourable conditions which can possibly be conceived (the disastrous effects of which were before so overpowering that, to Professor Volkmann, his clinical work had become a burden instead of a joy) have been simply neutralised by the conscientious carrying out, in all its details, with the earnest co-operation of the whole staff of the hospital, of the Edinburgh method.* Looked at from a pathological, that is from a scientific, point of view, the successful trials which have been made of Lister's treatment during the last few years in the great hospitals of Europe may be regarded as each a several experiment on a very large scale; the whole forming a series of experiments all of which point very distinctly to the same conclusion, that conclusion being, of course, that a serous surface may be exposed, and that living tissues may be incised, or even subjected to serious mechanical injury, without these parts becoming foci of infective inflammation—without any further reaction taking place than is necessary for the constitution of the reparative process. I need not remind you, gentlemen, that our London experience affords us examples (it is quite unnecessary for me to point out where they are to be found) that show that similar skill, care, and accuracy, even when not carried out on the principle of occlusion, lead to similar results; and, further, that in the past, on the whole, our hospital results, as is freely acknowledged by German surgeons, are far better than they have hitherto been on the other side of the Channel. But this consideration does not in the slightest degree detract from the value of German hospital experience for the scientific purposes we have now in view. When, as at Halle, we have pyæmic affections banished from wards which were formerly infested; when, as at Munich, hospital gangrene (a disease which probably a great many of us have never seen), which up to 1854 affected 80 per cent. of the traumatic cases in the hospital, has ceased to exist; when we see the same experience repeated at Strasburg, at Leipsic, at Innsbruck, and I know not at how many other places,—we need no longer wonder that it is common to hear the discovery of Lister spoken of in Germany as the greatest progress in the art of medicine which has taken place in modern times. But it is not, as I said before, with the human life saved and human suffering spared by his improvements that we have to do at present, but with the pathological lesson to be learnt from these results.

* "The individual particles of the finest floating matter of the air lie probably far beyond the reach of the microscope" (Professor Tyndall, *Philosophical Transactions*, 1876, Part 1, p. 44).

† "Der gefährlichste Staub ist derjenige von dem wir gar keine Wahrnehmung haben." Nägeli, *Die niederen Pilze in ihren Beziehungen zu den Infektionskrankheiten*. Munich, 1877, p. 153.

* It may be well to note that in Halle, as elsewhere in Germany, rapid improvement is in progress in all matters relating to medical education. Among other things, a magnificent surgical hospital is being built in the most airy part of the town, under Professor Volkmann's immediate direction.

The germ-theory explains everything by saying that the reason why a wound goes wrong is, that atmospheric particles enter in and contaminate it. It compares, in short, the treatment of an operation-wound with one of Professor Tyndall's or M. Pasteur's experiments on spontaneous generation. It professes, indeed, to be an application of the principles and method of such an experiment to a practical purpose. It is perfectly true that the same fastidious precautions which are necessary to command success in the one case are also necessary in the other. What, then, is the difference between them? In the laboratory experiment, the criterion of success is the absence of living organisms. If they appear in the test-liquid employed, the operation is considered as a failure; for, so far as experience has yet taught us, there is no case in which organisms come into existence otherwise than as the progeny or offspring of previously existing bacteria. Are we justified in applying the same test to the antiseptic treatment of an injured surface? From the theoretical point of view, we certainly are; for if, on a wounded surface protected by antiseptic dressings, bacteria were to appear, then one of two things would be certain: either that the germs had entered from outside, or that they existed in the patient's organism previously. But is this the true criterion? Certainly not. In judging of the value of a therapeutical method, the one and only criterion is success. The question of primary importance is not whether bacterial germs are killed or sterilised, but whether the pathological results of septic infection are prevented, so that the wound is free from inflammation, the constitution free from fever. Consequently, whatever doubts we may be led to entertain as to the theory, those doubts ought not to interfere with our cordial acceptance of the evidence which has now been accumulated of its prophylactic value.

Some of you are probably aware that two series of observations have lately been published in Germany which go to show that, although in many instances the occlusive treatment is successful, not merely in warding off infective results, but also in the shutting out of germs, there are others in which the first object is completely accomplished—the patient remaining free from fever, pain, and inflammation—but yet organisms exist in the discharges. Obviously we might, if we chose, say, "Professor Lücke is not Professor Lister. It does not follow that, because organisms are found in the discharges from drainage-tubes at Strasburg, they should also be found at King's College." This, of course, may be freely admitted, but does not answer the objection. What is alleged is, that in these cases, although the method was carried out sufficiently perfectly to accomplish its end (the absence of pain, fever, inflammation), nevertheless organisms had found their way into the discharges; but that here, as elsewhere, being placed under conditions hostile to their development, they had been harmless.

If this be true, the inference to be drawn from it is, of course, that the treatment of a wound is not an experiment on spontaneous generation, but an experiment on infection: to use Professor Tyndall's striking expression, a combat not with atmospheric germs, but with pathological infectivity. Clearly, if it were purely a question of the exclusion of germs, the entrance of one germ would be fatal. But are there not hundreds of instances in which traumatic surfaces are exposed to germs without any effect whatever? Look at the ordinary results of the thousands of operations that are daily performed on animals for economical purposes without any precautions against germs. How often does infection occur? Not once in ten thousand times. Again, how often does it happen that an ordinary incised wound, notwithstanding that the knife that made it is beset with germs of many sorts, fails to heal straight off *per primam*? Again, in vaccination and in subcutaneous injection, do we not take every pains to do the operation in such a way as to promote absorption of whatever is on the surface of the instrument; yet who ever thinks of air-germs in connection with either of these operations? Dangers from infection, alas! attend both; but the infections we have to fear are of *pathological*, not *meteorological*, origin.

Now, these facts cannot be explained on the ground that the wounds in question are too inconsiderable; for we know by experience that, when real infection is in question, it is precisely by such wounds that it enters. For example, you will find, if you examine the records of outbreaks of hospital gangrene, that the wounds attacked were not suppurating or granulating wounds, but mere scratches or pricks.

I am desirous, in all that I say on this subject, to keep strictly within the limits of my own scope; I do not desire to make practical applications. My aim is to show that the principles which underlie the success of the antiseptic treatment are deeper than the surface of the wound. Let me, in conclusion, endeavour to indicate what those principles must be. The first principle that suggests itself on pathological grounds relates to the avoidance of conditions in the wound itself which favour the development of infectivity. Considering that the development of

infective action in a wound (supposing it to depend on the evolution of successive generations of organisms) must be a question of time, and that the circulating blood and living tissue are the most powerful colytics that we know in restraining and preventing that development, all methods which tend to prevent the accumulation of blood or liquids in wounds must be of great importance, not because these materials are in themselves incapable of being absorbed or organised, but because, if accumulated in quantities, they are withdrawn from the colytic influence of the living tissues.

The second principle I take to be the avoidance of infective contamination, in connection with which the question at once arises of the source of such contamination. If it be not atmospheric particles, what is it? Bear in mind that, wherever bacteria have been vegetating for some time in moisture containing the material for their growth (and we have seen how simple their requirements are in this respect), there infective virus is being elaborated. Consequently, that ordinary filth (of which the only scientific definition is, that it consists of the products of bacterial evolution) is more or less virulent or infective according to its development. Hence, if against all filth there lie a *prima facie* presumption that it is infective and a source of danger, scrupulous cleanliness must be essential. I need not add that, in antiseptic surgery and in the practice of those surgeons who have accomplished the greatest successes in the combat with traumatic infection, this principle is so well recognised that, in the future, we may hope to speak of "surgically pure" instruments as familiarly, and with as much significance, as we now speak of "chemically pure" substances. As may have been observed before, the colytic treatment is an importation of the methods and principles of the laboratory into the surgical ward.

But there is a third principle, which must not be forgotten. If there be any truth in what I have been saying as to the mode of origin of infective virus, the use of disinfectants, and among disinfectants of those which are known by experiment to be the most efficient colytics, must be of the greatest value. The benefits already derived from the use of carbolic acid are matter of accumulated clinical experience, and, as I have already hinted, even better results may be hoped for from other bodies belonging to the same category.

I have occupied so much time with the discussion of the origin of common, or traumatic, or phlogistic infectivity, that I have too little left for the other question I have to bring before you; namely, that of the intervention of living organisms—microphytes—in specific infection, *i.e.*, in the communication of specific diseases from diseased to healthy individuals, and in the development of the pathological consequences of such communication. This question, let me observe, although quite as important as the other, is so entirely unconnected with it, that no conclusions we have arrived at with respect to the origin of traumatic infection can be applied without reconsideration to that of *contagium vivum*. The septic poison we have seen to be an exclusive product of bacterial development, a product which bacteria are capable of manufacturing from unorganised and perfectly harmless material, a product which, although incapable of passing through certain kinds of filters, is soluble in the ordinary sense. Pathologically, we have seen that it does not act the part of a specific contagium; that, in order to the production of its morbid effects, a sufficient quantity must be introduced into the circulation; and, further, that the intensity of effect is proportionate to the quantity introduced; so that, if the amount be not too great, the tendency is to a favourable, not to a fatal, termination. But everyone knows that there occur from time to time in clinical experience instances of a sort of septicæmia of a much more virulent kind; cases, for example, of septic peritonitis, in which the quantity of the agent required to produce the fatal result is not measured by drops or grains, but (if one may so express oneself) in homœopathic doses; cases in which we at once recognise that we have to do, not with a poison of which the effect is determined by its quantity, but with a ferment of which the destructiveness to life is chiefly dependent on the rapidity of its development.

The history of these most malignant forms of septicæmia (I call it so for want of a better word) is simple enough. The gateway by which the seed enters may be, and usually is, a mere prick, and the primary effect so slight as to excite no attention. After hours, or even days, the absorbents and lymphatic glands, of which they are the tributaries, become the seat of inflammation, on which follows diffuse suppurative infiltration of the surrounding cellular tissue. Soon the process extends beyond the limb affected, to the integuments of the trunk, to the pleura, to the peritoneum; the inevitably fatal result, which is preceded by delirium and collapse, being partly, perhaps, due to the direct influence of the specific contagium, but principally to the enormous development in the organism of the ordinary septic poison.

These appalling cases must be clearly distinguished as regards their pathological nature from ordinary septicæmia. That they also have their mycological interpretation I have endeavoured to show by experiment. I have shown,* as regards peritonitis, that if the exudation of a simple peritonitis be injected fresh into the peritoneum of another animal, the disease assumes a more intense form in the second than in the first; that if in this way the disease be communicated to several animals, the effects will differ in different cases; that if by artificial selection the most severe case be picked out and the exudation from that case be used for further transmission, a still more intense inflammation will be the result, until at last a virus is obtained of which the virulence resembles that of the specific cases of malignant peritonitis in the human subject to which I have been referring. To account for the production of such cases, you have only to substitute accidental for intentional selection, the most important point to bear in mind being that the process by which the poison is developed, whether accompanied by a specific organic form or not, is a pathological process, that is, a process which can only go on in the living tissue, and which is necessarily associated with a certain definite succession of structural and physiological changes in the affected part. To obtain information respecting these processes, we must have recourse to experimental pathology. For example, experiments like those to which I have referred, which show how, by a gradual evolution, we may rise from common traumatic infectivity to the intensified virulence of malignant septicæmia, teach us what we could not learn otherwise.

From these cases, in which the direct intervention of a morbid organism is merely a matter of inference, I pass to the consideration of the only instances in which we are, at the present moment, able to say with confidence that we know the relation between morphological and pathological development. When I last had the opportunity of addressing you on the subject of contagious diseases, I enumerated four such diseases as the only ones in respect of which we are able to assign any pathological meaning to the organic forms which present themselves in the diseased parts. With reference to three of these, namely, relapsing fever, diphtheria, and small-pox, some new facts have been brought to light during the last two or three years; but before I refer to them, I will bring before you the very remarkable discoveries relating to the origin and development of the fourth member of the group—the epizootic anthrax of cattle—which have been made during the last year by a pathologist with whom I have lately had the pleasure of making acquaintance, Dr. Koch of Wollstein, in North Germany.

In my former lectures, and more fully in a paper which has been published in the *Reports of the Medical Officer of the Privy Council*, I gave an account of this remarkable disease, which I then called by the English name splenic fever. A still fuller description of the disease is now in the hands of English readers in Professor Bollinger's article in Ziemssen's *Cyclopædia*. It is a disease of great rapidity, of which the prominent symptoms strikingly resemble those of septicæmia. Excepting in very rapid cases, which are often spoken of as apoplectic, a previous febrile stage may be distinguished, but in bovine animals death is preceded by alvine discharge and gradual loss of temperature. After death, the pathological appearances somewhat resemble those of septicæmia, in so far that capillary hæmorrhages occur in the affected parts, and that there are signs of disintegration of the blood-corpuscles and that the blood fails to coagulate after death; but there is this difference, that the disease exhibits special localisation, in some cases in the subcutaneous cellular tissue, in others in the submucous tissue, the change consisting in abundant discharge from the vessels of liquor sanguinis and of corpuscles. The existence of these infiltrations and the fact that the spleen is always intensely congested and swollen, constitute the naked-eye pathological characteristics of splenic fever. The facts which were known in 1874 relating to the propagation and essential pathology of splenic fever are fully stated in my paper.† Let me enumerate them: 1. The blood of a diseased animal communicates the disease by minimal inoculation to a healthy animal; 2. Such blood always contains, when in some stage of the disease, certain characteristic organisms—the so-called bacilli of anthrax; 3. Blood which has been filtered through porcelain is not poisonous; 4. Blood taken from animals in the acute stage cannot be kept for more than a week without losing its activity; 5. Notwithstanding this, there is evidence that in certain forms the poison is very persistent.

I suggested that this last fact could be explained by supposing that the organism (for here I may state by anticipation that I then regarded it, and still regard it, as completely made out that the specific pathological process is inseparably associated with the organism) that the organism is capable of existing in two states similar to those which we

know to exist in other cases, in one of which it undergoes rapid development but is of labile molecular structure; in the other, it is permanent and resistant.

My friend Dr. W. Roberts has complimented me on having anticipated the results of the investigations of this year. I cannot claim any special credit for this, for the indications afforded by the facts were too plain to be mistaken, so that I could scarcely fail to be right in my inference, if I paid sufficient attention. Knowing what I knew of the life-history of the group of organisms in question, it was not difficult to anticipate that, if such an organism existed, it must behave in the way suggested. Its development must be made up of an alternation of labile and stable states of existence—lability corresponding with rapid vegetation, stability with the apparent suspension of all those changes of the vital process which constitute life. The credit in such cases is due, not to the man who imagines how the thing is likely to happen, but entirely to the man who demonstrates what does happen by experiment or clinical observation. In this case, we must give it entirely and exclusively to Dr. Koch, who has proved experimentally that the blood of animals affected with splenic fever in its most acute form loses its activity very rapidly, but that certain kinds of blood may be kept for long periods, *e. g.*, of years. The contagious material must, therefore, exist in the blood in two forms. Blood which possesses the power of resisting contains, he says, not only the peculiar motionless sticks which are found in the blood and particularly in the enlarged spleen, of every diseased animal, but also certain oval glistening bodies which, from their mode of origin, Koch is justified in calling spores. The way in which the proof is given that they are so is the following. If you take the blood of an animal in the acute stage of the disease and cultivate it in serum at the temperature of the body, the organism begins at once to vegetate rapidly.* This growth does not, however, consist in multiplying of the sticks by division; for, on the contrary, the sticks prolong themselves into filaments of great length in which no divisions can be distinguished. Next a change takes place in the structure of the internal substance of each of these filaments, by virtue of which the protoplasm collects itself at certain points into masses. As time advances, these masses become more and more distinct, assuming finally the form of round or ovoid spores. Eventually, the filament fades away and the spores are liberated.†



Fig. 1.

Fig. 1.—Bacilli, as seen in a fresh preparation of an animal affected with splenic fever. The blood-corpuscles and bacilli are deeply stained by an aniline solution, which has been added for the purpose.

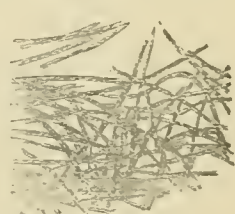


Fig. 2.

Fig. 2.—Felt-work of long unjointed filaments, into which the rods grow when transferred to humor aqueus, and kept at a temperature of 32 deg. C.



Fig. 3.

Fig. 3.—The same filaments twelve to twenty-four hours later. The formation of "spores" in their interior has already commenced.



Fig. 4.

Fig. 4.—The spores in their complete stage. Some are free, but the most are still held together by the scarcely distinguished remainder of the filaments. The infecting power of these spores has been recently tested in the course of experiments now in progress.

* Dr. Ewart, of University College, has during the last few weeks been engaged in studying the development of the bacillus, and has been able to add very considerably to the facts relating to its development. The summary I give in my lecture is founded on the observations in which I had the opportunity of taking part, through the kindness of Professor Cohn and of Dr. Koch, in the laboratory at Breslau. I will not anticipate Dr. Ewart's results, which will, no doubt, be soon published. It is sufficient to say that they are of such a nature as to fix the morphological specificity of the anthrax plant with even more certainty than before.

† The figures have been copied from Dr. Koch's photographs, published in Professor Cohn's *Beitrag* since the lecture was delivered. They will serve to render the statements I have given more intelligible.

* *Medicinische Jahrbücher*, vol. vi, p. 417; and *Journal de l'Anat. et de la Physiologie*, July 1876.

† *Reports of the Medical Officer of the Privy Council*, new series, No. 8, p. 36.

It is these spores which contain the element of resistance. I shall be able at our next meeting to show you preparations illustrative of their development. Since the publication of Dr. Koch's paper, they have been studied by M. Pasteur, who states that they are not only resistant to putrefaction, but also to the boiling temperature and to the action of oxygen under high pressure.* M. Pasteur further states that he has cultivated them in urine for very long periods, and has found that they retain their virulence after repeated cultivation. In a pathological point of view, the importance of the whole research lies simply in this: that to a liquid, which is in itself harmless, viz., serum or aqueous humour, properties can be communicated by setting up in it a process of vegetation, of which the effect is that a virus is produced—a virus which has no relation to that of putrefaction, and acts in a specific—that is, peculiar, way; its action being to multiply with extraordinary activity in the blood and tissues of the living animal, and by virtue of such multiplication to destroy life.

I am anxious to place before you the facts which we possess in relation to splenic fever in the strongest light, in order that it may be clearly seen that the conclusion we are compelled by these facts to arrive at, in respect to this disease, is based on evidence of an entirely different nature from that on which the general theory of *contagium vivum* is supported. If I come forward and assert, as a matter of scientific observation in respect of any substance, whether a chemical body or an organism, that it is a virulent contagium, you have a right to require of me to prove it, not by referring to analogies or to the condition of its origin, but by experiment. And in this experimental proof two things must be included: first, I must show you that if I introduce it into the organism of a living animal in minimal quantity, it will sooner or later become the focus of a pathological process; and secondly, I must prove to you that the virulent substance which thus acts in producing the specific disease, is itself a product of that disease, that is, that it can be obtained directly from the body of the diseased animal. It is on this ground that we proceed whenever we rightly apply the term contagium. Thus, in the case of vaccine, we correctly apply the term to vaccine lymph, because, on the one hand, it is a product of the process of vesication; and, on the other, produces with certainty a vesicle. In a word, it is at the same time a seed and the fruit of the disease. As regards cow-pox, therefore, we have the most complete certainty as to the existence of a contagium, and have it, as it were, between thumb and finger. Of its nature we know nothing as yet, excepting that it is particulate. As regards the question whether these particles possess organic structure or not, in other words, whether they possess the power of vegetative development which is associated with their morbid action, we know absolutely nothing. That organisms are present is certain enough, and that they are peculiar, but of their function nothing has as yet been ascertained. Mr. Godlee's experiments, which, as regards skill and accuracy, left nothing to be desired, go to show that the organisms which are always found in the liquid fail to afford evidence of their pathogenic properties. The same remarks apply to the organism of small-pox. Another similar example is that of diphtheria. It is perfectly certain that, in every case of faucial diphtheria, a mycotic process goes on in the affected mucous membrane; in other words, that the vegetation of micrococci is an element in the peculiar inflammation which gives rise to the diphtheritic concretion. And inasmuch as, from clinical observation as well as experiment, we know that the concretions contain in themselves the specific contagium, it is impossible to dispute that in every case in which the disease is communicated by contagium, that communication may take place through the organisms, but the proof is as yet entirely wanting.

With reference to both diseases, I mean both to small-pox and diphtheria, we have evidence of another kind, which is of great importance. Although the two have little resemblance, they correspond with each other in this respect, that both are followed by secondary affections in internal organs—that in both it is the same organs which suffer, viz., lungs, liver, kidneys, and heart. As regards diphtheria, an excellent description of them, founded on cases, has been given by a French writer, M. Labadie-Lagrave,† but without histological details. The most remarkable of these lesions, and the one which is of most interest in relation to our present inquiry, is the valvular endocarditis, which, according to M. Lagrave, occurred in more than half of the forty-six fatal cases under his observation. Now, this affection, of which, as a complication of diphtheria, he has given a good account, is the same as the "ulcerative endocarditis," which was described, perhaps for the

first time, by Dr. Kirkes, and has subsequently been noted by others in various infective diseases, particularly Dr. Moxon,* by the late Dr. Fuller in erysipelas, by Dr. Dickinson in pyæmia, by Trousseau, and, if I am not mistaken, by Dr. West in scarlatina, by Wunderlich in measles; and has been recently more completely studied by Dr. Heiberg† in puerperal pyæmia, and by Dr. Weigert in small-pox.‡ Now, in all these cases the endocarditis has a doubly infective character. It is itself the consequence of an infection, and the focus from which infection spreads; for it appears to be closely associated with affections of the kidneys, liver, and lung, which exhibit such characters as might well be accounted for by supposing that minute portions of infective material had become free from the diseased valves, carried away by the blood-stream, and thus disseminated in the affected tissues. The endocarditis presents itself in two stages. The early stage, in which what is seen is that the edge of the valve (usually, but not always, the mitral) is beset with a little chain of greyish miliary elevations on a redder ground; and a later stage, in which a process resembling ulceration has occurred, in which evidently the material forming the nodules has disintegrated.

The whole subject of infective valvular endocarditis and its concomitant disseminated affection of other organs requires a great deal of study, and I do not know any subject at the present moment more worthy of clinical and pathological investigation. But the point that I have now to bring under your notice is that, in the only diseases in which the lesions have been investigated anatomically, pyæmia and small-pox—in the former by Heiberg, in the latter by Weigert—it has been found that the affection of the valves is mycotic, that is, that the thickening of the endocardium which takes place—a thickening which has its seat in the intima—is associated with the development of colonies of micrococci; and, further, that the punctiform foci of dead alive material which occur in other organs are not minute abscesses, not foci of inflammation, but spots where localised tissue-death has occurred in consequence of little masses of the same kind which have either migrated from the affected valves, or quite as probably have found their way from the lymphatics of the affected skin—those vessels being in the early stages of malignant small-pox to a greater or less extent, occupied, as Dr. Klein and Dr. Weigert have shown, with the same organisms. In its bearings on the notions we must entertain as to the action of micrococci in the organism, these disseminated foci are of great interest and importance, for they show two things very plainly, viz., first, that, although ordinary bacteria cannot live in the circulating blood, yet there are organisms allied to these which can live and thrive after their own slow way—organisms which do not exhibit either the miraculous prolificness or the active motions of septic bacteria, but grow together in colonies of motionless spheroids; and secondly, that, when such organisms are present, they produce very little irritation in the tissues with which they are in contact.

The observations of Weigert show conclusively that the effect of the dissemination of these masses is not to produce foci of inflammation, but simply of necrosis. In the first instance, whenever the opportunity offers itself of investigating the lesions in its earliest stage, it can be made out with respect to each mass of micrococci—1. That it is enclosed in a vascular cavity; and 2. That it is surrounded by a zone of altered tissue, within and around which, although the elements have undergone a peculiar kind of degeneration, there are not any inflammatory changes. Eventually this island of altered tissue becomes the seat of cellular infiltration, and you have before you what may be termed a miliary abscess, but even then it is still possible to demonstrate in the centre of each such abscess the original mycotic nucleus.

What do we learn from this? 1. That, in certain infective diseases, of which erysipelas, diphtheria, and small-pox may serve as examples, the preliminary local processes which constitute the essential feature of the local lesions, whether primary or secondary, are associated with, and in great measure consist of, the development either in lymphatics or in blood-vessels of micrococci. 2. That these organisms have little or no resemblance to the bacteria of septic processes, being distinguished from them by their form, but chiefly by their mode of growth, that is, by the circumstance that they grow in rounded masses or colonies. Although obviously connected in their development with infective processes, they do not in the slightest degree resemble the infective organism of splenic fever. They show no tendency to multiply in the cir-

* See Dr. Moxon's "Case of Ulcerative Endocarditis of the Right Heart", *Pathological Transactions*, vol. xxi, 1870, p. 107.

† Heiberg, "Ein Fall von Endocarditis ulcerosa puerp.", (*Virchow's Archiv*, vol. lvi., p. 407). See also a case recorded by Gerber and Birch-Hirschfeld in the *Arch. der Heilk.*, vol. xvii, p. 208; another by R. Maier, in *Virchow's Archiv*, 1874, vol. lxxii, p. 145; and an important paper by Virchow himself on Puerperal Endocarditis, in the *Beiträge zur Gynäkologie*, 1872.

‡ See Weigert, *Anatomische Beiträge zur Lehre von den Pocken*, Part ii.; Breslau, 1875.

* Pasteur, *Charbon et Septicémie*; Paris, 1877, pp. 10 and 11. M. Pasteur declares that whereas the filaments perish at once in oxygen under a pressure of ten or twelve atmospheres, the spores, or, as he calls them, "corpuscules germes", are unaffected, and that blood containing them, when so treated, retains its virulence.

† Les complications cardiaques du Croup et de la Diphthérie, et en particulier de l'endocardite secondaire diphthérique, par le Dr. Labadie-Lagrave. Paris: 1874.

culating blood, nor, indeed, to spread their influence at all beyond the tissues in which they have taken up their residence.* They are associated in every instance with local, not with general, processes—with processes which spread by continuity of tissue, not with general infection of the whole organism. What the nature of that relation is, I still think, as I thought when I last had occasion to speak on this subject, must remain open. The view which commends itself to my mind as by far the most probable, is that, whatever may be the original nature of the primary disease in association with which they present themselves, the organisms are specifically the same: that they reciprocally are modified by, and modify the soil in which they find themselves, and, by virtue of this interaction, take as important a part in the secondary processes to which they belong as pus-corpuscles take in the process of inflammation. Whether they are in any respect entitled to be regarded as specific contagium particles, whether they possess the power either of conveying the contagium from a diseased part of the organism to a healthy, or from one diseased body to another, we are still bound, I repeat, to regard as an open question.

CLINICAL LECTURE ON PHLEBITIS.

By WILLIAM S. SAVORY, F.R.S.,
Surgeon to St. Bartholomew's Hospital.†

THE phenomena of phlebitis—its symptoms—are comparatively simple, and for the most part sufficiently clear. The disease often starts with pain—or, perhaps, more accurately speaking, aching—and acute tenderness in the course of the affected vein, which in the majority of instances, I think, at the outset presents to the touch evidence of being plugged. At other times, beyond perhaps an aching of the leg or other part, the only local evidence of the mischief is œdema. But this is usually, I think, very significant. The œdema of this affection is firmer, and apparently more generally diffused throughout the limb, than when it is due to simple obstruction or failure of the circulation. The affected limb, or part of it, is enlarged and thickened, but often with comparatively little alteration of shape, the skin pale and tense, and, when the part is grasped, the texture feels uniform and solid. One misses the characteristic pitting, upon moderate pressure, of ordinary œdema. The whole condition of the limb seems one rather of the state in which it is often left after an attack of phlegmonous erysipelas. And it seems to me important to distinguish between these two classes of cases: those which commence with local pain and tenderness, and those which are marked only by œdema; for, in the former case, the superficial veins only are at fault; in the latter, the deeper veins.

Take this case. Ernest C., aged 26, a barman, of dark complexion, well built, although inclined to be fat, and strong, was admitted into the hospital in the following condition. The right foot, leg, and thigh are much enlarged by firm œdema. The right thigh in the middle measures $23\frac{1}{2}$ inches, the left $20\frac{3}{4}$ inches. The skin is very tense and somewhat injected, and above the right ankle in the lower half of the leg it is eczematous. This part, he says, was the seat of an ulcer two years ago. In the upper part of Scarpa's triangle, in the position of the femoral vein, a hard and tender cord can be felt on deep pressure. There is also slight tenderness over the iliac fossa. The epigastric veins are conspicuous. He told us that, nearly two years ago, after a long boat-race, he noticed that the veins of the right thigh were prominent. Three or four months later, he found one day, after hard work, that the right ankle was swollen, but on the following morning this had subsided. From that time, however, the foot and ankle were often enlarged, and the swelling gradually extended upwards, so that for the last year the leg, knee, and lower part of the thigh were markedly larger than on the left side. His health was not affected until just previously to his admission, when he began to suffer pain along the course of the femoral vessels, and then the whole of the right limb became much swollen and very tense. He admitted that he had drunk freely of beer, and had syphilis six years ago. For some days after his admission, the pain disturbed his rest. His temperature rose from 101.8 deg. to 103.6 deg. The swelling of the thigh increased until it measured at the middle 25 inches. On the fourth day after admission, he had four attacks of epistaxis and one was copious. His temperature fell, and the next day it was normal. During the following week, the swelling

of the thigh subsided, until, at the expiration of a fortnight from his admission, there was very little difference in the size of the two limbs. But, for a week or two longer, a hard cord could be distinctly traced through Scarpa's triangle. He was kept in bed with the limb still. Strong lead lotion was applied at first, and afterwards a flannel bandage.

I may, perhaps, be allowed to publish the following note, which I made when I worked in the out-patient room of the hospital. I have seen, within the last twelve or fifteen months, eight or ten cases of this description. A person previously in tolerably good health, or at all events having no definite cause of complaint, is rather suddenly seized, without any obvious reason, with diffused pain in the calf of the leg. The pain, which is usually severe, is soon followed by a sense of extreme tension and by swelling, which, for a few hours or a day or two, gradually increases. When the leg is examined, the whole of it below the knee to the ankle is considerably swollen, tense, and very tender about the calf. In some cases, the induration is very marked. The surface will hardly yield to firm pressure. There is no elasticity, but a sense of hardness, as if something had been effused into the cellular tissue which had set and rendered the whole solid. By-and-bye, or in some cases from the first, the hardness is more circumscribed, and limited to the calf. There is never at first, and often not throughout, any discoloration of the surface. It is usually pale, tense, and somewhat shining. In favourable cases, the whole will gradually, almost imperceptibly, subside, and the limb resume its natural condition. In others, a sense of fluctuation gradually arises in the thickened and indurated calf, and this is followed by a blush on the surface. An incision, in these circumstances, will let out a considerable quantity of well-formed, but usually more or less blood-stained, pus.

With all this, a careful examination will in most cases fail to discover any morbid or unnatural condition of the veins of the limb. The femoral and superficial veins will appear natural. In some cases, however, the femoral vein is obviously thickened and tender, and can be traced as a cord through a portion of the thigh. There is usually little or no constitutional disturbance. Where the opportunity has been given, of course, the patients have been kept at rest; but, in more than one instance, they have continued to attend at the out-patient room, even walking to and fro, yet all has gone on well—in these cases it has happened without suppuration—and the limb has been restored.

Now, what is the pathology of these cases? Looking at their history and the features they present, I regard the veins as the primary seat of mischief. That the femoral vein itself is involved in some of the cases, is a matter of certainty. And those cases in which all the veins in reach of the senses appear normal, so closely resemble the others in which the veins are obviously at fault, that it is impossible not to refer them to one and the same pathological cause. If any opportunity of dissection were afforded me, I should expect in these last cases to discover something wrong in the deepest veins. I will not venture at present, on such slender evidence, to speculate further on the pathology of these most interesting cases. It is difficult to explain all the changes that ensue by simple venous obstruction, even though that were general; and, assuming this to exist, I could only guess at the cause of it. The cases are striking ones, and form a distinct class. That their pathology involves some change in the veins, I strongly believe. Beyond this, I dare not go.

Again, when the veins affected can be traced, the extension or course of the disease may be observed in two forms. There may be a simple extension, either gradual or rapid, of the pain, tenderness, solidification, and distension in the course of the affected veins; or these local signs may exhibit a striking want of uniformity. They may shift from vessel to vessel, or from one portion of a vessel to another, and in this way wander irregularly over the surface of the limb; subsiding in one part and starting afresh in another; fluctuating from week to week, or even perhaps from day to day, but withal obstinately inclined to linger, and to disappoint us of expected convalescence. Paget says of gouty phlebitis: "In such cases, the phlebitis may have no intrinsic characters by which to distinguish it; yet, not rarely, it has peculiar marks, especially in its symmetry, apparent metastases, and frequent recurrences" (*St. Bartholomew's Hospital Reports*, vol. ii, page 83.)

Here is an instance. E. C., about 50, was a stout, heavy muscular man, abstemious, very active, and in apparently good health. He had suffered, however, two or three times from "rheumatism in the knees and legs", once rather severely, for which he sought relief from the mud-baths of Marienbad, which "always cured" him. In both legs, below the knees, the veins were somewhat varicose. He came complaining of pain in one leg, and there was an oval dusky patch, branny to the touch, as large as the palm on the inside in the middle third. The tortuous internal saphena vein was very tender, somewhat thickened, and here and there apparently solid; but, in the midst of the thickened tissues, it could hardly be defined. This continued to trouble

* In this and the preceding statements relating to small-pox, I have followed Dr. Weigert, who was good enough to show me his preparations when I was in Breslau last October.

† Concluded from page 149 of last number.

him for two or three months. The surrounding disturbance in the skin and cellular tissue, with rest, speedily subsided; but the vein, the outline of which became sharper, remained painful, tender, and solid; the mischief fluctuating in severity and extent, sometimes extending in one direction while it subsided in another. He declared throughout that his general health was excellent, and he would complain of nothing beyond what he called the nuisance in his leg, and I could not discover anything further amiss with him.

Here is a very slight case. A spare active man, of fairly moderate habits, whose health had always been excellent, with the exception of rare and transient pains which he called rheumatism, discovered one morning in his bath that a spot on the inner aspect of the thigh, just above the condyle, was tender. Here I found a portion of the internal saphena vein, for two or three inches, plugged. He was astonished to hear that there was anything amiss there, was sure that it was not due to injury, and could hardly be brought to believe that the matter merited any attention. No amount of cross-examination could elicit evidence of anything further wrong. The mischief never extended, and the pain and slight swelling and tenderness slowly subsided with rest. His health has remained good, and he has never since been troubled in that or in any other way.

I have often been surprised in noting with how little constitutional disturbance this affection, even when severe and extensive, is accompanied. Nothing may be observed beyond a trifling and transient rise of temperature, and often even this is absent. There are exceptions, of course, and sometimes grave ones; but, as a rule, in these cases the patients neither show the signs nor complain of illness, and oftentimes one of our chief difficulties is to ensure rest. Persons cannot understand the importance we attach to what frequently seems to them a trivial affair; and become impatient of confinement. Of course, as in the rheumatic or gouty form of the affection there may be special indications of constitutional mischief. But even when we may be disposed to suspect strongly that a particular cause of this kind is at the root of the evil, it is sometimes difficult to elicit anything like clear evidence of it; and we must be, and perhaps too often are, content to believe without a reason.

Take the following instance. George B., aged 37, a fair, lean, ill-nourished man, a leather-cutter, was admitted on April 26th, 1877. He had suffered since the beginning of the year from pain in the left foot and leg, with some swelling. In February, he was laid up in bed for some weeks, and at this time his right foot and leg became similarly affected. This was supposed to be rheumatism. But at length the pain passed upwards to the inner side of the right thigh. He slowly recovered. The left leg became painless and natural, but some swelling of the right ankle remained. He went back to his work, and then the mischief in the right limb soon returned. Now there is oedema of the right foot, leg, and lower part of the thigh, and the distended skin is somewhat reddened. In Scarpa's triangle, the femoral vein is hard and distended, and near Poupart's ligament tender. There is no obvious distension of the superficial veins. Temperature 98.6 deg.; pulse normal. He told us that, in the previous August, he had a similar affection of the left internal saphena, but otherwise he had always enjoyed good health. His father died of consumption. Two sisters are living and healthy. There was no family history of gout or rheumatism. For more than a month he lay quiet in bed. The limb was slightly raised, and after awhile a flannel roller was applied. The signs of local mischief gradually disappeared, and his health was not disturbed. At the end of that time, no unnatural fulness could be discovered in Scarpa's triangle.

A rather stout man, with muscular limbs, very abstemious, the veins of whose legs had been for years somewhat varicose but without trouble, and who considered that he had always enjoyed excellent health, complained one evening of pain over the surface of the right tibia. Upon examination, a small tortuous vein there was found to be exquisitely tender, but soft and otherwise apparently not unnatural. The pain, however, continued and rather extended, and soon the vein became full and prominent, but not sensibly hardened. This lasted some days, when the mischief gradually crept over some of the veins of the inner side of the calf. These gradually became distended, and apparently filled with soft clot. Then the pain and tenderness on the vein first attacked slowly subsided; but presently a cluster of veins on the outer side of the calf fell into mischief, following a similar course. And so for weeks the trouble wandered about the saphena veins and their branches in the leg; but never appearing above the knee, except in one doubtful spot to the inner side of the saphena opening. As the fulness and tenderness passed away, the portion of vein was left apparently plugged, and each fresh accession of mischief was attended by no effects beyond those of the part involved. There was no oedema, no pain, when the limb was at rest and not touched, and his health

throughout was apparently so good that he only suffered from the enforced rest. He acknowledged, however, the comfort of keeping the limb quite quiet, with the foot somewhat raised.

Now, when this affection is established, what may be its course and result? This question opens the most interesting part of our inquiry.

The great majority of these cases terminate in recovery, and the recovery is usually at length complete. All evidence of any clot or plug in the vein is gradually lost, the vessel becomes natural to sight and touch, and all signs of any obstruction to the circulation through it disappear. What becomes of the thrombus? It is said to be absorbed. Where, and by what means? That we hardly know. What change does it undergo previous to disappearance? If much time elapse, it shrinks and contracts, and probably degenerates after the fashion to be noted presently.

Often, however, the vein remains permanently thickened. It is unnaturally rigid, and can be traced in this state for some distance along the limb. In most of these cases, there is probably only a partial restoration of the current through it. The clot in the interior does not wholly disappear, but very slowly shrinks and condenses into a structure more or less distinctly fibrous, which either forms a layer of variable thickness lining the whole of the surface, or it contracts into an irregular cord, which lies in contact with only a portion of the wall, the rest being free. Our museums contain many specimens of this kind: Veins with their walls either natural or rigid and thickened, with fragments of clot in the interior, variously shaped and arranged; of course obstructing the canal; many of these, by their structure and other characters and history, being clearly very old. A corrugation and apparent thickening of the vein-wall, due to contraction of a clot attached within, must not be confounded with the condensation and rigidity of the vein-wall, which is due to inflammation. In the former case, the vessel can be restored to its natural state by injection. Callender (*System of Surgery*, 1870, vol. iii, page 366-7) has clearly pointed out this. Moreover, these old clots sometimes acquire a very intimate connection with the vein-wall. Some of them may be stripped off or easily detached, and the surface of the vessel beneath may present little or no change. It may appear less polished, and the endothelium may have disappeared; but at other times the union is so firm that the clot cannot be separated without laceration, either of its texture or of the vein; and in certain rare specimens the two structures appear to be directly continuous. Organisation of the clot is an expression very often employed. What does this mean? When used in any definite sense whatever, very different ideas are by different pathologists attached to it. If it mean that the clot has acquired a fibrous structure and is permanent, then very many clots become organised; but if it mean that the clot has become continuous with the wall of the vein and possesses intrinsic blood-vessels, then organisation of the clot is beyond doubt a very rare event; and if the fact of its occurrence be disputed, it is not easy to produce satisfactory evidence of it. So far, therefore, as the effect upon the vein and its circulation is concerned, we find in these clots all degrees of duration and of obstruction. So, too, in the effect produced upon the limb. There may be no perceptible oedema throughout, or the whole limb may be converted into a huge unshapely appendage. When the oedema is considerable, or, indeed, oftentimes even when comparatively slight—as we should expect from its solidity—it only very slowly disappears. It may endure for very many months, hindering exercise, and otherwise producing much inconvenience, and making convalescence a very tedious process. Nay, sometimes the limb never after recovers its natural size or shape, for the tissues remain permanently infiltrated and hard. I say infiltrated, but frequently the cellular tissue seems to have overgrown; and with this actual increase of substance, there is much condensation. It is not only the subcutaneous tissue which may be thus affected. The change may have passed throughout the whole limb; to the connective tissue along the track of the great vessels, and between the muscles, and even into the substance of the muscles themselves. Sir James Paget tells us that even the muscle-tissue itself—the contractile substance—is hypertrophied; and that, in this way, the limb may become actually stronger than before.

A varicose state of the surrounding veins is not often seen, in consequence of thrombosis. They are far more frequently dilated, tortuous, and overgrown, from obstruction due to other causes, as from the pressure of a tumour. This may be because the larger veins are hardly ever permanently obstructed by thrombosis.

You will readily understand that there is the widest range in the extent to which the veins may be plugged. The whole mischief may lie within an inch, or it may extend throughout large tracts of the venous system, spreading in all directions from the vessel first affected, but especially towards the heart. Starting, for example, in one of the saphena veins, it may pass on into the femoral, iliac, and vena cava;

and no one needs to be told with what interest and anxiety its onward course is watched. It may prove fatal in this way, but I do not think it often does. When the largest veins are reached, the case is indeed grave enough, the peril obvious; but even then, without accidents, patients will escape. I think I am justified in saying that we regard these cases, even of very extensive plugging, more hopefully as we become more familiar with them. And the accidents of phlebitis, of which I have yet to speak, are, I think, comparatively less frequent than they were formerly supposed to be.

But, the clot once formed, may change in another way. It may undergo degeneration. And the study of this degeneration of clots in blood-vessels and its consequences cannot, I venture to say, be surpassed in interest and value by that of any other subject within the range of pathology or surgery. Even the history of our present knowledge of the process is singularly attractive, and I am sorry that there is no excuse for introducing it here. I have already said of the term suppurative phlebitis that, in the sense in which it was formerly used, the phrase no longer prevails. For Gulliver, first of all, and afterwards Virchow, showed that, what was formerly regarded as pus, is the liquefied product of the degenerated blood-clot. This, for obvious reasons, usually begins and is found most advanced in the centre; and while the crust of the clot still retains its integrity, an appearance is presented as of an abscess circumscribed by a wall of lymph, and thus the "pus" is shut off from the general circulation. Here is the old "circumscribed suppurative phlebitis". But at length the whole substance of the clot may liquefy, and the "pus" may then spread along the course of the vessel and become diffused in the blood. The old "diffused suppurative phlebitis". Now substitute "puriform" for "purulent", "pus-like" for "true pus", and, although the old pathology must be revised—the former explanation of the cause and course of the changes being no longer tenable—the description of the phenomena in this stage of the affection will still hold good.

But now proceeding, we come to a yet larger question. What is the consequence of this diffusion of liquefied clot into the blood? Virchow, when he overturned the idea of diffuse suppurative phlebitis as the cause of pyæmia, insisted nevertheless that the cause of pyæmia is the escape of the products of degenerated clot into the circulation; that still, therefore, pyæmia springs out of these changes, consequent on mischief in the veins. Now, when blood-clot breaks down, and its fragments or *débris* mingle with the blood, that infarction of distant vessels results there can be no doubt. And it can be easily understood how this embolism will vary in its characters and effects. If the detached fragment be large and coherent, a large artery, such as one of the chief branches of the pulmonary, may be plugged, and instant death may be and often has been thus produced. If the clot have so softened as to become puriform before its diffusion, then results capillary embolism in the lungs or elsewhere; and not immediate death, but severe disturbance, proving very grave consecutive mischief, but still, at first, local; and leading to changes in the parts affected—to inflammation and supuration, or perhaps gangrene—to which different observers have applied different terms. But with all this, not necessarily, or even commonly, I think, pyæmia. That pyæmia may thus arise, I do not deny. The changes just sketched may be set down as one of its causes; but I submit that there is not evidence enough to show that there exists any special or peculiar relation between the mischief in the veins and pyæmia as cause and effect. The error of this view has, I believe, arisen from concluding that because both affections, phlebitis and pyæmia, are apt to lead to capillary embolism and its consequences, therefore, when there is evidence of secondary mischief, pyæmia must exist. But some one will say: What, after all, is pyæmia more than this? The embola due to scattered blood-clot are local affairs—local at first, at all events; there is no evidence at this time of septic action on the blood; and if it should supervene, the general mischief follows on the local. But, in pyæmia, or septicæmia, or blood-poisoning proper, from the moment that the poison mingles with the blood, there is striking evidence of profound disturbance of the whole system, of which the local mischief in various parts is only the outcome; and I venture to think that the exalted temperature, rigors, and sweats are due to something more than infarction of a few capillaries. But now I must resist the temptation of further discussing this engrossing subject, and be content with referring those who care to pursue it to some of the earlier volumes of our *Hospital Reports*, where I have endeavoured to set forth some of the evidence from which this view is taken. Thrombosis and phlebitis, then, may be associated with pyæmia, yet pyæmia is often seen when these cannot be discovered. When these several states coexist, they may be, and in such circumstances usually are, the effects of a common cause—of a process which, acting locally, coagulates the blood in the vessels, and leads to inflammation of their walls; and, acting generally, gives rise to septicæmia.

I can well remember, years ago, when the doctrine of Virchow was dominant, with what anxiety these cases of phlebitis and thrombosis were watched; how from hour to hour pyæmia, with all its terrible phenomena, was expected to supervene. But now this is, for the most part, changed. We watch anxiously for signs of embolism, and we do all we can, by enforcing rigid rest, to guard against its occurrence; but we do not anticipate pyæmia. Still, although even the occurrence of embolism in any of its forms is exceptional, I would earnestly advise you always to act as if it were imminent in every case. Fortunately for his peace of mind, the patient does not see this sword of Damocles; but you must never forget that it hangs over him. (Let me give you one or two examples of its fall.)

A man aged 40, who had always enjoyed robust health, had been confined some weeks to his room and couch with thrombosis of the femoral vein. One evening, after his servant had assisted him into bed, he asked his master if he could do anything more for him before he left him for the night. "No, thank you", was the answer; and, giving the affected thigh a slap with his open hand, he added "I shall be able to help myself now." Before the man could leave the room, he heard the sound as of someone choking, and, looking round, he saw his master fall back and suddenly die. There was no examination, but the cause of death was obvious.

In the catalogue of our museum, two preparations in Series 13 are thus described.

"No. 132. A clot, which was removed from the pulmonary artery of a woman aged 33, who died suddenly from syncope nineteen days after delivery of her third child, having apparently progressed favourably up to that date.

"The clot measures three inches in length, and about one in diameter. One extremity, that which was towards the heart, is smooth and conical; the opposite is hollow, with ragged edges, leading into a cavity which occupies the greater portion of the interior, and is partially filled with grumous rust-coloured fibrine. It appears as if the clot had been gradually softening and disintegrating from the interior. The exterior is of a deep orange colour. Its structure presents no trace of lamination."

"No. 153. Another and smaller clot, *in situ*, from the opposite lung in the same case. It measures two inches and three-quarters in length and half-an-inch in diameter. Its extremity is rough and conical. It completely fills one of the primary pulmonary trunks, being continued into three branches by forked extremities. Of these, two, like the main clot, are firm and solid; the third is soft and pulpy."

These preparations alone might form the subject of a long discourse. Observe the evidence of disintegration of the embola and the suggestions of secondary embola consequent on this in the more minute branches further on.

Thomas E., aged 32, a dustman, was admitted into the hospital in the autumn of last year with simple fracture of both bones of the left leg in the middle third. He did well, and went to Highgate in September. But in November he was readmitted with periostitis of the left tibia about the seat of injury, and effusion into the left knee-joint. In a week, the effusion had almost disappeared and all the tenderness from the tibia, but some thickening remained there. He was allowed to get up. But, in the course of three or four days, he complained of pain in the left inguinal region and in the course of the genito-crural nerve. There was also retraction of the testicle. Then, upon further examination, a firm cord could be traced through Scarpa's triangle, and there was evidently thrombosis of the left femoral and lower part, at least, of the external iliac vein. This was rapidly followed by considerable œdema of the whole leg. The temperature rose to 101° deg. His rest was much disturbed. In the course of the week, an erythematous rash appeared on the chest, neck, and arms, and he complained of pain between the shoulders. The temperature then was from 99.5 deg. to 100.6 deg. The swelling of the left leg gradually subsided, but he complained of pain in the other leg and in the lower part of the abdomen. So matters went on for another week, when he complained of frequent chills, and there was marked tenderness over the femoral vessels. But the temperature was normal. Then, for a month or more, he gradually improved. He complained less, and the local tenderness and œdema of the limb slowly passed away. One day, three months after his second admission, he was allowed to sit up to have a warm bath. The day following, he was rather suddenly seized with great oppression of breathing, and he repeatedly spat small quantities of bright blood. The sputa were very offensive, and he complained of much pain between the shoulders. Temperature 100 deg. In this state, he was seen by Dr. Andrew, who found about the region of the left scapula diminished respiratory murmur and crepitation. The diagnosis was pulmonary embolism. For three or four days, these symptoms persisted; he continued to cough and to spit

blood. But gradually the sputa lost their odour and changed to blood-stained mucus; the temperature became normal; and in about a fortnight all the signs of this mischief passed away; and there remained only some slight swelling of the left leg and thigh, with scarcely any perceptible thickening in the course of the femoral vessels. In another fortnight, there was little to be observed beyond weakness and considerable depression; and, at his own wish, he left the hospital.

Pyæmia, then, as a consequence of phlebitis, is so exceptional that we hardly think of it as among the dangers to which our patient is exposed. The possible or probable occurrence of embolism is a source of far more immediate anxiety, but even this accident is comparatively rare. The majority of cases of thrombosis and phlebitis escape without it. The consequences of this affection are usually from first to last local—that is to say, limited to the vein or veins affected, and to the limb in which it occurs. Any direct evidence of disintegration of the clot within the vein is, for the most part, wanting. As a rule, all we are able to trace is the very gradual disappearance of the signs of thrombosis. The vessel, which at first is tender, distended, and solid, gradually becomes less sensitive to the touch, then reduced in size, but withal firmer and more cord-like; then, week by week, this solid passive cord becomes less and less distinct. The cases are very exceptional in which it remains completely and permanently plugged. No doubt, far more frequently the whole of the clot at length disappears; but, perhaps, in the majority of cases, a portion of the clot remains, either as a thin or thick layer lining the interior, or in the form of fragments shrunken to one side and adherent to the walls. For all practical purposes, then, recovery is complete; and, therefore, in these cases, the prognosis, as a rule, is favourable. I have, however, already mentioned that, where there has been any considerable œdema of the limb, this condition is very apt to linger, and the leg may thus remain cumbersome and troublesome for very many months; and I have already mentioned, too, that, in the gouty form of the affection, there is an especial liability to relapse, and consequently oftentimes much disappointment in the progress of the cure.

Almost the whole of the treatment of phlebitis is described in one word—rest; rest in the horizontal posture, or with the limb affected somewhat raised. When the liability to this affection is great, the most trivial causes seem to determine the formation or extension of clot. It is often started by extra exercise—an unusually long walk or slight overexertion. Even very moderate pressure on a vein, as from one leg resting on the other, will sometimes start it. And, after it has begun, the chances are that the mischief will spread to some extent, do what you will. But absolute rest is the best safeguard. For it is not only of chief efficacy in controlling the extension of the disease, but no other means are known which can be reckoned of any material value in lessening the chance of any of those accidents which wait upon phlebitis. Drugs may be employed when there are any special indications for them. When, for example, there is any evidence of gout or rheumatism, much good may come of physic, or when there are signs of other forms of constitutional disturbance, such as pyrexia. In all circumstances, measures of general hygiene should be carefully attended to. The patient should lie at rest in air as pure as possible; and, in view of the tediousness of these cases, it is often well to have him soon carried to some place where this condition can be best fulfilled. We know how phlebitis is apt to complicate the convalescence of fevers, and cases can be mentioned in which thrombosis or an attack of phlebitis has followed exposure to emanations from foul drains, in such a way as to suggest that some poison mingling with the blood, instead of continuing to disturb the whole mass, has coagulated a portion of it, and has thus been separated from the rest.

Neither can very much be done in thrombosis or phlebitis by local measures. The application of leeches in the course of the vessel has gone out of fashion. The relief they give is but temporary, and sometimes the irritation of their bites will prove mischievous. When the pain is very severe, it can be controlled by the local or general use of opium or morphia, or of something else. Otherwise, I think the most grateful application is, in the early period, a very strong lotion of acetate of lead; one part of the liquor plumbi to seven or eleven or nineteen of water. But, perhaps, the application of cloths wetted in simple water is nearly as good. Bandages at first are not advisable. They heat the limb, and otherwise increase the discomfort. But, when all signs of active mischief have subsided, when little or no tenderness remains, and the œdema is the chief trouble left, then bandages properly applied are undoubtedly very useful. Still later on, shampooing and baths of various kinds may be tried; but these should only be thought of when all risk of disturbing clots has long passed by. The baths of Aix les Bains, or Wiedbad, or the mud-baths of Marienbad may be suggested, and evidence is not wanting of brilliant cures effected by their means.

But, given a case of phlebitis, and it is not difficult to describe in general terms the prospect. At the best, it is likely to last long and prove tedious. It is not without risk to life; but a fatal issue, even from its several causes conjointly, is comparatively rare; and as time goes on, these risks diminish. But, if the patient would reduce these several risks to their lowest value, and otherwise accept conditions most favourable to his recovery, he must make up his mind to lie still for a long time.

AN ADDRESS

ON THE

HISTORY AND OBJECTS OF THE BRITISH MEDICAL ASSOCIATION.

Delivered at the First Annual Meeting of the Dublin Branch of the Association.

By ALFRED HUDSON, M.D., President.

Physician in Ordinary to the Queen in Ireland, etc.

IN occupying this chair for the few moments which remain of my term of office, my first duty is to offer you my sincere thanks for the honour conferred upon me by electing me as the first President of the Dublin Branch of the British Medical Association, and to tender the thanks of the members of the Branch to the distinguished visitors who have honoured us by their presence on this occasion.

Following the example of some of the distinguished men who have held a similar position to mine elsewhere, I shall throw a glance backwards upon the origin, objects, and progress, of the parent Association, and, to a very limited extent, I shall refer to the science it aims to advance. Such an address, while necessarily brief and fragmentary, must be of a twofold character—retrospective and suggestive. The materials I shall chiefly glean in the records of the Association, and more especially of the decade which has elapsed since its annual meeting in this city.

Having been for some years a member of the original Provincial Medical and Surgical Association, I may, perhaps, be permitted to make a few remarks on the precursor of that which is now the most numerous and powerful body existing in the profession.

I would remark, then, that much of the great success which has been achieved was due to two causes—the time and the mode of its inauguration. The time was one of wonderful intellectual activity and scientific progress. It was said by an eloquent writer of the period: “The reason of man is now more fully employed than at any former period; a vast store of mental power, a vast mass of mind, is everywhere at work; what formerly was vainly attempted by the labour of a few is now easily accomplished by the exertions of the many.” A glance at the names and works of the great physicians and surgeons of the time will amply prove the truth of this with regard to our science, so that we may say that the original promoters of the Association took advantage of that “tide in the affairs of men which, taken at the flood, leads on to fortune”. But it is due to the memory of its principal founder, Sir Charles Hastings, to state that much of its success was due to the judgment and clearness of view with which he drew up its rules and defined its objects, calculated, as these were, to advance the interests of the profession and the public, and to elevate the status, and illustrate the talents and acquirements of the provincial practitioner. This latter object was most effectually subverted by the masterly retrospective addresses of such men as Frichard of Bristol, Crosse of Norwich, Scott of Liverpool, Symonds of Clifton, Bardsley and Black of Manchester. Even now, no one could peruse these learned essays without improvement, nor without that feeling of admiration which prompted the late Sir William Ferguson to say in his presidential address: “Few physicians or surgeons of the present day would venture upon such extensive ground; but, doubtless, there were giants in those days, for they did their work well.”

All who are familiar with the annual addresses delivered during the last decade will admit that, if necessarily less comprehensive in their scope than those I have alluded to, they are marked by an equally enlightened and philosophic spirit, and justify the wise anticipation of the founder of the Association, that this retrospective view of medicine alone will stamp a considerable value on its proceedings, because nothing can be more proper than that, at stated periods, reports should be made of the advancement of a progressive science.

The career of the Association has been a continued and increasing

success. Founded forty-five years ago, and originally consisting of three hundred and ten members, the numbers have increased year by year, at first slowly, but since the present editor, Mr. Ernest Hart, took charge of its weekly JOURNAL, more rapidly, so that in the last eleven years nearly six thousand members have been added to its strength, and it now numbers nearly eight thousand members, comprising men of the first rank in the profession in the three countries; and has received and conferred honour by having been presided over by men of the highest professional status in the towns in which its annual meetings have been held, as by Sir William Fergusson, in London; Sir Robert Christison, in Edinburgh; by Dr. Stokes, in Dublin; Dr. Acland, in Oxford; and Dr. Paget, in Cambridge.

Commensurate with the growth of the Association in numbers have been the development of its work at its annual meetings, the increase in the number and interest of papers and discussions, and the improvement of its JOURNAL; the increase of the grants of money for the promotion of medicine and the allied sciences, and of its social and political influence.

Its meetings consisted originally of a single section. For several years, they have comprised from four to six, the attendance on each of which has been in proportion more numerous than that of the meetings formerly was. We had, at the late meeting in Manchester, no fewer than nine special addresses of marked ability, on medicine, surgery, midwifery, physiology, sanitary science, and psychology. Its JOURNAL, I think you will all admit, deserves the eulogy of Dr. Allen Thomson, in his address to the Glasgow Branch, that with an enormous circulation it maintains an useful and honourable place among the records of the medical literature of the time. Of the third object, I am happy to learn that the Scientific Grants Committee has this year at its disposal the sum of £400. I also learn that the Committee of Council, acting on the recommendation of the Scientific Grants Committee, have resolved that in future the Hastings Memorial Fund shall be allocated to found a Hastings oration or address, to be delivered biennially by some highly distinguished medical man, at home or abroad, who has elucidated by his researches some important point in medical science or practice.

It cannot be doubted that, by the subdivision into several sections, the power of doing scientific work at the annual meetings has been much increased; but, as Dr. Sieveking remarked (in his Address on Medicine in 1876): "An association can do little *directly* to promote science. Scientific work is rarely well done by large assemblies. The student works in the quiet laboratory, in the secluded library, or at the bedside of his patient; and though he may be encouraged by the sympathy and approval of his contemporaries, science and its results are, and ever will be, his chief reward." It has, however, powerfully contributed to the improvement of medicine as a practical art, by enlisting and embodying the labours and experience of those "silent workers who," says Sir William Jenner (Address on Medicine, 1869) "render most efficient aid, the results of their unspoken experience confirming or refuting the published assertions of the few. It is to the experience of the mass of the profession that we look for the final establishment of doctrine and of the rules of practice."

But the influence of the Association has been most decidedly felt in the improved relations of the members of the profession to each other and to the public, and the consequent increasing influence, both social and political, of the profession as a body, as well as in the promotion of that branch of preventive medicine called sanitary science.

The subjects of social reform and sanitary science, though essentially distinct, have been usually treated of together at the annual meetings under the name of Preventive Medicine, Public Medicine, or State Medicine. They were first thus grouped, so far as I am aware, by our fellow-citizen, Dr. Henry Maunsell, in an able and vigorous discourse on what he termed Political Medicine, published in 1839. I need not remind my hearers of the discourse delivered at the meeting in this city in 1867, by Dr. Rumsey, or of its effect in leading, as it did, through the exertions and influence of Dr. Stokes, to the creation of the Dublin University diploma in State Medicine.

It is to be remarked that a great impulse was given to the study of that portion of Preventive Medicine, which relates to the etiology of fever, by the offer, by Dr. Thackeray, through the Provincial Association, of a prize of £50 for the best essay on the sources and modes of propagation of the continued fevers of Great Britain and Ireland. Not that the prize essay added anything whatever to our knowledge of the subject, or was free from the confusion which pervaded all reports of epidemics of that period (and, I may add, of some of those of the subsequent Irish epidemics of 1847-9); all causes of fever, save contagion, being ignored by the writer, and all distinctions of species, as regards typhus and typhoid, being denied. Many minds were, however,

directed to the subject at this period, with the result of producing method and order where formerly all was confusion, and of placing the etiology and classification of fevers upon a sure and irrefragable basis. The late Dr. Parkes, in his admirable address in 1873, alluded to the pre-existing confusion, but added: "How wonderful is the change now. We can make, in most cases of so-called continued fever, a diagnosis as certain as in small-pox or measles; we know what to expect, and can indicate the limits within which the morbid cause acts. When I contrast this certainty with the vague, hesitating, conjectural, diagnosis of former times; when I think also of the results of this accurate diagnosis, viz., a recognition of the mode and conditions of spread, a recognition which leads at once to preventive measures, I begin to doubt whether, after all, this is not our greatest advance in practical medicine."

But we by no means limit the domain of preventive medicine or sanitation to the investigation and prevention of external or exciting causes of disease. It has a far wider scope, embracing not only the physical, but also the moral, political, and social conditions of mankind. Of the importance of national health, in a political point of view, Dr. Maunsell writes: "No proverb is more trite than that which proclaims health to be the greatest of earthly blessings; but it is even more—it is essential, as man is constituted, to the existence of anything like virtue and peace in a nation. All experience shows that human beings, when placed in circumstances which render their tenure of life especially precarious, become almost in a direct ratio with the uncertainty of their existence, profligate, selfish, and reckless of the sufferings of others." "For my own part," says Dr. Wilks (Address on Medicine, 1872), "I believe a much larger share of the conduct of mankind should come under the cognisance of the medical man. If it be his duty to have regard to man's bodily frame, and not merely to be (as Carlyle says) a body-cobbler, his function is very large, and he immediately enters into the domain taken possession of by the social philosopher, parson, and philanthropist."

Our influence in averting the too prevalent physical, moral, and social evils of intemperance; in controlling the physical education of children; in correcting the evil effects of overwork of the brain, and other evils of the advanced civilisation of the age, will at once suggest themselves as illustrations of Dr. Wilks's remark. But neither would I limit the action of preventive medicine to the antecedents of disease, or exclude it from the domain of curative medicine so termed; on the contrary, I regard the relations of preventive medicine to disease as being coextensive with our anticipations or prognosis of its access, progress, termination, and consequences. It not only recognises and wards off the external exciting causes, but foresees and guards against predisposition, whether arising from age, occupation, habits of living, temperament, constitutional states, pre-existing illness, or the material and moral surroundings of the individual. It takes account alike of the risks attendant on the evolution and development of early age, and the involution and degenerescence of advanced life, and regulates its hygienic measures accordingly, looking especially to the improvement of nutrition in the one, and to the due elimination of the products of regressive change in the other extreme. It recognises those constitutional states, whether inherited or acquired, which so frequently cause, combine with, or modify, visceral disease, as gout, struma, and syphilis; and those constitutional tendencies which Sir James Paget defines as "progressive changes growing up towards complete and evident disease; a study comprising the personal health characters, not only of those whose unhealthy constitutions are signalised in some typical form of disease, but in those also who, to the unobservant, may seem nearly well, or indefinitely ill, or, at most, locally unsound." (*Clinical Lectures*.) As a corollary to this, it investigates the state of health before the performance of operations, as with reference to the existence of albuminuria, or of intemperate habits, etc., while, by its anticipatory care of patients after operations, the mortality of these has, in the last thirty years, been reduced, according to Sir J. Paget, fully 50 per cent.

Again, preventive medicine suggests the measures necessary to anticipate and prevent secondary blood-contamination, by infection from diseased surfaces, such as those of the throat in scarlatina and diphtheria, and the intestinal ulcers in typhoid, while it averts the risks to which patients are exposed during the convalescence from these diseases, whether from the effects of disease or from injudicious management.

Preventive medicine also comprises the adaptation of the condition and work of the healthy organs to the condition of those which are unhealthy or enfeebled, so preserving what has been happily termed the balance of safety, and avoiding the too common error of stimulating an enfeebled organ (as the heart by alcohol). Of such treatment, Dr. Russell Reynolds justly observes (Address in Medicine, 1874):—"We may help a man to get through some work for which, without such

aid, he was totally or partially incompetent. We have evoked an amount of vital action that would otherwise have been impossible; but we have used up his life in doing so."

Again, the treatment of functional derangements of internal organs in so far as this is prophylactic of structural change, is, strictly speaking, preventive medicine. To two illustrations I may be permitted to allude. One is that form of congestion of the upper lobe of the lung to which young females are subject, more especially if menstruation be suddenly checked, and which, if neglected, too frequently eventuates in phthisis. The other is those hepatic derangements of which Dr. Murchison says: "I believe the day will come when, with a more perfect knowledge than we now possess of the healthy functions and of the signs of functional derangement of the liver, we shall be enabled to prevent, or to arrest at their commencement, many of the most serious ailments to which mankind are liable, and thereby to add another chapter to the volume of Preventive Medicine (*Croonian Lectures*).

And, to bring this digression to a close, probably no more striking example could be adduced of the value of the principle of preventive medicine than the influence exerted upon the intra-uterine health and future viability of the foetus by certain medicinal substances administered to the mother. I allude more particularly to the paper read at Manchester by Dr. McClintock, on "Fœtal Therapeutics"; and I would ask, does not the valuable results of the treatment suggested and detailed by him give us ground for hope that some of the predispositions to disease inherited from the parent may be successfully combated by preventive treatment during gestation? Exclusive of syphilis, I would suggest struma, phthisis, and epilepsy as the diseases more especially suited for such therapeutic experiment. It is true that its results, being negative and far distant, may seldom be realised by the experimenter; but, in such cases, as in many others, we act upon the Scriptural precept and "cast our bread upon the waters, to be found" (it may be) "after many days".

Then, to turn for a moment to the present state of what may be more strictly termed Curative Medicine, in his able and exhaustive address on the Progress of Medicine at Leeds in 1869, Sir W. Jenner made the remark that "the advances of curative medicine have been as decided as those of preventive medicine"; "that not only have sounder views of the rational treatment of special diseases, based on advances of pathological knowledge, been established, but new drugs of great practical worth have been introduced into our *Pharmacopœia*, and old drugs have been found to possess virtues heretofore unsuspected." I must refer to this address, well worthy of attentive perusal, for an enumeration of the more novel remedies then known. Time will not allow me to enumerate the many which have been since introduced, some of which have been adopted by the profession generally, while others are under trial.

Viewing these in their relation to pathological conditions, they seem to fall naturally under four heads:

1. Alteratives, viewed in relation to the several tissues for which they have an affinity, and on which they act; a knowledge which is co-related to that of the special changes to which each tissue is liable.
2. Antiseptics, in relation to septicæmia, pyæmia, diphtheria, and all diseases caused by infective germs.
3. Constructive or recuperative, in relation to excessive waste of blood or tissue, loss of balance between waste and repair, and some forms of tissue-degeneration.
4. Agents acting on the vaso-motor system of nerves, and through them upon the circulation.

Examples of each class will occur to all, and whether we regard the treatment by alteratives of the syphilitic affections of vital organs, or the antiseptic treatment of Lister, Sansom, and others; or the influence of phosphorus and the hypophosphites on enfeebled brain and spine; or the striking effect of the hypodermic injections of ergotine in internal hemorrhages, or of that of ether in collapse from hæmorrhage, or heart-failure from other causes, or of the inhalation of nitrite of amyl in the paroxysm of angina. We may appeal to these, with many others, as justifying our faith in medicine, and our anticipation of its future triumphs. To some of these the sciolist and the sceptic may take exception, as well as to other older and equally valuable remedies, as blood-letting, counterirritation, and mercury; but these objections amount to little more than saying I will not believe what I do not understand. But, as Dr. Wood rightly remarks, "to deny as has been done the existence or value of alterative medicines because we cannot tell why mercury relieves syphilis, or why iodide of potassium cures rheumatism, is as absurd as to deny the existence of the syphilitic and the rheumatic dyscrasia because we do not know their ultimate nature" (*II. Wood, Treatise on Therapeutics*, p. 351).

In the arguments of the sceptic we seem to recognise:—1. Objections founded on denial of the *vis consequentie* of treatment. These we can, in some cases, meet by a reference to the physiological action of our remedies; in others, by their immediate and direct effects on diseased phenomena; in others, we have no better answer at present than the experience of the mass of the profession. It were needless to remind you in how many instances this experience has been eventually confirmed by a more enlightened theory; let one example suffice.

We have often been told that the received notion that calomel acted as a cholagogue was disproved by the experiments performed on dogs by Dr. Hughes Bennett and others; but still the fact remained that headache and other supposed toxic effects of bile were removed by a calomel purge. The experiment and the empirical observation would seem to be reconciled by the theory which transfers the action of the drug to the small intestine, by irritating which, says Murchison, "it sweeps along the bile before there is time for its absorption, thus causing an increased flow from the bowel without the secretion from liver being necessarily increased".

2. Some objections are of more positive character, founded on chemical or theoretic grounds, such as Dr. Brinton's argument against that invaluable remedy in cases of gastric ulcer—nitrate of silver; as the objection on similar grounds to benzoic acid in acid states of the urine, and such as some laboured attempts to prove (see Waring's *Therapeutics*, pp. 388 and 389) the inutility of counterirritation by a mixture of fallacious reasoning and flippant ridicule (*Practitioner*, 1869). Here, again, we simply appeal to experience and wait for the explanatory fact.

3. There is the objection grounded on the secondary ill-effects of medicines. But, however just and well founded this may have been in former times, it no longer is so, since—to borrow the terse and pithy language of Mr. Simon—we have learned that "overdoctoring is an evil. Strong measures are not for trifling purposes, nor ought treatment to be allowed except where treatment is necessary". That "in medicine, as in ordinary life, it is the great test of common sense that a man seeks, and it is the great reward of observant experience that he learns to make his means proportionate to his ends" (*Art. Inflammation in Holmes's System of Surgery*).

But, lastly, the sceptic rejecting such moderate views, and relying on his own theoretic arguments, boldly predicts that certain doctrines in pathology or modes of practice can never obtain acceptance in future. In so doing, he ignores two important considerations. The first, that medicine, unlike the exact sciences, advances not directly, but in cycles, and that consequently change is not synonymous with progress. The doctrine or practice of to-day is often discarded to-morrow, only to be again accepted for better reasons and as founded on a surer basis. The illustration of the employment of digitalis in cardiac dropsy will occur to every mind and needs not to be dwelt upon.

But, again, we may remark that the history of medicine, as of other arts and sciences, abounds with vaticinations which have been falsified by advancing knowledge; and with problems pronounced dark and insoluble, which have been solved by its increasing light. Such vaticinations appear to me to be of two kinds, the one due to ignorance or imperfect means of research, the other to the inability to reconcile the novel doctrine or practice with existing theory. Perhaps I may be permitted to mention briefly one or two examples of each.

Cabanis, the author of a classical work on the revolutions of medicine in the beginning of the present century, pronounced the minute anatomy of the brain as not only badly capable of being ascertained by the scalpel or microscope, but as "rather an object of physiological curiosity than of medical utility, and at present wholly useless and likely to remain so". At a more advanced period, Sir Astley Cooper was, like all his contemporaries, so ignorant of the pathology of constitutional syphilis as to teach that it never attacked the vital organs, as the brain, liver, or kidneys. In the retrospective address of 1840, the able orator (Dr. Scott) characterised the doctrine that "the material of contagion is composed of organic matter, and not only an organic, but living matter, as startling, and based on a few unsatisfactory analogies". Lastly, not to multiply examples, that profound physician and psychologist Dr. Prichard, in his retrospective address of 1835, says: "How strange does the following proposition of M. Bronssais appear to those who have reflected on the obscurity of the subject. The cause of moral perversion and of suicide in cases of mental derangement consists always in irritation of the trisplanchnic apparatus, and especially of that belonging to the stomach acting on the brain." Doubtless, the hypothesis was, like others of the same author, both too general and too exclusive, but that it contained a germ of truth, daily experience proved; so that Sir W. Gull, in his address in Medicine at the Oxford meeting, remarks that, "as there is no explanation of laughter when the axillary nerves are tickled, so there seems to be none of the morbid fears which

oppress those who are the subjects of some affections of the colon, and who weary our patience with their doleful complaints. Yet, surely we have no more reason to deny the one than the other, though we must at present refer both to some ultimate fact of our natural history."

Now, according to Dr. Fothergill, this is no longer an ultimate fact, but is explained by the fact that the posterior cerebral lobes are fed by the vertebral arteries, these deriving their nerve-supply from the same cervical ganglion, which is in intimate relation with the thoracic ganglia and the splanchnic nerves which supply the abdominal viscera. "Thus," says Dr. Fothergill, "we now comprehend how disturbance in the abdominal viscera can produce melancholia without the intellect being obviously affected. There is anæmia of the posterior cerebral lobes from arteriole spasm, the result of distant irritation."

I would remark, in passing, that there is a possibility of the progress of therapeutics being for a time hindered rather than forwarded by advances in science. One danger arises from relying too much on the results of experiments on animals. Valuable results have, no doubt, been obtained from these, more especially with regard to the physiological action of medicines and to the antagonisms of certain poisons; but, as Dr. Matthews Duncan remarked in his able address on Obstetric Medicine in 1874: "There is a variety of circumstances which seem to indicate that the lower animals are not subject to exactly the same laws in these matters as man is, and certainly there must be great caution exercised in arguing in human pathology from the analogy of the lower animals."

Another danger may arise from an undue reliance on the mechanical aids to morbid anatomy and physical diagnosis which abound in the present day. Some of us may remember how, shortly after the introduction of the stethoscope, a too exclusive attention to the physical signs of diseases led not unfrequently to imperfect diagnosis both of the local mischief and of the constitutional state, and certainly a large amount of skill in the use of the more modern appliances is compatible with insufficient comprehension of subjective symptoms, and consequently with imperfect diagnosis. A similar remark holds good with regard to the microscopic study of morbid structure, a profound knowledge of which is also compatible with imperfect acquaintance with the disease which led to it. I would by no means undervalue those mechanical aids, far from it, but "it is well when the tool sharpens the wits that use it, and teaches its pupils in the end to dispense with its services". This reliance on physical diagnosis and its instruments becomes an effectual hindrance to true progress when conjoined with what Dr. Acland, in his presidential address in 1868, happily termed "reckless negation of the accumulated experience of our race". He well observes that "we are superior to our fathers in the means at our disposal, and in the positiveness with which we can up to certain points enunciate our results. But we ought not to overlook the fact that, with these positive gains, we are subject to contingent losses, and that in an epoch of details and comparatively facile methods of inquiry, the greater qualities of patience and reserve may be lost to those who are not themselves original investigators."

Another hindrance to progress is that produced by what I might term waves of fashion, which not only drown our judgment when fashion is at the flood, as when some doctrine or practice is carried to excess—like the much abused apophthegm of Graves, "Let my epitaph be 'He fed fevers,'" or the alcoholic treatment of Todd—but leave us stranded in doubt and uncertainty when it is at the ebb, as when blood-letting, once too indiscriminately employed, is indiscriminately neglected, for no better reason than that its disuse is now the fashion, the only arguments against the *use* being those drawn from the former *abuse* of this remedy.

I shall allude to but one more of the besetting sins of the day, which seems the natural outcome and result of self-confidence, and neglect of the labours of others. It is the unnecessary and increasing accumulation of dry facts, by which, as has been remarked, the progress of science is impeded like as that of an army by its baggage. The age of hypothesis is past, but that mental operation is now often wanting by means of which we advance from the observation and collection of facts to the laws of phenomena, and onwards to the theory of causes. Far too much of our periodical literature is occupied with the details of trite and familiar cases and observations by writers, of whom it might be said that they resemble the fool in "As you like it", of whom Jaques says—

"And in his brain—
Which is as dry as the remainder biscuit
After a voyage—he hath strange places cramm'd
With observation, the which he vents
In mangled forms."

I have said that the Provincial Medical Association was fortunate in its inception; and I think we may say the same of our own Branch

of the British Medical Association, which, thanks to the exertions of our able and energetic honorary secretary, has already established intimate and most friendly relations with the parent body, a proof of which we have in the presence of its distinguished President, and the able editor of its JOURNAL, among us to-day, giving "a testimony" (to use the language of the President in accepting the invitation to attend), "of readiness to strengthen the new and important bond which the Dublin Branch forms between the members of our profession in England and Ireland".

I am sure that these feelings will meet with a hearty response in the breasts of all our members, and that each will be anxious to support those interests, and promote those high aims, which the Association has in view. And let us remember that, while working for the Association, we shall be upholding the character of the Irish branch of the profession, a duty so eloquently enforced on the members of the Royal Irish Academy by Professor Jellett, that I shall make no apology for quoting a few words of his address: "God forbid that we should ever forget that the place which our country holds among nations must be fixed by the labours of her children, that their success is her glory, that their defeat or dishonour must fall darkly upon her. If this thought be irrelevant, it has in itself that which must command our attention whatever else may engage it. If it be selfish, it is selfishness so enlarged, so purified—may I not say so noble?—that it cannot fail to exalt the mind where it is found. And Truth herself will not condemn us, if with our devotion to her, a thought of patriotism shall mingle. It will not degrade her worship, nor will it render us unfaithful. We shall not love Truth less because we love our country too."

And surely, if any other stimulus to exertion were needed, we have it in the traditions of the Irish School of Medicine, and the memory of the illustrious band whose fame is for ever associated with it—of whom but one, Sir D. Corrigan, the last but not the least in fame and honours, now survives among us. Of men "whose high ability and conscientious worth", said the late Lord Carlisle on a public occasion, "have heretofore rendered the medical profession in this country illustrious, and have attracted to this city, from all shores, crowds who deemed it a privilege to sit at their feet and to profit by their lessons". And may I not add that we have it in the example of one who has so recently passed away from among us—of him to whom Lord Carlisle alluded by name as "that living light of the profession, Dr. Stokes"—who, though dead, still lives in his living works, in the widespread influence of his clinical teaching, and in the grateful memory of the numerous pupils trained, by his precept and example, to the knowledge and love of their profession, and of the many friends and colleagues to whom he was endeared by his high principles, scrupulous honour, and kindly consideration. Nor will he soon be forgotten by those members of the Association who visited Dublin in 1867, when he presided so worthily over its annual meeting.

The name of Stokes involuntarily suggests that of his great colleague, to whom so graceful and deserved a tribute was lately paid in this College Hall. Colleagues they were, in more than the ordinary sense of the term, for no two men were ever more fitted to be thus associated, inasmuch as in their mental gifts and character they were each the complement of the other. During their lives—and, to a great extent, to the present time—their names were constantly coupled as "Graves and Stokes of the Meath Hospital", as the joint authors of valuable papers in the *Dublin Hospital Reports*, and as the reformers of clinical teaching, and among the foremost of clinical physicians.

And if they differed in their type of mind, they differed in their fate. The man of eagle glance, of rapid intuition, and ardent temperament, died in the meridian of his powers, ere his brilliant theories and many valuable practical suggestions had been generally accepted by the profession. The other, the patient worker and profound thinker, was happily spared to beyond the "three score years and ten", long enjoyed an abundance of the blessings "which should accompany old age", and finally, left the stage of this world amid the mingled admiration and regret of his contemporaries in this and other countries.

Gentlemen, I feel that I have trespassed too long on your time and attention. I shall, therefore, add to my gleanings but one more—a passage from an eulogy on the lives and work of some of the master minds of a former generation, which I regard as peculiarly applicable to both my great teachers, and as conveying a salutary lesson to ourselves.

"And as I endeavour'd," says Dr. Robert Ferguson, "to track the workings of master minds, I observed that each felt the insignificance of man amid the might of Nature, and that he who looked most loftily tempered his gaze with such humility as to see nothing in his magnificent acquisitions but a few shells gathered on the shores of an un-

known ocean. And this estimate of human powers, I thought, should be a bar against the indulgence of all those envyings and heart-burnings that too often embitter the professional career. And then, if I followed them into the recesses of their study, I learnt that knowledge not only fills but purifies the understanding; that, in their communing with Nature, their minds had insensibly imbibed her influences; that their industry, like hers, was calm, unobtrusive, and incessant—an instinct rather than an effort, and its reward the gratitude of mankind. If their lives were chequered with the good and evil of our lot, I saw that they sustained the trials of prosperity with honour, and the sharp strokes of adversity with dignity. The consciousness of duties discharged, and the occupations of their career, alleviated private griefs; while the contemplation of the serenity and steadfastness of Nature prepared the heart for those higher and nobler thoughts without which there is indeed no repose."

Let me add, we have reason to know that such thoughts were entertained by both, and consequently that it may be said of both—

"They rest from their labours, and their works do follow them."

IODOFORM AS A LOCAL APPLICATION.

By WYNDHAM COTTLE, M.A., M.B. Oxon., F.R.C.S., M.R.C.P.,
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At a time when many new remedies are constantly being brought to the notice of the profession, and often lauded as of extraordinary virtue, but, after a longer and more extended trial, disappear from practice and are heard of no more, I should feel some disinclination to call attention to a not widely known drug, had not so high an authority as Mr. Berkeley Hill already done so. But, indeed, iodoform scarcely comes within this category. It has been in extensive use for some time by many surgeons, and, during the last two or three years, I have experimented with and prescribed it largely and with the most encouraging results. First discovered about the year 1824 by Serullas, its properties have long been known to chemists. It is readily obtained by adding an alcoholic solution of potash to tincture of iodine, and crystallises as a yellow lustrous coarse-grained powder of a peculiar pungent penetrating odour. It stands in the same relation to its analogues chloroform and bromoform as hydriodic acid does to hydrochloric and hydrobromic. It may be regarded as chloroform (CHCl_3), in which the three atoms of chlorine are replaced by three of iodine (CHI_3). It also forms substitution compounds with chlorine and bromine. It is sparingly soluble in water and glycerine, less sparingly so in alcohol and warm oil, but readily soluble in ether, and to a still greater degree in chloroform.

Two years ago, I made solutions of iodoform in alcohol and ether; but, as the liquid rapidly became of a dark iodine tint, I feared that some substitution-product or decomposition might take place in the liquid, and generally employed the solution in warm oil. Chloroform is, I believe, its most effective solvent. Iodoform can readily, by trituration, be made into an ointment with either lard or vaseline, and its odour, in some measure, disguised by the addition of essential oils, as the essential oil of almonds. As a powder, it can be employed alone or diluted with fullers' earth, magnesia, or tannin; the last mentioned body having the peculiar property of, in some measure, removing its powerful and disagreeable odour.

In the form of suppositories, iodoform has been employed as a local anodyne, but with no marked benefit, as I understand, though I have no experience of it in this respect. As a powder, it has been extensively applied to cancers and venereal sores; and I have to thank my friend Mr. George Perry for calling my attention to its use in these cases, when I was at once struck by the very remarkable results produced. Its action can, perhaps, be best shown by stating its effect in the several affections in which I have applied it.

Venereal Sores.—Iodoform seems to act equally well in these cases whether they are ordinary venereal sores or genuine hard or soft chancres, and whether situated beneath the prepuce or on other parts. Its action seems to be that of a topical irritant in some measure, and it may set up too much local action, if applied to an inflamed sore or wound, as Mr. Berkeley Hill points out in his paper on the subject in the BRITISH MEDICAL JOURNAL of January 26th, 1878. It should not, therefore, be applied to a sore when acutely inflamed.

From records of cases, I find that twenty cases of venereal sores classed "primary syphilis," which occurred in practice in their chance sequence and without any effort at selection, were treated by me by the ordinary local methods, with or without internal remedies. These were, on an average, rather more than twice as long under treatment,

before the sores were completely healed, as the same number of other cases, taken in a similar way and under precisely similar conditions, in which the only remedial measure was the topical application of iodoform. These results are the more encouraging when I add that, in patients so treated, there is diminished risk of buboes and lessened constitutional depression from the more rapid progress of the cases. It seemed to me also that the sequence of secondary syphilis was less frequent. Iodoform acts particularly well in cases where there is a disposition to slough.

Buboes, Syphilitic Ulceration, etc.—In practice, buboes that are most tedious and indolent are of frequent occurrence. They often have deep and extensive sinusses and fissures that show little or no inclination to heal, and sorely tax the patience both of the surgeon and of the patient. I have found that these cases almost invariably rapidly granulate, contract, and cicatrise by the application of iodoform; and the same obtains in the late forms of syphilitic ulceration. A man, about twenty-eight years of age, with serpiginous ulceration of syphilitic origin, which, first breaking out in the groin, had extended over the lower part of the abdomen and upper part of the thigh, and was for over a year under treatment, with every likely remedy, including change to the seaside. In this case, nothing seemed to check the morbid process, or to set up healthy action, till iodoform was called into requisition. Under its use, the ulceration had almost healed, when the patient was lost sight of. I have often injected the deep sinusses that may result from buboes, etc., with a solution of iodoform, and have frequently found them mend under this treatment when other means have failed. As an injection in gonorrhoea, in the few cases in which it was tried, it seemed to set up so much inflammation, that I abandoned its use.

Chronic Ulcers.—In ulcers about the lower extremities, and indeed elsewhere, I have formed a very high opinion of iodoform as a therapeutic agent. I have used it largely both at the hospital and in private. Ulcers that have remained open for years, and on the treatment of which much care and skill have been expended, often close in a few weeks under its influence; but the same caution must be repeated as in the case of venereal sores. It will only irritate the actively inflamed wound. It is the indolent ulcer, from whatever cause it may arise, whether from varicose veins, malnutrition, syphilis, or injury, that is especially benefited by iodoform. Repeatedly, under its use, I have seen a surface, glazed or oedematous, rapidly take on healthy action, granulate, and heal, and this where other measures have been tried for months, or even longer, without effect. Often, too, the pain that so frequently accompanies these ulcerative processes ceases after iodoform has been applied for a few hours.

As a Parasiticide.—In many cases of ringworm of the scalp of long duration, and which had been before the subjects of much and careful treatment, I have prescribed iodoform in the form of an ointment. In several of these, speedy improvement ensued, spores being no longer to be found and the parts returning to a state of health; but I met, in some instances, with considerable difficulty in inducing the parents to apply the remedy, on account of its powerful odour. It set up no violent inflammation, and I hope it may prove an useful adjunct to the means at our disposal for combating that disease.

Chloasma quickly yields to this agent; but, again, its odour is an insuperable objection to its employment in the treatment of this disease. The results that I obtained from its application in several cases of sycosis were not encouraging, as it seemed to give rise to undue irritation. In the form of powder, I have used iodoform in several cases of lupus with ulceration and rodent ulcer; but my observations on its conduct in these cases have not been at present sufficiently complete to warrant a definite opinion.

A word, in conclusion, as to its mode of application. If used as a powder, iodoform should be dusted on the ulcerated surface, and a piece of dry lint, or lint soaked in a weak solution of carbolic acid, may be laid over it, and this process repeated night and morning. Undiluted, I have often found it apt to produce irritation and pain, and, therefore, generally prescribe it mixed with equal parts of either fullers' earth or tannin. As a parasiticide, I have used it as an ointment with about twenty grains to an ounce of lard, and have directed it to be applied twice daily. Such an ointment spread on lint is a convenient mode of application to a wound or ulcer, and its employment in this form prevents the risk of dropping this disagreeably smelling drug on the patient's clothes, etc. If an ointment of the strength named cause inflammation or pain, it may be diluted. I am also in the habit of ordering iodoform in combination with a salt of mercury, etc., with satisfactory results. So also it may most conveniently and easily be applied by painting the part with its solution in alcohol, chloroform, or ether, as Mr. Hill describes.

There are two drawbacks to the use of iodoform. The first is its extremely disagreeable odour, which, unless it is carefully covered over,

scents the room in which the patient is; the second is its high price. The latter, however, would soon be reduced, if any considerable demand arose for it.

A SUCCESSFUL CASE OF SPLENOTOMY.*

By DR. A. MARTIN, BERLIN.

THE great progress of modern laparotomy, which we all agree we owe principally to the energetic initiative of our English brethren, is sufficiently proved to encourage us to-day to proceed to the removal of growths and degenerate abdominal organs which but a short time ago seemed to be a *noli me tangere*. The benefit of this we gynecologists particularly enjoy, as only thereby the removal of those genital organs which seem to be singularly exposed to degeneration has become common property among us. Looking at the results of ovariectomy, we can boldly proceed to the removal, if it become necessary, of any other abdominal organ, provided only that this step do not injure irreparably the bodily system. And here only begins the great difficulty, namely, to know what organs the body can lose without fatal result. Experiments on animals cannot be accepted as the best evidence in the settlement of this question; much more do we owe to those accidents which destroy or wholly arrest the function of the organs of the abdominal cavity. If this can be proved in a convincing manner, the removal of degenerate organs or parts of them can be a question only of improved surgical manipulation.

An organ, the function of which has remained a problem to physiologists, the *spleen*, seems to have been always protected against surgical interference because of its unknown value in the corporeal system. But there are partial and even entire interruptions of the function of this organ, chiefly from traumatic causes, which show that we can easily spare it from the body; and, as far as I have examined the literature of the subject, these accidental cases encourage us to make a favourable prognosis when surgical interference becomes necessary. And bold surgeons have taught us already that this extirpation can be done. The results of these cases have not, indeed, until now been very favourable to this extirpation, as out of nine patients only three recovered from the operation. But if we examine the causes of the six failures, we find that one died of pyæmia; two sank under the influence of shock; while the remaining three died of bleeding, one upon the operation table, and the two others a few hours after the operation. The three survivors recovered rapidly, and, as far as it is stated, enjoyed good health, suffering from no disturbance of digestion or other sources. It is much to be regretted that observations were not made on them as to changes in the blood. At all events, it seems to be ascertained that we can live without the function of the spleen.

Concerning the operation itself, in all these cases the organ has been considerably enlarged; by such enlargement, the spleen always grows towards the median abdominal line, and in no instance was there any difficulty noted in finding the diseased organ or in removing it through the abdominal incision. Surely, the difficulties of the operation are all accumulated in the ligation of the splenic vessels, which must be cut in the most dangerous neighbourhood of the stomach or of the pancreatic glands. In both cases, it is evident that the ligatures are likely to slip, or to injure to a fatal degree the functions of these organs. If, then, besides these dangers, the vessels are enormously distended with blood during the operation, we need not suppose that these splenic arteries and veins are particularly fragile if the ligatures cut through when tightened and come away. Nor should we be much surprised if the ligatures should slip, as we cannot put them far enough from the ends of the divided vessels; and just in these parts that would seem very necessary, as the blood from the great aorta runs directly into them with enormous force. Billroth is particularly afraid, it seems, of injuring the pancreatic gland, and concludes from his case, in which the ligature slipped off the artery two hours after the operation, that, in spite of the dangers resulting therefrom, we ought to tie the ligature even around a part of the pancreas, in order to secure the arteries and veins. Péan has fixed the ligature like a pedicle in the wound; others have taken the whole of the vessels in one; while others have secured the vessels singly. I think we should act every one according to his own experience, and that the method of treatment in every instance has to accommodate itself to particular circumstances. As far as these differ, the probability of the result differs. This evidently is proved by my own case, in which splenotomy was greatly facilitated by the single circumstance that the organ had left its usual place and was wander-

ing about in the whole abdominal cavity, being suspended only by a pedicle which contained the elongated splenic vessels.

The patient, a poor hunchback woman, thirty-one years of age, menstruated abundantly at eleven. At the age of twenty-one, she suffered for a short time with rheumatism, and since then with palpitation of the heart. She has been twice confined: first in 1871, when forceps were used; secondly in 1875, spontaneously, though her pelvis was narrowed in consequence of early rickets. In her last childbirth, which I had to witness in the Royal Maternity of Berlin, she suffered from lochiometra, in consequence of ante flexion of the puerperal uterus, which began the ninth day after confinement. Soon after her dismissal, she returned to the hospital to obtain relief from intense pain in the groin, which began as soon as she undertook the duties of her previous occupation, that of a laundress. By-and-by, the symptoms of endocarditis became intensely marked, and at the same time a wandering spleen was diagnosed. This wandering spleen at that time did not inconvenience the patient at all, as there was no soreness or tenderness, and she willingly appeared at the clinics of the different schools of Berlin. Notwithstanding the great attention paid to her in these clinics, her general health did not improve; especially, since her last confinement, chronic metritis and prolapsus of the anterior vaginal wall had developed to a high degree. Although she was treated in nearly all the clinical offices in the city, she became worse, and in time was hardly able to walk about. From the beginning of the year 1876, she felt other pains than those of the prolapsus and of the metritis, and attributed them to the wandering spleen. At last, she resorted also to galvanism, which for some time diminished the pains; but, during last winter, she obtained but little relief from it, and could obtain no rest from her pains until she had taken enormous doses of morphia. She also came to my ambulance, complaining less of her menorrhagia and the prolapsus than of the severe pains in the spleen, which she diagnosed perfectly well herself. Repeated microscopical investigations proved the constitution of the blood and the number of the red corpuscles and their relation to the white ones to be quite normal, at least as far as could be ascertained by comparing the specimens with the blood of healthy persons. The corpuscles themselves were absolutely healthy. There could be no doubt as to the nature of the wandering tumour in the abdominal cavity. It was strikingly evident, as well from the volume as from the form, that the tumour felt immediately behind the very thin abdominal walls was the spleen. The hilus could be easily recognised, so also the borders of the tumour, which could not be mistaken; while the whole organ seemed not to be enlarged. Under percussion, the normal place of the spleen was empty immediately after the patient had been walking; but, after some hours' rest in bed, the dulness in this region returned. After she had walked to and fro for some time, and after pressing over the abdominal wall, the top of the spleen came down to the pelvic brim, so that it could be touched *per vaginam*. Without difficulty, it could be pressed down in the pelvis along side of the uterus.

As the pain, which was constant and intense, and which continued even when the patient herself seemed unconscious from chloroform, could not be diminished by drugs or any other means, I thought I was justified in delivering the poor woman of the organ, especially since it was probably in a state of degeneration, though I was not, through the changes, able to satisfy myself as to this question. The operation of extirpation seemed the more justifiable, since I knew, through the successful cases of the other authors, that the removal would not necessarily endanger the system. I therefore proposed the operation of splenotomy to a council of medical friends, and, as they endorsed the step, I proposed it to the patient herself, adding at once a statement of the dangers of the operation. In despair, she agreed at once to undergo it, and I had some difficulty to convince her that we must wait until after the next menstrual period.

On May 13th, 1877, I performed the operation of splenotomy, observing most accurately the antiseptic method of operating. Before the patient was placed on the table, the spleen was pressed into the median line. This being done, chloroform was given. The incision, which was in the median line, was about four inches in length, extending from the umbilicus downwards. The walls of the abdomen were extremely thin. Under the peritoneal opening, the omentum presented, but the spleen had disappeared; after some difficulty, it was found in its normal place. I was astonished to find how difficult it was to bring the organ out of this position and through the incision. The hilus was occupied by a group of vessels, which seemed to be quite separated from each other and to run free of all connections with neighbouring organs a distance of about four inches. The group next the lower surface of the organ contained one large artery. This I tied as firmly as possible with a silk ligature. Then I took the middle group, containing some arteries and the splenic vein,

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

which was about the size of a thick goose quill. The ligature was carried around it in the same manner as in the case of the other vessels. While ligaturing the third group, the silk broke, wounding a small artery. In a moment, a hæmatoma was formed by the blood effused into the peritoneal layer around the vessels. I now tied the vessel further from the spleen, and stopped all bleeding completely. I next cut through the vessels and took away the spleen. Although the bleeding had ceased, I surrounded the vessels with a thick silk ligature, and fastened the whole once more. After this, there was no bleeding whatever. After cleaning off the effused blood, I dropped the pedicle, which had commenced to swell most fearfully, back into the cavity. This being quite clean, I closed the abdominal walls and covered the wound with antiseptic dressing. Twenty-eight minutes after the operation was commenced, the patient awoke in her bed feeling quite comfortable.

The removed organ was only a little larger and heavier than normal; it was densely covered with star-like old and recent superficial cicatrices of perisplenic inflammation. The parenchyma itself was not changed, nor was the blood the vessels contained pathologically changed.

The patient recovered without any febrile reaction. Being accustomed to the use of morphia, she received, during the first three days, several doses *per diem*. For the first day, she took only small pieces of ice. On the second day, the bowels began to act spontaneously; then she had beef-tea and wine. On the fifth day, she felt so well that, during the momentary absence of the nurse, she left her bed to look out of the window. On the fourth day, the bandages were changed under carbolic spray, the wound having healed almost completely *per primam intentionem*. On the ninth day, she felt so well that I could not detain her in bed any longer, and on the eleventh day I found her sitting in the sunlight at the door of my clinic. The patient felt extremely well; the old pains, which I believe to be caused as well by the chronic inflammation as by the tension of the peritoneum by the organ, had disappeared, nor were any functions of the body disturbed. In different preparations, I examined her blood microscopically, and sometimes in these examinations I was favoured with the kind assistance of Dr. Gravit, of Virchow's Pathological Institution; but we found no alteration of the corpuscles, either in form or behaviour, nor in their relative number, nor was the fluid changed from its state previous to the operation. During the third week, the patient suffered serious indigestion from improper food. The menses were postponed six weeks, as has frequently occurred before; and the flow was not so profuse as during the former periods. I was the more satisfied by the rapid recovery of the patient, for there thrombi were surely to be expected to form in the long splenic arteries, and I feared serious trouble therefrom. Nevertheless, no symptoms of any danger could be discovered, and three weeks after the operation the patient returned to her work, and at every opportunity hastened to show herself to those who had previously treated her.

This, gentlemen, is the case I have to report to you. It proves undoubtedly that we can exist without the spleen—that splenotomy does not change the constitution of the blood. Besides this, the case proves that, as soon as the tying of the vessels is facilitated, the operation of splenotomy will not be such a dangerous measure as it has been thought to be, and especially when it is done under the antiseptic regimen, which in Germany at this time would not be omitted in this operation.

CASE OF OSTEO-SARCOMA OF TIBIA, RECURRING IN STUMP OF THIGH, AND PROBABLY AFFECTING THE LUNG.

By JOHN EWENS, L.R.C.P., L.R.C.S.E.,
Surgeon to the Hospital for Sick Children, Bristol.

THE BRITISH MEDICAL JOURNAL of December 29th, 1877, contains a report of osteo-sarcoma of the femur, with death from subsequent deposit in the lung, read before the annual meeting of the Association in August last, by Mr. Heath of Manchester. As the following case seems to be in some respects somewhat antagonistic to the conclusions arrived at by Mr. Heath, in connection with the opinion of the late Sir W. Fergusson, it will not, I think, be without some practical interest.

A boy, aged 8, was admitted into the Hospital for Sick Children, Bristol, in May 1876, with a large tumour of the upper extremity of the left tibia. The history given was that, some weeks before, he had been struck by a stone flung by another boy, and that he had walked some distance in the snow, and got chilled. The very rapid growth and general appearance of the tumour led to the diagnosis of malignant

disease, and that nothing but prompt amputation far beyond the limits of disease could afford the least chance of saving life. The inguinal glands, though more distinct than usual on account of the extreme emaciation, did not appear to be diseased. There was no abdominal tenderness, or evidence of any visceral disease. Amputation was performed by the circular method about the middle of the thigh. The wound was dressed with carbolic oil, and the arteries tied with carbolicised catgut. Rapid union of the deep structures occurred by first intention, and the patient was discharged quite well in about a month. The whole of the upper third of the tibia was involved in the malignant growth, which also extended into the joint (but did not invade the femur) and for a considerable distance down the cancellous tissue of the bone. The soft parts were also extensively involved. Unfortunately, the hospital cards containing detailed notes as to circumference of the tumour, etc., have been lost or mislaid.

On October 14th, the boy returned with a tumour, of the size of a small orange, on the inner and anterior side of the stump, which, he said, had been growing about six weeks. It was not very painful, and was somewhat movable, and probably had deep attachments. He said it had commenced on the surface. The inguinal glands were not tender or materially enlarged. His general health was wretched; hurried respiration; quick pulse; leading me to suspect extensive disease of the lung. On examination, dulness with extensive crepitation over the whole of the posterior aspect of the chest was detected. The only question remaining was the propriety of removal of the stump at the hip-joint, but this was negatived after further careful examination of the amputated limb (which is now preserved in the museum of our medical school), the femur being found free from disease; and the inference was that, as the whole of the diseased structures had been removed, the malignant cachexia was so decided as not only to reproduce the disease in the stump, but most probably the lung-affection was of a cancerous nature. He was therefore discharged, and lived about a month. I visited him about a week before his death, and found that the tumour had rapidly increased in size and appeared as though it would soon ulcerate; but this did not occur, and the chest-disease was the immediate cause of death. As he lived ten miles from Bristol, no *post mortem* examination could be obtained.

It appears to me that this case proves an exception to the rule laid down by Sir W. Fergusson, referred to by Mr. Heath, "that large malignant growths, springing from the long bones, do not, after amputation, if the whole of the diseased structures be removed, return in the stump, but at some distant part; and, therefore, it is not necessary to amputate above the knee in case of the tibia, or at the hip-joint in case of the femur."

Now, in the case I record, it is obvious that the disease did return in the stump—whether prior or subsequently to the lung-disease I cannot say—and that it progressed with a rapidity which would have speedily of itself proved fatal; and yet it was my own opinion, and that of my colleagues, that I operated far beyond the limits of disease then apparent. Hence it would seem to be impossible, with certainty, to promise immunity from a return of this formidable disease, whilst in suitable cases we must not hesitate to amputate.

Mr. Holmes (*Surgical Treatment of Children's Diseases*) in the course of his observations on this subject, says (second edition, page 334): "Usually, however, the case proceeds very differently; the malignant deposit reappears in the course of a few weeks after removal of the limb, either in the glands or in the interior of the body."

Mr. Erichsen (*Science and Art of Surgery*, seventh edition, vol. II, page 207), in connection with this subject, says: "I believe that return is much more speedy and certain after amputation, in the peripheral than in the central form of malignant disease of bone, provided that in the latter the whole of the bone has been removed; this is due to the more extensive contamination of the soft parts in the former than in the latter case." Again, "If the limb be removed in the continuity of the diseased bone, there must necessarily be a great probability of a very rapid return of the morbid action in the stump; and this probability amounts to a certainty in those cases in which the disease is central, and in which the whole of the medullary canal and cancellous structure are implicated and infiltrated with cancer. In cases of peripheral disease, this return in the same bone may not take place"; but, as there can be little certainty about the matter before operation, he advises removal at or above the next joint. Further on, he observes: "In some forms of malignant bone-disease, however, the muscles inserted into the affected bone often become speedily contaminated, and this contamination may spread widely through the substance or along the sheath of any particular muscle. Hence, I think the rule in these cases should be to amputate not only above the diseased bone, but, if practicable, above the origins of the muscles in the neighbourhood of the disease."

As the disease did not return either in the glands or the bone, and the site of the recurrent tumour corresponded to the cut end of the sartorius, it appears to me to be an example of that form described by Mr. Erichsen, of infiltration of this muscle spreading upwards from its tibial insertion. Of course, his suggestion to amputate "above the origins of the muscles in the neighbourhood of the disease" could not in this case be adopted. It is very unfortunate that no *post mortem* examination could be obtained, as it would have cleared up any ambiguity as to the condition of the internal organs and the exact relation to the bone of the tumour in the thigh.

THERAPEUTIC MEMORANDA.

THERAPEUTIC USES OF IODOFORM.

THE experience of Mr. Berkeley Hill, related in the JOURNAL of January 26th, will, no doubt, elicit other reports on the value of iodoform. I have for a long time employed it in ulcerations of the throat, whether syphilitic or not. When it was first introduced into practice, I applied the crystals to such ulcers in the same way as Mr. Berkeley Hill has used them in primary affections. Finding that, in this form, too much irritation was often produced on the spot where the hard scaly crystals rested, I recommended the drug to be finely powdered, and in this form it may be applied either with a pencil or on bits of cotton-wool. Then came the recommendation to dissolve in ether, which is, in many cases, an excellent plan; but, in others, the fine powder will be found preferable.

In specific ulceration of the soft palate, pharynx, tonsils, or nasal passages, iodoform will often be most efficacious. In those indolent cases which have been believed by able observers to be scrofulous ulceration, but which some of their critics still think due to syphilis, iodoform will sometimes bring about a favourable change when the failure of other means has been most discouraging. As it is equally useful in unquestioned scrofulous conditions, the amendment cannot be used as a diagnostic aid. In ulceration which can only be detected by rhinoscopic examination, the iodoform may be applied by the assistance of the mirror. In this way, some most obstinate cases of *ozæna* and other troubles may be cured. Some other methods of applying this drug locally will suggest themselves and have been for several years taught in my lectures.

I am glad to be able also to support Mr. Berkeley Hill with regard to the use of iodoform internally. I have not often given it in such full doses; but this is, perhaps, due to the difference in the cases in which I have prescribed it. I have very seldom seen it produce much coryza, and have not yet come across iodic acne thus excited. My most usual pill contains one grain of iodoform made up with extract of taraxacum or sarsaparilla.

It should be remembered that, in using any drug in the fauces and nares, a large portion is carried to the stomach; on which account, when applying it freely in these situations, I have not thought it necessary to give pills at the same time.

PROSSER JAMES, M.D., Dean Street, Park Lane.

NOTE ON IODOFORMED WOOL.

THE remarks of Mr. Berkeley Hill, in the JOURNAL of January 26th, on the "Therapeutic Use of Iodoform", suggest some further applications of this drug than the scope of his observations embraces. It is more especially in diseases of the nose and postnasal region that the proved curative influence of iodoform requires to be more extensively known. In cases of rhinitis, *ozæna*, postnasal catarrh, and hyperplastic deposits, whether simple or syphilitic, iodoform exercises quite a specific influence. As regards the best method of using it topically in these sensitive regions, the objection to the ethereal solution is its extreme painfulness. This defect—a very serious one in the case of delicate females—is due entirely to the solvent employed, iodoform itself having a distinctly anodyne influence on the tissues to which it is applied. Allowing the ether to evaporate somewhat from the sponge or brush employed modifies this unpleasant effect; but even then I have observed patients shrink from its application with expressions of the greatest dismay. I have, therefore, sought for some vehicle for iodoform which, while free from the objections due to the ether, will enable the drug to be maintained in contact with the tissues to be influenced by it. Finely carded cotton-wool appears to supply this requirement; an "iodoformed wool" has been prepared for me by Messrs. Bullock and Co., which has yielded very satisfactory results in practice. Each drachm of the wool contains a drachm of iodoform, with which it is

very intimately blended. For use, it is simply necessary to pass on a probe a small portion of the wool to that part of the nasal cavity which may be deemed necessary. Here it will remain for a period varying from one to twenty-four hours, its presence being unrecognised by the patient. A noteworthy fact about iodoform is, that, unlike most of the substitution-products of the same series, it retains the therapeutic peculiarities of the introduced element, iodine, while acquiring somewhat of the pain-allaying influence of its new associates. This circumstance opens up a wide field for its application as a remedy. From a practical point of view, it would be profitable if other readers of the JOURNAL would contribute the results of their experience of this really valuable drug.

EDWARD WOAKES, M.D.Lond., Surgeon to the Hospital for Diseases of the Throat.

IODOFORM AS A LOCAL APPLICATION IN NASO-PHARYNGEAL DISEASE.

THE fact that iodoform, as a remedy in syphilis, has been approved by so accurate an observer, and so competent an authority, as Mr. Berkeley Hill, induces me to recommend it to the profession as a local application in subacute and chronic catarrhal inflammations of the naso-pharynx; a most troublesome class of diseases, and one in which, according to my experience, the use of all other topical agents with which I am acquainted is followed by aggravation, more or less prolonged, of the symptoms it is intended to relieve; that is to say, arrest of the nasal secretion altogether, with consequent obstruction of the passages, or by unduly profuse nasal discharge, which only increases the already existing hyperæmia and thickening. It may be briefly stated that, in such conditions, there is congestion, with granulations, of the visible portion of the pharynx, which, by means of the rhinoscope, can be seen to extend into the naso-pharynx. On anterior examination of the nostrils, so much of the turbinated bones as can be seen will be observed red and swollen; the lower one especially is often so thickened, that nasal respiration is considerably impeded. If, as is frequent, deafness coexist, it will, on this account, be very difficult to pass an Eustachian catheter, and it is quite common for this swelling to be mistaken for a new growth.

Iodoform may be applied in two ways: first, as an ethereal solution (one part of iodoform to ten or twelve of common ether), with a brush or on a piece of sponge or cotton-wool in a suitable holder. The application should be made first to the throat, passing the brush up behind the uvula, and then very thoroughly by another instrument up each nostril. This procedure may, if the mucus be inspissated, be preceded by use of the posterior nasal douche. The only pain is that due to the discomfort of introduction of a foreign body into sensitive passages and to the evaporation of the ether. In any case, the smarting is but momentary. After the application, which should be repeated twice or thrice a week, the mucous membrane will be noticed to be much paler in colour, and to be covered by a thin film of the iodoform. After about six repetitions, the swelling will be found to have much decreased. The second method of using iodoform to these parts is one which may be pursued by the patient; namely, mixed with vaseline and applied with a small brush far up each nostril. This can be done night and morning, or on the alternate days of the stronger application. The form that I employ is five to eight grains of iodoform (with sufficient ether to dissolve it) to one ounce of vaseline.

For the valuable suggestion to use this remedy I am indebted to Dr. R. C. Brandeis of Louisville (at present in this country), who was first led to employ it from observation of its good effects in catarrhal affections of a somewhat analogous nature in the vagina and uterus. It has also been on constant trial by my colleagues at the Central Throat and Ear Hospital for now nearly six months, and I have no doubt that others who try it will hold it in equally high esteem.

LENNOX BROWNE, F.R.C.S. Edin., Weymouth Street.

ON THE USE OF KOUMISS AS A THERAPEUTIC AGENT.

THE remarks of Dr. Lowther in the JOURNAL of January 19th, and the cases mentioned by him, well illustrate the value of koumiss as a remedial agent, and as a form of nourishment almost certain to be assimilated in what otherwise might be considered to be, perhaps, hopeless cases. In phthisis, in the early stages, where capriciousness of appetite or disinclination for any food is a prominent symptom, as also in the laryngeal form of the disease, we possess in koumiss an agreeable and efficacious form of nourishment. In cancer of the stomach or rectum, in the vomiting of pregnancy, in mesenteric disease, in affections of the throat accompanied by dysphagia, in gastric catarrh or

gastric ulceration, koumiss will be found valuable as a remedy and as food. Some patients may consider that it is a somewhat expensive medicine; but, if it be explained that it is also food, and that it is certainly cheaper than wine, this objection is readily overcome.

LEWELYN THOMAS, M.D.

CLINICAL MEMORANDA.

THE MARKET HARBOROUGH FASTING GIRL.

THE case of Martha White, so carefully recorded by Mr. Grant, is one of immense importance at a time when the food action of alcohol, opium, etc., is so much discussed. The theory that morphia is both a tissue-preserver and, by its oxidation within the body, a force-producer is almost settled by this remarkable and well-observed case.

I do not see that Mr. Grant need have much difficulty in believing that "it is possible for a person to be kept alive for three years and a half by morphia alone", especially when we remember that the patient under consideration was in a state of complete inability for muscular or mental exertion during most of that time. Many animals live for months in a state of torpor without any food whatever. Morphia produces a condition of the nervous system closely allied to the torpid state of such hibernating animals. When under the influence of the drug, tissue-waste is reduced to its lowest ebb, as is witnessed by the exceedingly small amount of excrement passed during the three years by Mr. Grant's patient. The oxidation of the morphia would doubtless be quite sufficient to supply force for carrying on all the respiration and circulation which such a modified form of animal life would require.

It does not seem more difficult to believe in such a case than in that (recorded by the late Dr. Anstie) of an old man who lived nearly twenty years on a pint of unsweetened gin and a finger-length of toast daily.

The late Dr. Inman of Liverpool records the case of "a middle-aged woman who for two years lived entirely upon opium and gin-and-water. Her chief symptoms were frequent, almost daily, sickness, and epileptic fits three times a week. The bowels were not opened during the whole two years. At her death, the abdomen was so distended as to appear ascitic. This was due to the coating of fat, four inches thick, in the abdominal walls. There was no obstruction in the intestinal canal, and no fecal or other accumulation within it."

The action of alcohol and morphia in such cases is almost identical.

It would be very interesting to know the amount of morphia administered daily in Mr. Grant's case; as also the temperature, pulse, and frequency of respiration of the patient.

JAMES MUIR HOWIE, M.B. Edin., Liverpool.

SURGICAL MEMORANDA.

REMOVAL OF FOREIGN BODIES FROM THE AUDITORY CANAL.

AMONG the various means suggested for the removal of foreign bodies from the ear, I see no mention, either in the JOURNAL or in text-books on the subject, of a simple and harmless plan which I have used lately with success. Some months ago, a boy aged 12 was brought to me with a round smooth white pebble in the auditory canal. It could be plainly seen, and had been there for two days, during which time, I was told, repeated efforts had been made to remove it; but their only result was to cause pain, congestion, and swelling of the mucous membrane, which firmly grasped the foreign body, and prevented the possibility of passing any instrument beyond it. I syringed the ear for some time without any good result; and, as his friends were very anxious to have other means tried, I did not like to send him home unrelieved. Having at hand a bottle of the cement known as coaguline, which seems to be a solution of isinglass in acetic acid, I prepared a piece of soft pine-wood, about as thick as a No. 8 catheter, by hollowing the end so as to cause it to fit accurately on the convexity of the pebble. Having now melted my cement by placing the bottle in hot water, and having dried the foreign body with cotton-wool, I covered the hollow end of the piece of wood with the cement, and applied it to the pebble. After waiting for ten or twelve minutes for the cement to set, I made gentle but steady traction, and had the satisfaction of withdrawing the stone firmly cemented on the end of the wood. This plan will obviously be more suitable for round smooth bodies which fill the canal than for small angular ones; but the former are the ones most difficult to remove by any other procedure.

GEO. GRAY, M.D., Castlwellan, Co. Down.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

UNIVERSITY COLLEGE HOSPITAL.

RECURRENT FIBROID TUMOUR OF THE BREAST.

(Under the care of Mr. CHRISTOPHER HEATH.)

FOR the report of the following case we are indebted to Mr. A. J. PEPPER, Surgical Registrar.

M. A. L., aged 39, was admitted under Mr. Heath, for the third time, on November 6th, 1877. She had received a blow on the left breast in 1862, and to this she attributed the development of a tumour in 1864. This was removed with the breast in the same year, by Mr. Campbell De Morgan. It recurred, and was removed by Mr. Erichsen in 1868; again by Mr. Prescott Hewett in 1870, and by Mr. Heath in June 1876 and January 1877. The return of the growth commenced after the last operation, soon after the wound had cicatrised. The patient has enjoyed good health, and states that none of her relations had been the subjects of tumour.

On admission, she was a thin dark complexioned woman. She presented no signs of constitutional disease, there being no cachexia nor evidence of disseminated growth. Over the region of the left mamma were several extensive cicatrices, the result of previous operations for the removal of the affected breast and recurrent tumours. A lobular mass extended laterally from the left border of the sternum to the posterior fold of the axilla, and, vertically, from an inch below the clavicle to the fourth rib. It completely filled the axilla, so that the arm could not be brought to the side. It was purple in colour; was intimately connected with the skin over it, and was elastic and fluctuating throughout the greater part of its extent. It had not commenced to fungate. The superficial vessels were dilated. Several small nodules were scattered around the main growth. The axillary and supraclavicular glands, as far as could be ascertained, were not enlarged.

On November 14th, ether having been administered, Mr. Heath made an incision across the face of the large tumour and shelled it out. This was repeated with the smaller nodules. In this way, the greater part of the growth was got rid of. No skin was removed. The bleeding was somewhat profuse, and several vessels were tied with catgut ligature. The wound was then syringed out with a strong solution of chloride of zinc, and the edges of skin brought together with carbolised silk, a drainage-tube having been introduced. The operation was performed under the antiseptic spray. Free oozing took place soon afterwards, but this was readily checked by a firm binder. On the third and fourth days, the temperature reached 101 deg. Fahr., and then gradually declined to the normal.

For the first week, the discharge from the wound was quite sweet, but then became somewhat fetid. With the exception of a little bagging of pus, all went on well, cicatrisation, as heretofore, taking place rapidly. The drainage-tube and sutures were removed on the eleventh day, and the antiseptic dressing was changed for boracic acid on the sixteenth day after the operation.

On December 1st, several small nodules of growth appeared, and these, increasing rapidly, were removed on December 14th in the same manner as before. On the 29th, the wound had nearly healed; but now a thickening was noticed about the cicatrix, and a distinct nodule had formed.

The patient (whose general health had suffered but little), not being willing to submit to further operation for the present, was discharged on January 2nd, 1878.

Structure of Tumour.—To the naked eye, the aspect was varied, some parts being tolerably firm and striated, distinct bands traversing the section; but the greater portion was soft and gelatinous, of a greyish colour, and mottled here and there with extravasated blood. The centre had broken down into a grumous pulsatous material of a dark red appearance. Microscopically, the growth was found to consist of oval, spindle-shaped, and round corpuscles, characteristic of fibro-plastic tumour.

REMARKS.—This case presents the features well defined of the disease in question: the protracted course, the recurrence *in situ* after removal, and the absence of constitutional infection, together with immunity from attack obtained by the lymphatic glands. The longest

interval between the operations required for recurrences of the tumour was six years; the shortest six months; that is, if we omit from consideration the last procedure, which was required rather for continuation of growth after an unavoidably incomplete removal than for a "return" of the affection. Coincident with the increasing rapidity of progress of the disease, we find an alteration in its consistence and naked eye and microscopical appearances. At first, it presented more the characters of a "fibroid", its cellular structure reaching a higher development, but latterly it was in great part gelatinous, or so soft as to have broken down and mingled with blood derived from extravasation into its substance. It is to this alteration in the course of the tumour that Paget has drawn the attention of pathologists, believing it forms a transition stage, as it were, between simple and malignant growths; but the absence of cachexia and the freedom from invasion of the lymphatic glands seem pretty sharply to mark it off from the more virulent disease, although cases have been reported by Gluge and others where a "malignant degeneration" is said to have occurred.

ABERDEEN ROYAL INFIRMARY.

CASE OF COMPOUND COMMINUTED DEPRESSED FRACTURE OF THE CRANIUM: USE OF TREPHINE: RECOVERY.

By J. C. OGILVIE WILL, M.D., Surgeon to the Infirmary.

J. McK., aged 40, labourer, was admitted to the Infirmary on September 29th, 1877, on account of an injury he had sustained by falling from the wall of a house then in the course of erection. The statement supplied by a fellow-workman was, that he fell a distance of thirty feet, breaking the fall twice by coming against some wooden planks and alighting on his head on a heap of stones and gas-cinders. He was unconscious when picked up; but this rapidly disappeared, and, before his removal, he was able to express a strong desire to be taken home; but his wishes were overruled, and he was conveyed to hospital. On examination, a wound about an inch in length, and somewhat semi-circular in outline, was found about the centre of the left parietal bone; there had been a considerable amount of hæmorrhage, but this had ceased before I saw him. On introducing a finger through the wound, a depressed fracture of the skull was readily diagnosed, the forefinger sinking into a pit formed by the depressed portion of bone, while the edges round the depression were well defined. The patient was perfectly sensible, answering questions intelligently, and saying that he would be all right in a few days. He seemed to think that a great deal of unnecessary fuss was being made, and he was very much displeased at having been brought to hospital. His pupils were normal and equal; his respiration regular; his pulse about 80; and he had perfect use of his limbs.

Dr. Pirrie saw the case with me, and elevation of the depressed bone was at once agreed to. The patient having been put under chloroform, and the hair around the wound having been removed, the original wound was enlarged by an incision running from each end, and four or five vessels, which bled freely, were secured by catgut ligatures. When hæmorrhage ceased, and after the wounded surfaces had been well sponged, the extent and appearance of the depression were at once evident. The depressed portion of bone was about the size and shape of a postage-stamp with its corners cut off; it was exactly evenly depressed all round, lying about the eighth of an inch below the normal level of the bone; the overlying edges were even and sharp, and, as the fracture was somewhat oblique in direction, they overlapped the depressed part to a slight degree. In addition to the circular fracture, there was a line of fracture running across the centre of the depressed portion.

On account of the regularity or evenness of the depression, and of the overlapping of the undepressed edges, it was found necessary to make use of the trephine, which was applied, and an elevator inserted. An attempt to raise the depressed portion, without altogether removing it, was made, but it failed; and, upon increased force being applied, a fragment of the fractured bone started out, and, by the repeated application of the elevator, the whole of the broken pieces of bone were removed. The fracture of the internal table was found to be slightly in excess of that of the external plate. The dura mater was uninjured. The bony edges were then rendered smooth, some rough projections being snapped off. The surfaces of the wound were thoroughly cleansed; the edges were accurately approximated and stitched together with catgut; a drainage-tube was inserted, and a strip of lint soaked in cold water was applied.

After operation, the patient's pulse was 102; respirations 22; temperature 99.8 deg. On visiting him at 4 P.M., I was informed that he had slept during the afternoon; he expressed himself as feeling comfortable and free from pain; he had not been sick, and he had swal-

lowed some iced milk. At 9 P.M., he said that he felt well and expected to be all right in a few days. Pulse 98; respirations 22; temperature 100.4 deg.

September 30th, morning. He passed a very good night, sleeping quietly; he had passed urine. There was a slight serous discharge from the tube. Pulse 106; respirations 26; temperature 99.2 deg. A dose of calomel, to be followed by white mixture, was prescribed. 9 P.M.—He was quiet and free from pain. He had slept some hours. The bowels had been freely opened. Pulse 98; respirations 22; temperature 99.4 deg.

October 1st. He had slept well during the earlier part of the night; but suffered considerable annoyance from a cough and pain in the left side of his thorax. The wound was united throughout, except at the point of emergence of the drainage-tube. The discharge was very trifling in amount. All the sutures save one were removed, and also the drainage-tube. Morning temperature 99.6 deg.; respirations 22; pulse 97. Noon temperature 100.6 deg.; respirations 22; pulse 106. Evening temperature 100.1 deg.; pulse 104.

October 3rd. He had a fair night, though somewhat troubled by cough. The discharge from the wound was very slight. Temperature 99.2 deg.; respirations 21; pulse 110. His urine, which had up to this date been normal in reaction and appearance, was to-day found to be alkaline, specific gravity 1030; large deposit of phosphate of sodium. On the following day, the urine was again acid and free from deposit, specific gravity 1027.

From this date, improvement was steady, the patient taking nourishment well; and, excepting on one or two occasions, when he had some transient uncomfortable feelings in his head, but which were unaccompanied by any rise of temperature, nothing occurred worthy of remark. To show how little inconvenience he suffered, I may mention that, on visiting him on October 4th, at an hour when he did not expect me, I found him sitting up in bed writing a letter. The highest temperature registered during his entire illness was that above mentioned on October 1st; viz., 100.6 deg. On October 6th, he got up to stool for the first time, and, on October 20th, he was allowed to leave his bed for a short time; he felt a little dizzy on the first few occasions, but this feeling soon passed off. A few drops of pus continued to exude from the wound each day during the patient's residence in hospital and occasionally after he left, and, though the opening was carefully probed, a small piece of bone, which was subsequently extruded, escaped observation. Consolidation of the parts connected with the opening in the bone soon commenced, and, by the end of November, firm pressure could be applied with a finger without causing the parts to yield.

In the beginning of December, the patient was dismissed, at his own request, and, although the advisability of keeping quiet for a long period was strongly put before him, he could not be persuaded to take that view of the matter, saying that he was quite fit for work, and that he could not afford to be longer idle. He has since presented himself at the hospital on several occasions, and he is apparently enjoying excellent health; and, notwithstanding an evidently free indulgence in liquor, he does not seem to suffer from the effects of the severe injury he sustained, his mental and other faculties being unimpaired.

MANCHESTER ROYAL INFIRMARY.

REMOVAL OF THE TONGUE WITH SCISSORS.

(Under the care of Mr. LUND.)

THE patient, a married woman, aged 34, had suffered from a growth in the right half of her tongue for fifteen weeks. Ulceration had extended beyond the substance of the tongue into its connections with the jaw, rendering the prospect of benefit from removal not of a very hopeful character; the pain, however, and other kindred considerations, overbalanced every objection, and the tongue was condemned for removal. Mr. Lund, before operating, observed that he was going to proceed by following the example of Mr. Whitehead and remove the tongue by scissors through the mouth, an operation which appeared only to require a certain amount of manual dexterity in order to obtain the best features of any of the recognised modes of extirpating the tongue. After explaining the details of the operation, Mr. Lund commenced by passing a ligature through the tongue, which he intrusted to his assistant on the patient's right hand, with a request that he would continue to draw the tongue firmly outwards and upwards, as by this means he would afford him the most important aid in the operation. The patient's mouth was maintained well open with Ferguson's gag during the operation. The tongue was then deliberately removed by successively snipping with ordinary scissors through all its attachments to the jaw and hyoid bone. The hæmorrhage where the two main arteries were cut was undoubtedly sharp,

and would speedily have proved decisive in the absence of coolness and decision. Both vessels were tied with catgut, and no bleeding subsequently took place.

After the tongue had been removed, Mr. Lund gave Mr. Whitehead an opportunity of putting into practice his suggestion that a silver wire ligature should be attached to the remaining portion of the glosso-epiglottic ligaments; a procedure which, he anticipated, would prove of advantage in the after-treatment of such cases. By means of such an aid, it was expected that the floor of the mouth would not be left so entirely beyond the command of the surgeon should secondary hæmorrhage take place; and further, it would enable the surgeon to draw forwards and upwards the posterior floor of the mouth, and so fix it by attaching the ligature to the teeth or even outside the mouth, and by this means secure a tendency for the secretions to drain outwards, in preference to their gravitating down the larynx, with the constant risk of being drawn into the trachea, rendered less under the protection of the epiglottis in consequence of the operation. In the after-progress of the case, these speculations proved to be not unfounded; for although no secondary hæmorrhage took place, the possible utility of the wire ligature in such a case was demonstrable, and any inconvenience occasioned by the presence of the wire in the mouth was of too trivial a nature to demand consideration. The patient necessarily suffered pain after the operation; but when the pain, which was obviously of a neuralgic character, and in a great measure was due to the patient having been injudiciously placed in a bed where there was a down draught, was excluded, it could but be admitted that there was comparatively less than that which results from any of the other methods of removing the tongue.

The recovery was uninterrupted; the convalescence, and consequently the period of inconvenience, showed a most marked and favourable comparison with that of any other operation. The month, on the eighth day, exhibited a healthy granulating surface, and no ill effects from the operation were either apparent or apprehended.

REVIEWS AND NOTICES.

TWO LECTURES. 1. Lectures, Books, and Practical Teaching. 2. Clinical Instruction: being Introductory Addresses delivered in the University of Glasgow and in the Western Infirmary, Session 1877-1878. By W. T. GAIRDNER, M.D., Professor of Practice of Medicine in the University of Glasgow, etc. Printed for Private Circulation. Glasgow: J. Maclehose. 1877.

In two introductory lectures delivered in the University of Glasgow and the Western Infirmary, Dr. GAIRDNER gave the results of his experience as to the best methods of imparting medical instruction and the relative value of the different forms of teaching.

Referring to the character of systematic lectures, so-called, two distinct varieties are described: those which are as good as a book, no better and no worse, except that they give the student the trouble of attending them and of taking notes to assist his memory; and those in which the living teacher endeavours to render himself of value to the student. Medical teaching should always be such as to convey the facts and doctrines of modern medicine, and such as is fitted to impress them upon the minds of the students and to inspire them with the spirit of modern medicine.

In the modern era of investigation, with our present methods of physical observation, a change has become necessary in the methods of conveying instruction.

Dr. Gairdner thinks that the chief advantage of oral lectures over a book consists in the greater amount of thoughtfulness engendered in the former case, while at the same time the opportunity is afforded of testing the statements and questioning them. After all, the utmost that the student can do in the course of his ordinary curriculum is to learn well a few of the better known and more clearly established facts and principles, and acquire such mental training as may prove a fitting soil for the future teaching derived from reading, experience, and social and professional intercourse. The teacher can help to imbue the mind of the student vividly with what is least doubtful and most important, and train the mind when to acknowledge ignorance and suspend judgment, or form only provisional conclusions; how to appreciate at once, with the least amount of delay and disturbance, every important symptom and physical sign bearing upon a case, and how rapidly to sum up in his mind all the available evidence as to the natural termination of similar cases, the probable causes, the probable results of remedies; and thus arrive at a thoroughly reasoned, but not always proved, conclusion as to what ought to be done in each individual case. The student's mind would thus be opened to future enlightenment. It appears

obvious that these processes of mental training can be carried out far better by a living man than by any book.

Speaking of the methods of clinical instruction, Dr. Gairdner refers to the evils arising from a want of subdivision of labour, especially in the conduct of out-patient departments, the overcrowded state of which often leads to bad habits of inaccuracy and want of thought. A multitude of cases thus rapidly seen tends to render the mind sterile rather than experienced, so that the student is trained to become the veriest empiric—a mere man of routine.

LA RÉFORME DU CASERNEMENT DANS L'ARMÉE FRANÇAISE. LES BAINS DOUCHES. Par M. C. TOLLET. Paris. 1877.

THE necessity for improving the construction of the barracks in which the troops are lodged in France, and so reducing the sickness and mortality among them, has recently attracted very earnest attention in that country. Among others, a distinguished engineer, whose name appears above, has been prominent in describing the "Barracks of the Future", and in advocating, as guiding principles for their construction and for that of military hospitals, that they shall consist of one-storeyed buildings, that they shall have an ogival outline, all angles being suppressed, as the form presenting the least impediments to the freest movement of air about them from whatever quarter the wind may blow, and that they shall be composed of incombustible materials. M. TOLLET professes to have taken from the English system all that is excellent in respect to housing the troops in small separate groups, as in hut-barracks, and to have borrowed from the Americans principles of simplicity and lightness of construction, at the same time guarding himself against imitating their employment of wooden barracks, which are perishable and inflammable. These objectionable circumstances are avoided by the skeletons of the barracks being made of iron, and this framework filled in with various materials of an incombustible nature. Barracks were erected on this system for a portion of the 8th corps d'armée in 1875; at Bourges, for two regiments of artillery; at Cosne and at Autun, each for one regiment of infantry. These barracks have been occupied since May 1876, and, it is said, with the result of the average sickness of the troops quartered in them being reduced to one-half of the previous ratio. At the same time, there was a very considerable gain in the original outlay for their construction, as compared with the cost of barracks of the ordinary forms.

M. Tillet is now advocating the addition of warm baths to all barracks, and he has prepared plans and estimates for a system which he considers to be the most simple, the most easy of application, and the most economical which can be devised. We must refer the reader who may be specially interested in the subject to the plans and drawings attached to M. Tillet's paper, which will be found in the form of a pamphlet, published on the 1st of November last, for the Société Française d'Hygiène, by Messrs. Delahaye of Paris. A description without the drawings would fail to convey an adequate notion of the form and arrangements of the bath-houses proposed by M. Tillet. He adopts the douche-bath as the most suited to soldiers for the purposes of ablution, and, at the same time, as requiring the least expenditure of water. Separate cabins are supplied for the bathers in the proportion of two for every hundred troops, together with the necessary compartments and fittings for deposit of clothes, materials for washing, etc. The author gives various reasons for supplying warm instead of cold water for purposes of ablution in barracks. Twenty-five litres of water are allotted for each douche; and, owing to the manner in which the flexible outlet-tubes are arranged, it is easy for a man to direct the water over any part of his body at pleasure, and at any desired rate. M. Tillet estimates the original cost of construction of the whole bath establishment, with its fittings, at the rate of ten francs per soldier; and the cost of repairs, maintenance, attendance, and fuel at one hundredth of a franc for each douche bath—an outlay which, as M. Tillet says, is truly insignificant in regard to the cleanliness and comfort of the individual soldier, and the sanitary saving that would result to the army at large.

COLUMN FOR THE CURIOUS.

JABORANDI.—In Boyle's treatise *The Usefulness of Experimental Philosophy*, he states, on the authority of Piso, "that an infusion of the root jaborandi rescu'd, to his knowledge, many from an imminent death, who had eaten several sorts of poison; and this, after the whole tribe of European alexipharmics had proved unsuccessful". This essay was published in 1663. I copy the extract from the complete edition of Boyle's works published in 1738 by Peter Shaw, M.D.

F. W. COCK, JUN.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 9TH, 1878.

PHYSICIANS, PRACTITIONERS, AND FEES.

THE large number of letters which we continue to receive on this subject, as well as the correspondence and the articles lately published in the *Times* and other newspapers, show the great amount of interest felt in the question both by the profession and by the public. The discussion seems, on the present occasion, to have originated in the comparatively trivial fact that it is not customary for medical men, in sending in their bills, to furnish an account of the items of attendance. We had thought that this custom obtained in the interest of the patient rather than of the doctor. It would often be neither pleasant nor profitable to the individual members of a family that the reasons for medical attendance upon them should be submitted to the inspection of all the rest. That small portion of the public who complain of this omission are probably the same as those, unfortunately to be found in every practice, who require their bills to be rendered five or six times, at intervals of six months, before they think fit to pay them. It would, no doubt, be too much to expect such persons to consider that this repeated rendering of accounts is itself a sufficiently arduous labour, without compelling the addition of writing out the items every time. That this enormous addition to labour, as it would compel extra clerical assistance, would probably add to the cost of the medical attendance, is of no moment to that portion of the public who as often as not forget to pay their bills. But this is the smallest part of this question, and is in itself of little importance, since no doubt medical men, who are asked to do so, will offer no objection to furnishing the items of their accounts; and had this been all, we should not have troubled our readers with any remarks on this matter. The settlement of some of the other questions touched upon in this correspondence is, however, not so easy a matter, while some of them involve points of very great difficulty.

What, for example, is a consultant; and what is a practitioner? Is the distinction a real one to-day; or is it not rather a survival of the time when the surgeon of old, who was the father of the present general practitioner, following his calling of a barber, was considered, and justly, quite unfit to associate with the educated gentleman in attendance on the Court or on some great noble? To our mind, a consultant ought to mean a medical man who sees patients only in consultation with their ordinary medical attendant; and, if this definition be accepted, we doubt whether any specimens of the genus exist. Practically, so far as we can see, a consultant is a gentleman no doubt, as a rule, of superior general culture and knowledge of his profession, who sees patients at his own house at stated hours, and who is quite willing to visit them at home if requested to do so; it being understood that he confines his practice to medicine or surgery, as the case may be; and that the rate of his remuneration is higher than that usually accorded to the practitioner. He is, in fact, a practitioner (though exclusively medical, surgical, or obstetrical) among the rich, or among those who are willing to pay a guinea or more for each consultation or visit. As, in point of fact, the ordinary general practitioner, so called, finds the bulk of his work in medicine and obstetrics, the difference

between him and the consultant really resolves itself into a difference of fees. We are not objecting to this. The difference of remuneration generally corresponds with the superior value of the opinion of the consultant as compared with that of the practitioner, though some of the latter offer advice at their own lower rate quite as valuable as the highest possible.

The term practitioner, again, is one which covers a very wide range, not only as to fees, but as to the real value of the advice given. This will not appear remarkable, if it be remembered that the grade practitioner is constantly furnishing additions to the ranks of consultants. Some of the names which deservedly stand highest in the consulting world were formerly to be found among practitioners: a fact which goes far to explain the differences in value of the advice of practitioners of different degrees of standing. It is not to be expected that a practitioner who in the course of a few years will be reckoned among consultants proper, and who is even now, let us suppose, consulted from time to time by his professional brethren, will take fees as small as those which a beginner is glad to accept, or as small as he himself was satisfied with ten or twenty years before. These considerations are strengthened by the way in which a man in general practice comes to devote his attention to a particular subject, and by-and-bye comes to be regarded by his professional brethren and the public as an authority upon that subject. As his special work increases, his reputation becomes more and more established; and thus, the reputation increasing the practice, and the practice in turn increasing the reputation, the point is at last reached when the medical man may confine himself to that department in which common consent and special attention on his own part make him an acknowledged authority.

This being the course of things, there must always be men who are partly consultants and partly practitioners; and we venture to think that it is well both for the profession and the public that it should be so. For this reason, we dissent entirely from those of our correspondents who, either by implication or avowedly, wish to maintain a hard and fast line between practitioners and consultants. This hard and fast line would at once be seen to be untenable, if it were asserted that a practitioner like the late Dr. Anstie was not entitled to the same rank in the profession as some of our own consultants whose names will never be mentioned after their own generation. There are some questions now demanding settlement—questions of the greatest importance—which the family doctor, as distinguished from the consultant, has special facilities for determining. We are inclined to think that, but for the fact that it has been taken for granted that the family attendant need not be a highly cultivated or scientific man, some of these important questions would be nearer their solution than they are at present. Who, for instance, ought to be so competent to deal with that phase of evolution which goes under the name of heredity as the family practitioner, who knows the history of his patients by personal observation over many generations, and whose father, had he been trained to observe them, could have furnished particulars which his own observation could not cover? We venture to think that the waste and misdirection of observation, from want of sufficient training in the family attendant, have caused a loss which is even now sensibly felt in the scientific thought of the time. Nothing will tend so much to perpetuate and aggravate this want as the continued disability which prevents the practitioner from rising to the highest grades of his profession. One of our correspondents actually goes so far as to assert that a quasi-consultant who does some general practice deserves to lose his fees when he allows the visits to "run on". By what principles of honesty, or even of etiquette, he justifies such an assertion, we are at a loss to discover. That regulation of the College of Physicians which prohibits its Fellows from suing for fees was intended, not to cover the dishonesty of a fraction of the public, but to raise the standard of the medical profession; and it is, therefore, the more to be desired that

such an amount of good feeling should exist on the part of the public as to render an appeal to law altogether unnecessary.

The differences to which we have referred in the value of the advice of different general practitioners justifies the different arrangements which they are willing to make with the public. So long as a differential value of skill exists, a differential scale of payment is a necessary consequence. This must evidently be a matter of private arrangement between the doctor and his patients. Some excellent observations and suggestions have appeared in these columns, in a paper written on this subject by Dr. Ogle of Derby. Dr. Ogle deprecates payment, either by the medicine supplied or by the number of visits paid, and is very anxious that the doctor should become the agent of preventive medicine in ordinary medical practice. In order to the attainment of this end, he advocates the annual payment of a sum, to be agreed upon, which shall cover all ordinary attendance. Such an arrangement obtains, we believe, in many parts of the Continent, and is by no means unknown in this country. Under it, the medical man can be of immense service to his patients by periodic visiting, without risking the unpleasant accusation of purposely running up unnecessary bills. Ordinary work is defined as including "all attendances for which the request has been made at an early hour of the day, say by the time of the first postal delivery; also all visits made by members of the family to the doctor at his own house, when he is 'at home' for consultation". Night visits, Sunday visits, urgent summonses for the convenience of the patient, etc., to be paid for extra. This arrangement makes the interest of patient and doctor identical, and has been found to work well where it has been tried. In order to carry out the preventive portion of Dr. Ransome's scheme, which he adopts, Dr. Ogle suggests the following. "All *per annum* sums of, say under ten guineas, to be paid to a common fund. The respective family doctors to receive, say two-thirds of this; the remainder to be devoted to the general purposes of the Sanitary Association, available for payments for medicine, organisation of hospitals and convalescent homes for the well-to-do, registration of disease, purchase of expensive instruments, and the like." It would be well if these suggestions, particularly the former, could be carried out. The latter is unfortunately open to the objection that medical men would be called upon to do for the public what the public ought to do for themselves. It would be too much to ask any other profession than the medical to part with one-third of their fees for charitable purposes; though the enormous amount of gratuitous work already done by doctors in hospitals, etc., makes this proposition seem less anomalous. The sacrifice might, however, be worth making temporarily, since the public, finding the advantages of the arrangement, might continue it at their own cost. The former part of Dr. Ogle's scheme would, if carried out, for ever put an end to this unseemly and paltry squabble about fees, and would tend to make the relations between the profession and their patients more satisfactory. We should be glad to hear that the British Medical Association had taken some steps towards the carrying out of these or similar suggestions, since we are convinced that their adoption would be beneficial to all concerned.

THE DUBLIN BRANCH OF THE ASSOCIATION.

THE first annual meeting of the Dublin Branch has been held under auspices which are promising of the continued growth and increase of usefulness of the Association in Ireland. Although only a Branch meeting, it became an occasion of considerable importance to the interests of the Association and the profession at large, from the fact that it was presided over by the most eminently representative men in the departments of medicine and surgery in Ireland. The heads of all the great medical corporations of the metropolis of Ireland and of the Irish Medical Association were present, including Dr. Hudson, the Physician to the Queen in Ireland; Mr. George Porter, Surgeon to the

Queen in Ireland; Dr. Gordon, President of the King and Queen's College of Physicians in Ireland; Dr. McDonnell, President of the Royal College of Surgeons in Ireland; Dr. Darby, President of the Irish Medical Association; Professor Haughton, Medical Registrar of Trinity College, Dublin; and a number of other persons of official and scientific eminence. Nearly all the great names in medicine and surgery which adorn the metropolis of Ireland were represented on the list. The President of the British Medical Association, Dr. Eason Wilkinson of Manchester, showed his sense of the importance and interest of the occasion by attending. Dr. Curtis and Dr. Macnaughton Jones, the President and ex-President of the South of Ireland Branch, the first in the order of chronological formation of our Irish Branches, accepted the invitation to be present; as well as Dr. Cumming and Dr. Moore of Belfast, the President and Honorary Secretary of the new North of Ireland Branch, the youngest, but, we have good reason to hope, far from being the least promising, of the Branch organisations of the Association. Among the visitors, also, the Branch had the satisfaction of welcoming Dr. Jacob, who inherits a historic name in Ireland, and who has continued some of its best traditions by constant attention to and unflinching support of the interests of the profession in Ireland.

At the general meeting, Dr. Hudson delivered the address which we have the advantage of reproducing to-day, and which will, we believe, be considered by all our readers worthily to uphold the reputation of the leaders of the Irish school of medicine for philosophic thought and eminent clinical sagacity. Of such a meeting, held in the fine hall of the College of Physicians, in the presence of the admirable statue of Stokes which adorns the College and faced the speaker as he delivered his address, it was impossible but that the memory of the words of Stokes, and of his attachment to the Association, should have rested; the welcome with which he greeted the Association in Ireland in the name and as the leader of the whole profession; the frankness and heartiness with which he recognised it as an Association altogether peculiar in its organisation, aiming at objects which are good, and consequently are great; seeking the unity of all the members of the profession in the three kingdoms in a series of independent but yet connected organisations; aiming at the advancement of the profession by labours of love on the one hand and by labours of science on the other. These words and that influence were living in the minds of our Irish members, although the voice that uttered them is stilled for ever.

The speeches of Dr. Little, the Vice-President of the College of Physicians, and the accomplished editor of the *Dublin Journal of Medical Science*, of Dr. Darby, the President of the Irish Medical Association, and of Dr. Jacob, in responding for the Irish press, were specially marked by a warm appreciation of the importance of the British Medical Association as an organisation of which the objects are faithfully reflected in the words of Dr. Stokes, which fosters all local efforts, while it endeavours to combine the whole profession for interests of the highest kind which are common to all medical men. The words of Dr. Wilkinson, accurately responding to that sentiment, and worthily expressing the opinions of the Association at large, were warmly received; and his presence was cordially welcomed as a testimony to the sympathy which the Association at large feels for its members in Ireland. Within the last ten years, the number of our Irish members has risen from a score or two to upwards of five hundred, representing, we believe, more than a third of the total strength of the medical profession in that country. It is only within the last fifteen months that we have succeeded in persuading our Irish members of the importance of organising themselves in Branches, so as to secure the full benefits of association, and to take their just share in the general councils of the Association, and to assume their rightful influence in the conduct of its affairs and in directing its operations.

The initiative in forming the first Irish Branch is due to our brethren in Cork, and especially to the efforts of Dr. Macnaughton Jones in that city. The Association, however, owes a debt of gratitude to Dr. J. W.

Moore of Dublin, for many years of faithful courtesy and gratuitous services as its Honorary Secretary for Ireland since the Dublin meeting of 1867, during which it had no Irish Branches. Especially, also, are acknowledgments due to Dr. G. F. Duffey, to whose energy and administrative capacity are mainly due the formation of the Dublin Branch and the eminent success which attended its first annual meeting. He must have felt himself largely requited by the brilliant success of the meeting and dinner. Eighty members attended the banquet, and probably so large and eminent an assemblage has never before graced a Branch meeting. Forty new members were elected to the Branch in the course of the day. It now numbers one hundred and forty-seven members, and there is every reason to anticipate that that which has been so successfully commenced will be carried on with corresponding prosperity and advantage. The programme of the Branch and its sphere of usefulness was accurately traced in the report which Dr. Duffey presented. The Association tends every day more and more to embrace the whole strength of the medical profession in the three kingdoms. Thus united, and acting through the local councils and by the representative central executive, the profession is attaining power and influence, which it will behave all who are interested in it to see used with the highest regard for public and professional good.

THE PATHOLOGY OF DROPSY.

MM. COHNHEIM AND LICHTHEIM recently published a paper in Virchow's *Archiv* (Band lxi), in which they showed, by a series of experiments, that, while it was possible to produce the highest degree of hydræmia without causing anasarca, yet this result followed very slight irritation of the skin of the animals; and they inferred that some degree of change in the vessels of the skin and cellular tissue was a necessary factor in its production. Writing from another point of view, Professor Senator of Berlin gave an account of his clinical investigations on the importance of the functions of the skin in relation to the kidney in the same periodical (Band lxx), in which, it may be remembered, he undertook to refute the common prejudice in favour of free cutaneous transpiration, which seemed favoured by the results of varnishing the skins of dogs and other small animals; death in these cases, preceded by albuminuria and phenomena of uræmic poisoning, having been generally observed. Senator painted his patients with various substances—collodion, tar, etc.—and found them suffer no inconvenience from the process; indeed, they seemed to consider it rather beneficial, for one experiment was terminated by the patient asking for his discharge as quite recovered. With reference to these relations, Dr. O. Lassar, who is, we believe, assistant to Professor Cohnheim, reports a very interesting case in the January number of Virchow's *Archiv*. It was that of a man who had been under the care of Dr. Friedländer, and whose body came to the pathological theatre with the diagnosis "nephritis". During life, his urine had been very albuminous, and contained hyaline and granular tube-casts. The body was extremely oedematous, and in certain parts the epidermis was raised in little scabs containing clear thin not coagulating fluid. The section showed dropsy of the cavities and oedema of the lungs, but no disease of any organs to account for the dropsy; notably, the kidneys were macroscopically and microscopically free from lesion. On inquiry, however, it turned out that the patient had dated his illness to the use of petroleum, which he had rubbed over his skin to free himself from scabies; he had done this for four days, and after a week he noticed a swelling of the feet, which spread over the abdomen and thorax; after about a fortnight, it disappeared, but returned in eight days to remain up to his death. During his stay in the hospital, his pulse had been noted as small, empty, and of low tension; the blood-corpuscles were few but relatively normal in proportion; his temperature was normal. Histological examination of the skin showed localised areas of inflammation characterised by a small-celled growth spreading along the course of the blood and lymph-vessels, and nuclear

proliferation in all the layers of the cutis. According to Dr. Lassar, in this case the skin-affection was primary, and the cause not only of the oedema, but of the albuminuria as well, the renal affection being purely functional. The examination of the kidneys is stated with precision; the absence of all appearances capable of explaining the phenomena, including congestion, are so carefully noted, the only abnormality being a trace of fatty degeneration of the epithelium, which is of no importance, that it is hard to deny the functional nature of the albuminuria; but its mechanism is quite unexplained, the absence of congestion of the kidneys and the low tension of the radial pulse negating the idea of simple filtration under pressure. But we cannot see why it should be considered secondary to the skin-affection, so long as we have another at least as probable cause, namely, the direct influence upon the kidneys of the absorbed petroleum; from what we know of the influence of allied compounds, we are justified in supposing that this may have been the case. We are not told whether the quantity of urine passed was below the normal or not; this omission is serious; because, if it were, we think there would be quite sufficient reason to regard the dropsy in this case as secondary to, and caused by, the non-elimination of water by the kidneys. Until this point is cleared up, we see no reason for giving up this view of the mechanism of dropsy, founded on so many clinical facts, and which has recently found such an able exponent in Professor Bartels. If dermatitis *per se* could produce anasarca, we ought to see it frequently in the cases of extensive superficial burns or scalds; in these cases we have never found histological evidence of renal changes or any anasarca.

JUDICIAL POST MORTEM EXAMINATIONS IN SCOTLAND.

A CASE has recently occurred in Scotland which raises a question respecting *post mortem* examinations in inquiries before the Procurator-Fiscal, similar to that which frequently presents itself at coroners' inquests in England. Who is the proper person to conduct a *post mortem* examination in a case of sudden death? By whom should he be nominated or selected? The facts in the Scotch case are very simple; but the correspondence relating to them is so lengthy, that we could not possibly find room for it in the body of the JOURNAL.

Dr. Angus Fraser of Aberdeen, being the family medical attendant, was sent for one morning to see the deceased. He found him dead in bed. On inquiry, he was informed that the man had gone to bed in apparently good health, and had been found dead by his wife, who was sleeping by his side, a short time before the doctor saw the body. He was sent for to verify the death. Dr. Fraser looked upon this as an ordinary case of sudden death from natural causes; in other words, there were "no facts or rumours connected with the death, pointing to criminal blame, or a notable absence of the characteristics of death from natural causes". He, therefore, did not think it necessary to report the case to the authorities, so that a certificate might be obtained for a judicial remit; in other words, he considered a judicial inquiry into the cause of death unnecessary. For his own satisfaction, however, he thought it would be well to make a *post mortem* examination, to ascertain the cause of death. This was assented to by the widow, and it was arranged that it should be made two days after death. In the meantime, the Procurator-Fiscal, who appears to have received information of the sudden death from other sources, issued a remit or an order for a *post mortem* examination to Dr. Ogston, Professor of Medical Jurisprudence in Aberdeen. The *post mortem* examination was made by his son, Dr. F. Ogston, on the day after death, no doubt with the sanction and under the superintendence of the professor; and the result, it is to be presumed, quite confirmed Dr. Fraser's view that the man had died suddenly from natural causes; and there the matter dropped.

If this case had occurred in England, it would probably have been carried a stage further. A public inquest would have been held in some public-house, a jury of twelve or fifteen neighbours would have

been assembled, and the evidence of the widow and the two doctors would have been formally taken. The verdict would have been the same—death from natural causes; and it is precisely these additional proceedings in English practice which are quite unnecessary, and which it is desirable to abolish in all cases of sudden death from obviously natural causes.

Dr. Fraser complains that the *post mortem* examination was handed to another; but a Procurator-Fiscal, like an English coroner, has an undoubted right to nominate whom he pleases to conduct the examination, *i.e.*, provided the person nominated is a legally qualified practitioner. Of the competency of the gentleman nominated in this case by the Procurator-Fiscal there can be no question; Dr. F. Ogston, who acted under his father's directions, obtained his qualification to practise in 1873. On this occasion, Dr. Fraser had seen only the dead body of the man, and had not recently been in attendance upon him. It seems also, from the correspondence, that he had not communicated in any way with the Procurator-Fiscal. Had he informed the Procurator-Fiscal of the abovementioned circumstances, this gentleman states in one of his letters that he should very probably have arranged with him either "to examine the body or to be present at its examination".

After carefully reading the whole of the correspondence, we cannot perceive that the Procurator-Fiscal has exceeded his duty or been guilty of any neglect or omission. He simply exercised that power of selection which the law gives him *ex officio*, and he issued the remit to a gentleman in every way competent to conduct the *post mortem* examination. The result confirmed the justice of Dr. Fraser's opinion.

It is reported that small-pox is still raging severely at Cawnpore and Lucknow. Half of the Buifs are out in camp, owing to an epidemic of the disease in the former station.

A TELEGRAM from Mysore states that the census shows that 25 per cent., or a million and a quarter, died during the famine, and that 35 per cent. of the poor classes have disappeared.

DR. J. RUSSELL REYNOLDS, F.R.S., Physician to University College Hospital, is gazetted Physician to the Queen's Household, in succession to the late Dr. Francis Hawkins.

DR. LAMSON, chief Surgeon at Bucharest of the Sick and Wounded Russian Soldiers' Relief Fund, has received the decoration of the Star of Roumania, in recognition of his services to the sick and wounded.

MR. J. E. A. STEGGALL, the son of a well known member of the profession in London, who last week achieved the proud position of second wrangler at Cambridge, has been adjudged the first Smith's prize for pure mathematics, defeating the senior wrangler in the competition for that high honour.

ON the 13th instant, at 8 P.M., at the rooms of the Society of Arts, John Street, Adelphi, Mr. W. Eassie will explain the systems of cremation now in regular use in various parts of the continent, and will illustrate his paper by diagrams and also by models of crematory apparatus which have been collected by him in Italy and Germany.

ON Tuesday evening last, Dr. B. W. Richardson delivered the first of a series of four lectures, to be delivered on successive Tuesday evenings at Devonshire House, Bishopsgate Street Without, on the subject of the practice of abstinence from alcoholic drinks, with special reference to the difficulties of learning to abstain. The lectures are delivered under the auspices of the National Temperance League.

AT the distribution of the prizes for 1877 by the French Academy of Sciences on January 28th, the Montyon prize in physiology was awarded conjointly to Dr. D. Ferrier and MM. Carville and Duret. The Bréant prize (£4,000) for the discovery of a cure for cholera was not awarded, but the interest of that sum was given to M. Rendu, for several memoirs on etiology.

DR. HENRI GUENEAU DE MUSSY was last week elected a Member of the Academy of Medicine in Paris, in the Section of Hygiene.

THE PRINCESS OF WALES.

OUR attention having been drawn to certain statements respecting the health of Her Royal Highness the Princess of Wales, we are very pleased to have authority to state that Her Royal Highness' health was never better than at the present time, and that all reports to the contrary are without foundation.

CARDIFF MEDICAL SOCIETY.

THE annual meeting of this Society was held on January 31st. The report of the Committee showed that the number of members was twenty-four, being an increase of three over the number last year. Seven meetings have been held during the year; of which two were special, having reference to an alleged charge of cruelty against one of the members, and the censure of another by the Local Government Board. Ten papers had been read at the meetings. The following officers and Council were elected. *President*: W. T. Edwards, M.D. *Vice-President*: A. P. Fiddian, M.B. *Committee*: The President, Vice-President, and Secretary; M. G. Evans, M.D.; J. Milward, Esq.; H. J. Paine, M.D.; W. Price, M.B. *Honorary Secretary and Treasurer*: A. Sheen, M.D.

DEATH OF DR. PEASLEE.

WE regret to hear of the death of Dr. Edmund R. Peaslee, the distinguished American gynaecologist. He died at the age of 64, in New York, on January 21st, of pneumonia, after a week's illness. Dr. Peaslee had gained a high reputation in ovariectomy, on which subject he published some years ago a treatise of much value. He had been engaged in teaching anatomy, surgery, and obstetric medicine in various institutions since 1842; and from 1874 up to his death was Professor of Gynaecology in the Bellevue Hospital Medical College.

ANOTHER FASTING GIRL.

WE have it on the authority of a provincial paper, that another Welsh fasting girl has come to light. Her name is Morgan. She is about fifteen years of age, and is said not to have eaten nor drunk anything since the 30th of October last.

PREVENTION OF DISEASE.

DR. SAUNDERS, the Medical Officer of Health to the City of London, in his recent report, says, in reference to cases of contagious disease, many of them had been under the treatment of medical men attached to the dispensaries for some time before their existence was notified to him, and sometimes his only sources of information were the weekly mortality returns. He considered that great inconvenience and possible danger to the general health of the city might be occasioned by this delay, and hoped that something might be done in future by which such delay might be prevented.

THE APPLICATION OF PENALTIES UNDER THE MEDICAL ACT.

MR. R. H. S. CARPENTER, Secretary of the Medical Alliance Association, has forwarded to us a copy of correspondence between himself and the President of the General Medical Council, including correspondence with the Receiver for the Metropolitan Police District, respecting the application of penalties obtained in cases of prosecution under the Medical Act. The manner in which the penalties in the Metropolitan District are appropriated on behalf of the Exchequer instead of being, as the Medical Act provides, paid to the Treasurer of the General Medical Council, has already been several times noticed in our pages, and has been the subject, on the part of the Medical Council, of resolutions and of communications with Government. The matter will, we learn from the correspondence, be again brought before the Executive Committee of the Council; and it is to be hoped that action will be taken to remove the anomalous condition under which, in the metropolitan district, the penalties recovered under the

Medical Act are diverted from their equitable destination. In the meantime, it is interesting to notice that, in the letter to the Receiver-General, Mr. Carpenter quotes some very high authorities—viz., Sir P. B. Maxwell, in his work on the *Interpretation of Statutes*; the Master of the Rolls, in the case of the Dean of Ely *versus* Bliss; and Chief Justice Lord Campbell, in the case of Miller *versus* Rhind—to show that (to use Lord Campbell's words) "without any express repeal, if a subsequent enactment is contrary to and inconsistent with a prior enactment, the prior enactment is repealed". Notwithstanding this, the Receiver, in his reply, entirely ignores these authorities, and falls back on the opinion of the solicitors to the police, under whose guidance he has acted.

RUSSIAN EPIDEMICS.

ACCORDING to the Russian press, an appeal has been made to the Government from Alexandropol for a grant of money to cleanse the town, on the ground that, owing to the passage of seventy thousand sick and wounded through the town since the war begun, and the neglect of the local authorities to disinfect the place, the streets and the houses are filled with disease. The death-rate is 55 per 1,000, and nearly every house that has not been converted into an hospital for the army contains inhabitants stricken with typhus. At Tiflis, the operations of one branch of the Red Cross Society are entirely suspended, all the doctors being dead. It is expected in the Caucasus that a plague will break out in the spring. At Penza, small-pox and measles are rife. Near St. Petersburg, the black small-pox has broken out among the Turkish prisoners interned at Gatchina; and it is further stated that ten thousand sick and wounded are awaiting removal at Sistova. So many are suffering from typhus that it is proposed to have "typhus trains" to carry soldiers infected with that disease only.

HEREDITARY CONGENITAL DISLOCATION OF THE CRYSTALLINE LENS.

AT the meeting of the Medical Society of London on January 14th, Mr. Wordsworth exhibited six persons belonging to one family who are all affected by congenital displacement of both crystalline lenses. They consist of Mrs. H., her two sons, and their three children. A third son of Mrs. H. (now in New Zealand) was examined many years since, and his case described in the first volume of the *Royal London Ophthalmic Hospital Reports* by Mr. Dixon. In addition, Mrs. H. states that her own father, his youngest brother, and her grandfather, were all similarly affected. If this be so, there is a series of ten cases occurring in five successive generations. They all complain of being short-sighted; and, on close examination by oblique illumination, and when viewed by the ophthalmoscope, the crystalline lens in each eye is seen to be displaced, and its edge visible in the pupil. In distant vision, they look through that part of the pupil in which the crystalline lens is absent; and for near objects, through the crystalline itself. The family recognised the defect in all who are subject to it; and in those they considered exempt, the examination confirmed their opinion.

THE CONTAGIOUSNESS OF DIPHTHERIA.

SOME facts relating to the contagiousness of diphtheria are given in the recent Report of the State Board of Health of California, in speaking of an epidemic of diphtheria which occurred in April, 1876, in the Asylum for Orphans at Vallejo. During the period referred to, there were forty-three cases and ten deaths. The Board state that "one of the business men of Vallejo was called to Santa Rosa, Sonora County, to attend the funeral of some members of a family of relatives who had died from the scourge diphtheria. On returning to Vallejo, he and some of his family were taken down with the disease, and were attended by members of a family residing near the Home for Orphans. The children of the last-mentioned family were attending the school of the Orphans' Home at the time they were taken sick. Two of the family died, and soon after some of the Home inmates were taken sick with the same disease." During the prevalence of the epidemic, no suffi-

cient precaution was taken to isolate the sick, nor was attention apparently given to the fact of the contagiousness of the disease. The Board also give some interesting facts with regard to the transmission of diphtheria from point to point. A child just recovering from diphtheria went to visit a family at Dixon, wearing the same clothes as used during its illness. One of the children of this household was soon taken sick with the disease and died, there having been previously no diphtheria in the vicinity and no communication by the child with infected localities. Free intercourse with the sick was allowed, and the funeral of the deceased child was largely attended by other children, thereby causing an outbreak in the school near by, from which a large number of cases started. Not one person became ill who had not been exposed to direct contagion.

THE CHARITY ORGANISATION SOCIETY AND THE PROVIDENT SYSTEM.

At a meeting of the Council of the Charity Organisation Society on January 28th, Sir Charles Trevelyan moved the adoption of the following recommendations of the Medical Committee.

"1. That, in the opinion of this Committee, it is advisable to appoint a Subcommittee, with a suitable agent placed at its disposal, for the pose of extending and promoting provident dispensaries in the metropolis.

"2. That it is desirable that a separate fund be placed to the credit of this Committee for the purpose of carrying out these objects."

After briefly pointing out the advantages of the provident system of medical relief, as well as the growing public opinion in its favour, Sir Charles adverted to the special difficulties it has met with in the metropolis. The Council of the Society have always regarded it as a most important branch of charity organisation, and through their District Committees they have great facilities for pressing it upon the attention of the managers of medical charities all over London. The proposal was favourably received, and referred to the Administrative Committee for consideration. We are glad to observe that Mr. T. Holmes has accepted the chairmanship of the Medical Committee of the Charity Organisation Society, *vice* Sir Charles Trevelyan, who has resigned.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual meeting of subscribers to this Fund was held on January 10th at Messrs. Churchill's, New Burlington Street, when the report of the Committee was presented, and the officers were chosen for the ensuing year. The hard times have pressed heavily on the resources of the Fund; for, not only has the number of applicants for relief been larger than hitherto, but there has also been a smaller amount of money wherewith to help them. In no year since the establishment of the Fund, in 1836, has so much been expended in giving immediate aid, £1,640 having, by the aid of a bank deposit, been distributed in the form of grants to needy members of the profession, their widows or their children. It has been doubted whether there really is such distress in the medical profession as can be relieved by small grants of money; but it is a fact, with which perhaps only those conversant with the working of this charity are familiar, that there are numbers of medical men or their relatives whom such help does preserve from abject poverty. There are persons, nearer to them than many may imagine, for whom a few pounds at once, or a few shillings in weekly doles, provide the only means of sustenance. Another branch of the Fund is that for giving annuities of from £10 to £25 to deserving members of the profession above sixty; but the number of applicants is so large, that it is rare for any one to obtain this boon before the age of seventy. The working expenses of the Fund are small, beyond those for postage and printing. The officers are all honorary, and the room, in which the Committee meets monthly, is very kindly lent by Messrs. Churchill. We venture, therefore, to urge the claims of this Fund upon the charity of every medical man. There are many, we believe, who do not give, because the existence of the Fund has been unknown to them; and we would ask them now, with these few facts before them, to do all they can, and to get others—their friends in the pro-

fession, and not less their friends in the laity—to help this really benevolent work. The Treasurer, Dr. Broadbent, 34, Seymour Street, Portman Square, or the Financial Secretary, Mr. Herbert W. Page, 28, New Cavendish Street, W., will gladly acknowledge any new subscriptions or donations which may be sent to them.

SMALL-POX AT HARWICH.

THE epidemic of small-pox at Harwich, we are informed, is much on the decline. Only four cases occurred last week. Of these, three only were admitted to the hospital. Thus there is reason to believe that the means taken for isolation have not been ineffectual. The death-rate was not lessened; but the greatest mortality took place amongst the patients admitted during the first week. It is further reported that some influential inhabitants of Harwich have petitioned the Local Government Board to institute an inquiry into the cause of the outbreak of small-pox. At Dovercourt, the people formed a local committee and stamped out seven cases, and they are now entirely free. No deaths have taken place among those recently re-vaccinated. A number of young people have died. The nurses belonging to the St. Alban's Diocesan Nursing Association are doing their duties in the temporary hospital admirably, in the face of considerable difficulties.

HEALTH OF FOREIGN CITIES.

THE Registrar-General states that a summary of the weekly returns with which he is favoured by various local authorities abroad, shows that the average annual death-rate during the fourth quarter of the year 1877 in thirty Indian and foreign cities, was 28.4 per 1000, against 22.8 in twenty of the largest English towns. The population of these thirty foreign cities is estimated at about twelve and a half millions of persons. In these cities, the lowest death-rates were 16.5 and 17.7 in Philadelphia and Christiania; whereas the rates ranged upwards in the other towns to 44.9 in Bombay, 45.7 in Alexandria, and 97.3 in Madras. The mortality in Madras, though it showed a considerable decline from that in the preceding quarter, still continued high; the 9,636 deaths during last quarter included 438 from small-pox, and 381 from cholera. In Calcutta 347, and in Bombay 127 deaths were referred to cholera. In St. Petersburg, 544 deaths resulted from fever; equal to an annual rate of 3.26 per 1000. In Paris, the deaths from typhoid fever were 327, equal to an annual rate of 0.66 per 1000; whereas in London the rate from this disease did not exceed 0.39. In Berlin and Philadelphia, typhoid fever was especially fatal. Small-pox showed more or less prevalence in Madras, St. Petersburg, Vienna, and Trieste. Scarlet fever caused 331 deaths in Berlin, against 154 and 269 in the two preceding quarters; this disease also prevailed in Stockholm, Dresden, and in the American cities. To diphtheria, 347 deaths were referred in Paris, 306 in Berlin, 337 in New York, and 193 in Brooklyn; showing in each of those towns an increase upon the numbers returned during the preceding quarter.

THE LIVERPOOL SAILORS' HOME.

AT the annual meeting of this Institution held on Monday last, the chairman alluded to the great benefits which had resulted from the establishment of the Seamen's Dispensary. This year's report states that the dispensary was opened on February 26th, 1877, to the seamen of all nations, whether boarders in the Home or not. Mr. F. W. Lowndes and Dr. A. E. Bernard, the medical gentlemen who in the first instance volunteered their services, and to whose energy and perseverance is largely due the success of the institution, reported that, since the opening of the dispensary, 847 patients had applied for advice, and there had been 2,363 attendances. The patients had all been supplied at the dispensary with medicines and other requisites, at the uniform charge of one shilling for each attendance. Patients proceeding to sea were provided with extra medicine when required. The result of the first year's trial showed very conclusively that the dispensary would not only be self-supporting, but that in the forthcoming year a substantial surplus may be expected. The dispensary

had been the means of supplying a great want. The medical officers had in numerous instances received the most gratifying acknowledgments from different patients of the value of this addition to the many other institutions provided for their benefit. They greatly appreciated being able to obtain medical advice and medicine for so moderate a sum, and in such convenient proximity to the shipping and other offices. They were also sensible of the protection which the dispensary secured them from the extortions of the many self-styled "doctors" to be found in the vicinity of the Sailors' Home. Many patients, after having been cured, had returned with shipmates, while many others had heard of the dispensary in distant seaports from former patients. A detailed report of the results of this valuable institution is promised in a short time.

REGISTRATION OF DISEASE.

THE Boston City Board of Health has lately issued a circular which will be interesting to our readers in relation to a matter much discussed now, and which will probably be the subject of legislation. We give the following extract:

"Whereas diphtheria is a disease contagious and dangerous to the public health, and whereas it now exists in the city of Boston; therefore the Board of Health issues the following notice: That on and after January 1st, 1878, the following provisions of Chapter 26 of the General Statutes will be strictly enforced.

"Sect. 47. When a householder knows that a person within his family is taken sick of...any...disease dangerous to the public health, he shall immediately give notice thereof to the...board of health of the town in which he dwells. If he refuse or neglect to give such notice, he shall forfeit a sum not exceeding one hundred dollars.

"Sect. 48. When a physician knows that any person whom he is called to visit is infected with...any disease dangerous to the public health, he shall immediately give notice thereof to the...board of health of the town: and if he refuses or neglects to give such notice, he shall forfeit for each offence a sum not less than fifty nor more than one hundred dollars."

SCOTLAND.

THERE is at present a considerable epidemic of measles in Edinburgh. Last week, thirteen deaths were attributed to this disease. The only other deaths from any zymotic complaint were five from whooping-cough and one from fever.

THE convener of the county of Bute, Mr. A. B. Stewart, has undertaken at his own expense to erect a considerable addition to the hospital at Rothesay, to be used for the purposes of a general hospital. At present, there is only room for patients suffering from contagious diseases.

A NOTE of the rainfall at Glasgow for the past three years has just been published by the Superintendent of the Glasgow Parks. The table for 1877 shows a total fall of 48.03 inches. The greatest fall was in January (9.39 inches); and the least in September, when only 1.50 inches fell. The rainfall of 1877 was about one-fourth in excess of the two preceding years; the dry days one-third less; while the mean temperature was almost equal.

THE Edinburgh Association for Incurables, an institution which has been in existence only for a few years, has just issued its annual report. The present building in Salisbury Place having been found too small to meet their requirements, the two adjoining houses have been acquired, and will be available at or before Whit Sunday, when the managers expect to be able to commence building operations immediately. They trust that part at least of their new hospital will be ready for occupation next year. During the year, the Committee have received a legacy from Mr. Ross amounting to £1,360. They have also received intimation of a legacy of £1,000 to be paid "when the hospital is erected, towards the expense of the building", after the death of the testator's widow. On January 1st, 1877, there were in

the hospital eleven males and twelve females. The special thanks of the Association were given to the trustees of the late Mr. J. A. Longmore for their promised grant of £10,000 for the building of the new hospital.

HEALTH OF GLASGOW.

IN his report of the health of the city of Glasgow for the fortnight ending January 26th, Dr. Russell mentions the following facts of interest. There was, he says, one case of small-pox registered, the origin of which was interesting. In his report for the fortnight ending December 1st, he had stated that two sailors belonging to the ship *Roseneath*, which left Montreal on October 27th, and on board of which small-pox had appeared, had been removed to hospital. The woman with whom one of these men lodged declined to accept of revaccination. She sickened on December 23rd, and died on the 29th of what seemed to be typhus fever; but her husband, who works in Millwall, London, as a shipwright, and who came down on his wife's decease, was seized with small-pox on his return, and was now in Highgate Hospital; and the case now reported in Glasgow was a next-door neighbour, who attended to the poor woman in her sickness. He had now no doubt that she died from malignant small-pox. The number of cases of fever registered was 84; viz., 80 enteric fever, 3 typhus, and 1 undefined. The number of cases of enteric fever among the persons known to be supplied with infected milk had now increased to 72 within Glasgow; but no fresh cases had arisen since the week ending January 12th. The persons suffering from enteric fever at the present time were distributed through the city thus: Central District, 4; Eastern District, 23; Northern, 17; and Western, 44. A dairy-owner, who sent a large quantity of milk into the city daily, had made a special request that his premises might be examined by a competent authority; and he might also add that an officer was going the rounds of a number of dairies, endeavouring, if possible, to trace the outbreak of fever in the east end.

REPRESSION OF BABY-FARMING.

AT the Edinburgh Police Court last week, a man and his wife were charged with an offence against the Infant Life Protection Act, second section, in that, between the 27th of November last and the 25th of January, they unlawfully retained or received for hire two infants under the age of one year, not being twins, for the purpose of nursing or maintaining them apart from their parents in their house aforesaid, which was not registered under the third section of the said Act, whereby they were each liable to be imprisoned for a period not exceeding six months, with or without hard labour, or to pay a fine of five pounds. An agent for the accused explained that they were very respectable people, and had acted in ignorance of the Act. Under these circumstances, a fine of five shillings only was imposed.

ADULTERATION IN GLASGOW.

THE Glasgow City Analysts, in a report on the articles examined by them during the past quarter, say that the samples of milk, flour, bread, oatmeal, and wine were genuine. All the coffees were adulterated with chicory, the proportion of which varied from one-tenth to two-thirds of the entire weight. Of the samples of arrowroot, three were genuine, two consisted entirely of tapioca-flour, and one of potato-starch and Indian-corn starch. The malt liquors consisted of bitter beer, sweet ale, and porter. All were of good strength and in fair condition; but, of the seven samples, three were found to contain an excessive quantity of salt.

IRELAND.

LIMERICK UNION.

AT a meeting of the guardians, held on the 30th ultimo, to appoint a medical officer to the Workhouse in the room of Dr. O'Kelly, resigned, a resolution was adopted that the salary should be reduced from £200,

as advertised, to £150 *per annum* with rations and apartments. Dr. McAuliffe refused to accept the post at the reduced salary and withdrew his candidature, being allowed travelling expenses. There were three candidates at the reduced remuneration, Dr. Russell being elected by a majority of votes.

CLONASLEE DISPENSARY.

LAST week, the election of a medical officer for the Clonaslee District took place, and caused considerable excitement owing to the interest shown in the appointment. There were two candidates, Dr. Neale and Dr. McKenna, the former being elected by a majority of one. One of Dr. McKenna's supporters urged his election because he was a Roman Catholic; but Dr. Neale's proposer very properly pointed out that the question of a candidate's religion should not be alluded to, and that being a member of any particular creed could not constitute a man a good doctor, unless he could rely on his own abilities.

THE CORK STREET FEVER HOSPITAL.

WE announced last week that Dr. Grimshaw's term of office, as physician to this hospital, had expired. The governors of the hospital have, we are glad to learn, shown their appreciation of Dr. Grimshaw's services during the fourteen years he has been in connection with it by appointing him Consulting Physician. This graceful compliment is more highly esteemed, inasmuch as it has never been conferred before, we believe, upon any of Dr. Grimshaw's predecessors.

HEALTH OF DUBLIN: ANNUAL REPORT.

DURING the past year, there were registered in the Dublin Registration District 9,325 births, being equal to a ratio of 1 in 34, or 30 per 1,000 of the population; and 8,795 deaths, or 28.0 per 1,000. The deaths from zymotic diseases numbered 1,528, or 48.6 in every 10,000 of the population, exceeding the mortality from these causes in either of the two preceding years, but 218 deaths under the annual average for the ten years 1867-76. Nearly one-third of the total mortality from zymotic diseases was produced by measles and its complications, the deaths from which amounted to 461. Small-pox caused 38 deaths; fever, 280; diphtheria, 23; erysipelas, 29; whooping-cough, 106; croup, 101; diarrhoea, 156; and scarlet fever, 122, the smallest number in any year since 1866, and only one-third of the average annual number for the ten years 1867-76. The deaths from convulsions numbered 629, being exclusively those of children, and, with nine exceptions, were amongst those under five years of age. Bronchitis proved fatal in 1,388 cases; pneumonia, 310; pleurisy, 18; and lung-disease, unspecified, in 147. Diseases of the heart and organs of the circulation caused 452 deaths; paralysis, 182; apoplexy, 123; epilepsy, 38; brain-disease, unspecified, 157; Bright's disease, 50; and kidney-disease, unspecified, 79. Deaths from "constitutional diseases" numbered 1,720, being about 5 per cent. over the average for the previous ten years; they comprised 1,030 from phthisis, 174 from hydrocephalus, 172 from mesenteric disease, 61 from scrofula, 161 from cancer, 10 from gout, etc.

ULSTER EYE, EAR, AND THROAT HOSPITAL.

THE seventh annual meeting of the Committee and subscribers of the hospital was held, on the 29th ultimo, at Belfast. During the past year, 3,041 cases were treated in the institution, 155 of whom were intern patients. The expenditure was somewhat in excess of the annual income; and the Committee regret that a debt of £200 still remains, and appeal to the subscribers and the public to help them to clear off this debt, which so materially hinders the usefulness of the institution. With a view of rendering the hospital available for all classes of the community, the Committee have framed rules regulating the mode and terms of such admission, which may be summarised as follows. Poor patients may be admitted to the general ward by a subcommittee, or by the acting surgeon, free of charge. Any suitable case will be admitted on payment by the patient, or by any other person, at the rate of ten

shillings a week. Private patients, under the care of the acting surgeon, may be admitted to hospital on payment of fifteen or thirty shillings a week, according to the ward selected; the acting surgeon to be at liberty to charge his fees to such private patients the same as if he rendered them his services in their own homes. The Committee have forwarded copies of these rules to boards of guardians, and to persons interesting themselves in the welfare of individual patients, and in many instances there has been a satisfactory response.

THE LATE DR. CHURCHILL.

THE funeral of this distinguished and much respected obstetrician took place at Stewart-town, county Tyrone, on Monday last. By the wish of the family, the ceremonial was strictly private. At the usual stated monthly meeting of the King and Queen's College of Physicians, on the 1st instant, it was resolved to adjourn the meeting to that day week, in consequence of the announcement of Dr. Churchill's death. The Registrar was likewise directed to communicate to Dr. Churchill's family the feelings of regret with which the College had received the sad intelligence, and the sympathy it felt towards them in their bereavement; and also to inform them that, during the long period of Dr. Churchill's association with the College, as Fellow and President, he had not only secured the good opinion of every one connected with it, but had rendered it the most valuable services by his learned labours in many other ways, which had redounded to the credit and advantage of the body. A resolution of condolence with the family of the late Dr. Stokes, a Fellow and ex-President of the College, was also passed at the same meeting, the first since his death.—The meeting of the Pathological Society of Dublin, last Saturday, was also adjourned in consequence of Dr. Churchill's death.

SCIENTIFIC LECTURES.

THE first lecture of this year's course of annual scientific lectures, in the King and Queen's College of Physicians, was delivered, on Monday last, by Dr. Walter Smith. We have already published the names of the three lecturers selected by the College and the subject of their lectures. Dr. Smith's first lecture dealt with the physical basis of electrotherapeutics. After a brief historical sketch, and the explanation of some fundamental physical conceptions, the lecturer proceeded to treat of the forms of electric currents utilised in medicine, which he arranged as follows. 1. *Galvanic (Voltaic) Currents*: 1. Continuous; 2. Interrupted: (a) direction uniform; (b) direction alternating. II. *Induced (Faradic) Currents*: 3. Electro-magnetic; (a) extra-current of primary coil; (b) alternating currents of secondary coil; 4. Magneto-electric Currents. Each form of current was illustrated by diagrams, and the two varieties of interrupted galvanic current were experimentally shown. With the aid of Sir W. Thomson's reflecting galvanometer, the alternating currents of the secondary coil and magneto-electric currents were demonstrated, and the greater physiological effect of the opening current was exemplified on the muscles of the forearm. With a current of suitable intensity, no contraction was produced on completing the circuit; but, on breaking contact, a marked contraction was obtained. The lecturer next spoke of electro-medical apparatus; and recommended for general adoption, either the Leclanché battery, or the recent modification of it proposed by Clamond, in which peroxide of iron is substituted for the peroxide of manganese. From seven years' experience of the Leclanché battery, Dr. Smith believes that it answers every demand that can reasonably be made upon it, even although, being a single fluid combination, it cannot give either a constant electro-motive force or a constant resistance. Of induction machines, those furnished with coils, worked by a zinc-carbon cell in the bichromate of potash solution, were recommended as portable, easy to manage, and thoroughly satisfactory. For electrodes, carbon or metal terminals are more cleanly and convenient than the ordinary cup sponge-holders, which offer greater resistance and may be entirely dispensed with. A simple hand instrument, by which a galvanic current can either be interrupted by moving a spring or commutated, was shown and its action demonstrated

on a galvanometer. Some such appliance should be supplied with every galvanic battery intended for medical use. The latter part of the lecture was devoted to an exposition of the laws of the transmission, diffusion, and localisation of electric currents in the human body. The cases were considered successively of the propagation of electricity along linear conductors, and through conductors of three dimensions, homogeneous and heterogeneous; and the complex nature of the problem in reference to the human body was pointed out. It was next explained how although, strictly speaking, it is impossible to absolutely localise an electric current in any part of the body, a relative localisation of a current can be effected. The different factors that influence the localisation of currents were explained and illustrated. With the aid of diagrams, it was shown how the density of the current is altered by modifying the dimensions of the electrodes; how the distribution of the electric curves can be controlled by varying the distance which separates the two electrodes; and how enormously the resistance of the skin varies, according as dry or moist electrodes are employed. Dr. W. Smith's second lecture will be delivered next Monday.

HOUSE OF INDUSTRY HOSPITALS.

HIS Grace the Duke of Marlborough, K.G., Lord-Lieutenant of Ireland, paid an official visit to these hospitals yesterday week. The House of Industry Hospitals comprise three distinct and separate buildings, viz., Richmond Surgical Hospital, the Whitworth Medical Hospital, and the Hardwicke Fever Hospital, as well as a large general and ophthalmic dispensary building. These hospitals, which together furnish accommodation for over 320 beds, are under the management of a board, the members of which are appointed by the Government, and receive for their support an annual Government grant of about £7,500. It is understood that the Richmond Hospital especially is much in need of repairs and alterations; and that its immediate surroundings—cow-houses, etc.—are very objectionable from a hygienic point of view. The visit of the Lord-Lieutenant will, it is to be hoped, induce the Government to make the required improvements at an early date.

REMOVAL OF SMALL-POX PATIENTS TO AN HOSPITAL.

THE parents of a small-pox patient, living in the vicinity of Dublin, recently refused to allow the removal of their son to hospital when ordered there by his medical attendant. A warrant, under the 54th section of the Public Health Act, was consequently directed to the police-constable of the district for the removal of the patient. On proceeding to execute it, the patient's father stood in the room with a large stone-hammer in his hand, and declared that any man who approached to take away his son would have his brains knocked out! The constable evidently thought discretion the better part of valour, for he took his departure without even arresting the father, which we believe the same Act gives authority for doing—the man having wilfully obstructed the execution of the order. Another small-pox patient in the same district, whose parents also refused to allow her to be moved to hospital, has since died. Such conduct on the part of these peasantry is doubtless, in great measure, due to ignorance of both the laws of the land and of sanitary science; and we think the guardians of the union in which these cases occurred have shown their sense by having explanatory posters printed and published throughout the union, and by prosecuting the minatory father.

PUBLIC HEALTH IN IRELAND.

THE Government Bill "to consolidate and amend the Acts relating to Public Health in Ireland" has been printed. It consists of 292 clauses. A memorandum prefixed to the Bill states that its objects are "to consolidate into one Act the various provisions with respect to sanitary matters and burial grounds of the several Acts—no fewer than twenty in number—now in force in Ireland, and to amend the same where such amendment is required". The memorandum also gives a full summary of the provisions of the Bill.

THE BRITISH MEDICAL ASSOCIATION IN IRELAND.

THE first annual meeting of the Dublin Branch of the British Medical Association was held on Thursday, January 31st, 1878; Dr. ALFRED HUDSON, Physician in Ordinary to the Queen in Ireland, and President of the Branch, in the chair. There was a very large and influential attendance of members of the Branch and of the profession generally. Among those present were: Dr. Eason Wilkinson, President of the British Medical Association (Manchester); Mr. Ernest Hart, Editor of the BRITISH MEDICAL JOURNAL (London); Dr. James Cuming, President of the North of Ireland Branch (Belfast); Dr. Curtis, President of the South of Ireland Branch (Cork); Dr. R. M'Donnell, President of the Royal College of Surgeons of Ireland; Dr. Samuel Gordon, President of the King and Queen's College of Physicians; Mr. Porter, Surgeon to the Queen in Ireland; Dr. T. Darby, President of the Irish Medical Association (Bray); Dr. P. C. Smyly, Vice-President of the Royal College of Surgeons of Ireland; Dr. Little, Vice-President of the King and Queen's College of Physicians; Dr. W. Adams; Dr. L. Atthill; Dr. Bell; Dr. E. H. Bennett; Dr. S. L. Bigger; Dr. Blood; Dr. Boyce (Stillorgan); Dr. Brunker (Dundaik); Dr. F. E. Clarke (Drogheda); Dr. E. Collins; Mr. T. Collins; Mr. D. Corbett; Dr. Doyle; Dr. J. F. Duncan; Mr. R. W. Egan; Dr. M. Eustace; Dr. J. M. Finny; Dr. A. W. Foot; Mr. H. J. K. Gogarty; Dr. T. W. Grimshaw; Dr. Hamilton; Dr. R. J. Harvey; Rev. Dr. Haughton; Dr. Hayden; Dr. Head; Mr. R. T. Hearn; Dr. G. Johnston; Surgeon-Major J. Johnston; Dr. Macnaughton Jones (Cork); Dr. J. B. Kelly (Drogheda); Dr. H. Kennedy; Dr. J. Lalor; Dr. Macan; Dr. McClintock; Dr. MacSwiney; Dr. Mapother; Dr. T. P. Mason; Dr. H. Minchin; Dr. Moore (Belfast); Dr. J. W. Moore; Dr. Murray (Ashfield Beauparc); Dr. E. S. O'Grady; Dr. L. H. Ormsby; Dr. A. Patton (Finglas); Mr. W. B. Pearsall; Mr. E. Peele; Dr. J. F. Pollock (Blackrock); Dr. F. T. Porter; Dr. G. D. Powell; Dr. T. Purcell; Dr. J. M. Purser; Dr. C. H. Robinson; Dr. E. B. Sinclair; Mr. A. O. Speedy; Dr. W. T. Soker; Dr. W. Stokes; Mr. H. R. Swanzy; Dr. Glascott Symes (Kingstown); Dr. W. Thomson; Dr. Truett (Clonmannon).

Report of Council.—The minutes of the previous special general meeting having been read and confirmed, the report of the Council was read by the Honorary Secretary, Dr. DUFFEY. It was published at page 167 of last week's JOURNAL.

Dr. JAMES LITTLE (Vice-President of the King and Queen's College of Physicians), in moving the reception and adoption of the report, said: I think we may fairly congratulate the Council on the successful meeting which is now assembled to inaugurate this Branch of the British Medical Association. When the project was first started—I had almost said when Dr. Duffey first started it—many persons questioned the utility of the measure, and wanted to know the object to be attained by the members of the profession thus uniting together. I think the numbers here to-day attest that Dr. Duffey has succeeded in convincing the members of the profession in this city that we do well to unite together as a Branch of this great Association, and to put ourselves into active physiological relation with the parent Association in England. There can be no doubt that we will derive very great advantages from being thus actively associated with the British Medical Association, which is probably the most powerful medical organisation in the world, and it will insure to us the cordial support of that organisation. This Branch will also serve to keep alive feelings of goodwill and an interchange of that friendly intercourse which is so desirable among the members of the profession; though I am glad to say that this is a direction in which the aid of the Branch was least needed here, for there is probably no other city in Europe where the same number of medical men are engaged in friendly rivalry, and where the same cordial terms subsist between the various members of the profession. [*Hear, hear.*] I think we may also take it that the British Medical Association will lose nothing, but gain a great deal, by having the Branch thoroughly organised and added to its other Branches. In many respects, the Dublin Branch will be an exceptional one. It differs in many respects from the provincial Branches, and also from the Scotch Branches. In the first place, it is formed in a capital city; and, in the next place, I do not suppose there is in England a city which could afford a larger number of members than does Dublin and the small towns surrounding it. In such an Association as the British Medical Association, numbers count for a good deal. With the exception of London, this is, perhaps, the largest medical school in the three kingdoms; and I cannot help feeling that the younger members of the profession, in coming forward and joining this Branch, will have the opportunity of getting their ideas associated in this British Medical

Association; and this Society will prove to be a good feeder for the other Branches in England. It has always appeared to me that organisations such as these are of the highest value, and anyone who reads the JOURNAL in England must be aware of the fact that not only are matters which concern the material interests of the members of the profession attended to by this Association, but there is a large amount of scientific work done at the meetings. If an association contented itself with carrying out those measures which would secure proper pay and provision for the various members of the public service—if an association concerned itself only with such matters—the public would consider it very little better than a trade organisation for the protection of their own interests. But, when we find a vast amount of scientific work is done, that the various members vie with one another in bringing their contributions to the store of professional knowledge, all that can be said by the public is that such an association is concerned as much for the protection of public as professional interests. I think these Branches will tend to establish most firmly public and professional support. This is a Branch that will give us the opportunity of sending representative men to England and of doing honour to those among us who deserve it. We will not send men who are not likely to deserve the honour by their professional attainments, blameless professional life, and eminent public worth. [*Applause.*] I have much pleasure in offering my congratulations to the Council and to the Honorary Secretary on the importance and truly representative character of this meeting, and beg to move that the report now read be adopted. [*Applause.*]

Mr. P. C. SMYLY (Vice-President of the Royal College of Surgeons): I have much pleasure in seconding the motion; and I thought when I heard the report read that it was so exhaustive that nothing could be added to it. But I think we are all indebted to the Vice-President of the College of Physicians for the way in which he has spoken. [*Hear, hear.*] The report is most satisfactory; and I think we may be very well pleased with the promise of success that this Branch has now before it. There certainly is a very good representation in this room not only of the members of the profession in Dublin, but I see many worthy faces from distant parts of the country who have come to support us here to-day. Dublin certainly might do a great deal by itself; but the profession in Dublin feel a debt of gratitude to the country practitioners who come from the most distant parts to aid us with their advice and assistance on all occasions, and I think that an Association supported by such men as I see around me to-day may very well look forward to a brilliant future. [*Applause.*] I have great pleasure in seconding the adoption of the report of the Council.

The motion was passed unanimously.

New Members.—The HONORARY SECRETARY read a list of twenty-two gentlemen who had been duly proposed and seconded, and who were desirous of becoming members of the Association; and, on the proposal of Dr. DUFFEY, seconded by Dr. MCCLINTOCK, they were elected. In addition, several members of the Association were elected members of the Branch.

President's Address.—The PRESIDENT read an address, which appears at page 186.

The New President.—The officers and Council for the ensuing year, whose names were given at page 167 of last week's JOURNAL, having been elected, the President vacated his chair.

Mr. G. H. PORTER (Surgeon in Ordinary to the Queen in Ireland), the new President, then took the chair amid applause. He said: Gentlemen,—I thank you most sincerely for the great honour you have conferred upon me to-day, partly by your kindness, and partly by the good rule—for I do believe it to be a good rule—that, in rotation, a physician and a surgeon should occupy your presidential chair. The honour you have conferred upon me is greatly enhanced by the fact that I succeed so distinguished a physician as my friend and colleague Dr. Hudson. I promise you this, that during my year of office I shall do everything in my power to raise the status of this your new Branch [*applause*], so that when I shall vacate the chair the Branch may be found, or I trust it may be found, in as wholesome a condition as it promises to be to-day. [*Renewed applause.*]

Vote of Thanks.—Dr. GORDON (President of the King and Queen's College of Physicians): It is a source of great gratification to me, sir, that this resolution has been put into my hands—a resolution conveying the thanks of this Branch to our ex-President. His reign over us has been but short; but, although short in time, it has been pregnant with a great deal of advantage. He has had the trouble of originating this Branch as Chairman, and he has presided over our meetings with the usual courtesy and energy for which he is so famous, and, lastly, he has crowned his brief period of office to-day with the admirable address to which we have just listened—an address that will be long remembered for all the different topics that he has managed to introduce into it

so very short a time, and for the ability with which it has been delivered. I have the greatest pleasure in moving :

"That the warm thanks of this Branch be given to our ex-President, Dr. Hudson, for his admirable address, as well as for the ability with which he has presided over the Branch during the first year of its existence, and for the interest he has taken in its formation." [*Applause.*]

Dr. MCCLINTOCK : I rise with feelings of very great pleasure and satisfaction to second the motion which has been put to the meeting by the President of the College. I need hardly say that I concur to the fullest extent in every word of praise and commendation that he has said as regards the outgoing President during his term of office, and also as to the ability that he has displayed in his address. Like his other contributions to medicine, though not many—not at all so many as we would wish—it yet bears unmistakable evidence of thought and reflection, and of a richly cultivated mind and understanding. I need say no more than that I am sure all the members present will heartily and entirely acquiesce in the reception of this proposition ; and I think it would be hardly necessary to put it formally to the meeting, for I have very little doubt that a resolution of this kind will be carried by acclamation. [*Applause.*]

The resolution was then passed by acclamation.

Dr. HUDSON : I beg to return my warm thanks to the kind friends who have spoken in too flattering a way of me, and to express my indebtedness to them for the patience with which they listened to me. [*Applause.*]

The proceedings of the annual meeting then terminated.

The Dinner.—In the evening, a large number of members and their guests sat down to dinner in the "Hall of the Statues" of the College of Physicians. Covers were laid for eighty. The chair was occupied by Mr. George Porter, Surgeon-in-Ordinary to the Queen, and President of the Branch. To the right of the chairman were—Dr. Wilkinson, Manchester, President of the British Medical Association ; Dr. Gordon, President of the King and Queen's College of Physicians ; and Dr. Curtis, Cork, President of the South of Ireland Branch. To his left were—Dr. Darby, Bray, President of the Irish Medical Association ; Dr. Robert McDonnell, President of the Royal College of Surgeons ; Mr. Ernest Hart, London, Editor of the BRITISH MEDICAL JOURNAL ; and Rev. Professor Houghton. The guests also included Sir George Owens ; Dr. Cuming, Belfast, President of the North of Ireland Branch ; Dr. Moore, Belfast ; Dr. Macnaughton Jones, Cork ; Dr. Brunker, Dundalk ; Mr. Drew, R.I.A. ; Dr. Shaw, Trinity College ; Dr. Patton, and Dr. Jacob. After the usual loyal toasts were proposed,

The CHAIRMAN said: Gentlemen, I have now to ask you to drink what we may truly regard as the toast of the evening, namely, "The Health of the British Medical Association". With it I couple the name of its president, our distinguished guest, Dr. Wilkinson. My first and most pleasing duty is to thank him for his great kindness in coming over to attend our meeting of to-day, and in joining us at this festive board. The British Medical Association requires no eulogy from me. You all know the good work it has done since the day of its foundation. Not only has it extended in every way the knowledge of medicine and surgery, but it has always nobly upheld the rights of the medical profession whenever these have been assailed. I therefore ask you to drink "The British Medical Association, and Dr. Wilkinson".

The toast was drunk with enthusiasm.

Dr. WILKINSON, in returning thanks, said: I have much pleasure and satisfaction in being here to-day, at the first meeting of your Branch, which, I am informed, already numbers more than a hundred members. It is now many years since I joined the Lancashire and Cheshire Branch of this Association, which was then called the Provincial Medical and Surgical Association. At that time our Branch did not claim many more members than you do now. At the present time our Branch is one of the largest of the British Medical Association. How was this accomplished? Mainly through the energetic character of our founder, Sir Charles Hastings, who stimulated the local secretaries to increase their members, and to strive to enlist in the ranks of this Association every medical man in the kingdom. Secondly, through the zeal and activity of our secretaries, who spared no pains to accomplish their leader's object. What they have done, yours may do. Thirdly, through the means of the JOURNAL, and the influence which it has exercised as a means of scientific communication, and in promoting the other objects of the Association. In a scientific and social point of view the scheme has brought together men who were isolated from their fellow-labourers, and has enabled them to exchange ideas, and thus to stimulate each other to advance our

noble profession, and to increase our means of doing good to those entrusted to our charge. Further, in a social point of view, it has enlarged our way of regarding men, and has helped to rub off many of the asperities with which we regarded one another. It tends to show that we are dependent one on the other, and I can certainly see a kindlier feeling pervading our ranks than existed formerly. When we remember that our Association now numbers nearly 8,000 members, I think we may fairly say that it is making a steady advance towards the realisation of its founder's hopes. [*Applause.*] Dr. Wilkinson then said—The formation of the Dublin Branch of the British Medical Association is a source of sincere congratulation to the Association at large. It forms one more link in the bond which the founders of the Association desired, that it should unite the profession in the three kingdoms in the bonds of friendship, sympathy, conjoint scientific action, and moral influence in promoting the common interests of humanity, science, and medicine, which are identical in all the three kingdoms. You have here a valuable local Association—the Irish Medical Association—of which I am happy to see the President present to-night. [*Applause.*] We desire the sympathy and good will of that Association ; we hope to see it flourish. It has peculiar local advantages and national usefulness. We tender to it our aid in all its useful purposes, and we are delighted to see that it joins the other great medical institutions of Ireland, in extending the wish which I now propose to you in the form of a toast—"Prosperity to the Dublin Branch of the British Medical Association, coupled with the name of its respected President, Mr. Porter," whose reputation and character stand so high as to need no encomium from me. [*Applause.*]

The toast was drunk in an enthusiastic manner.

The CHAIRMAN said : Dr. Wilkinson, I am deeply indebted to you for the kind manner in which you have proposed the toast of the Dublin Branch of the British Medical Association, and mentioned my name in connection with it ; and, gentlemen, I thank you most heartily for the warm manner in which you have received the toast. I am not going to inflict a speech upon you. I assure you with sincerity that I would rather perform a capital operation than make a speech. [*Hear, hear, and laughter.*] At the same time I must on your behalf, as well as on my own, express to Dr. Wilkinson our warm thanks for the manner in which he proposed the toast which has just been drunk. I have to thank you also for placing me in the high and honourable position of being your President ; and I trust that I shall be fortunate enough to merit in every way the confidence which you have placed in me. I confess that it was for a long time a matter of reproach to us in Dublin that we had no Branch here of the British Medical Association. That reproach has been to-day happily removed. I can say very little for the Branch at present ; all we can do is to hope that it will have a bright future. [*Applause.*] I will now ask you to drink a toast which, I may say, is nearer home than any of the others. It is the Irish Medical Association ; and I couple with the toast the name of our old and valued friend Dr. Darby. [*Applause.*] His presence here to-night is a proof that there is no antagonistic feeling between the two associations. [*Hear, hear.*] The objects of both are in many respects the same. The Irish Medical Association is perhaps more exclusively a protective society. You all know that it has done good work. [*Applause.*] When attempts have been made on many occasions to crush our professional brethren, that Association has manfully fought their battles. I therefore call upon you to drink with enthusiasm "The Irish Medical Association and Dr. Darby". [*Applause.*]

The toast was most heartily received.

Dr. DARBY, on rising to respond, was received with warm applause. He said : Gentlemen, it has been my good fortune on so many occasions to return thanks for the toast of the Irish Medical Association, that anything that I can say now will be merely repeating myself. I thank you all very warmly for the manner in which you have received the toast. When the charge of the Medical Charities of Ireland was undertaken by the local bodies constituted under the poor law, the Irish Medical Association at once became a necessity ; and I would say that now there is no country in which medical charities are so well administered as they are in this. They afford most excellent, efficient, and valuable relief to the sick poor. The medical men who first administered that relief were placed in a very novel and difficult position, being overworked and under-paid. Undoubtedly at the time of the change in the law it was necessary to form an association in Dublin for the protection of medical men living in remote districts. The Irish Medical Association is now an important national institution, and I think we owe a debt of gratitude to the late Dr. Arthur Jacob, who laid the foundation of the Association, and to his son for the manner in which he has promoted the interests of the Poor-law medical officers in this country. [*Applause.*]

The CHAIRMAN : Gentlemen, the next toast on my list is one that I am

sure you will feel very great pleasure in having brought before you. Before mentioning it, I feel bound to say that I think we are very much indebted to our Honorary Secretary, Dr. Duffey [*Applause*], not alone for the formation of this Branch, in which, without offending any other gentleman, I think I may say he took a most active part, but also for the manner in which he has arranged the list of toasts now in my hand. The toast I am now about to give you is the health of the College of Physicians and the College of Surgeons in Ireland. It gives me a great deal of pleasure personally to propose this toast, because I have always thought, and think still, that the closer those two colleges are cemented together the better. [*Applause*.] No higher qualifications can be held by any man than the licences of those two colleges. We are indebted to the College of Physicians for the great privilege of having been able to dine in this beautiful hall to-night, as well as for that of holding our meeting here to-day. [*Hear, hear.*] The College of Physicians in Ireland has always been foremost in its efforts to aid the profession in every way. I beg to couple with the toast the names of the respected Presidents of those two colleges, Dr. Gordon and Dr. Robert McDonnell. [*Hear, hear.*] With respect to the College of Surgeons, it would ill befit my purpose to say much; still I cannot help making one or two remarks. I have been connected with it from my earliest days, and I believe that as a great national institution the College of Surgeons of Ireland has done its duty well, and has successfully endeavoured to send out on the great platform of life highly educated surgeons. I believe I may say, without fear of contradiction, that wherever surgery is practised, whether in some remote nook in distant lands, or on the field of battle, our licentiates have manfully and courageously upheld the prestige of Irish surgery. I give you, therefore, "The College of Physicians and the College of Surgeons, coupled with the names of Dr. Gordon and Dr. Robert McDonnell".

The toasts were received with acclamations.

Dr. GORDON, President of the College of Physicians, said: On the part of the College of Physicians, I return you my most hearty thanks for the way in which you have received this toast. I can only say on the part of the College of Physicians that, individually and collectively, nothing gives them greater pleasure than to assist in every way in their power in any effort on the part of any branch of the profession to forward views interesting to the profession or to the public at large. [*Applause.*] How much more, then, do they feel it to be their pleasure and their duty to assist in promoting the efforts and the objects of such a society as I see collected in these halls to-night, to whom, on the part of the College of Physicians, I give a most hearty welcome. [*Applause.*] I beg to return you on their part their most hearty thanks for the way in which you have received the toast proposed by the President. [*Applause.*]

Dr. McDONNELL, President of the Royal College of Surgeons, on rising was received with hearty applause. He said: I also return my sincere thanks, on behalf of the corporation that I represent, for the manner in which you have drunk our healths. The College of Surgeons has never been wanting, and I hope never will be wanting, in aiding any movement that tends to raise the honour and dignity of the profession. We look, therefore, with great satisfaction on the formation of this Branch of the British Medical Association, and I hope it may go on and be prosperous. The speeches this evening have been admirable, and I will not try to rival them; but before sitting down, with your permission, I will propose a toast which, I venture to say, in spite of what the President has said about another toast, will be the toast of the evening. I propose to you the health of Dr. Duffey. There is not one of us who does not know the services that Dr. Duffey has rendered in the formation of this Branch. [*Cheers.*] The tact, the zeal, and the good sense that he has displayed in the accomplishment of his task could not have been excelled. It was for a long time feared that a Branch Association of the British Medical Association would be regarded as inimical to, if not in some degree antagonistic to, our own Association. He has called it into being, and I hope it will go on and prosper under his auspices, and that it will not prove in any way inimical to, but on the contrary beneficial to, its friend the Irish Medical Association. I propose to you the health of Dr. Duffey; and I call on you to drink his health with enthusiasm.

The toast having been most warmly received,

Dr. DUFFEY, on rising, was received with prolonged applause. He said: The President of the Royal College of Surgeons in Ireland has taken me quite by surprise by the kind way in which he has mentioned my name. I can only say that any efforts that I have made in connection with the establishment of a Branch of the British Medical Association in Ireland have been amply repaid by our meetings of this afternoon and this evening. I thank you all, gentlemen, very sincerely for the way in which you have drunk my health; and I may be allowed especially to express my thanks to the President of the British Medical

Association and to Mr. Ernest Hart, for their presence here to-day. I think it a very great personal compliment. I repeat that any trouble that I have taken in this matter has been amply repaid by the success of our meetings and by the kind way in which my name has been mentioned.

The CHAIRMAN: I have now to give you a toast to which I am sure you will all respond heartily, namely, the South and the North of Ireland Branches of the British Medical Association; and with it I associate the names of Dr. Curtis and Dr. Cuning, the distinguished Presidents of those Branches. We must admit that Cork took the lead of us by establishing its important Branch before we formed ours. It showed us a good example. I think we owe a debt of gratitude to both these gentlemen for having done us the honour of coming to attend our meeting of to-day, and of being present at this entertainment.

The toast was duly honoured.

Dr. CURTIS: It gives me great pleasure indeed to answer for the South of Ireland Branch of the British Medical Association. When I received your invitation, I determined that, no matter what inconvenience it might involve, I would be present at your meeting. [*Hear, hear.*] I was amply repaid to-day by hearing the able and eloquent address of your late President; and I have been still further rewarded to-night by hearing the various speeches to which we have listened. It is, I am sure, a great honour to be the President of any Branch connected with the British Medical Association; but I take especial pride in being the President of the first Branch of that Association that was formed in Ireland—not that I speak of it as the first in point of numbers, but as the first established in the order of time. I may say that I do not believe, at this present moment, there would be a Branch established in Ireland but for the unceasing and untiring energy of my friend and colleague Dr. Macnaughton Jones. [*Hear, hear.*] When it was first proposed to establish a Branch in the South of Ireland, a meeting of the profession was called, and they said—"No, it will not succeed"; but Dr. Jones said—"It must succeed". Then they rallied round him; and we have now in the South of Ireland a society which is the largest outside of Dublin, numbering close on one hundred members. I am justly proud of being President for this year of that society. So prosperous is it, that we intend, in the year 1879, to entertain the parent society and all the branches of the medical profession who will do us the honour of coming to Cork. [*Applause.*] I believe Cork to be peculiarly adapted for that purpose beyond other places in Ireland. We have the beautiful Lakes of Killarney and the romantic scenery of the harbour to show you; and we shall have the co-operation of various bodies, including the Queen's College, Cork, which, through the kindness of its President, Dr. Sullivan, will be thrown open on the occasion. All I can say is, that if we do not show you the hospitality for which the South is famed, I shall be very much surprised. We shall certainly receive you with *Cœd mille fealte*. [*Applause.*] I beg again to thank you for the toast, and your kindness in mentioning my name.

Dr. CUNING: I rise to return you my best thanks on behalf of the North of Ireland Branch of the British Medical Association, which has been very recently founded. In the formation of that Branch, we have been content—as we are content in a great many other things—to follow, at a respectful distance, the action of our Dublin brethren. We did not found it until after we discovered that a Branch had been formed in Dublin; but, although somewhat late in its foundation, our Branch bids fair to be a prosperous member of the great Association in whose prosperity we are all so deeply interested. We are all deeply interested in it, because it is a body that is capable—and, I think, alone capable—of reflecting faithfully the opinions of the medical profession at large. We know that the great corporations that have been in existence for many years in connection with the medical profession have done great service for it, and have represented its opinions very faithfully to the Government of the country. But year by year our relations to the Government became closer and closer, and it became more important than ever that the medical profession should speak as an united body. This now is effected by the British Medical Association; and it is very desirable that we should draw the bonds of union between all its branches as close as possible. I am happy to say that our Branch bids fair to be prosperous and successful. It has been personally very gratifying to me to come up to Dublin and to meet so many old friends amongst the members and elders of the medical profession here; and it is also especially gratifying to me to sit under the presidency of a man so universally respected in the surgical world as the distinguished President of your Association. [*Applause.*]

The CHAIRMAN: My list of toasts is now drawing to a close, but the toast I am about to bring under your notice is one to which I know you will all warmly respond. I have no doubt whatever about it. I

give you "Our Visitors", and with that toast I couple the names of Mr. Ernest Hart and Dr. Macnaughton Jones. [Applause.] A good thing cannot be said too often. Thanks have been already expressed to Mr. Ernest Hart for his great kindness in coming over to Ireland; and as your President I now tender to him again our best thanks for his great kindness in doing so, when, I am sure, it must have been a great inconvenience to him to come over to Ireland. [Applause.] I also tender your thanks to Dr. Jones for his kindness in coming up from the South of Ireland to attend our meeting and banquet. Mr. Hart's action in the present instance is just like every other act of his in respect of matters connected with the medical profession in Ireland. One of the most important features connected with the British Medical Association is its JOURNAL, and we all know how brilliantly and honourably that journal is conducted. We all know that when an Irish question is put forward in that journal it is not put in a dark corner where no one can read it, but always receives a prominent place, and the kindest and best remarks are made on it. We are indebted to Mr. Hart for a great deal, and the parent Association also owes him a great deal. I therefore give you "Our Visitors", coupling with the toast the names of Mr. Ernest Hart and Dr. Macnaughton Jones. [Applause.]

The toast was most cordially received.

Mr. ERNEST HART, on rising, was received with warm applause. He said: So great is the hospitality and so manifold are the attractions of Dublin, that to every visitor to that city I think there can be but one regret, and that is the regret which arises when he leaves the city, and there is even then the consolatory hope of a speedy return. That, sir, I am sure was the main feeling in the minds of every one of the visitors to Dublin ten years since, when you gave to the members of the British Medical Association so memorable a welcome in 1867. And on returning to-day I was forcibly reminded by the words of the Vice-President of the College of Physicians of the expressions with which the President of the British Medical Association in that year, the illustrious Dr. Stokes, whose name will always be affectionately cherished and venerated in the Association, welcomed us on that occasion, because they seemed to me to express with characteristic earnestness and precision the best sides of our Association and those which give it the strongest claims to the adhesion of its Irish members and, indeed, of all its members. He said: "Your society is altogether peculiar in its organisation, and one in which we recognised the union of the profession in the three kingdoms for objects that are good, and consequently great. It has in good earnest sought to raise the status of medicine by the labours of love, on the one hand, and by those of science, on the other." Dr. Little expressed precisely those two aspects of the Association: its scientific aspect, on the one hand, and its social aspect, which regards the common interests of the profession, on the other." Dr. Little also very happily expressed the change which has taken place by saying that to day the Irish members entered into complete physiological relation with the British Medical Association by the constitution of this Branch. Dr. Wilkinson, the respected President of the Association, has again referred to the three methods by which the Association progresses; namely, the representation of its members on the General Council and Committee of Council; the action of the local Branches; and the connection of members with the Association through the weekly JOURNAL of the Association—the BRITISH MEDICAL JOURNAL. Notwithstanding many efforts and much correspondence which I have had with leading members of the profession in Dublin on the subject at the date of and since our general meeting in Dublin in 1867, the only direct connection which the Irish members have had with the Association until quite lately has been through that which has been just described as the third bond of union between us—the JOURNAL; nevertheless, it has been a great source of satisfaction to me that, in the course of the ten years that have elapsed since I first became editor of the JOURNAL, the number of members has, run up from a very small number to several hundreds, until now it is nearly, if not quite, five hundred, which is more than a third of the whole profession in Ireland. We have every reason to hope that, now that the members of the profession here have direct connection with the Association in all its powers and forms of usefulness, the Association will take still wider and firmer root here; and that the profession in Ireland will be united with the profession in England and Scotland for all generous purposes by a direct, organic, and immediately active union. It has been to me a very great pleasure to attend here to-day and to take part in welcoming the formation of those three Branches in the north, the south, and the east of Ireland, and I hope that we may all at no distant day have the pleasure of welcoming the formation of a Branch in the west of Ireland. [Applause.] At any rate, the pleasure of attending such a meeting as this, so full of happy omens, is much

more than a compensation for the fatigues of crossing the Channel; and I hope that the Irish members of the Association will favour us by returning the visit and by attending numerous at our annual meetings. I feel a well grounded confidence in assuring them that, at all meetings of the Association throughout the United Kingdom, they will always receive from the English and Scottish members a most hearty welcome, and find the leaders of the Irish profession amongst the most honoured guests. [Applause.]

Dr. MACNAUGHTON JONES: I assure you that it has given me very great pleasure to attend the first annual meeting of this Branch of the British Medical Association. So many good reasons have been brought before us to-day in proof of the advantages which must follow to the profession in Ireland from the formation of Branches of this great Association in our midst, that it is quite unnecessary for me now to dwell on the reasons which induced me to attempt the formation of a Branch in the South of Ireland. But I must say that when I determined to take in hand that movement I was actuated by only one motive, namely, an anxiety to spread among my professional brethren a greater desire, if possible, than at present prevails amongst them for the promotion of scientific knowledge. I was actuated by no political motive. I felt that throughout the provinces of Ireland there has been a mass of latent scientific power which ought to be called forth; and I believed that by the formation in this country of such Branches of the British Medical Association as exist all through England and in most parts of Scotland, we should promote the advancement of medical knowledge in Ireland. It was for that reason alone that I took in hand the formation of the South of Ireland Branch; and I was ably seconded by some gentlemen who have worked at my shoulder in the matter from the first moment to the present. I should be wanting in gratitude if I did not mention the name of a gentleman who has been all through most efficient in connection with the South of Ireland Branch, and who, although young, has already gained for himself a wide reputation in medical science—I mean Dr. Atkins of Cork. Dr. Curtis, our worthy President for this year, has referred to my exertions, but I assure you that I should have been nowhere had I not been seconded by our efficient and able secretary Dr. Atkins. It would ill become me at this late hour to detain you with any remarks as to the advantages which must accrue to our profession from the formation of Branch Associations in Ireland. I agree with Mr. Ernest Hart in hoping sincerely that we shall yet have a fourth branch society for Connaught, so that all the four provinces of Ireland may be represented in the British Medical Association; for we know that we have already in Connaught a Queen's College, ably officered, and we cannot fail to realise the fact that there exists throughout that province a vast amount of medical knowledge, which is not at present brought forward. There is one point to which I wish to allude. It is, of course, important in the formation of Associations such as this that care should be taken not to collide or interfere in any way with the interests and the working of other Associations. I candidly confess that, when our Branch Association was first formed, I felt that it might be considered antagonistic to a kindred Association of a scientific character which already existed in Cork. But competition is always the life and soul of business, and competition has already done good in a scientific point of view in Cork, for we have stimulated that other Association, which was becoming more or less a dead letter, and now we have two Associations where previously only one existed, and that, perhaps, of a very slow character. Just one word more. We have taken in hand a great work. We intend to invite the British Medical Association to Cork in 1879. That invitation has been already put on record in the JOURNAL of this Association. But we are fully alive to the responsibility of that movement. We know that in bringing so vast an Association to the South of Ireland we undertake a task which it may not be easy to accomplish in such a manner as we wish. Dr. Curtis told you of our beautiful scenery and surroundings, and of our lovely lakes, but we feel that there are a great many other matters which enter into the success of the annual meeting of so important an Association as our parent society is. I am one of those who think that, if the annual meetings of the Association were to merge into mere social gatherings, they would become something which would not be valued by the members of our society generally. We must have scientific matter, and I am very glad of having this opportunity of saying to our Dublin friends that I hope they will come manfully forward and help us on the occasion with scientific material, and give us in that respect such assistance as will enable us worthily to represent Ireland, and not be behind any other city in the United Kingdom in giving to the Association not alone a hearty welcome and social amusement, but also such scientific food that they will not leave the southern metropolis without carrying home with them useful knowledge, besides having enjoyed an agreeable holiday. I shall not

detain you any further, but beg again to thank you very sincerely for the very unexpected honour you have paid me by coupling my name with the toast [Applause.]

The CHAIRMAN: The last toast on my list is not the least, as I am quite sure you will think when I mention it to you. I give you "The Press". The Press in this country has been always foremost to assist the oppressed. It has been always foremost in lending its aid to the advancement of science and knowledge; and I can say with truth that on every occasion on which it was in its power to do so, the Press has manfully stood by our profession. I therefore ask you to drink, and warmly drink, the toast of the Press, and I couple with it the names of Dr. Patton and Dr. Jacob. [Applause.]

The toast was duly honoured.

Dr. PATTON, in responding, said: The Press would forfeit its claim to the confidence and support of the patriotism and intelligence of the city and country if it did not assist in advancing the interests of a profession to which the world owes so much—a profession which is the brightest and best of all professions.

Dr. JACOB: There is an advantage in being obliged to speak after having heard the ideas of those who have gone before me. I have listened with great attention to the many admirable speeches which have been made this evening. I am but a young medical man, and yet I recollect the time when there were but few representatives of medicine connected with the Press. But, as a medical man, I feel pleasure in observing that the medical profession has now many competitors for its good word and its patronage. [Hear, hear.] Its influence upon society is more beneficially felt than ever; and the JOURNAL of the parent Association, with which this Branch is connected, proves in the strongest way that the profession not only deserves from the public the most complete recognition, and from the Press every assistance which the latter is capable of affording, but that it is capable of reciprocating in the most ample manner the good offices of both. Sir, my friend Dr. Patton represents a much more influential and useful arm of the Press than I do. [Vv.] He is able to place the Association before the general public in a way that neither my eminent *confrère*, Mr. Ernest Hart, nor myself could do. Our position is amongst you who know what we can do, and who are thoroughly conversant with every word that we publish; but the daily press is more influential in placing our profession in a right position before the world. All I can say is, that as long as the medical profession applies itself to the high objects which are represented by this Association, namely, the advancement of science and the good of the general community, not only the Press which is specially interested in the profession, but also that which is devoted to the interests of the general public, will give it their support. The profession has never occupied so excellent a position in the public estimation through the columns of the fourth estate as it now occupies. From the pre-eminence which I see given to medical matters in the columns of the leading journals, it bids fair, I think, to occupy the best position amongst the learned professions of our country. I think, therefore, that what this Association has to do, and what we all have to do, is to cultivate those objects which recommend themselves to the esteem of the public at large; and you may be perfectly certain that if you follow that course you will receive the best assistance that the Press is capable of affording to you. I thank you very much for the manner in which you have conducted me with the toast. [Applause.]

The proceedings then terminated.

MEDICAL EDUCATION IN THE UNIVERSITIES OF OXFORD AND CAMBRIDGE.

WE are compelled to defer, from want of space, further remarks on the subject of medical education in Oxford, to which attention has been recently directed in our columns. We have, however, received this week various important contributions towards the solution of the question raised; one is in the form of a letter, addressed by an eminent German Professor to a friend in London; and another, to which still more value will be attached, the early sheets of a pamphlet about to issue from the pen of Dr. Michael Foster of Trinity College, Cambridge, discussing the second branch of the subject which we have opened, namely, the state of medical education at Cambridge, indicated in our first comment as calling also for discussion. Dr. Michael Foster's pamphlet has a direct bearing upon the state of medical education in Oxford, as well as in Cambridge. Meantime, we only note this significant fact that, whereas in Oxford clinical teaching has been regarded as an impossible point, in Cambridge the teaching is mainly clinical and practical, and the courses most remarkable for their deficiency are certain theoretical courses.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

At the ordinary meeting of the College on January 30th, Drs. Handberg, Jones, Munk, Burdon Sanderson, and Priestley were elected Councilors.

The following by-law was repealed. "Every candidate who has prosecuted his studies abroad, whether in part or to the full extent, ... shall nevertheless bring proof of his having attended during at least twelve months the medical practice of an hospital in the United Kingdom."

Exemption from re-examination in Chemistry and Materia Medica was recommended by the Council in the case of candidates for the licence of the College who had previously passed in those subjects at an University in the United Kingdom, in India, or in a British colony where the degree or a licence to practise was granted.

It was recommended that the following general principles should be adopted in reference to the prize of one hundred guineas offered for the best essay on Hydrophobia: That the subject should be the Causes, Prevention, and Treatment of Hydrophobia; that special value should be given to original researches; and that the prize should not be awarded unless there were an essay of sufficient merit.

It was reported that great improvement had been shown by the candidates in the examination in Chemistry.

THE AMENDMENT OF THE MEDICAL ACTS.

Dr. LUSH has printed the Bill which he has reintroduced, at the instance of the Medical Alliance Association, for the amendment of the penal clauses of the Medical Act in such a form as to protect the public from the deception now practised with impunity, by a great number of persons holding fictitious and worthless diplomas from bogus universities or falsely assuming medical titles. This, which was the avowed object of medical legislation, and set forth as such in the preamble of the first Medical Act, has, as is well known, been frustrated by the defective wording of the fortieth section; and the results have been equally prejudicial to the profession and to the public. The Bill appears to be framed in harmony with the resolution on the subject carried at the last general meeting of the British Medical Association. Dr. Carpenter, the Honorary Secretary of the Medical Alliance Association, has forwarded to us a circular which is issued with the Bill, and which concisely sets forth the particulars of a number of cases, showing the conflicting decisions of magistrates and judges arising out of the defective wording of the Act; and in this brief abstract may be seen how thoroughly incapable the Act, as at present worded, is of affording protection in this most important respect either to the public or to the profession.

THE PRIVILEGES OF THE PROFESSION.

A BILL to amend the law relating to dental practitioners has been introduced by Sir John Lubbock and Dr. Lush, having the useful object of providing registration for persons specially qualified to practise as dentists in the United Kingdom. Very short notice has been given of the second reading, and no time has yet been afforded to the bodies specially concerned, such as the medical profession at large and the Association of Surgeons who practise Dentistry, to consider the clauses. The Bill was set down for second reading on Wednesday; but, upon representations being made to Sir John Lubbock to that effect, the second reading has been postponed to Wednesday next. This, however, is still too short a time to allow due consideration of the clauses of this Bill by those whose interests are affected; and we trust no objection will be made to further postponement in order to enable satisfactory arrangements to be arrived at, by which a measure so useful in its objects may be carried through in a form which is not open to the same objections palpable on the face of this Bill as it at present stands. The effect of the third clause of the Bill would be to take away the privileges of all surgeons and general practitioners practising dentistry, and to prohibit them from calling themselves dental surgeons, or by any other name implying that they are qualified to practise dentistry. This is open to obvious objection; it is contrary to all precedents, whether of the Apothecaries' Act or the Pharmacy Act. The rule of law and the rule of reason always has been, that the greater includes the less; and it is obvious that a surgeon fully qualified cannot be debarred by this Bill from practising the branch of surgery known as dental surgery, any more than from practising ophthalmic surgery or aural surgery. As the Bill stands, it reads like an

inconsiderate attempt to cut off from surgery one of its most ordinary departments. If this precedent were established, we might expect to see a register created for oculists, for aurists, and for obstetricians; and fully qualified surgeons debarred from practising in these departments, in the same way as this Bill proposes to prevent fully qualified surgeons from practising dental surgery. It is hardly possible to suppose that this was the intention of the framers of the Bill; but that would certainly be its effect. A meeting of the Parliamentary Bills Committee will be at once summoned to consider this Bill.

ARMY MEDICAL SCHOOL, NETLEY.

THE thirty-fifth session of this school was brought to a close on Monday, the 4th instant; and while we observed that a considerable number of strangers were present from the neighbourhood, as well as the military and medical officers doing duty at the Hospital, we were sorry to notice that no representative from the War Office nor from the India Office nor the Admiralty was there to give countenance and moral support to the work of the School, and personally to give away the prizes to the successful competitors.

Surgeon-general Dr. Massy, C.B., the Principal Medical Officer at Netley, presided, and presented the Martin Memorial Medal at the conclusion of the proceedings.

The session has been attended by 53 candidates—namely, 25 for the army, 19 for the Indian, and 9 for the naval medical service. There were also present two surgeons of the Indian medical service, home on furlough, who availed themselves of the opportunity of going through the practical work of the school, and another surgeon belonging to the Quebec Royal Artillery was also present and worked most industriously during the session.

Of the 25 army candidates, one of them failed to obtain the necessary number of marks to qualify him for admission to the service. Out of a maximum of 6,900 marks obtainable he gained only 2,122, a number less by 178 than what is just sufficient to place a man in the list of successful competitors; and out of 3,500 marks obtainable at Netley he gained only 872. It is well that these results should be known amongst candidates, because we have reason to believe that an impression has been gaining ground of late that, when once a candidate has passed the London examination, he has no need of any further exertion to maintain his place at Netley, and so pass into the service. He must gain at least *one-third* of the maximum marks obtainable by the combined results of the London and Netley examinations.

Two candidates only out of the 53 especially distinguished themselves in the work of the school. These were Mr. S. J. Thomson and Mr. R. N. Campbell, both of the Indian medical service, Mr. Thomson gaining both the Herbert prize (£20) and the Martin Memorial (gold) Medal. This is the third competition that has taken place for this last-named honourable distinction, instituted in memory of the late Sir Ranald Martin, K.C.B. It is open to the competition of all the candidates of the three services attending the Army Medical School during each session, and is awarded to the candidate who most of all distinguishes himself in Military Medicine. On this occasion 22 candidates competed for the medal—namely, seven army, four navy, and eleven Indian candidates, a special examination paper having been set for this competition by Professor Maclean. The final struggle mainly lay between Thomson (979), Campbell (945), and Brander (895), of the Indian service; Young (865), of the army; and Porter (861), of the naval candidates. Mr. J. S. Thomson became the successful competitor, and received the medal from Surgeon-General Dr. Massy, C.B., amidst the acclamations of his fellows.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Examination Hall of the Queen's College, on Thursday, February 14th, 1878.

The Chair will be taken by the President, SAMPSON GAMGEE, Esq., at 3 o'clock P.M.

The following papers are promised.

Mr. Lawson Tait: Fifty Cases of Ovariectomy.

Mr. Lloyd Owen: Nystagmus.

Members are invited to exhibit patients, pathological specimens, new drugs, or instruments, at the commencement of the meeting,

JAMES SAWYER, M.D.,
EDWARD MALINS, M.D., } *Hon. Secretaries.*

Birmingham, February 7th, 1878.

SIIROPSHIRE AND MID-WALES BRANCH.

A QUARTERLY meeting will be held at the Salop Infirmary on Tuesday, February 12th, at 6.30 P.M.; J. RIDER, Esq., President, in the Chair.

The Secretary will feel obliged to those members who intend to read papers if they will signify the same to him before the day of meeting.

HENRY NELSON EDWARDS, *Honorary Secretary.*
Shrewsbury, January 30th, 1878.

LANCASHIRE AND CHESHIRE BRANCH.

THE first intermediate meeting of this Branch will be held at the Town Hall, Oldham, on Tuesday, March 5th, at 3.30 P.M.

Dr. W. H. Broadbent (London) has kindly consented to read a paper on the Mechanism of Speech and Thought as illustrated by Pathology.

Members wishing to read papers or to exhibit specimens are requested to communicate with the Honorary Secretary as soon as possible.

Dinner will be provided at 6 o'clock.

D. J. LEECH, M.D., *Honorary Secretary.*
96, Mosley Street, Manchester, January 31st, 1878.

METROPOLITAN COUNTIES BRANCH.

AN ordinary meeting of this Branch will be held at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, February 27th, at 8 P.M.; when Mr. T. HOLMES, F.R.C.S., will read a paper on Provident Dispensaries, to be followed by a discussion.

ALEXANDER HENRY, M.D. }
W. CHAPMAN GRIGG, M.D. } *Honorary Secretaries.*

London, February 7th, 1878.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

AT a meeting of the Committee of Council, held at the Freemasons' Tavern, Great Queen Street, London, on Wednesday, January 9th, 1878: Present, Dr. R. W. FALCONER (President of Council), in the Chair, Dr. E. Wilkinson (President), Mr. W. D. Husband (Treasurer), Dr. T. Clifford Allbutt, Mr. Alfred Baker, Mr. J. W. Baker, Dr. M. M. De Bartolomé, Dr. L. Borchardt, Mr. E. C. Board, Mr. Callender, F.R.S., Dr. Alfred Carpenter, Dr. Charles Chadwick, Dr. J. W. Eastwood, Mr. R. S. Fowler, Dr. E. L. Fox, Dr. C. Holman, Mr. A. Jackson, Mr. Frederick Mason, Mr. F. E. Manby, Dr. E. Morris, Dr. C. Parsons, Mr. R. H. B. Nicholson, Dr. A. P. Stewart, Dr. E. H. Sieveking, Dr. W. F. Wade, Mr. C. G. Wheelhouse:

The minutes of the last meeting were read and found correct.

Resolved: That the twenty candidates whose names appear on the circular convening the meeting be elected members of the Association.

Read letter from Dr. Wilson Fox, of which the following is a copy:

"67, Grosvenor Street, W., December 21st, 1877.

"My dear Sir,—After some consideration, I have resolved to ask you to bring the following question before the Council of the British Medical Association, and to favour me with a reply to it.

"The question which I desire to put is this: 'Are women to be permitted in the future to attend the meetings of the Medical and Surgical Sections of the annual and other meetings of the British Medical Association, and to take part in the discussions at such meetings?'

"I had believed that this question was answered in the negative by a large majority of the Association a few years ago.

"At the last meeting, held at Manchester, a lady was present, and spoke in a discussion in the Section of Medicine.

"As I do not intend to be a member of any society where medical topics are debated in public between men and women, I shall be glad to learn the decision of the Council in this matter, reserving to myself the right to publish this inquiry and the reply which I may receive.

"I remain, my dear sir, respectfully yours,

"Francis Fowke, Esq."

"WILSON FOX.

Resolved: That Dr. Wilson Fox be informed that the Committee of Council have no power to prevent ladies who are members of the Association from attending the meetings of the Association.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date be approved, and the recommendations carried into effect.

Resolved: That a seal for the Association be adopted.

The President of Council then reported that the subcommittee appointed to consider the design for a seal for the Association had decided upon recommending the head of Sir Charles Hastings, the founder of the Association.

Resolved : That the design for the seal proposed by the subcommittee be adopted.

Resolved : That the terms of the lease of 161, Strand, having received the approval of the Solicitor to the Association, Mr. J. R. Up-ton, be, and they are hereby accepted, and that the common seal of the British Medical Association be affixed to an indenture dated the day of _____, 1877, made between Sophia Webb of the one

part, and the British Medical Association of the other part, being the counterpart of a lease of a message or tenement and premises situate and being No. 161, Strand, in the county of Middlesex, for a term of twenty-one years from the 29th September, 1877, at a yearly rent of £320.

Resolved : That the Committee of Council insure for £3,000, and also for one year's rent (£320) in addition, so that in event of fire the Insurance Company pay the rent, as well as damage by fire.

The minutes of the Arrangement Committee for the annual meeting to be held at Bath were read, and it was

Resolved : That the minutes of the Arrangement Committee of to-day's date be approved, and the recommendation be carried into effect.

The minutes of the Habitual Drunkards Committee of to-day's date were read.

Whereupon an amendment was moved :

Resolved : That in the event of the Home Secretary not being prepared to introduce a Government measure, this Council will be prepared to give support to any reasonable measure which may be introduced by a private member.

STAFFORDSHIRE BRANCH : ORDINARY MEETING.

THE first ordinary meeting of this session was held at the North Staffordshire Hotel, Stoke-upon-Trent, on Thursday, November 28th, 1877; present, Dr. ARLIDGE, President, in the chair, and twenty-five members.

New Members.—The following members of the Association were duly elected members of the Branch : Dr. J. A. Gailey (Leek) ; Mr. J. C. Garman (Wednesbury) ; Mr. M. Taylor (Cannock) ; Mr. George Lowe and Dr. W. G. Lowe (Burton-upon-Trent).

Pathological Specimens.—Dr. JOHNSON exhibited an Acephalous Fœtus.

Mr. ALLCOCK showed two specimens of Extracapsular Impacted Fracture of the Left Femur. Both patients were over seventy years of age ; one being a male, and the other a female. Before death, osseous union was complete.

Mr. VINCENT JACKSON showed a portion of the right upper jaw of a man, which had been recently removed by him on account of extensive Epithelial Disease involving the mucous membrane covering the palate and alveolar processes.

Communications.—Dr. J. H. TYLECOTE read a paper, in which he narrated the histories of some recent cases.

Mr. FOLKER read a paper on a successful case of Excision of both Knee-Joints.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

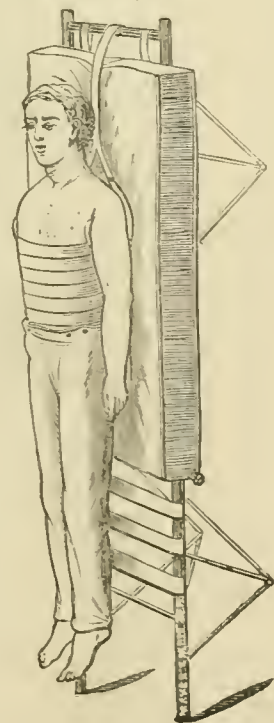
FRIDAY, JANUARY 25TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Sayre's Plaster of Paris Jackets in Spinal Disease.—Mr. BERKELEY HILL brought, for the inspection of members of the Society, a selection of twelve patients with angular and lateral spinal curvature, for which they were wearing Sayre's plaster jackets. In doing this, he avoided criticism of the correctness of the theoretical grounds on which Dr. Sayre explained the mode in which the spine was affected, and also the description of the method of application, observing that those matters were set forth in Dr. Sayre's *Spinal Diseases*, etc. (Smith and Elder, 1877). He confined himself to the results which had been gained by six months' experience of the mode of treatment. The cases exhibited that evening had been mainly under his own care, but some were from the hospital patients of his colleagues, Messrs. John Marshall and Arthur Barker. Four cases from the Cheyne Hospital for Incurable Children were exhibited by Mr. James P. Bartlett. The

cases comprised examples of angular and lateral curvature of various situations and degrees, some wearing the jury-mast to support a curve in the upper dorsal region, one with lumbar abscess and sinns. The first case treated in University College Hospital after Dr. Sayre had himself demonstrated his method, was put up on July 13th. The patient immediately lost the pain in her back, which up to that time had been too severe to permit of her walking about or sitting up for more than half an hour at a time ; and she went for a walk out of doors of her own accord the same day. Two days later, she went into the country till November. She at once discarded invalid habits ; and in the latter part of her stay nursed a sick sister. The jacket put on in July was worn till nearly Christmas ; it was then removed, and a poroplastic felt corset moulded on to the trunk while the patient was suspended. This did not appear to give sufficient support, as the pain in the back had returned frequently and increasingly. Hence Mr. Hill exhibited the patient wearing her corset—an excellent fit—to show that this material did not embrace the trunk with sufficient immobility to support it effectually. Mr. Hill next read the notes of the second case to which the plaster jacket was applied in University College Hospital, on July 14th, 1877, by Mr. Marcus Beck. This was a case of very acute character and with well marked symptoms. The patient could not walk fifty yards without his crutches, and only a very short distance with them, on account of the severe pain produced. On being encased, he walked out of the hospital easily, carrying both crutches in one hand. One month later, he was able to walk nine miles. He wore the shell for three months ; it was then removed, and he had remained quite well ever since. Mr. Hill then briefly described the case of the daughter of a medical man in Cheltenham, who was encased by Dr. Sayre himself at Guy's Hospital on July 25th, 1877. She had been suffering for eight years from injury to the upper dorsal region, causing collapse of the upper part of the column, great protrusion both backwards and forwards, complete inability to stand or walk, constant pain, and at one time, paraplegia. On January 23rd, 1878, her father wrote : "She began to improve from the first, and has continued to walk with increasing strength ever since. She has literally had no pain at all. She does her share of play, and goes regularly to school." Mr. Hill then summed up the benefits which six months' experience of the plaster shells had shown. 1. Pain was at once arrested. 2. So far as the spine was concerned, the patient was immediately able to sit upright and to walk about. 3. Control of the lower extremities, when lost or diminished, was rapidly improved or restored. 4. Abscesses steadily closed. 5. The spinal column lost

much of its abnormal curve and consolidated in the improved position. 6. In lateral curvatures, a permanent increase of stature was often obtained. 7. Finally, by Sayre's jacket cure was more rapid and less irksome than by any other method. Mr. Hill remarked that caution was necessary to prevent the patient from attempting too much exertion ; even when thoroughly supported in the shell, most patients required rest through some part of the day. In conclusion, Mr. Hill mentioned several small modifications in the method of application, which had been found to be improvements. The chin-piece should be more deeply cupped at the chin and well lined with thick felt. The suspending straps should be attached just in front of the zygoma and behind the ear. The axillary slings should be padded firmly, and stiffened, so as to take the form of the cross of a crutch. To receive adult or heavy patients from the gallows without risk of bending the plaster shell before it had set, Mr. Hill had contrived a table, swinging at its middle like a toilet looking-glass. This, carrying the slack air-bed, could be pushed against the patient while suspended ; two large hooks were slipped under the arm-pits and hitched to the top of the table. The patient, thus attached to the table, was freed from the gallows. The table was lowered from the vertical to the horizontal position, and the patient sank



without strain or jolt into the slack air bed, which supported the plaster evenly on all sides till it set. Messrs. Mayer and Meltzer, who had

constructed the table, had also made a light folding frame to answer the same purpose. To cut up or trim the plaster shells, a carpenter's small dovetail saw and a pair of French vine-dresser's shears were the handiest tools.—[The accompanying woodcut represents a patient attached to the folding frame of Messrs. Mayer and Meltzer, and reclining against the slack air-bed, previously to being lowered to the horizontal position.]

The PRESIDENT said the practical character of Mr. Hill's paper added considerably to its value. In cases at St. Bartholomew's Hospital, the difficulty of removing patients from the upright to the lying-down position had been experienced, and he had overcome it by a table very similar to that shown by Mr. Mayer.—Mr. T. SMITH remarked that the table was of great assistance. He had seen a case in Dr. Sayre's hands in which the bandages were broken during the movement from the upright to the horizontal position. In private cases, he merely asked for a leaf out of the dining-room-table; that answered every purpose of the swinging table. As regarded the pads which had to be used for the female breast and the abdomen in both sexes, he always had recourse to air-pads with a stopcock; the air could then be let out before the dressings were removed. He highly praised Dr. Sayre's method of treating cases of spinal disease.—A VISITOR, whose child had been under Dr. Sayre's treatment, said that he had found great difficulty in removing the plaster splints, and had consequently after a time adopted Hides' splints, with which the child could walk about without growing faint.—Mr. C. LUCAS had not yet found any inconvenience arise from the suspension of the patients necessary to the application of the jacket. Of twelve cases so treated by him, four were cases of lateral, eight of angular curvature. Three times he had had to undo the splint before cure was complete; once, in a child put up by Dr. Sayre himself at Guy's Hospital, the skin covered by the splint became covered with psoriasis. Arsenic being given, in three weeks the child recovered from its skin-affection, and the splint was reapplied. In a second case, desquamation occurred in the skin covered by the splint. In the third case, the splint was removed for the treatment of pediculiculi. He had not seen sores produced by pressure, and thought they could only come where the bandage was applied badly, and where no pad was put over the spines of the vertebrae. He also spoke in highly laudatory terms of Dr. Sayre's method of treatment.—Mr. BARWELL was the first to put on the bandage in this country, which he had done before Dr. Sayre came to England. He had now used it in seventeen cases; and in only one case had the bandage had to be removed. It was on that occasion done by the house-surgeon for difficulty of breathing. It was replaced very carefully after three days, and was then worn with comfort. The angle of the spine did not improve subsequently more than it did at the first suspension. The apparatus shown by Messrs. Mayer and Meltzer was ingenious, but not usable in private practice. At his own house, he used a sofa and a stiff sheet; the patient, being placed in the sheet, was gradually lowered to the sofa. Sayre's bar, when used for suspending the patient, pressed on the axillary nerves; in the suspender used by himself, the pressure was made by two pieces instead of by one; and, as the pressure was thus made chiefly inwards against the chest-wall, heavy people even might be suspended without hurt to themselves. He did not find it necessary to pad the spines of the vertebrae; he simply lifted the bandage from the spines at the time of its application, and subsequently replaced it by a piece of cotton-wool in each axilla, and another large pad between the mammae. He related the case of a man who, with angular curvature, had for four years had asthmatic breathing; and who, directly the splint was applied, lost the asthma.—Mr. BARKER said that the troubles with the plaster corset witnessed by himself in cases at University College Hospital were chiefly the following. Chafing occurred to a marked degree in two cases. The first was that of a very young child (affected with angular curvature), who, after a fortnight's application of the jacket, had a slough of some size over the most prominent spine. It rapidly healed, however, directly the splint was removed. In the second case, a slough also formed after the jacket had been worn six or seven weeks. This child had, however, been otherwise greatly improved by the jacket, and the slough healed when the bandage was removed. The jacket in the first case was shown to Dr. Sayre's son, who found it an excellent one, without any fault that he could detect. Perhaps, the cause lay in the early age of the child and the consequent small size of the pelvis, upon which the corset could not take a good grip, so admitting of more wriggling. In the second case, too, no cause in the plaster-case could be found for the sloughing spot. One ought to be aware of possible troubles that might occur. At the same time, he was confident that other corsets which he had applied had been productive of unmitigated good, as in the case exhibited by him there that evening.—Mr. GOLDING-BIRD had treated eighteen cases, and had seen a great deal of good result in all of them. No

harm ensued, except in some of the early cases, from chafing. The whole treatment lay in the swinging of the patient: the plaster-cast simply kept the body extended when the swinging had effected its good by lifting the heavy head and arms, which were pressing on the weakened spine. The treatment consisted in the fact of its being an extending, in contradistinction to a pushing force, and it afforded that which Mr. Hilton had contended should be the aim in such cases—namely, to afford physiological rest to the part. Felt should not be used for the formation of the cast; it did not retain sufficient stiffness to give the necessary support.—Mr. B. HILL briefly replied.

Erythema Multiforme.—Dr. TILBURY FOX exhibited a patient suffering from this disease. The skin exhibited all the varieties of erythema usually described in the text-books.

CORRESPONDENCE.

ADMISSION OF LADIES TO THE MEETINGS OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—I cannot believe that the resolution of the Committee of Council communicated to Dr. Wilson Fox, and published by him in your issue of to-day, represents the true position of the British Medical Association with regard to women.

The terms of the resolution, I may remind your readers, are, "that Dr. Wilson Fox be informed that the Committee of Council have no power to prevent ladies who are members of the Association from attending meetings of the Association". Hence it must be inferred that, in the opinion of the Committee of Council, there are ladies who have the legal status of members of the Association; in which case it would follow as a matter of course that the Committee of Council would have no power to prevent them from attending the meetings. But the admission of women into the Association would involve a radical change in the constitution of that body, such as could not be effected without the general consent of its members. Such consent has certainly never been given. At the meeting which took place in Edinburgh two years ago, some of the members learned for the first time to their great surprise that a lady had been admitted as a member by one of the branches acting entirely on its own responsibility. And a member of that Branch, present at a large gathering of Associates in which the subject was discussed, justified the act by the words of the constitution, in which it was stated that any registered medical practitioner was eligible of membership. But any sound lawyer would, I conceive, inform us that those words must be interpreted according to the meaning which they were understood to bear when the constitution was framed. And, as the idea of any woman being likely to become a registered medical practitioner was far from the minds of the founders and original members of the Association, the words "registered medical practitioner" must be held to be exactly equivalent to the words "male registered medical practitioner", as bearing upon the constitution of the Association. The case is parallel with that of the University of London, where the term "person" used in the charter is universally admitted to mean "male person", so that a new charter is necessary in order to enable the University, however willing, to admit women to examinations and degrees. If this be so, the act of the Branch in admitting a lady to membership was entirely *ultra vires*, and therefore null and void.

In order to ascertain the wishes of the Association generally regarding the admission of women, it was moved at the Edinburgh meeting by Mr. Pemberton, of Birmingham, seconded by Dr. Marshall, of Clifton, and carried by an overwhelming majority, that a voting paper should in the course of the following year be sent to every member, requesting him to reply *aye* or *no* to a query on the subject; and the result was a largely preponderating vote in the negative. The mind of the Association having been thus declared, it was surely the duty of the Council to take the earliest opportunity of writing to the lady in question, apologising for the mistake which the Association had made through one of its Branches in admitting her in a manner which had proved to be entirely invalid, and at the same time returning her any money which she had contributed to our funds. This, however, has plainly not been done. The vote taken with so much trouble and expense to the Association has been allowed to remain a dead letter; and we learn from Dr. Wilson Fox that at the Manchester meeting last autumn a lady not only attended the Section of Medicine, but took part in the discussions. Further than this, the use of the word "ladies" (in the plural) in the resolution of the Committee of Council seems to indicate either that, in spite of the vote, other women have been since admitted in the same illegal manner, or that the Committee anticipate the probability of such

an occurrence. If otherwise, the terms employed by the Committee are certainly most unfortunate, as calculated to create needless uneasiness in the minds of our members.

Let the Committee, then, lose no time in doing what ought to have been done long since, and write to the lady or ladies concerned, in the sense above referred to. Or if they decline the responsibility of immediate action, let them see that the subject be brought before the entire Council at the next annual meeting; and in the meantime let them, if they think it necessary, take legal opinion for the Council's guidance. The affair is of vital importance: for if it be not settled in accordance with the wishes of the majority of our members, I fear it will lead to the disruption of the Association. For my own part, deeply as I should regret to be compelled to sever my connection with a body to which I am personally warmly attached, and which, if conducted on its old basis, is calculated to be in the future, as it has been in the past, of the greatest benefit to our profession, yet I feel as strongly as Dr. Fox does the utter unseemliness and impropriety of having medical topics discussed without restriction in a mixed company of men and women, and I could not consent to belong to any society in which such practices prevailed. On the other hand, believing as I do that the next annual meeting will prove that the due action of the executive body is alone required to clear us from what I cannot help regarding as a disgraceful blot, I would earnestly appeal to Dr. Wilson Fox to withdraw in the meantime his resignation.—I remain, Sir, yours sincerely,

JOSEPH LISTER.

London, Feb. 2nd, 1878.

* * The facts of the case we understand to be these. Early in the year 1873, Mrs. Garrett Anderson, M.D. Paris, L.S.A. London, was elected a member of the British Medical Association and of the Metropolitan Branch, by the Council of that Branch; her paper of application being numerous and influentially signed. On the 14th day of January, 1875, Mrs. Frances Hoggan, M.D. Zürich, L.K.Q.C.P.L., was elected a member of the British Medical Association by the Committee of Council. At the annual meeting of the Association in Edinburgh, at which both ladies were present, attention was called to the subject, and a resolution was carried "That it be an instruction to the Secretary, between now and the next annual meeting, to issue a circular addressed to every member of the Association, requesting an opinion 'Yes or No', as to the admission of female practitioners to membership". A copy of this resolution, with a request for an answer, was accordingly issued by the General Secretary by post to every member of the Association; and 4,161 answers were received, of which 3,072 were noes and 1,051 ayes. This result was announced at the general meeting in Sheffield. Since the date of the Edinburgh meeting, no ladies have been either proposed or elected members of the Association. Thus the question is narrowed to the relation of the Association to the two ladies mentioned, one of whom has attended and spoken at various meetings of the Branch and of the Association. We cannot but think, with Professor Lister, that means may easily be taken to settle satisfactorily a question which lies within such narrow limits, in the sense of the principle already affirmed by a majority of the members.—ED. B. M. J.

THE LOST MEDICAL SCHOOL.

SIR,—For some years, as it has appeared to me, Oxford (I speak only of Oxford in this letter, but might speak in much the same sense of Cambridge) has been doing most valuable work in medical education. Year by year, the schools of medicine attached to the large London hospitals have been receiving among their pupils an increasing number of men previously instructed in science at Oxford. And, seeing the stamp of the men, and the extent and quality of their knowledge, London teachers owe great obligation to the teachers, the system, and the influence under whom and which this preparation for purely medical study has been made.

Speaking of advanced education generally, it is no little advantage to teachers and taught that a more or less considerable number of men of good culture and of some years beyond boyhood should be infused among the various classes. No one who has any long experience of London medical schools can be ignorant of a growing improvement in tone and diligence, of a general evidence of aim in study among the pupils. This advance I attribute, in a large degree, to the presence of a number, of an increasing number, of University men. These, as older men who have been long enough emancipated from school to have lost the riotous joy of new freedom, give steadiness to the mixed mass of which they form a part; as trained men, prepared and ready to make practical application of their acquired theoretical knowledge, stimulated, moreover, by some perception of their actual needs and ultimate objects, they give an impulse to progressive study among the

pupils at large; as pupils of teachers of great learning and high purpose, they react upon their new teachers and quicken them in turn.

Seeing this, I have been and am looking forward to the time when views on medical education such as have been long advocated by my own master Mr. John Simon, in one direction, and by the very Oxford teachers who are just now the objects of attack, may assume practical form. The two views put together amount pretty much to the following.

London, with its large hospitals and enormous poor population, offers unlimited opportunity of clinical instruction. Oxford, with admirably arranged museums and laboratories, and large endowments for professors, has almost as unlimited possibilities in the way of general biological instruction. Both would gain, and medical education would be greatly advanced, if each were to take the distinctive part in education suited to its capacity. In neither, at the present time, can there be said to be a complete and satisfactory system of medical education. In London, under the present system, as determined chiefly by the requirements of the several diploma-giving corporations, the strictly preliminary studies are carried on side by side with the clinical studies, very often under the direction of men who ought to be strictly clinical teachers. The student rarely follows his purely biological studies in a thorough way, partly through actual want of time, partly because the atmosphere of clinical work in which he is living distracts and draws him on prematurely to the technical applications which are more fascinating to most minds. Zoology and botany receive little attention, save from a few aspirants for degrees at the University of London; the time allotted to chemistry is altogether inadequate; and physiology is for the most part taught by men engaged in clinical work and private practice, by men who, if they have the knowledge and appliances, have not time to use them effectively in teaching.

As regards Oxford, it is evident that, if anyone should hope, as things stand, to get a complete and thorough medical education there, he would be doomed to disappointment. But, if the work and the avowed objects of the Oxford biological teachers be looked at in a broad and statesmanlike way, there is no ground for regret in this disappointment. Oxford, being content to teach well and thoroughly what she can teach in such manner, and to leave London to supply what she herself cannot; being content to develop to the full her resources of biological instruction, and to let the men she has trained seek their clinical instruction in the splendid field offered by the largest city in the world, will survive the attacks now made on her, and enormously advance the study of medicine in England. In her large and admirably arranged museums and laboratories, under teachers who can devote their whole day to their teaching and its subjects, many a medical student of the near future will be able to pursue, undistracted and unhurried, his preliminary biological studies; and afterwards he can come, as men pass from school to college, to London, to find there the material of purely medical study and teachers no longer embarrassed by the duty of imparting preliminary instruction. Here, as may be hoped, he will study at once the pathological aspect of physiology, the surgical and medical anatomy of man, the processes of disease, the treatment of the sick. In this relation, the total existing appliances of the London schools will be none too large for the needs of comprehensive, though purely medical, study. It may be said that there are good schools of biological science in London, and that they may also take up the work of preparation. This I cheerfully recognise; nay, most hopefully; for, while I am chiefly speaking of Oxford as a type, I am keeping in view the necessity of the preparatory work being carried on in many places, but always under such conditions of separation from the applied work as Oxford presents.

It has been urged that Oxford, having an infirmary with a staff of medical officers and a considerable population, is capable of being a school of clinical medicine, the experience of German universities being cited in favour of the argument. But, from the point of view here taken, the wisdom of the Regius Professor in not attempting to make a small medical school at the expense of the great School of Biology which he and his associates are fostering, commends itself to me. Others have elsewhere pointed out that the famous schools of clinical teaching springing up in the comparatively small university towns of Germany are mostly the creation of individuals, and wane when their great lights are quenched. Furthermore, the distances between centres are mostly great in Germany; and that, nevertheless, men go from school to school to complete their education. Oxford, with her two or three hundred beds and population of a few tens of thousands, lies, in regard of distance and of clinical opportunities, under the shadow of London, with her millions of population. The clinical part of education can be given so much more fully and completely by London (only two hours' journey distant), that Oxford is wise in refraining from competition, and is equally wise in refraining from spoiling the work pro-

perly falling within her scope by the forced introduction of work of another kind.

These considerations are not set forth without the consciousness that they have a bearing upon the whole question of medical education. But the time has come, and perhaps the occasion, when the question of medical education may be once more reviewed rather from the side of teaching than from the side of examining, which appears to me to absorb a most disproportionate attention. It is clear that such a division of work as is here contemplated, with some attempt at completeness in both departments, will involve a large extension of the recognised period of medical study. So be it. The total period of study is at present far too short, chiefly because a preparatory stage has been cut off by the regulations of recent date. As long back as I have had any opportunity of advising young men on the commencement of medical study, I have advised them to spend at least a year—if possible, more—between leaving school and going to a hospital in learning something of pharmacy, chemistry, botany, and the rudiments of anatomy. Since the much-to-be-lamented abolition of apprenticeships, this sort of intermediate training has been doubly needed. And, if the present discussion about the "Lost Medical School" shall serve to draw attention to the necessity for schools of scientific training intermediate between school life and hospital study, I am sure that the far-seeing men who are bent on making Oxford a great biological school of the kind will not complain.

The regulations of the University of London illustrate the want of harmony between the present method of education and the requirements of a good degree examination. Although the subjects included under the term "preliminary science" are all taught at several of the London hospital schools, "preliminary science" has been separated from the properly medical examinations, and candidates are advised to pass the examination in that subject, if possible, before going to hospitals. It is certain that, if they do not, students have to neglect most of the work properly belonging to their first year at a hospital. In the fact that the examinations at the University of London are held at times which fit in no way with the general order of study in the hospital schools, and in the fact that the examinations are so arranged that students entering for them must actually break off from the ordinary classes, is a strong indication that the Senate considers the present routine of medical education too short and imperfect to be the basis of the examination for its degrees.

The views here advocated are by no means new or original, but are once more brought to the front, in the hope that a retrogressive policy may not be forced upon the University of Oxford.

It is with medicine as with seamanship; both require long training, early and late; in both, science and practice are appropriately taught in different places. Because London has museums and schools of naval architecture, and every appliance for teaching the theory of seamanship, it does not follow that men may be trained to navigation, to sail ships in storms, on the Thames. A man is made a sailor only by going to sea. In medicine, London offers, so to speak, the sea on which men scientifically taught at Oxford or elsewhere may become masters of their art.—I am, sir, your obedient servant,

WILLIAM M. ORD, Dean of the Medical School
of St. Thomas's Hospital.

London, February 4th, 1878.

THE PRESENT INFLUENCE OF OXFORD UPON MEDICAL EDUCATION.

SIR,—It is naturally a somewhat delicate matter for medical graduates of Oxford to come forward and state all that they know and think respecting the conditions of medical education now existing in their own University.

While the questions bearing upon this large and debatable subject remain open, it may not, perhaps, be unseemly for one who has had many opportunities for observing the influence of Oxford training upon the men who pass from that University to the larger medical spheres of London and Edinburgh, to afford his testimony to that influence.

In the first place, I think it is important to recognise, as Dr. Chambers has pointed out, that there is, properly speaking, no medical school in Oxford, nothing at all corresponding to a Faculty as understood in the Scottish and Continental Universities. In default of this, candidates for the B.M. degree present themselves at large recognised medical schools after securing as many special advantages as are within reach in their University.

First, I wish to enumerate these advantages as they exist; and, secondly, to state my experience for the last fifteen years of the in-

fluence they have exerted upon many of the candidates who have enjoyed them.

It is found, for the most part, that Oxford men who purpose following medicine as a profession pass out through the Natural Science School to their B.A. degree. This, in itself, secures an early acquaintance with several subjects of prime importance in relation to early medical training. Thus, a study of Botany, Chemistry, Natural History, Physics, Comparative Anatomy and Physiology, or of some of these subjects, is commenced in the second year of the undergraduates' course, and a sound basis is thus laid in direct relation to future and more exact study of some of these sciences. Surely, nothing can be better than such a course as this. It simply provides the best preliminary curriculum in the best possible manner for the medical student proper. And when to this special training are added the required attainments in *literæ humaniores*, and the invaluable culture and refinements of academic life, as barely realised anywhere but in the old English Universities, we find, in my opinion, the highest type of candidate for the special study of the medical art.

Such, at all events, is my experience of the men who present themselves from Oxford at the great medical schools. They come, it is true, with little or no practical knowledge, and are, as Dr. Payne points out, much behind the average medical student in this respect. But they come, for the most part, with minds already well-trained, eager to learn, and prepared to acquire and make their own all that has to be taught; and it is simply incontrovertible that they very speedily reach the level of, and in many instances surpass, the rank and file of ordinary hospital pupils.

While I bear this testimony, I am aware that this is not the point now at issue and under discussion in your columns, and I leave to others better conversant with the University to express their opinions respecting it. I myself could never imagine Oxford as a fully equipped medical centre, and have been content to regard its limited number of medical graduates somewhat in the light of a *corps d'élite* who have given a tone and character to the profession wherever they have established themselves.

With the late Sir Henry Holland, I have also believed that "there must always be an aristocracy in every profession". This much, however, I may say, that, with the materials at their disposal, it has appeared to me that the present medical professors have done splendid work, and have well maintained the character of their chairs. As an outsider, I can also testify to the facilities afforded me for study by one of them some years ago.

Whether or not, by more subdivision of their labours, by incorporating the Scientific Fellows of the separate Colleges into a systematic teaching body, working under the professoriate, a more thorough training might be given in various branches of Anatomy and Physiology, I am unable to state. Possibly something beneficial may be achieved in this direction, leaving the larger question of establishing a complete medical faculty for further and more mature consideration.—I have the honour to be, sir, your obedient servant, M.D. EDIN.

London, January 30th, 1878.

PHYSICIANS' FEES.

SIR,—Twenty-six letters and a leading article in the *Times* on "Medical Charges", and as much writing, if not by so many writers, in our *BRITISH MEDICAL JOURNAL* on "Physicians' Fees", ought to produce some fruit. I think it might produce good fruit, if the respective writers would give their names, with a view to further conference. My own sentiments are most in accord with those in your pages who signed themselves "F.R.C.P." and "F.R.C.S."; but I do not think their suggestions sufficiently deep. The root of the matter is, that "consultations" ought to be improved in character. The old-fashioned mode of conducting a consultation is not suitable to the present condition of medical science. Improve the article, and the improvement in price will follow.—I am, yours faithfully,

Derby, Jan. 29th, 1878. WILLIAM OGLE, M.D., F.R.C.P.

P.S.—If the writers of the several letters, or any who agree with them, will favour me (in confidence) with their names, I will arrange, if practicable, for some further action on the subject.—W. O.

SIR,—Much has been written upon this subject of late, but one important point has not been touched upon, namely, the duty of the consultant to the consultee. It appears to me that, when a patient is sent to a consultant for an opinion by a general practitioner, the prescription and any hints as to treatment ought to be forwarded to the regular attendant, and not given to the patient; for it is no consultation if the consultant gives the prescription to the patient, tells him to

take it to some pet chemist, and to come to him again after a time. I have sent patients to men of standing in London, and requested them to send me their opinion of the case, together with their prescription, but from their acting as above have lost hold of my patient for a time. In the law things are managed better, and the Q.C. only gives his opinion through the solicitor sending the case to him.—I am, etc.,
February 4th, 1878. L.

EXTENSION IN HIP-JOINT DISEASE.

SIR,—In his letter in the BRITISH MEDICAL JOURNAL of January 26th, Mr. T. Holmes disputes the claim of the American surgeons to priority in the use of weight-extension as a remedy for acute pain in hip-joint disease, and observes: "I have used and seen used this method of treatment for, I should say, at least twenty-five years. I claim no originality in the method, for it was certainly used by my predecessor at the Hospital for Sick Children, Mr. Athol Johnstone; and in Mr. Marsh's paper, to which Mr. Adams gives a reference, there is a quotation from Sir B. Brodie's first edition very clearly recommending it." I trust you will allow me to make the following remarks in reply.

The quotation in Mr. Marsh's paper (*St. Bartholomew's Hospital Reports*, vol. ii, page 153. London, 1866), above referred to, is as follows. Speaking of weight-extension, Mr. Marsh observes: "This appliance was recommended by Sir Benjamin Brodie in the first edition of his well-known work on *Diseases of the Joints* in the following terms: 'I will not say that the effect of such a continuance of extension (by the weight) is to prevent the shortening of the limb altogether, but I am satisfied that it will, in many instances, render this less than it would have been otherwise; at the same time preventing, or very much diminishing, the excessive aggravation of the patient's suffering, with which shortening of the limb is usually accompanied.'"

In the fifth edition of Sir Benjamin Brodie's work on *Diseases of Joints*, published in the year 1850, *i. e.*, thirty-two years after the first edition, the only passage I can find referring to the use of weight extension in joint-diseases is the following, at page 139. "In some cases where, the disease being in an advanced stage, there seemed reason to apprehend a displacement of the head of the femur with a retraction of the limb, I have endeavoured to prevent it by the application of a moderate constant extending force. For this purpose, a leather strap was applied above the condyles of the femur, having a string attached to it, passing over a pulley fixed, at a moderate height, to the lower end of the bedstead, and supporting a light weight; the pelvis being at the same time fixed by a strap to the middle or upper end of the bedstead. This, in some instances, seemed to relieve pain; and I am inclined to think that it was useful otherwise, by counteracting the muscles, which tended to draw the limb upwards. However, it almost always happened that something occurred to prevent the experiment being fully and fairly tried; and all that I can venture to say respecting it is, that it may be worth while, in certain cases, to give this mode of treatment a further trial."

In the collected works of Sir Benjamin Brodie, by Mr. Charles Hawkins, published in 1865 (vol. ii, page 151), the same paragraph appears, in precisely the same words, clearly showing that the subject had not at any time further attracted the attention of Sir Benjamin Brodie.

It is quite clear, from the above quotations, that Sir Benjamin Brodie did not employ weight-extension for the relief of acute pain in hip-joint disease, but with the view of preventing contraction and dislocation. It appears remarkable, however, that, when the weight-extension "in some instances seemed to relieve pain," it never occurred to such an acute observer as Sir B. Brodie to employ the same means in the cases of excruciating pain, with involuntary startings of the limbs, etc., described in his work—as in Cases Nos. 14, 31, etc.—cases in which, according to late experience, it would probably have been eminently successful.

Sir Benjamin Brodie (*op. cit.*) speaks of the impossibility of applying any mechanical means to ensure absolute rest in acute inflammation of a joint, as the pressure of a bandage cannot be borne; and observes: "The pain which the patient experiences on every movement of the limb is a sufficient guarantee that he will use his best endeavours to keep it in a state of repose. These may, however, be assisted by prescribing the maintenance of the recumbent posture, and by laying the affected joint on a waterproof pillow, partially distended with air or water, which, by bulging forward on each side, will give sufficient lateral support to counteract, in some degree at least, the ill effects produced by an involuntary starting of the limb." This, together with local and general antiphlogistic means, was the treatment adopted by Sir Benjamin Brodie in cases of acute diseases of the joints; and I do

not find any mention of the application of weight-extension in the treatment of any of the numerous cases recorded in Sir B. Brodie's works.

Mr. Holmes does not claim more for himself, and his predecessor Mr. Athol Johnstone, than to have employed weight-extension during the progress of hip-joint disease; without any special reference to its power of relieving acute pain, and thus superseding the necessity for the severe antiphlogistic treatment of our predecessors. This, which we must admit to have been a great discovery, undoubtedly belongs to the American surgeons; and the first published account of the practice, and its explanation of relieving pain by overcoming reflex muscular contraction, and thus preventing interarticular pressure, is, so far as I am aware, that given by Dr. Davis of New York, in his work *On Conservative Surgery*, 1855, alluded to in my paper read at the Manchester meeting, and published in the JOURNAL of January 5 h.

Whilst Sir Benjamin Brodie thought weight-extension might be useful in preventing contractions and dislocations, we know that it was employed more than thirty years ago for the straightening of contracted joints. In my work on *Club Foot*, second edition, page 401, the case is described of a gentleman who consulted me, in 1852, for contraction in both knees, and who had been subjected to a treatment by weight-extension ten years previously, *i. e.*, thirty-five years from the present time; a weight of twenty-five pounds being applied to each leg.

I employed weight-extension successfully in a case of contraction after hip-joint disease, in the year 1849, in a young gentleman, in whose case the late Mr. J. H. Green recommended that weight-extension should be tried.—I am, sir, yours, etc.,

WM. ADAMS.

Henrietta Street, Cavendish Square, January 29th, 1878.

SAYRE'S TREATMENT OF SPINAL DISEASE.

SIR,—The time for discussion on Mr. Berkeley Hill's interesting spinal cases treated on Dr. Sayre's plan, at last Friday's meeting of the Clinical Society, was so limited that I had no opportunity of informing the members present, that this so-called newly introduced method of suspension by the gallows has been largely employed, for many years past, in several orthopædic institutions on the Continent; and that I saw last spring nearly the same kind of apparatus used by Dr. Klopsch, Professor of Surgery at Breslau in Prussia. Here a strong horizontal beam is supported at its middle on a vertical mast fixed in the ground, and from the two extremities of the former depend exactly the same kind of gallows as is attached to the apex of Dr. Sayre's tripod. The patient's head having been fixed in the way now well known here, the cord is shortened till the toes can only just touch the ground. The patient is now told to walk round and round, the horizontal beam being made to turn on a pivot. There are usually two or three cross beams, so I have seen as many as six patients walking round simultaneously, as best they could, on tiptoes, while their spines were being extended by the weight of their bodies. Complete suspension in the air is also employed very often. Even the shoulder-loops are quite identical with those now said to have been invented by Dr. Sayre. I saw a similar apparatus and treatment at the Orthopædic Institution of Dr. Schilbach, at Leipzig. This gentleman is a *privat-docent* of, and has an orthopædic out-patient's department in connection with, the University of Leipzig. It is a curious fact that, in Germany, the gallows is called Glisson's swing (*Glissonische Schwebel*), after Francis Glisson, an English physician, who wrote a book *De Rachitide*, a second edition of which appeared in London in 1660. He gives, at page 368, a description of the swing, with an illustration, and explains the principle on which it is used. I have no wish to depreciate the great debt of gratitude we owe to Dr. Sayre for the introduction of the plaster of Paris bandage for spinal disease, especially Pott's disease; but I do not think it is quite fair that no acknowledgment has been made of the real inventor of the suspender, or of the fact of its having been long in common use in Germany.—I remain, yours obediently,

BERNARD ROTH, M.D., M.R.C.S.Eng.

48, Wimpole Street, W.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, February 1st, 1878.

Hydrophobia.—In answer to Lord C. Hamilton, the CHANCELLOR of the EXCHEQUER said that the attention of everyone had been directed to the increase of hydrophobia and to the number of stray and dangerous dogs, and that the Government were considering the subject with a view to legislation.

Monday, February 4th.

Medical Officers of Health.—Colonel NAGHTEN asked the President

of the Local Government Board whether he had considered the desirability, with a view to the better carrying out of the Public Health Act, especially with regard to the suppression of nuisances, of making it compulsory to appoint the medical officers of health in all cases for unions or other large areas, instead of, as is now sometimes the case, for parishes only.—Mr. SCLATER-BOTH said he did not intend to propose any change in the law on that subject; but the Local Government Board had always encouraged a combination of local authorities in respect to the appointment of these officers, and it would continue to do so.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL SERVICE.—List of army medical candidates, who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley, February 1878.

	Marks.		Marks.
1. Keayes, W.	4930	13. McLaughlin, H. J.	3330
2. Young, P. G.	4553	14. Power, E. R.	3316
3. Crofts, F. W.	4573	15. Donovan, H. L.	3329
4. Hemish, R. T.	3956	16. Leader, N.	3156
5. Parker, W. A.	3900	17. Tidbury, J.	2913
6. Green, A. P.	3869	18. Lyle, A. A.	2842
7. Landy, A. R.	3865	19. Clinch, J. V.	2784
8. Anderson, J.	3850	20. Conolly, J.	2742
9. Pedlow, J.	3850	21. Charlton, H. A. H.	2542
10. Routh, J. J.	3350	22. Barrington, H. W.	2496
11. Mulrennan, J.	3348	23. O'Neill, S. L.	2495
12. Grier, H.	3335	24. Quarry, C.	2454

INDIAN MEDICAL SERVICE.—List of Indian medical candidates, who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley, February 1878.

	Marks.		Marks.
* 1. Thomson, S. J.	5008	11. Tully, E.	4950
2. Campbell, R. N.	5000	12. Davidson, D. C.	3685
3. Brander, E. S.	4972	13. Bennett, C. H.	3942
4. Manser, R.	4880	14. Peacocke, J. C. H.	3890
5. Chatterjee, F. C.	4719	15. Nariman, K. S.	3875
6. Emerson, G. A.	4565	16. Sargent, A. F.	3697
7. Adey, H.	4500	17. Thornhill, W. H.	3615
8. Koyaji, B. N.	4290	18. Robinson, R. H.	3486
9. Street, A. W. F.	4130	19. Reporter, M. E.	3327
10. Jervis, H. P.	4065		

* Gained the Herbert Prize and the Martin Memorial Medal.

NAVAL MEDICAL SERVICE.—List of naval medical candidates, who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley, February 1878.

	Marks.		Marks.
1. Porter, J.	4670	6. Charlton, G. R. D.	3445
2. James, C.	4015	7. Bell, G. W.	3350
3. Loane, Th.	3775	8. Jeans, F. A.	3160
4. McLeod, A. W.	3620	9. Reid, A. W. W.	3145
5. Triggs, J. B.	3544		

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

ACTION AGAINST A MEDICAL OFFICER OF HEALTH.

SIR,—In your comments upon the County Court action lately brought against me and the sub-inspector to recover the value of some herrings which we were alleged to have illegally seized, you state "the defendants were represented by Mr. Proud, but whether or not he was clerk to the local authority is not stated, and we do not, therefore, know whether or not Mr. Manson was properly supported by his board". Kindly permit me to explain that Mr. Proud is not the clerk to the local authority, but was employed by them; and further, that I am happy to state that I have always received every consideration and all necessary support from the board. With reference to the risk at which medical officers of health carry on their duties, I may mention that I was advised that there was a statutory defence to the action brought against me: in fact, a plea that, as I was acting in my official capacity, no action would lie against me. However, it was much better for the case to be tried on its merits than to have even the appearance of shirking inquiry. The plaintiff supported his case by witnesses who said they had eaten some of the fish. I am afraid some people will eat anything; and, if such evidence be of any weight, a conviction for selling unsound food will be difficult to obtain.—I am, sir, your obedient servant,

R. T. MANSON, Medical Officer of Health

for No. 1 District, Auckland Union Sanitary Authority.
Howden-le-Wear, February 4th, 1878.

PUBLIC HEALTH MEDICAL APPOINTMENTS.

FRANK, D. Edgar, L.R.C.P., appointed Medical Officer of Health for the Brownhills (Staffordshire) Local Board District.

POOR-LAW MEDICAL APPOINTMENTS.

ELSON, Frederic, L.R.C.P., appointed Medical Officer and Public Vaccinator to the Whitwell District of the Workop Union, *vice* H. E. Walker, M.R.C.S., resigned.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members on January 31st, 1878.

Cottle, Ernest Wyndham, M.B.Oxford, 3, Savile Row
Duncan, James Matthews, M.D.Aberd., 71, Brook Street

MEDICAL VACANCIES.

The following vacancies are announced:—

BRECON INFIRMARY.—Resident House-Surgeon. Salary, £100 per annum, with apartments, attendance, fire, and lights. Applications to be made on or before the 11th instant.

CASTLEBLAYNEY UNION.—Medical Officer to Dispensary District. Salary, £125 per annum, exclusive of emoluments as Sanitary Officer, Registration and Vaccination Fees. Applications to the 14th instant.

CLIFDEN UNION.—Medical Officer for the District comprising the Islands of Inishboffin and Shark. Salary, £90 per annum, exclusive of Registration and Vaccination Fees. Applications to the 13th instant.

DENTAL HOSPITAL OF LONDON.—Dental Surgeon. Applications to be made on or before the 13th instant.

GENERAL INFIRMARY, Hertford.—Medical Resident and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before March 6th.

GENERAL INFIRMARY, Northampton.—Surgeon. Applications to be made on or before the 27th instant.

HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Resident Medical Officer. Salary, £100 per annum, with board, residence, etc. Applications to be made on or before the 14th instant.

HOSPITAL FOR WOMEN, Soho Square.—House-Physician. Applications to be made on or before 12th instant.

IPSWICH BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.

LINCOLN LUNATIC HOSPITAL.—Resident Medical Superintendent. Salary, £150 per annum, with board, lodging, and washing. Applications to be made on or before the 16th instant.

LIVERPOOL ROYAL SOUTHERN HOSPITAL.—Two Honorary Surgeons. Election in February. For particulars, apply to Honorary Treasurer.

METROPOLITAN FREE HOSPITAL.—Assistant Physician. Applications to be made on or before the 12th instant.

NARBERTH UNION.—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

NORTHAMPTON GENERAL INFIRMARY.—Physician. Applications to be made on or before the 20th instant.

QUEEN'S UNIVERSITY IN IRELAND.—Examiners for 1878 in the following subjects, at the salaries stated. Medicine, £100; Surgery, £100; Midwifery, £75; Materia Medica, £75; Medical Jurisprudence, £75. Applications to be addressed to the Secretary, at Dublin Castle, up to the 15th instant.

ST. GEORGE'S HOSPITAL.—Surgeon and Assistant-Surgeon. Applications to be made on or before the 13th instant.

TOBERCURY UNION.—Medical Officer of Coolaney Dispensary District. Salary, £120 yearly, with Registration and Vaccination Fees. Applications to the 11th instant.

WESTMINSTER HOSPITAL.—Aural Surgeon and Assistant Surgeon. Applications to be made on or before the 26th instant.

WESTERN GENERAL DISPENSARY.—Honorary Surgeon. Applications to be made on or before the 11th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*PAUL, Frank T., M.B., MA., appointed Pathologist to the Liverpool Royal Infirmary, *vice* *Rushton Parker, M.B., appointed Assistant-Surgeon.

*HACON, W. E., L.R.C.P., appointed Assistant Medical Officer to the Central London District Infirmary at Highbury.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

FREEER.—On January 4th, at The Lindens, Lozells Road, Birmingham, the wife of *Edward L. Freer, M.R.C.S.Eng., of a daughter.
SKRIMSHIRE.—On January 30th, the wife of *Charles Parnham Skrimshire, M.R.C.S.Eng., of Clydach Yilla, near Abergaveony, of a son.

PRESENTATION.—Mr. Caskie of Largs was recently presented with a massive tea and coffee service, and salver, and a purse of sovereigns, by a number of the residents of Inverkip, Wemyss Bay, and Skelmorlie, at a public entertainment given in his honour.

A CENTENARIAN.—There is at present an old lady residing in Lower Crumpsall, who has attained the age of 103 years. Her name is Jane Pinkerton, and she resides with her daughter, who is 72. She was born at Paisley in June 1774. She went to the north of Ireland, and married in 1798. About thirty-four years ago her husband died.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Kelburne King (Hull). "A Case of Ligature of Carotid and Subclavian Arteries for Aneurism of Arteria Innominate, and Aorta"; Mr. Balmano Squire, "Two Cases of Flat Vascular Nævus successfully treated by repeated Linear Scarifications"; Dr. Althaus, "On Diseases of the Anterior Cornua of the Spinal Cord".

TUESDAY.—Royal Medical and Chirurgical Society, 8 P.M.: Ballot, 8.30 P.M.: Dr. Poore, "Analyses of Seventy-five Cases of Writers' Cramp"; Dr. Broadbent, "On a Case of Amnesia".

WEDNESDAY.—Hunterian Society, 7.30 P.M.: Annual Meeting for Election of Officers, 8 P.M.: Annual Oration by P. L. Burchell, M.B.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

SIR.—Can you inform me if there is an English translation of Bouchut's *Traité des Maladies des Enfants*? and oblige, yours faithfully,

REDLAND.

*. We are not aware that there is one.

MEDICAL EDUCATION OF WOMEN.

SIR.—Dr. Wilson Fox has, in my opinion, opened a question worthy of serious and dispassionate consideration by the British Medical Association. I think few will deny that the loss of such a member to the Association is of more importance than that of any number of half-informed young ladies. When I say half-informed, I speak advisedly, for I could not conceive any English gentleman imparting, or any English lady receiving or studying, the entire curriculum of medicine and surgery. But independently of this narrower view, there is the wider one, whether the British Medical Association, by opening its doors to women, does not thereby encourage them in prosecuting the study of medicine, with its always possible results. It would be out of place here to enter on the effects of such study on the virgin mind. One result alone—that a maiden should acquire knowledge that a matron should not possess—should be sufficient to cause every father and brother to oppose such a perversion of education. We have enough to contend with, in shielding our maidens from the vile influences of "Priests in Confessional" and books of the Besant and Bradlaugh order, without aiding them in studies unbefitting their sex.—I am, sir, yours faithfully,

R. EATON POWER.

Dartmoor, February 1878.

AN article to which our attention has been called in the *Dublin Mail* of the 30th ultimo, upon the Dublin Orthopaedic Hospital, is, in our opinion, open to very grave objections. We trust that the medical gentlemen whose names are therein mentioned had no complicity with the publication of the article in question; and in any case it is to be regretted that the facility should have been afforded for the publication of an article so closely allied to an advertisement, and the particular powers there attributed to the medical officers. Such publications are injurious to the character of the profession, and call for general condemnation.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a Post Office.

SUICIDE OF A STUDENT AT GUY'S HOSPITAL.

SIR.—The suicide of one of the students at Guy's Hospital has caused sincere regret. It is not my purpose to attribute blame to any one, or to try to elucidate the real cause of this sad occurrence. Such a task would not only be difficult, but, I am inclined to think, unjustifiable. At the same time, the public have been led to suppose, from an account which appeared in one or two of the daily papers, that this suicide was due to the disappointment and chagrin caused by the refusal of the authorities to allow the student in question to present himself at the College of Surgeons. Be this so or not, I think much good may arise if the present practice in regard to the signing of schedules at Guy's and some other medical schools is reconsidered. Under the existing arrangements, those who are responsible for these matters delay giving an answer to the majority of students until the last day for sending in the papers to the Royal College of Surgeons. In some instances, this practice is carried to such excess that students have been known to be refused admission to an examination, because they have not been able to get their schedules from the medical school authorities until late in the afternoon. Students are kept in doubt under this system until the very last moment, and then, if the answer be unfavourable, the reaction after the excitement of a prolonged suspense is likely to do much mischief. If the schedules are signed, the evil is only a degree less, for by the time the student has been to the College and made the necessary arrangements with the authorities there, he is practically fit for little. Just let your readers imagine the effect of a student waiting, waiting, waiting for an answer from his teacher from ten o'clock till late in the afternoon each day, and day by day during the last three or four days, before an examination! His precious time is wasted, for how can he pretend to read with this load of anxiety on his shoulders? His temper is ruffled, and his nerves become unstrung. Under such circumstances, the wonder is that many of the students pass at all. If the authorities would only place themselves in the position of the students under circumstances similar to those I describe, a new rule would soon be made. The reform needed is, that the classes for the second College examination should commence quite two months before each examination, and the decision of the lecturer should be announced and a list of those men who are considered fit to be admitted to the examination posted in the hall at least a week before the last day for sending in names to the College of Surgeons. If this alteration were made in the direction I suggest, I am convinced that in the future the probability of a repetition of the sad event recently enacted at Guy's Hospital would be considerably lessened. It is no excuse to say that the authorities are anxious to let as many men up as possible, and hence the necessity of the present system; because, if a student be not sufficiently advanced a week before an examination, for his own sake and in the interest of the school he should be kept back.

Hoping you will exert your influence to put an end to a system which has led to great evils in the past, for by its means teachers are made unpopular, parents are dissatisfied, and students are rendered less able to meet the examiners with confidence and nerve.—I am, etc.,

A FOURTH YEAR'S STUDENT.

T. M.—Under the circumstances, we think the course permissible, proper care being of course taken that the stated limits are not overstepped.

AN APPEAL.

SIR.—I venture to appeal to your readers on behalf of the family of Mr. J. C. White late senior house-surgeon to the Ardwick and Ancoats Dispensary, who was tried, convicted, and sentenced to five years' penal servitude at the last Manchester Assizes, for attempting to procure abortion. However indignant we may feel that a member of our profession should have been guilty of such an offence, we surely must all sympathise with the wife and children, who are thus suddenly left, through no fault of their own, in a state of utter destitution. A subscription-list has been opened, with a view to affording temporary assistance to Mrs. White until she is able to obtain some employment. The Rev. John Watson, Rector of St. Jude's Mill Street, Ancoats, Mr. Cullingworth, and myself, form a committee to receive contributions and to see that the funds are properly applied. We shall be greatly obliged to any friends who will help us. Post Office orders may be made payable to me at the Branch Office, Downing Street, Manchester.—I am, sir, yours faithfully,

T. N. DEAN, Consulting-Surgeon to the Ardwick and Ancoats Dispensary.

37, Shakespeare Street, Ardwick, Manchester, February 6th, 1878.

P.S.—Without wishing in the least degree to palliate the crime, I may mention incidentally that the young woman has received no injury, and that at the time of the trial she was still pregnant of a living foetus. I may also state that there was no evidence to show that White had any personal reasons for trying to induce abortion. He appears to have had no other object in view than that of helping a married acquaintance to escape the consequences of an improper intimacy with his servant.

T. N. D.

"A SUFFERER" should personally consult one or more competent members of the medical profession.

BOOKS OF REFERENCE.

SIR.—To a "Member" asking for two good practical reference books, I would recommend Flint's *Practice of Medicine* (Lea, Philadelphia) and Murphy's *Middlebury*.—Your obedient servant,

WM. VANDREY LUSH, M.D.

Weymouth, January 30th, 1878.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

INSURANCE INQUIRIES.

SIR,—Allow me to inquire through your columns what the profession ought to do, or does, in regard to a new system of inquiries made by insurance offices, especially the smaller ones, as to the nature and duration of the fatal disease of claimants—not only such as we return to the Registrar-General, but also whether there were any other disease, "its name and history"? "If you do not know how long the fatal disease existed, how long do you think it did?" Also, "whether you have any suspicion that irregular habits had anything to do with the illness, or with its fatal termination". As a consultee, it rarely happens that I am called on to sign certificates myself, but they are sent on to me from the medical man in attendance whom I have met, and, looking upon them as catch questions, I have myself ignored, and have advised others to ignore, them; merely to state what was the fatal disease, and the duration of the second or final cause of death; also to make a note of the office requiring such answer. Suppose the doctor dates a diseased heart from an attack of acute rheumatism twenty years before, and the company's own referee has overlooked it, his own doctor, never consulted about insurance, is forced into the position of instigating the dispute of a policy. Again, about intemperate habits. To sign an open certificate that they have hastened death, or that you suspect so, when perhaps the drinking has been secret, and indignantly denied by patient and friends, when also a few months before some office has taken the life without inquiry as a first-class one—to do this would be, I hold, simply suicidal on the part of a doctor; to ask it, ought, I think, to deprive any office doing so of any medical support or recommendation.—Your obedient servant,
Leicester, February 3rd, 1878.

JOHN BARCLAY, M.D., F.R.C.P.

DEPORTED PAUPERS: THE CASE OF MICHAEL KENNY.

SIR,—In an article headed "Deported Paupers", in the JOURNAL of January 19th, you give an account of the circumstances connected with the death of a pauper named Michael Kenny, taken from the Liverpool Workhouse on November 16th, 1877, for removal to Ireland, which is erroneous in several important details. As I am the medical officer concerned in the case, and your strictures reflect strongly on my conduct in consenting to his removal, I hope you will allow me space to put the matter before you in its proper aspect.

Michael Kenny, aged 35, was admitted to the Liverpool Parish Infirmary on October 10th, 1877, and, on examination, was found to be suffering from tubercular deposit to a limited extent in both lungs. During the time he was in hospital he was not confined to bed, nor had he an acute symptom during his stay; on the contrary, he was actively engaged in assisting the trained nurse in carrying food, medicines, etc., and this of his own accord. He was again examined, at the request of the removal authorities, on November 10th; and there being no action in the tubercular deposit and his state being the same as on admission, I signed the order for his removal. The night of his removal was neither wet nor stormy, as proved by the evidence of the removal officer and the log of the ship. He was a steerage and not a deck passenger; and if he exposed himself during the passage it was his own act, for it was proved that the ship affords covered space for about one hundred and fifty steerage passengers, and there were only about forty or fifty on this particular night. With regard to the removal, the words of the coroner, Dr. White, are as follow: "They" (the removal officers) "appear to have done so with humanity." When leaving the Liverpool Workhouse, he had flannels (singlet and drawers) given to him, and was warmly clad. On arriving at the South Dublin Union, he was asked by the authorities there if he had any complaint to make, and answered "No." He then took his own discharge, and nothing further was heard of him until November 21st, when he was admitted to the South Dublin Union, "suffering from bronchitis." You will thus see that he was not "so ill that he was at once removed to the workhouse infirmary". There is an interval of four clear days, during which there is nothing known as to his actions or whereabouts. On his admission to the Dublin Union, it was proved that he was poorly and insufficiently clothed. The presumption is, that he pawned his clothes for food or drink, or both.

In your article you speak of his "weak and wasted frame": now, when he left this, he was neither weak nor wasted, but in a fairly nourished condition, and fit to undertake the journey. As to his being "unfit to be removed to the healthy wards" while in the Liverpool workhouse, this was explained at the inquest, but not reported in the newspapers. It is a rule with us in this workhouse to admit all paupers suffering from phthisis, no matter how incipient the stage, into the wards of the hospital; so that, not being free from disease, he was unfit to be removed to the healthy wards. There was not sufficient disease to interfere with his removal to Ireland; and had he asked for it, I would have given him his discharge to follow his occupation, that of a waiter.

As to Kenny's condition from the 21st November until about a fortnight before his death, when he came under the charge of Dr. Nicholls, there was no evidence. I think it is conclusively shown by the above facts that the deceased did not suffer by the act of removal. While in the Liverpool workhouse, his diet differed from that of the healthy inmates only in the addition of a pint of milk daily.—I am, sir, yours truly,
WILLIAM IRVINE.

CLIMATE AND CIRCULATION.

SIR,—In the quarterly report on the health of Dublin, I see there are one hundred deaths set down to circulatory diseases. The proportion seems high, and tends to heighten my suspicion that the natives of comparatively mild western climates have slighter hearts, arteries, and veins than people of countries where the vicissitudes of temperature are more sudden and pronounced. Can any of your readers give instances from personal knowledge on the subject? My own experience of a weak heart is, that it gets on much better near the west coast of England or Wales than anywhere inland or eastward. I should much like to know if there are any medical statistics published bearing on this point.—Yours faithfully,
January, 1878.

C. L. B.

MR. GARNER (Birmingham).—We believe that arrangements will probably be made before the end of the year for carrying out the object which Mr. Garner suggests. His letter has been handed to the General Secretary for the information of the JOURNAL and Finance Committee.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MEDICAL REPORTS ON OFFICIAL EMPLOYERS.

SIR,—I should be glad of your opinion on the following case. A. B. has had under his care for some years a patient who is clerk in an insurance office. On the patient's return to work after a temporary absence from ill health, certified to by A. B., he is seen, at the request of the authorities, by C. D., the medical officer of the institution. C. D. writes to A. B. in the following terms: "I should be much obliged if you can give me any particulars you can as to the state of health of Mr. —, a clerk in the — Office. As medical officer to that office, I have been requested to see Mr. — in reference to the state of his health and fitness for work, and he informs me that he has been for some years under your care. I shall be particularly obliged for your opinion as to his health previous to his contracting the disease from which he is now suffering."

A. B. replies, and sends a report and his opinion of the patient's state of health. He then asks to whom he is to look for his fee, adding that as the office is to benefit by the information, he thinks they should pay it (not the patient). In reply, C. D. offers to send the fee himself! adding, "At the same time I would mention that the questions I asked were for my own information—as one medical man from another, and as I am in the habit of sending and receiving on the terms that are usual between members of the profession."

A. B. of course declines to accept anything from C. D., but protests against the view C. D. takes, pointing out that the information is only valuable to the office, and not in the least to C. D. personally. I should be glad to know what the ethical rule is in similar cases.—Yours faithfully,
HENRY W. KIALMARK.

66, Princes Square, January 30th, 1878.

* The office ought to pay the fee; and C. D. is not, we think, justified in asking the desired information from A. B. on any other terms.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; The Western Mail; The Bath Chronicle; The Bolton Chronicle; The Lincolnshire Chronicle; The Chippenham Chronicle; etc.

COMMUNICATIONS, ETC., have been received from:—

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AN ADDRESS ON SOME POINTS OF SCIENCE AND PRACTICE CONCERNING CANCER:

Delivered at the Annual Inaugural Meeting of the Midland Medical Society at Birmingham, on November 9th, 1877.

By JOHN SIMON, C.B., D.C.L., F.R.S.,

Consulting-Surgeon to St. Thomas's Hospital, and formerly the Medical Officer of Her Majesty's Privy Council.

MR. PRESIDENT AND GENTLEMEN,—Let me, in the first place, return you my best thanks for the very kind reception which you give me. If I came before you to-night as a great discoverer, conscious of having some most important new knowledge to communicate which would change the aspect of our science, I might beyond measure congratulate myself on an opportunity (which not all great discoverers can obtain) of unfolding my valued acquisition before a large and cultivated audience. But, having no such budget to open, and feeling therefore much diffidence before this assembly which I have to address, I must remind you of your own responsibility for the flattering invitation which brings me here. In answer to that invitation, I have undertaken to put before you my line of thought on a subject which I believe you will not deem unimportant; but I fear that my treatment of the subject can hardly be such as to justify my presence here, and in proportion as this shall be the case I would beg leave to count upon your indulgence.

The reflections which I propose to bring before you relate to the present state and prospect of our knowledge of Cancer. And my choice of the subject of cancer has been determined by two motives: one, that I personally feel, and have always felt, a particular interest in the subject; and the other, a consideration which I will hereafter mention. I do not apologise to you for having *written*, and intending to *read*, what I have to say on my subject; for, though I know it to be pleasanter bearing, as well as speaking, when the speaker has at most only to avail himself of slight notes, the subject of cancer is so very large, and offers so many sidings for digression, that, unless I strictly adhered to manuscript, I could not be reasonably safe in regard of time.

Most that I have to say will relate to the causes and treatment of cancer; but it may be convenient that, in introduction, I refer, though very briefly, to two important movements of opinion which there have been within the last twenty or thirty years: first, with regard to the natural succession of facts in the evolution (if I may so term it) of a case of cancer; and, secondly, with regard to the intimate anatomy of cancerous growths. And, before I start, let me say that throughout my argument I shall always use the word "cancer" in its old-fashioned surgical sense, intending it to cover all the various tumours and ulcers which we familiarly class as *malignant*; and the word "tumour", which often may include "cancer", I use restrictedly, in its pathological sense, as meaning only *tumour by process of growth*.

1. The men who within our times have theorised on the Evolution of Cancer, have equally had before them for explanation certain broad facts in the natural history of the disease. They have seen that the tendency of persons to suffer cancer runs with marked excess in particular families, or, in other words, is in a great degree hereditary. They have seen that the natural course of a cancer, left to itself, is to pass into indefinitely extending processes of local destruction, which involve such flux of organic material as must sooner or later exhaust the general strength, and end the life, of the patient. They have seen that often before this course, as regards one cancer, can complete itself, other cancers are making progress in other parts of the patient's body, to the more rapid detriment of his life; or that, at any rate, after his death, other cancers, more or less advanced, will generally be found in his body. And, not least, they have seen that surgical removal of cancer, whether by knife or caustic, is in general of no effect to cure the patient; often because of the just mentioned presence of the disease in various other parts of the body; often, also, because the disease recurs in or near the place of removal.

The older cancer-theory of our times—the theory which was in full bloom some twenty years ago, and is even now not quite extinct, inter-

preted those facts to about the following effect. It conceived the patient to be *ab initio* the subject of a form of general ill-health or cachexia which disposed his entire body to form cancer, just as the entire body of a person incubating small-pox is disposed to form variolous pustules. His state before the cancer showed itself was a state of general cancerous tension. When a solitary cancerous tumour (say a skirrhous breast) came under surgical notice, it was regarded but as the partial effect of a diffused cause, the outward and visible sign of a tension to which it gave partial vent; and the many cancers, when they were seen, in lymph-glands and various other organs, were but the more perfect utterance of that original dyscrasy.

In this theory there was, as we now know, a large admixture of wrong inference. For the better theory which is now generally accepted in its stead, our profession has been mainly indebted to the staff of the Middlesex Hospital; in the first place, to Mr. Septimus Sibley's most instructive paper of pathological statistics, published in 1859, from the experience of the cancer-wards and deadhouse of the hospital, to which he had then recently been house-surgeon and registrar; and afterwards to the admirable practical teachings (too soon silenced by death) of the late Mr. Charles Moore and the late Mr. Campbell De Morgan, surgeons of the hospital.

The amended theory of cancer recognises no cancerous cachexia except such general ill-health as gradually results from the progress of cancer. It appeals to the fact familiar to us all—familiar even in a degree which often in a particular point of view makes the experience painful to us, that the person who comes to consult us with a cancer, a person whom we may at once see to be doomed to death within a year or two, is often to all appearance in rude general health. The theory does not necessarily pretend to explain the origin of the local disease which in such a case is brought to our notice; but, starting from that as fact, it argues what must result from it. Given (it says) one primary tumour, all other facts of the case follow from it by logic of humoral sympathy; just as, in the story of syphilis, secondary and tertiary consequences need only the one hard chance to account for them. The cancerous cachexia, like the syphilitic cachexia, is but an affair of *progressive infection*; essentially by the juices of the body—the lymph and blood, but sometimes also accidentally in other ways; an affair only of infection, of ever-widening infection, from the one first established focus of disease. How that first focus came to be, and how it came to have its wonderful endowment of infectiveness, are questions which must be separately argued; but meanwhile (says the theory) let us frankly recognise that, where our cancer-patients show certain general signs of disturbed health, presumably this "cachexia" is the effect, not the cause, of the cancer.

II. Of late years, too, there has been change in the point of view in which pathologists have regarded the Anatomy of Cancer. Thirty years ago, cancer was supposed to be a specific new bodily texture, having (as cartilage or muscle has) an organisation proper to itself in contrast with other textures, and proper to it in all its forms. In those early days of modern histology, not all men who had picked up a smattering of Schwann were competent to understand the real physiological significance of his doctrine: and many a microscopist of those days talked of "cancer-cells" as he talked of nerve-cells and fat-cells; professing that, by the visible presence or absence of these characteristic cells which he described, every tumour would declare itself malignant or non-malignant. This (in the sense in which it was meant) was an absurd twist to be given to pathology; and I remember that even in 1847, in the first pathological lecture which I gave at St. Thomas's Hospital, I ventured to raise my voice against it. From across the North Sea, however, there was then happily beginning to be heard a voice far stronger than mine; and Virchow, rapidly laying the foundations of his now well known system of textural pathology, soon consigned to the limbo of vanity those mare's-nest "cancer-cells" of the too easily satisfied preceding decennium. The profounder and permanent work which since that time has been done in the anatomy of cancerous and other tumours is of really immense amount—immense, even if we regard only the contributions which have been made to it in the German language; but even yet it is far from complete, and the generalisations to which at present it seems to point must of course be deemed subject to correction by further contributions as they come in.

It is impossible that on this occasion I should attempt to do justice in detail to even any of the more finished sections of that immense anatomical labour; and I will only venture to describe in a few sentences what, up to the present time, seems to me their essential outcome. It seems that cancers have not, as was pretended, any one structure common to them all; that, on the contrary, different species of cancer have structures as dissimilar as the structures of bone and muscle. One principle of similarity does, indeed, apply to them all;

not the principle of likeness *per capita*, but the principle of likeness *per stirpes*. Each primary tumour has characters impressed on it, and for the most part very emphatically impressed, by what we may call its particular local parentage. The different species represent different textural origins; each texture which starts a primary cancer having, so to speak, a cancer proper to itself. Mucous and cutaneous surfaces and involutions, connective tissues, pigment-tissues, bone and periosteum, muscle-substance, lymph gland, nerve-substance, and so forth: each has its own distinctive way or ways of growing primary cancer; and, as we study the whole range of cancerous tumours, from skirrhous to glioma, we seem to see that the growth of each makes itself only gradually divergent from the normal growth-type of the texture which it represents. And as each sort of primary cancer expresses in this way more or less clearly the organ which started it, so, of course, it is in intimate structural affinity with the non-infective tumours of the same organ; and I believe that the best histologists, when they contemplate the first textural beginnings of a cancer in any affected organ, see only such simple signs of textural overgrowth as might equally be the beginnings of a non-infective tumour.

In a certain sense, however, though a sense widely different from that of the doctrine of thirty years ago, we may still say that the various sorts of cancer have morphological characters in common; but the likenesses to which I here refer are likenesses rather of expression than of feature. Thus, for instance, it seems general to cancers that the overgrowing textural elements of which they primarily consist do not develop into ripe texture, but remain more or less immature; and that in some cases they exhibit a marked reversion to very early embryonic type. It seems also general to cancerous, as compared with non-cancerous tumours of respectively the same textural parentage, that, as they grow, their first textural type soon becomes obscured: on the one hand, by the crowding of forms which, in proportion as the process is vehement, will more and more be immature or embryonic; and on the other hand by evidences, which are sometimes extreme, of the tendency of the new growth to degeneration. On the whole, then, the knowledge which anatomy hitherto contributes to the explanation of cancer is but indirect, and rather negative than positive in its bearings. The anatomical forms explain nothing in regard of the property of infectiousness which is associated with them, and which, as I will hereafter show, constitutes the real puzzle of the disease. The anatomical forms are matters of mere local accident; but the infectiousness of the cancer represents its very cause.

III. As regards the extremely difficult subject of the Causes of Cancer, it may, I think, be said that of late years we have come to estimate more fully the nature of some of the problems which have to be solved; and that, in consequence, some definite lines of study have begun to suggest themselves as tending, directly or indirectly, to throw light on the origin of the disease. Little as this progress may seem, it is, I think, not to be despised; and those who are studying the ætiology of cancer may derive the greatest encouragement, as also, I think, some most instructive suggestions, from a consideration of the wonderful advances which during the last dozen years have been made in the ætiology of tubercle.

1. A first and very strongly marked ætiological character of cancer is its preference for particular lines of hereditary succession. Superficially, it may appear that cancer in this respect only follows the lead of the non-cancerous tumours, for they also tend to run in family lines; but, on fuller inquiry, it seems little less than certain (at least so far as some of the best known forms of cancer are concerned) that cancer and the non-cancerous tumours are hereditary in two different senses. In the non-cancerous tumours, the hereditary influence seems to be the true and entire cause of the phenomenon; whereas, in some of our best known types of cancer, it seems only or chiefly to supply that part of the causation-compound which we familiarly call by the name of predisposing conditions: a distinction which, our studies of tubercle tend to show, may be one of most critical importance.

I have said that the hereditariness of the non-cancerous tumours, as compared with that of cancer, seems to be a simple matter. The non-cancerous tumours, in their most characteristic forms, belong, I believe, to the same pathological category as supernumerary toes and fingers; that is to say, they represent the same sort of idiopathic fault in the embryonic antecedents of the animal. They are local quantitative "monstrosities". True, they may not be ostensibly congenital, as the toe or finger is; but, though a part have not at birth any ostensible pleonasm of texture, not the less it may have in reserve the endowment which will afterwards evolve such pleonasm, a waiting-power like that with which the sexual organs remain undeveloped for the first sixth or seventh part of life; and the growth of the tumour, perhaps not becoming manifest till years after birth, illustrates, I believe, when at last

it comes, the deferred exercise of a congenital endowment. As to this sort of anomaly, it can be no wonder that, amid the infinitely complex movements of force and matter which fulfil the scheme of embryonic development, sometimes this or that molecule divides itself not quite normally, or sometimes this or that molecule drops ever so little out of line, or sometimes there occurs unduly this or that divergence, or this or that confusion, of molecules. It is easy to conceive that, in immeasurably small errors of this sort, geriminal antecedents may establish themselves for even the most startling malformations which adorn our museums; and, among such supposed molecular irregularities, the simplest we can imagine would be that, in the distribution of matter and force among so many millions of molecules, sometimes there results here or there a supernumerary or superpotential molecule. And, as regards the hereditariness of such errors, nothing is more certain as fact than that, when once the monstrosity exists, it is apt to be fixed and appropriated as part of the transmissible type of the animal. It is not only that the tendency to form (as the case may be) the supernumerary digit or the hypertrophic tumour runs in very marked degree in lines of hereditary succession, but that in both cases we sometimes see the local endowment cling to its place of manifestation with an obstinacy which is as characteristic as inheritance,—we see, namely, that the amputated supernumerary digit, or the cut-out non-infective fibroma of skin, tends to reproduce itself locally, even again and again, as if in local restitution of a normal type.

The marked hereditariness of cancer is certainly not to be explained on hypotheses as relatively simple as those; and I do not think it to be yet proven that the hereditariness of cancer is (except sometimes in certain accidental respects) an attribute of the spot where the disease occurs.

2. A second ætiological character of cancer is the tendency which it apparently has, in some of its forms, to found itself (so to speak) on certain already-existing local disorders. See, for instance, as regards epithelioma of the skin, the very numerous cases in which the chronic raw of a common mechanical irritation, having existed perhaps on and off for years as a mere inflammatory phenomenon, has at last (as the phrase is) "taken on malignant action". And, in the same point of view, as regards the terrible liability of the female sexual system to cancer, and the conditions which make womb and breast such apt soils for the cancer-eventuality, see, and especially at the one critical period of life, how vast a quantity of common irritative unhealthiness is suffered by the two organs as incidental to their decline of function.

It is worth notice that, in this ætiological direction, cancer seems to diverge considerably from the non-cancerous (hypertrophic) tumours; for, in the pathology of the latter, it can hardly be said that any important part is played by circumstances of local irritation. It may, no doubt, be said that, in the vegetable kingdom, tumours on various parts of plants are found, in a very extensive range of cases, to arise where there is such irritant action as would in animals produce inflammation. There are the well-known and very numerous cases in which insects or acari give occasion to the tumours, on leaves and elsewhere, which are known by the name of "galls": cases, indeed, in which the animal avails itself of the plant's vital irritability to get housing of suitable pattern built for its young by the resentful efforts of the texture which it invades; and more recently it has been learnt that organic forms far below the status of insects and acari, and so minute as to be out of reach of any but skilled observation, may cause tumours of the same sort. Thus M. Davaine, investigating the gall of the Alpine rhododendron, in which a parasitic animal had in vain been looked for, finds, as the apparent cause of the tumour, a very minute fungus, with mycelium, pervading it; and a Russian botanist, M. Woronine, finds that forms of the lowest (vibrionic) micro-fungi stand in apparently a like causative relation to tumours of the roots of certain plants—viz., of the alder and the garden-lupin. Cases like these are evidently frequent in the vegetable kingdom, and are perhaps to some extent represented among animals by those thickenings of texture which serve to encapsulate in the body for an indefinite time the cystic entozoa or the trichina; and also among animals a certain quantity of papillary or polypous outgrowth will sometimes be found associated with chronic inflammations of skin or mucous membrane: but, barring such doubtful exceptions, it would seem that tumour-formation of the merely hypertrophic kind is not apt to arise in the textures of the animal body in consequence of common irritation; and the relation of cancer to irritated parts would thus far appear to be *sui generis*.

3. Of all the ætiological characters of cancer, that which I think incomparably the most important is the property of infectiousness which its cause imparts to it, and which in fact makes the identity of the disease.

I need not say that in a great variety of diseases which are primarily local (including many which we can ourselves start by inocu-

lation for purposes of study) the primarily diseased part is able to infect other parts by means of the lymph and blood which it directly or indirectly transmits to them, and into which it has shed its contagium; and, in the case of cancer, evidence has long existed that those are the essential means by which the disease, when once started at any spot, tends to produce secondary and tertiary cancers in other parts of the body. Molecules, larger or smaller, of the primary cancer are always apt to be contained in the outflowing lymph and blood; and, in particular cases, the growth intrudes into veins with masses which are visible to the naked eye, and bits which detach themselves pass on with the blood till they become fixed as emboli in smaller vessels.

Secondary and tertiary cancers, beginning to show themselves in the organs which have been infected from the primary seat of the disease, invariably imitate in their structure the particular structure (whatever it was) of the primary cancer—the epithelioma, the glioma, the fibrosarcoma, or what not; and commonly they imitate it with an exactness which extends even to its minute individual peculiarities. When this remarkable fact is taken in connection with that other (which I just before mentioned) of the frequent passage of shaped texture-elements from the primary cancer into the lymph and blood, the simple theory at once suggests itself, that secondary and tertiary cancers are the outcome of a kind of natural budding-process from the primary; that living cancer-elements, floated from the one place to the other, and carrying with them a strong germ-power of their own, affix themselves as parasites to the textures which they reach, and grow there to an unlimited extent, in forms which (from the nature of the case) repeat exactly, as would vegetable grafts, the features of their parent stock. This explanation of the secondary and tertiary growths in cancer would seem to have some warrant from its simplicity; but though, as matter of fact, it seems certain that in some cases transported bits of cancer-tissue do really engraft themselves in new sites in the manner which the theory describes, such graftings appear to be quite exceptional, and their result, as regards the growth of the grafts, is questionable.

The process in which the secondary and tertiary growths in general arise is apparently of a zymotic kind; and certain observations relating to it which have been made by Dr. Creighton seem to me of quite singular interest with regard to the genesiology of cancer. In the course, namely of some elaborate cancer-studies which were made by him under the Lords of the Council—studies which it was my great good fortune to be able officially to promote, Dr. Creighton made much minute investigation of secondary cancer-nodules in liver and lymph-glands, and of various other secondary and tertiary cancers; and the explanation, which this research has seemed firmly to establish, of the meaning of such consecutive nodules, is, not that they represent the primary disease propagating itself by offshoots to new parts, but that they are autochthonous growths of the parts where they occur. It appears that, under the contact-influence of matter from the primary cancer, the textural elements of the next affected organ pass, by successive changes of their own, into growth of a new sort, by which, as it advances, the secondary nodules are gradually evolved into their wonderfully close textural imitation of the distinctive texture of the primary disease. Almost invariably this imitative growth seems to be not in any degree modified by the anatomical type of the organ in which it occurs: Dr. Creighton's single (but only partial) exception being the case of the ovary; which organ, when secondarily cancerised, seems able to add more or less cyst-formation on its own account to whatever cancer-type it has got by contagion.*

The spreading of cancer by such a process as Dr. Creighton describes must certainly be regarded as one of the most curious of all hitherto observed facts of contagion. Pause and consider what it signifies. The primary cancer, anatomically regarded, is a definite original texture of the body, growing a modified process of growth, in which, notwithstanding its modification, the original type of the texture can be identified; and now this modified texture is seen to possess the marvellous endowment, that, coming into inoculative relations with other textures of the same body, it compels those second textures to abandon their own textural identity, and heterologise themselves to the textural pattern of the tumour. Think how, as we watch in different cases the workings of the contagium of cancer, we see the unity of that principle expressed in infinite variety of results—see the skirrhous of breast, or epithelioma of lip or tongue, counterfeited by the textural elements of the infected lymph-gland,—see some melanotic sarcoma of the choroid, or some follicular form of bowel-cancer, reproduced by the cells of the infected liver,—see the infected lung representing some osteo-sarcoma of the femur or some cysto-chondroma of testicle!

* Dr. Creighton's valuable papers, which I hope will some day have separate publication, are meanwhile to be found in the *Reports of the Medical Officer of the Privy Council and Local Government Board* (New Series, Nos. iii, vi, viii).

And as we contemplate, in the light of Dr. Creighton's observations, the local progress of the primary disease (say some glioma of the retina, or some round-celled sarcoma in a limb), we become, I think, better able to understand the meaning of that singular so-called "infiltrativeness" which it possesses, as compared with the merely displacing power of (say) a large fatty tumour or a large collection of hydatids: an "infiltrativeness," with which it seems to abolish, but not by stretching, the various barrier-surfaces against which it comes; an "infiltrativeness" which, it would seem, may be nothing else than the circumferential contagious working of the cancer on the elements of each texture which it reaches.

I need hardly say that the ultimate meaning of these strange phenomena is beyond our present powers of explanation. Dr. Creighton's facts tend irresistibly to remind one of the molecular changes in sexual impregnation. As one sees the emigrant forms of the primary cancer melt away in the lymph-gland to which they have been borne, and then the texture of that lymph-gland begin a series of developmental changes which will eventuate in a new presentation of the parent disease, one's mind recalls the original working of the spermatic force which called the whole organism into being, and one is tempted to speculate whether, perhaps, the essential power of the "malignant disease," its power of specific fertilisation, may really be that the part has in activity in it (under unexplained conditions) some normal or abnormal survival of that ever-marvellous first ferment. But, if there are points of view in which that sort of speculation might seem to find encouragement from facts (and perhaps especially as regards the more fungic cancers of early life) other points of view, especially as regards skirrhous and the other epitheliomata, seem to me to suggest a widely different, though not necessarily incompatible, line of speculation. As our patient in extremity of advanced syphilitic poisoning, with tertiary gummatous tumours widely diffused among the organs of his body, tells us of the little chancre-inoculation ten years ago from which this general tumour-formation has resulted; or as we call to mind the equally demonstrable contagium of tuberculosis, and the profuse (though only military) tumour-formation which this contagium specifically promotes,—can we, with those cases before us, feel sure that no analogous exterior influence, nothing of the nature of a morbid poison, is concerned in the causation of cancer?

Our present ætiological position seems, in short, to be this. In the genesis of the primary cancer, we have evidence of two forces: one, the natural growth-power of the texture, the other a power which is at least relatively foreign; and the cancer, which will act zymotically on other organs, expresses the co-operation of those two powers. Whether the process, as regards its unknown factor, depends, directly or indirectly, on some contagium from the outer world, or is from first to last merely the abnormal play of forces native to the body, is the question which waits to be solved. In our present imperfect state of knowledge with regard to many of the requisite elements for judgment, it would, I think, be unwise to attribute impossibility to either of the alternatives. In relation to them both, as well as to other conceivable hypotheses of cancer, our scientific need and duty is to continue observing, as accurately as we can, every local and personal and hereditary condition which may seem to act, either attractively or repellingly, on the factor which it is our aim to understand; and of such indications there are already some which I think valuable. Thus, for instance, the fact (above noted) that cancer has marked affinity for organs which are already in certain accidental ways disordered, seems to show that the unknown exciting cause either is not native to the body, or at least is not specially an attribute of the texture in which the disease breaks out. And the fact (as it appears to be) that cancer, though eminently contagious from part to part in the affected body, can hardly, if at all, be communicated to any other body, even among animals of the same sort, by artificial inoculations, injections and transplantations, seems to say—first, that the unknown factor in cancer can only operate where certain general predisposing conditions exist,—and, secondly, that cancer is perhaps not an hereditary disease, except as regards those predisposing conditions.

IV. In coming now to the Treatment of Cancer, I come to what I cannot but describe as hitherto matter for most painful contemplation. We practically have no treatment of cancer (in the sense of curative or preventive treatment) except such as consists in endeavours, in selected cases, to extirpate it with knife or caustic. In a very large majority of cancer-cases, probably more than three-fourths of the entire number, there can hardly be any serious thought of recourse to this one expedient; sometimes because of the original locality and perhaps visceral relations of the disease; sometimes because the cancer, since its origin, has made too much progress; and sometimes because of conditions concerning the patient's general health. To

knife or caustic, the sole present resource of our art, we, therefore, can only resort in favour of the much smaller proportion (probably not as much as one-quarter) of our cases. And, in regard of this favoured minority, what is the good which surgery can promise? First, it can promise a microscopical hope—a hope which, on the whole, is so small as to be scarcely distinguishable from despair, that the disease will be radically cured by the operation. Secondly, it can hold out hopes, the exact nature and the strength of which will differ very greatly in different cases, but which, at their very best, are only hopes of palliation: sometimes the prospect that, under circumstances which otherwise threaten very speedy death, immediate, though only brief, respite will be obtained; sometimes the possibility (more or less) that such real check will be given to the disease as may sensibly affect the duration and (for longer or shorter time) the comfort of life; sometimes the object that particular local horrors of the disease will, if even only for a very short time, be abated. All this, taken at its best, is but poor measure of comfort for us to be able to give in respect of a disease so frequent and so dreadful as cancer. And even as much as this for but one-quarter of the cases!

Of late years, hopes have been expressed that perhaps the general prospect as regards these cases may improve under a more vigilant and strenuous application of the doctrine which we owe to the Middlesex Hospital. The opinion that cancer is at first a merely local disease implies, of course, that every endeavour should be made to remove it before it ceases to be merely local; and the line of practice which has of late been recommended in that view is in substance this:—"Except so far as there may be in the individual cases special reasons to the contrary, operate, at the earliest possible moment, with knife or caustic, as searchingly and extirpatingly as you can, on every tumour or sore which you think cancerous; and, if there be any reappearance of the disease, whether at its first site or in the lymph-glands or elsewhere, operate again to the like effect, and, should occasion arise, again, and again, and again."

As regards my estimate of that rule, I need hardly observe that injudicious persons, purporting to give effect to it, might do very objectionable things under the name of surgery; for you will observe what vastly important qualifications are involved in the exceptions of the rule. But I would not seem to dispraise the rule merely because it is difficult to apply, and therefore leaves wide room to abuse. I would judge it as in dry principle, and as if it could always receive the best possible application—such application as it would have had at the hands of Mr. Moore and Mr. De Morgan themselves, if their lives had not been cut short. And, looking thus at the rule, what are we to say of it? is it a rule which can be practically applied with any large measure of success?

So far as the arguments in its favour are speculative, I doubt whether they would justify much more hope of preventing the secondary cancerous infection by removal of the primary cancerous tumour or sore than we should have of preventing secondary syphilis by removing the primary inoculation-spot when already it had declared itself a hard chancre; whether in the one case, more (or much more) than in the other, we could expect to interpose effectively between a diseased organ and its lymph-glands, or between it and the blood, at a time when the primary infective disease had already become manifest to our senses. And particularly I should doubt whether the repeated recurrence to operations could be expected often to succeed; whether the operators would not be too closely imitating Mr. Lowe's famous Hyperboreans, who, in their horror of the north wind, travelled ever more and more to the north, in hope that at last they would get to the rear of it.

But I would not pretend to answer the real question with arguments of a speculative kind. Whether a greatly more ardent practice of operating for cancer than was in favour with our best surgeons of twenty to thirty years ago would prove itself an advance in surgery: whether our operative policy towards cancer ought to be in general (subject to proper exceptions) *aggressive*, or in general (subject to proper exceptions) *expectant*: these are questions to which no safe answer can come, except from the teachings of experience; and many years must elapse, and the experiences of many men be put together, before the answer can be given in an exhaustive arithmetically exact manner.

But, be that answer what it may, we meanwhile have the pain of knowing that even the eminent authorities whose names are most identified with the advocacy of early and (in cases of relapse) repeated operations express almost no hope of radically curing the disease by such treatment. Mr. Moore, when last discussing in print (1870) the grounds on which, in his opinion, operations for cancer might be advised, expressly said that the notion of eradicating the disease by operation can but rarely sway the mind of surgeon or patient; for that,

though there have been instances in which cancer of the lip, and more rarely of the breast, removed by operation, has not, even after many years, reappeared, such cases, on account of their rarity, can have but little influence in the decision. Mr. De Morgan, again, in the famous discussion on cancer of 1874, spoke of the "all but certainty of the disease's recurrence, remove it as we will". And this phrase of his drew an instructive comment from Sir James Paget: "I do not know", said Sir James, "what percentage *almost* means; but I will venture to say, speaking of ordinary typical cancer of the breast, or any other part which is its most frequent seat, that the number of cases in which it does not recur is not more than one in five hundred."

Now, accepting as of unquestionable authority those gloomy statements with respect to the relapse of primary cancers after removal, what but far gloomier statements can we expect with respect to the hopefulness of subsequent removals? And, returning from these details to the general statement with which I started, how can we not feel that the powerlessness of surgery in relation to cancer is a pain, if not even a reproach, to all of us?

It seems to me imperative, under the circumstances, that we should look about, with all the best intellect of our profession, to see if this state of the case cannot be amended. Little as I can myself hope ever to contribute to the object, I would at least desire at this opportunity to say how pressing important an object I consider it; and I will even venture to make some remarks on the studies which I think should be made in the matter.

Unless we suppose cancer to be in its nature incurable and unpreventable, we may conceive its cure or prevention becoming possible in either of the two following ways. 1. In proportion as the natural history of the disease shall be scientifically understood, definite indications as to curing or preventing it will be the natural counterpart of its pathology, and the resources, as they may then be, of practical medicine will be appealed to in an intelligible form; or (2) there is the chance—for it is no more than a chance—that, before full scientific insight is obtained, clinical experiments, more or less speculative, or even some discovery more or less accidental, may bring to light a specific antidote to the disease. Laboratory researches on the one hand, tentative therapeutics on the other, are, therefore, our two great lines of work; and to each of them I would give a few words.

1. Of Laboratory Researches three chief sorts are requisite: the histological, the chemical, the ætiological.

a. In histology, notwithstanding that so much work has been done, the initial stages of tumours, both cancerous and non-cancerous, have yet to be very much further investigated: on the one hand, the embryology (so to speak) of each primary tumour as collated with the structure and developmental antecedents of the organ which bears the tumour; and, on the other hand (as in extension of Dr. Creighton's admirable work) the morbid changes which first arise in the lymph-glands and other seats of each sort of secondary infection.

b. In the chemical investigation of tumours, our work is yet all to do, and offers, I think, as regards cancer, a most promising field for the worker. Particularly we want the exact chemical comparison of cancers in their riper stages with the normal organs which appear nearest akin to them; as, for instance, the comparison of masses of developed glioma with masses of (as near as may be) kindred normal brain-substance.

c. And not least, in laboratory work, we want continued exact researches into the essence of the infective process which multiplies cancer: such researches as those which, within the last dozen years, have so largely increased our knowledge of tubercle; researches, I mean, conducted by experiments on living animals, with regard to the intimate conditions of the specific infection. In recommending studies of that sort, I am not unaware, nor do I regard it as unimportant, that they inevitably involve a certain amount (which happily in the present case would not need to be a large amount) of suffering to the animals which are used for experiment. But, as cancer, one of the most dreadful of diseases, is one which affects both man and brute, so it may very greatly concern the permanent interests of brute as well as man, that, even at some present cost to the brute, those studies should be diligently followed. And if we—students of Nature and servants of mankind, acting under the best light of our individual consciences and of the collective conscience of our great profession, are ready, for the sake of human interests, to impose that first cost of brute suffering, let us hope that the caprices of impulsive legislation, and the personal discretion of successive Secretaries of State, may not render such studies virtually impossible in England to all but clandestine investigators. Let us hope, too, that, amid our serious work, the Bacchanals of an ill-informed enthusiasm, inflamed by calumny, may not rage to re-enact on some of us followers of Esculapius the unmerited mutilation of Orpheus:—

"Whom universal Nature did lament,
When, by the rout which made the hideous roar,
His gory visage down the stream was sent,
Down the swift Hebrus to the Lesbian shore."

2. As regards Tentative Therapeutics, I am very strongly of opinion that, situated as we now are in relation to the treatment of cancer, our practice, in regard of cases which we do not submit to operation, ought to be systematically planned as a consistent search for more effectual treatment. Each of us should, I think, often take stock in his mind as to therapeutical resources hitherto not tried against cancer; and should, at all proper opportunities, and with the best provisional light which the pharmacology and pathology of the time can give, make for himself successive new endeavours to find a "specific" for the disease.

[By "specific," I mean in principle some influence (positive or negative) which shall be *electively* hostile to the cancer, shall be a power against the life of the cancer without being a power against the life of the body. The *Pharmacopœia* contains (I need not say) a large number of agents, such as chloride of zinc, which, so far as they can be applied to any given cancerous mass, will destroy it; but agents which do this only in respect of their being common caustics, *operating on diseased and healthy textures alike*, are evidently of no different intention from the knife; and to ring for ever the changes on common caustics, is not to touch the question of *specific* treatment. (Comp. John Hunter's *Lectures*, Palmer's edit., vol. i, p. 625.) And what I here argue in regard of the local treatment of cancer is equally to be applied when we consider the possibility of acting on cancer by internal remedies: for any treatment which operates through the blood has opportunity according to its nature to affect every organ of the body; and it would be no medical gain to poison the cancer to death if our poison were equally effective on the rest of the organisation.]

In advocating the search for a specific, I do not propose that men should refrain from knife or caustic in cases where they believe that they can clearly see their way to advantage from either; and I, of course, fully recognise that at present, in a certain number of cases, we really have no proper alternative but to operate; but, referring to the statement which I before made as to the very large number of cases in which no question of operation can be entertained, I would remind you that, even in the hands of those who are warmest advocates for operating, there must remain of necessity an immense field for trial of other modes of treatment. And let me illustrate this with reference to a particular line of experimentation, where probably the results (positive or negative) could be obtained with far more rapidity than in any other line.

Supposing the *materia medica* to contain a specific for the cure of cancer, how would you know that it deserved its name? By what test would you measure its action? No doubt we should see, under adequate internal administration of the drug, that the existing cancerous tumours, primary and secondary, affected by it through the blood, would shrink and vanish as syphilitic gummata shrink and vanish under the internal druggings which are appropriate to them; and nothing short of this would prove that we had a specific for cancer. But though full proof would not exist on any less showing than that, presumptive evidence (positive or negative) might often be got on far less elaborate showing: that is to say, if there existed such a specific as I suppose, very probably its characteristic action might be to some extent tested by the behaviour of any particular cancerous sore to which it were judiciously applied—just as, in the case of syphilis, we know the great local potency of mercurial preparations. Suppose that, experimenting in succession on a number of (non-caustic) drugs, as direct applications to cancerous sores at the surface of the body, we at last came on a drug which in a series of cases showed itself able so to "change the action" of cancers to which it was applied, that under its use the cancerous fungation would cease, and the cancerous sore would heal, evidently we should have hopeful reason to try whether the same drug, internally administered, would produce like effects through the blood, and would accordingly admit of successful use against visceral and other deep cancers to which it could not be directly applied. In thus mentioning a particular line in which I think that important therapeutical observations might easily be made, my intention is only illustrative, and I do not attempt to enter on detailed suggestions. I am content to have shown one direction (no doubt there are many others) in which most of us could constantly be making new therapeutical endeavours: for every man, with much surgical practice, is often having under his care cases of open surface-cancer, at the breast or elsewhere, with which, under present circumstances, he does (therapeutically) next to nothing; and, if his mind were made up as to any new agent he would wish to try, cautious separate use of it as a dressing to such sores or to parts of them—cautious, of course, not only as regards the sore, but also as regards the general action of the drug,

would soon furnish him with a series of facts, out of some of which, sooner or later, important hints for progress might come.

That particular suggestion, however, is, I repeat, only incidental to the main argument which I am desirous of pressing. My only essential point, let me emphatically say, is the one of general principle: the principle that we have to go to work on new lines, and with all our might, in respect of the treatment of cancer.

Among the moral qualities which go to make a great doctor, the very foremost, in relation to efficiency in practice, is a noble reluctance to be beaten. With a genius of untiring endeavour which may be summarised as "never say die," with a happy temperament of obstinate hopefulness, he fights for his patient to the very death, and, like a late eminent prize-fighter, if again and again knocked over, again and again "comes up smiling" to the scratch. You all know what a quality that is in the routine practice of medicine—how the strong man of our profession seems almost to hold back patients from the grave by the contagion of his own hopefulness—aye, and that again and again, by his efforts, he seems to win back the apparently for ever lost, and (like an older athlete than the one I just quoted) brings "Alkestis from the tomb". This great quality of the best minds in our profession, so constantly, so vigorously exercised in regard of cases which are recognised as curable, is naturally least appealed to in detail when cases stand in masses in the opposite category, generalised as hitherto never cured. But, gentlemen, is it therefore dormant in regard of such cases? Is it not on the contrary rather felt by us all that, just in proportion as the individual claim on us seems to slacken where there are those long traditions of despair, so much the more a claim is created that the collective case should be met by our collective exertions, and that, as regards every such problem of so-called "incurable disease", the whole mind of the profession should be resolutely, almost indignantly, at work?

I am particularly glad to have had the opportunity, which this evening has given me, of appealing, as regards cancer, to that strong common instinct, which I have described, of our professional heart, and of appealing to it in the presence of so many of whose sympathies I feel myself secure. And let me now say that the reason which, as additional to my own interest in the subject of cancer, led me to choose that disease as the matter on which I should speak here to-night, refers, in connection with this feeling, to the nature of your Midland Society.

The subject of cancer—partly from its very large extent and various branchings as a pathological study, and partly from the distribution of cases (which are material for study) among all practitioners of our profession, is a subject which almost absolutely requires to be worked, at least in several of its parts, by the co-operation of many persons; and I would submit that it might, with peculiar advantage, be taken up by such a Society as this for concerted work under a well-organised committee.

Medicine (I need not say) is entirely a science of observation; and any man who would pretend to improve it, except from the basis of facts, is an anachronism from days before Lord Bacon. But "facts", to be the basis for science, must be *real* facts, must be *complete* facts, must be *well-defined* facts, not theories of facts, not fragments of facts, not nebulae of facts; and scientific facts can never be established as such for joint use, except where individual experiences, brought face to face with each other, and acting in check of each other, are rectified to a common standard of description as complete as the knowledge of the time permits, and are expressed with uniform nomenclature and in harmonious methods.

With regard to cancer, moreover, it is of particular interest that the two classes of work, which I distinguished as laboratory work and therapeutical work, should be brought into intimate correlation: that the practising physician and surgeon, who may himself be unable to keep pace with the daily advances of histology and organic chemistry and experimental pathology, should be able to refer to laboratories where such advances are fully represented as well as appreciated; that the laboratory-worker should be able to get from the physician and surgeon, not only the physical thing which he may want to study, but the circumstantial knowledge which may be requisite to interpret it; and that, under joint auspices, representing the best strength of our science in each of the two great branches of work, contributions, which may be turned to universal account, should be sought in all directions, and be made matter of record and publication.

Science (says the late Sir John Herschel) is "the knowledge of many, orderly and methodically digested and arranged, so as to become attainable by one". With regard to cancer, as I think on the one hand of the vast quantities of experience, or, let me rather say, of raw materials for experience, which in this country of ours are daily running to almost absolute waste for want of some sort of organisation by which they might be shaped into science; and as I think, on the other hand,

what a Society like this might accomplish by such machinery as you could command, I see a contrast which I can only parallel by quoting the familiar antithesis of certain two possibilities of carbon: the smoke which merely obscures our day-time, and the lamp which serves as sunshine to our night.

And here, gentlemen, I conclude. That, from this great city—the birth-place and home of so many strong and wise men, the centre of so many industries, the vigorous representative organ of so much that is worthiest in English life, there may some day come help to mankind in the conflict in which our enemy now prevails against us, is the wish, the very hearty wish, with which I bid you my respectful farewell.

A LECTURE

ON

RHYTHMICAL HYSTERIC CHOREA.

By PROFESSOR CHARCOT,

Physician to the Salpêtrière Hospital, Paris.

GENTLEMEN,—In one of our patients, who has for a long time been suffering from hystero-epilepsy, with attacks of a mixed character (hysteria major), we have observed, during the last few days, a rare pathological condition, quite worthy of being placed under your eyes, but which in its nature is essentially as unstable and mobile as is, it is said, the sex in which it is ordinarily developed.

The phenomena date already several days back; but it may happen that to-morrow—perhaps in a moment, for nothing can be foreseen in this respect—they will have ceased. The occasion is, then, pressing; and it is important to seize it. That is why I have resolved to commence our conferences of this year without any preliminary remarks, without preamble, and to enter at once upon the clinical study, which is, moreover, the object which we pursue in these conferences. I shall designate under the name of rhythmic hysterical chorea the pathological condition to which I call your attention. The descriptive analysis which I am about to present to you will, I hope, amply furnish the means of justifying all the terms of that denomination.

The young patient whom you see there lying perfectly conscious of her acts is hardly nineteen years of age; her previous clinical history is, however, already very long and very eventful. I will mention to you its principal episodes in a moment. I commence at once the description of the symptoms with which I am desirous that you should become acquainted without delay.

That which certainly strikes you at the outset is, the remarkable movements by which the head, the trunk, and the limbs of one side of the body (the right side) are incessantly agitated. At the first view, these movements appear disorderly; it seems difficult to submit them to analysis. However, a more attentive examination enables us very soon to recognise a certain number of general characters. Thus the agitation may be decomposed, in each part affected, into alternate movements, especially of flexion and extension, always the same and absolutely uniform. You see the trunk strongly flexed on the pelvis



Fig. 1.

(fig. 1), carrying with it the head, which, in its turn, becomes bent upon the breast, and at one moment the forehead is scarcely more than fifty centimètres (twenty inches) distant from the right knee, which at

that moment is in forced extension. Then the head and the body are straightened, describing a trajectory, which represents a semicircle corresponding to that passed through just before in the opposite direction, in the movement of flexion; so that ultimately the back, and then the occiput, fall heavily upon the pillow; almost immediately the movement of flexion recommences, and is soon followed by the movement of extension; and so on. (Fig. 2.) It might be supposed that you



Fig. 2.

had here a profound and repeated salutation, rendered absurd by its very repetition and by its exaggeration.

Observe that these acts are reproduced with regular rhythm. To-day we count from thirty to forty salutations in a minute; yesterday and the day before, the agitation being greater, they varied from forty to eighty. At the same time, the upper and lower limbs of the right side are simultaneously extended and flexed alternately, following the same rhythm.

These movements of the various parts deserve, moreover, to be studied with attention, not only in their individual, but also in their reciprocal relations, in their isochronism. Let us take the stage at which the flexion of the head and trunk is as pronounced as possible. (Fig. 1.) At this moment, the entire upper limb is in extension; its long axis, directed vertically, forms a right angle with the plane of the bed on which the patient is lying; the forearm, extended upon the arm, undergoes also a movement of pronation, in virtue of which the palm of the hand is directed upwards. This attitude of the upper limb recalls well enough, you see, that which is produced in the mode of swimming which is commonly called *la coupe marinière*. At this moment, the leg is extended on the thigh and the foot flexed on the leg, reproducing in a very marked fashion the deformity of a talipes equinus; then the lower limb, rigid in all its parts, is strongly pressed against the mattress. The flexion of the two limbs (fig. 2) is commenced immediately after the straightening of the trunk is evident, and it progressively becomes more marked at the same rate as the latter. When the revolution is completed—that is to say, at the moment when the head and trunk, completely extended, fall back on the pillow—the forearm is strongly flexed on the arm, the hand upon the forearm, and the fingers, bent on themselves, at last touch the shoulder with their extremities. Simultaneously, and in the same proportion, the thigh is flexed upon the pelvis, the leg upon the thigh, in such a way that the heel is almost brought into contact with the corresponding buttock. This attitude of forced flexion of the limbs lasts only for an instant; for it immediately gives place to a movement of extension, which becomes more and more considerable in proportion as the flexion of the head and trunk, which has again commenced, becomes more marked.

Such is the series of phenomena which, for the last twelve days, have been reproduced monotonously with almost mathematical regularity, without cessation and without a truce, night and day, except during the few hours when sleep comes. At the moment of waking, a very curious fact occurs, to which I will return directly. The limbs, which, while the patient is awake, are incessantly agitated by alternate movements of flexion and extension, become for some moments, and especially the lower limb, the seat of muscular rigidity, resembling hysteric contraction; but this rigidity is transitory and of very short duration, and soon a series of movements of extension and flexion recommence. Observe that the limbs of the right side are alone agitated by these movements; those of the left side remain quite free. Thus, with the left hand, in spite of great oscillations of the trunk, the patient can safely carry to her mouth a glass full of water without spilling a drop. She can, further, with this hand, trace characters upon paper, and even write her own name very legibly.

Some further details are necessary to complete the picture of which a sketch has now been drawn.

Examine attentively what occurs in respect to the face at the moment when the head and trunk are thrown backward. You see that, at this moment, the right labial commissure is momentarily drawn outward and to the right. The deviation ceases at the very moment when

the head is bent forward. There is thus produced an intermittent and rhythmical grimace, which is very singular. If, at the moment when this grimace is made, you ask the patient to put out her tongue, and to make it project from her mouth, you will notice that the point of the organ is carried very strongly to the right. Involuntary movements of the tongue in this same direction are produced in the mouth every moment; and, as they coincide with the deviation of the labial commissure, considerable difficulty in pronunciation is the result. The words are cut and divided, and altered by a sort of babyish imperfection, which is strongly marked. *Chau-chou* is pronounced instead of *haoussou*; *chan-cho* instead of *chanson*.

We shall now, to finish this descriptive study from Nature, ask the patient to rise; the involuntary movements are quite as pronounced in the vertical position as they were in the horizontal. The young patient cannot hold herself upright without the assistance of her left arm, which she rests on the bed; with the help of another person, she can take a few steps forward; she then advances with a rhythmical balancing of the body, a cadenced movement of the limbs of the right side, which reminds one fairly of the dance called "mazurka". Such at least is the opinion expressed by some who are competent in such matters.

You have seen enough, gentlemen, to be led to recognise the affection which you have under your eyes as one which might be called a chorea, provided always that we take this word in its largest acceptation; so that, for example, it serves to designate affections of diverse nature where there exist gesticulations, involuntary movements of wide range, permanent movements, incessant, persistent, without lapse or truce—except, however, during the period of sleep. For this is not a case, as becomes evident from the first glance, of ordinary chorea (chorea minor, Sydenham's chorea), such as you may observe in another patient (A.), whom I have placed alongside of the first in order to better mark the contrast. In A., the involuntary movements belong to the classic type, and consist, consequently, in gesticulations which are not rhythmical, truly disorderly, and hardly describable, or which, at least, cannot be expressed by anything like a precise formula. In the young G., on the contrary, the chorea—which in this particular case is a hemichorea, since the movements of the limbs at least are limited to one side of the body—the chorea is of the kind which my colleague Professor Sée, in an important work which you know well, has proposed to designate under the name of systematic or rhythmic. (See *Mémoires de l'Académie de Médecine*, p. 95.) These qualifications, observe, are perfectly applied to our case. In our patient, indeed, the chorea may be called rhythmic, since the pathological movements affect a very regular rhythm. It may also be called systematic, since the movements in each period of the rhythm are reproduced according to a constant and uniform type.

We might seek to give still more precision to our terms, and to show that the pathological movements which we are studying should be referred to the variety of chorea called *malleatory*. Properly speaking, "*malleatory*" signifies that the gesticulations are comparable to those of the arm of the smith who strikes upon the anvil (*malleator*). But the action of striking upon the anvil is not the only one which may be imitated in this kind of chorea. If we were to persist in seeking terms of comparison in the exercise of certain physiological or professional acts, we might, looking at the movements of the arm and right leg, describe the chorea in G. as *natastary*; or it might be more naturally called *salutary*, if we considered, on the other hand, more particularly what occurs when the patient is erect and endeavours to take some steps, and, as she goes along, performs a sort of dance.

But these shades of difference have little real importance. It will suffice, in order to characterise the situation, to point out that, in a general way, the involuntary acts in question reproduce, more or less accurately, certain intentional voluntary acts.

[To be continued.]

Full Sc.

THYMOL AS A REMEDY IN SKIN-DISEASES.

By H. RADCLIFFE CROCKER, M.D.,

Assistant Medical Officer to the Skin Department, University College Hospital, etc.

TEN years ago, a paper was sent to the Pharmaceutical Society by a M. Bouillon, a French chemist, advocating thymol as a substitute for carbolic acid (*Pharmaceutical Journal*, January 1869). Since that time until lately, this substance has attracted but little attention in England; but in Germany, several have worked at it, among whom may be especially mentioned Volkmann, who has used it in antiseptic dressings, after Lister's method, instead of carbolic acid spray; and Buchholz of Dorpat, who has made experiments upon its power of preventing or destroying living organisms in fluids, in comparison with

other antiseptics. In this country, however, it has been recently brought into general notice, mainly by the lectures of Dr. Burdon Sanderson at the London University "On the Infective Processes of Disease"; and as I have been employing it for the last five months in several skin-affections, it will be opportune to relate my experience of it. I was first shown this substance by Mr. Martindale of New Cavendish Street, who was selling it, dissolved in vaseline, chiefly as a lubricant for the finger in obstetric and similar examinations. Finding that its properties were similar to those of carbolic acid in some respects, I thought it would be useful as a stimulant application in skin-diseases, and so far it has certainly exceeded my expectations.

As when prescribing it I am constantly asked what is thymol, and the information regarding it is scattered through many publications, it may be well to give a short account of it. It is obtained from the essential oil of thyme, which is found in several plants—*Thymus vulgaris*, *Thymus serpyllum*, *Mentha sylvestris*, and *Ptychotis ajowan*, the last a very common plant in India, which would probably be the main source if much demand arose for it. Oil of thyme consists of two bodies; one a liquid hydrocarbon, thymene, and the other oxidised, thymol ($C_{10}H_{14}O$). It is placed by chemists in the camphor group, and is homologous to phenol, forming thymolates and sulpho-thymolates with alkalis. As imported into this country, it is a white solid, crystallising in oblique rhombic prisms, though from weak solutions it may be obtained in the form of needles, with the odour of oil of thyme, and is obtained in the solid form by freezing the essential oil or by distillation; but when made by acting on the oil with caustic alkali, with which it combines, and separating it from the alkali by an acid, it occurs as a liquid which cannot be made to crystallise. In water it is only permanently soluble about one part in a thousand, but readily soluble in alcohol, ether, glacial acetic acid, vaseline, and fatty substances generally. Still better as solvents, both on account of the quantity taken up and because so dissolved it can be diluted to any required extent, are the caustic alkalies, thymolates being formed, I believe.

As I wished to use it in the form of lotion as well as ointment, Mr. Gerrard, the dispenser of University College Hospital, undertook to work out the pharmacy of it. The results, of which I have availed myself in prescribing, are as follows: Five grains of thymol dissolved in an ounce of rectified spirit will not be precipitated on the addition of an equal bulk of water; but some will be thrown out when diluted to four ounces to be redissolved when the proportion of six ounces of water to one ounce of spirit is reached. In the proportion of two grains to the ounce of spirit, it is miscible with water in any proportion. A solution of seven grains of caustic potash in a drachm and a half of water will take up fifteen grains of thymol. A solution of ten grains of caustic soda in a drachm of water takes up thirty grains of thymol. Glycerine only increases the solubility in water very slightly. Further details may be found in Mr. Gerrard's paper in the *Pharmaceutical Journal*.

As an outcome of the above, I have used the following formulae.

1. An ointment, consisting of one ounce of vaseline and from five to thirty grains of thymol: the thymol being dissolved in the vaseline.
2. A lotion, consisting of thymol, five grains; rectified spirit and glycerine, each one ounce; water, sufficient for eight ounces. The glycerine is added to correct the desiccating effect of the spirit alone.
3. A solution of five to eighty grains of thymolate of potash* in eight ounces of water.

As yet, I have not had occasion to use stronger lotions than the above. I have only lately used the last lotion; but so far, have found it equally efficacious, while it has the advantages of economy and the readiness with which the strength may be increased. Ointments made with lard instead of vaseline act very well, but vaseline ointments have a better appearance. The disease in which I first prescribed it and have had the greatest success, is psoriasis.

In my early cases, I used the ointment of a strength of twenty-five grains to the ounce, to be rubbed into the seat of eruption after the removal of the scales, night and morning; but I soon found that it was a powerful stimulant, and that 5 per cent. was too strong for many cases, and here I must dissent from Husemann (quoted in the *Law-Book of Pharmacy* for 1876, p. 283), who has made some physiological experiments with this drug. He says: "It produces no irritation on the skin, but it does on the lips." In a concentrated form I have found it even caustic in its effects. In a case where the ointment had been carelessly dispensed, so that crystals were present undissolved in the vaseline, minute holes in the skin were produced in those parts

* Since writing the above, Mr. Gerrard has found that the alkali merely dissolves the thymol, and that when the vaseline ointment is stronger than twenty grains to the ounce, the thymol should be first dissolved in alcohol, in the proportion of one minim to the grain.

where the crystals had remained some time. The discrepancy arises from the insolubility of the drug in water; when quite dry, Husemann is perhaps correct, but, in the presence of a solvent like vaseline or the alkaline saliva on the lips, its irritant effects are apparent. To return to the psoriasis, I found it better to begin with a weaker ointment, namely, ten grains to the ounce; and then, if the remedy were suitable, to continue as long as improvement was manifested, and if it became stationary, to increase the strength by five grains to the ounce until, in some cases, thirty grains to the ounce was reached. In the majority of cases, the weaker ointment was sufficient to cure the case; and another advantage is that it can be more continuously applied than the stronger forms, a method to be preferred, as a rule, to intermittent applications. Many cases treated with thymol showed rapid improvement, and some very chronic cases, which had resisted other treatment, including tarry applications, improved and were finally cured by it.

If the disease were limited or nearly so to its usual situations on the extensor surfaces of the forearms and legs, I usually ordered the ointment; but when the diseased surface was of considerable extent, a lotion was prescribed to be applied with soft rag several times a-day, lotions being generally more convenient in the daytime to people following their usual avocations. In some people it produces tingling and occasionally smarting when first applied, but this only lasts a few minutes. Like all stimulant remedies, it does not suit every case, and must not be applied, or at least very dilute, when, on removing the scales, the parts are much hotter to the touch than the surrounding skin and very red; in short, whenever the hyperemia is considerable. This must be first subdued by soothing astringent measures externally, and appropriate internal medication, and then thymol applications will materially hasten the cure. In fact, it is most successful in that class of cases in which tar is usually prescribed, and while quite as efficacious and in some cases succeeding where tar fails, it is cleaner, colourless, and hence can be used on the face without producing the brown discolouration of oil of cade and other preparations of tar, while the odour is rather pleasant than otherwise.

In the later stages of eczema it is also extremely useful; some cases of very long standing, which had been submitted to other treatment of various kinds, rapidly yielded to thymol. It was necessary in eczema to use a weaker ointment of only three to five grains to the ounce; and I have not met with any case of eczema that required a stronger application than that, and unctuous are generally better than watery applications in this disease.

As might be anticipated, it is adapted to a smaller proportion of cases than psoriasis, and must be restricted to cases in the dry stage or where the amount of discharge is diminishing, *i.e.*, not until the activity of the inflammation has subsided; hence it happens that even in the same patient it would cure one part, and be too stimulating for another part where the inflammation was still active. If, however, due discrimination be employed, the duration of the disease may be much curtailed. Smarting when first put on is rather more frequent than in psoriasis. With similar precautions, it also rapidly completes the cure in so-called lichen agrius; but usually a preliminary soothing treatment is required for some time before thymol is prescribed.

Lewin and Bucholtz have shown that thymol is about eight times as powerful as carbolic acid as a destroyer of the lower forms of life, and hence its usefulness in vegetable parasitic diseases was suggested. Accordingly, I have treated cases of tinea versicolor, tinea tonsurans, and tinea circinata. In the last two I have not yet used it sufficiently to warrant an opinion as to its merits, but in tinea versicolor I have used an ointment of ten grains to the ounce and the thymolate of potash lotion of ten grains to eight ounces. The ointment was effectual, but slow in its action; but the lotion cured cases where a large surface was affected in a few days. I cannot, however, claim for it any great advantage over sulphurous acid and the hyposulphites. I may also mention, for what it is worth, that a case of lichen planus which has lasted five years, after a fortnight's treatment with thymolate of potash, shows more improvement than I have ever seen in so short a time; the itching is gone, and the eruption is less prominent.

I think we may conclude from the above facts that thymol is a valuable addition to the list of stimulant remedies for diseases of the skin, and probably also as a parasiticide for diseases of fungous origin; but, like all stimulants, it must not be used wherever there is much hyperemia, as it will be more likely to aggravate than benefit such active cases; judiciously employed, however, it gives results which cannot fail to be gratifying to prescriber and patient, while its pleasant appearance and odour, as compared with preparations of tar, with the avoidance of the discoloration of the hair and skin produced by chrysophanic acid, are not the least of its claims to attention.

Other therapeutic uses to which it has been put are, as a caustic to the exposed pulp of carious teeth, for which it is much used by French

dentists, and as an inhalation in throat-affections; but I do not know how far it has been advantageous. I am not aware of its having been given internally, but Husemann is quoted in the *Year-Book of Pharmacy* for 1876 as having injected two grammes (thirty grains) under the skin of a rabbit weighing one kilogramme, the only effect being a slight decrease in the number of respirations and temperature and a slight increase of pulse, but probably the greater part was not absorbed. The urine was turbid, had a smell of peppermint, and contained blood-corpuscles and albumen. *Post mortem* there was marked accumulation of fat in the liver, and the kidneys were inflamed. The symptoms of poisoning by it were great irregularity of breathing and paralysis setting in gradually. The heart continued to beat after all other action had ceased. So far, that would not appear to promise much from its internal administration. Its great pungency also would be an obstacle to its being given by the mouth.

FRACTURE OF FEMUR SUCCESSFULLY TREATED BY ELASTIC PERINEAL BAND.

By DANIEL ROBERT ALCOCK, M.R.C.S. Eng., L.K.Q.C.P.I., etc., Waterford, late Staff-Surgeon, R.N.

ON June 26th, 1876, I was sent for hurriedly to see Miss J., aged 13, who, I was informed, had sustained a severe injury in the right leg in the following manner. She was running across the park, when her foot slipped into a hole that was concealed by the long grass, and she was thrown forcibly upon her right side. When lifted up, she was unable to stand, as there was complete loss of power over the right lower limb. Upon examination, the limb was found to be an inch and a half shorter than the other, and a fracture of the shaft of the femur at the upper portion could be easily detected, both by crepitus and from the extreme mobility and deformity of the lower portion of the injured limb. The foot was slightly inverted. As the patient suffered considerable pain upon any movement, she was placed under chloroform, the fractured portions brought into position, and a well-padded Liston's splint applied. The perineal pad now applied was prepared with some care, an India-rubber air-cushion being inserted, to alleviate pressure upon the perinæum. There was a considerable amount of muscular spasm, with occasional jerking. As the limb was in good position, and of the same length as the other, the appliances were not disturbed. A sedative draught was ordered for the night. Sleep was frequently disturbed by the spasmodic jerking of the limb. The perineal pad had stretched, and the limb was found an inch shorter than the other in the morning. I now found that I must overcome the muscular spasm and provide constant equable extension to keep the fractured bones in apposition. As I was not able to apply a weight and pulley, from the peculiar construction of the bedstead, I decided upon using an elastic perineal band; and, after searching for some time, found what exactly suited my purpose. This consisted in a manufactured material sold in the shops as garter-elastic; it is about an inch in width; and, by employing it in layers, the necessary amount of extension power can be obtained. Two layers of this elastic I found, by a spring-balance, to exert extension force equal to that of a weight of seven pounds, which was quite sufficient for my purpose. I prepared a perineal band in the following manner. Two layers of elastic, eighteen inches in length, were covered by a sheath of soft chamois leather. Broad linen tapes were stitched to the end of the elastic, leaving the sheath free for it to move in. I had my former appliances removed, and, keeping up extension by assistance, applied a bandage evenly and firmly from the toes to the upper portion of the thigh. This very much relieved the muscular spasm. The long padded splint was then adjusted, the ankle-joint being carefully protected by cotton. The elastic perineal band was then applied well extended; this suited admirably in keeping up constant equable extension; from its narrow width, it did not interfere with the use of the bed-pan. If, at any time, pressure were complained of, by inserting the hand, and drawing down the elastic band, a soft silk pocket-handkerchief or other material could be placed between the band and the part pressed upon. Thus, in no way was constant extension interfered with. An air-cushion well inflated was placed under the sacrum. On the tenth day, some pain was experienced in the knee- and ankle-joints; and, fearing that the extension was being carried too far, I reduced it one-half, or to three and a half pounds. This last band was kept on for three weeks without any inconvenience. In the sixth week, all appliances were removed. There was no shortening of the limb, but some stiffness remained in the ankle-joint. The patient was now allowed to sit up daily, and after a few weeks she went into the country, returning here again for Christmas. I had an opportunity of

examining the limb six months after the accident. There was no shortening whatever, and the limb was as useful as the other. I could, however, still detect some thickening at the seat of fracture.

ANKYLOSIS OF BOTH HIP AND KNEE-JOINT : OPERATION : RECOVERY.*

By W. H. FOLKER, F.R.C.S.,

Senior Surgeon to the North Staffordshire Infirmary.

THE case which I bring before you to-day I believe to be unique, and from that fact interesting, although there was no new or unusual operation connected with it.

In October 1875, a man named Richard T., aged 23, was admitted into the North Staffordshire Infirmary. He had been attacked seven years previously with rheumatism in both knees and ankles, by which he was then confined to his bed for several weeks. Six months later, his knees were again attacked with pain, and gradually bent; the right becoming affected about a month before the left. From lying continually on his back, with the knees drawn up, the hip-joints became permanently flexed; and, in consequence of this fixed position of his hips and knees, he was bedridden until his admission to hospital. When admitted, he was emaciated and anæmic. Both lower limbs were much wasted. Both knees were firmly ankylosed at a right angle, and both hips flexed at a considerable angle, the left being quite immovable, and only the very slightest movement remaining in the right. There was no pain or swelling in any of the joints.

In May 1876, after various things had been tried and failed, his right hip was forcibly extended under chloroform, and the knee-joint on the same side excised. The bones united firmly without a bad symptom, leaving him with the slightest flexion of both hip and knee. In October, he could just manage to walk on crutches, but with great difficulty, as the left foot was much raised from the ground, and the right was unable to bear the whole weight of the body without great pain. He was very anxious to have the other limb operated on; and accordingly, on November 11th, his left hip was forcibly extended under chloroform. Considerable force was required to break down adhesions; the joint giving way with several loud cracks. I then proceeded to excise the knee by raising a flap of skin from the front of the joint; but, when this was reflected, the whole of the bones were found so firmly joined together that it was impossible to disarticulate the joint, and indeed it could scarcely be made out where it was. I, therefore, removed with the saw a wedge-shaped piece, which, though I thought at the time it would include the joint, proved to be the condyles; the upper incision cutting through the bone above them, the lower opening the joint, but leaving behind a small portion of the posterior part of each condyle. The limb was placed on a Macintyre's splint, the wound brought together with sutures, and a drainage-tube inserted.

For a few days after the operation, there was a good deal of ecchymosis round the hip, and such intense pain that it was found impossible to keep it straight. His body was, therefore, slightly raised by pillows. There was very little pyrexia, the temperature not rising above 100.2 deg. The wound healed in three weeks, when there was some union between the bones. By January 1st, this had become quite firm, and a fortnight later leather splints were applied and he was allowed to get up. The knee was straight, but there was a very slight flexure of the hip.

At first, there was some considerable difficulty in using crutches, owing to the position and stiffness of the hips and the extreme timidity of the patient; one foot also had the toes much pointed, and the ankle nearly ankylosed in that position. By exercise and patience, this was at length overcome, and in May he was discharged from the Infirmary, able to walk fairly well on crutches.

By these operations, this poor fellow was enabled to walk about by himself with only the aid of crutches, after having been confined to bed for seven years, during which time, from the position in which his limbs were ankylosed, he had been unable to get out of bed, or even turn over without assistance.

I had thought of performing subcutaneous division of the necks of the femora, to enable him to bend his body and sit down; but he became very unruly, and it was thought advisable that he should leave the Infirmary. I shall hope to see him again after awhile, and ascertain if he is still further improved and contented with his present condition; or whether, emboldened by former success, he may decide on having a little more surgery.

* Read before the North Staffordshire Branch.

CLINICAL MEMORANDA.

CROUP AND DIPHTHERIA.

WITH reference to Mr. Pugin Thornton's note on this subject, I would draw his attention to Dr. Carl Weigert's paper in the August number of Virchow's *Archiv* (1877, p. 461), entitled "Ueber Croup und Diphtheritis". Dr. Weigert has repeated the experiments of Brétonneau, Stricker, Reitz, and others, by injecting irritating substances into the larynx, and he has studied the histological appearances of the resulting changes. These, he finds, present the peculiar transformation of the epithelium and the other characters of croup in the human subject. This is an important argument in favour of the non-specific nature of the inflammatory process; it has been hitherto held that the false membranes produced in similar experiments have only a superficial resemblance to the true pathological formation.

ROBERT SAUNDBY, M.D., Birmingham.

OBSTETRIC MEMORANDA.

DIVIDED PLURAL LABOUR.

I THINK the rarity of cases like the following will justify its publication. On January 18th, a midwife delivered Mrs. Bishop, of Richard Street, Birmingham, of a full-grown healthy male child. On the third day after her confinement, she came downstairs and resumed her ordinary employment, feeling quite well. On the morning of February 4th (the seventeenth day after her former accouchement), she sent for me, stating that she felt the sensation of something moving in her abdomen. Very shortly after my arrival, I delivered her of twins, a boy and girl, each one being full-grown and quite healthy. The placenta were softened and more of the consistence of jelly than anything else, and had to be scooped away by the hand. However, the mother and three children are doing exceedingly well, and the uterus is rapidly resuming its natural size. The most remarkable feature of the case is that, all through the case, there has been an entire absence of "pains", and she observed to me that, had she been asleep, she does not think that my manipulations in delivering her would have awoken her. She is the mother of ten children besides the above, and is a corpulent, strong, and healthy woman.

J. R. H. LUMBY, M.R.C.S., L.R.C.P.E., Birmingham.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

CHARING CROSS HOSPITAL.

MR. BARWELL'S WARDS.

Two Cases of Successful Operation for Aneurism of the Innominate.—C. H., a domestic nurse, aged 27, well nourished but slightly built, was admitted to Mr. Barwell's wards, presenting the signs of aneurism of the innominate artery. She had always enjoyed good health till her present illness, with the exception of an attack of rheumatic fever at the age of fourteen, which did not appear to have left behind any heart-mischief. She had never been engaged in heavy work. About Christmas 1876, she began to suffer from palpitation and breathlessness, with pain in the region of the sternum, increased by taking food, and these symptoms never completely left her. In March 1877, she came under the care of a surgeon in the country, who noticed abnormal pulsation above the right clavicle and in the carotid region. Rest gave her some relief; but, on resuming her work, the symptoms soon returned. When she came under Mr. Barwell's care at the beginning of the present year, there were distinct signs of aneurism of the innominate, and strong pulsation was seen in the right common carotid; but there was scarcely any visible tumour; the right radial pulse was stronger than the left. There was no cardiac murmur, and the aneurism appeared to be purely confined to the innominate. A week after admission, she was placed under the influence of ether, and the carotid and subclavian arteries were simultaneously ligatured, antiseptic precautions being used. She rallied well from the operation; the next day, there was intense headache, not localised, and the fingers of the right hand were

somewhat numb. Four days after operation, the right radial pulse was faintly perceptible, though no pulse could be felt in the brachial or temporal arteries of the right side. Within a fortnight, the wounds were healed. When seen three weeks after operation, the aneurism appeared to have consolidated, and the patient was in every way in a satisfactory condition; the right radial pulse was distinct, though feeble; no pulse, however, could be felt in the axillary; it appeared, therefore, that collateral circulation was being re-established.

The second case was that of a woman, L. G., 37 years of age, a widow, who had worked hard in a small shop, where she often had to lift heavy weights. Two years ago, while engaged in hard work, she felt great pain in her back, and from that time has been troubled with breathlessness on slight exertion, so that she was obliged to seek a light situation as housekeeper. In October 1876, she complained of shooting pain in her right chest, not localised; she also began to suffer from cough, breathing became laboured, and she felt ill; she also suffered much from vertigo, and was unable to obtain any relief of these symptoms. Her nights had been restless, and she had been unable to lie down, on account of irritative cough. Latterly, a swelling formed and rapidly increased in the region of the innominate. When she came under Mr. Barwell's care, there was a distinct pulsating tumour, extending from the second right costal cartilage to the sterno-clavicular articulation; it measured 2.5 inches vertically and 1.5 inches transversely. The radial pulses were equal. After she had been kept quiet in bed for a fortnight, a ligature was applied to the right carotid and subclavian in the third part of its course. She slept well after the operation; but, next day, suffered intense headache, and pulsation in the tumour continued. A week later, the wounds had nearly healed, and the patient had recovered well from the operation, but complained of numbness in the right arm; pulsation in the tumour was lessened. When seen two months after operation, there was some pulsation over the right chest, which appeared due to dilatation of the aorta; the innominate aneurism appeared to be solid.

Epithelioma of the Eye.—A woman aged 47 came under treatment as the subject of epithelioma of the eyelids and conjunctivæ. Her health had always been good. Fifteen years ago, she noticed a little wart on the left upper eyelid; this was cut out a twelvemonth later. Five years ago, a growth started from the old scar and extended towards the inner canthus; this was cauterised and, for another year, gave her no trouble. Then the upper lid, inner canthus, and lower lid became involved in the growth, which steadily increased and extended on to the conjunctiva. On admission, a large fleshy growth involved both the upper and lower eyelids, entirely covering the eye; the mass extended downwards as far as the malar protuberance and nearly to the left ala nasi. Mr. Barwell made a clean removal of all the diseased parts, emptying the orbit and scraping out the lacrimal duct with a tenotome. At the same time, a simple sebaceous cyst in the neck was removed as a precautionary measure, such tumours being apt to degenerate in the subjects of cancer. The patient has made a good recovery, and a scar of moderate size remains.

Labio-glossolaryngeal Paralysis.—A middle-aged man was sent into the hospital, with the expectation that tracheotomy would be performed for the relief of his urgent difficulty of breathing. The dyspnoea was found to depend upon laryngeal paralysis, and it was observed that the right half of the tongue was much atrophied; there was also some weakness of the muscles about the mouth, on the right side, and difficulty in swallowing. Distinct indications of syphilis were obtained, and mercurial treatment was at once resorted to. The case appeared to be one of bulbar paralysis, and recovery soon commenced under this treatment, without any necessity for surgical procedure.

Removal of Loose Bodies from the Knee-Joint.—A young actress, while performing at a theatrical rehearsal, felt her left leg suddenly give way under her with great pain. When examined, a distinct protrusion was found at the inner side of the knee. Mr. Barwell made an opening into the joint over the protrusion under the carbolic spray, and removed a large lipomatous growth, which extended into the joint; also several smaller ones in its vicinity, which were not actually in the joint. The wound was dressed antiseptically and kept immobile. The healing process proceeded rapidly without any drawback, and was complete within a fortnight.

Excision of the Hip-Joint.—A little boy of very strumous tendency was brought to the hospital some months ago, on account of advanced disease of his left hip-joint. His general health was then very bad, and he was also suffering from strumous disease of the clavicle and one finger. On these grounds, the case was considered unfavourable for excision. He lately returned to the hospital with a large abscess in the neighbourhood of the diseased hip; it was then determined to give him the chance of benefit by operation. Excision was performed. He made a good recovery; all sinuses have healed up; his general

health has improved, and the disease of the clavicle and the finger is also relieved. The operation has quieted his strumous tendencies, instead of aggravating them, as is sometimes the case.

Excision of the Lower Jaw for Sarcomatous Growth.—An old man had undergone a minor operation for removal of epithelioma of the lower lip two years previously, and lately came under observation as the subject of recent sarcoma of the lower jaw. The skin over the tumour was much involved, and it was evident that nothing short of a radical operation would avail anything. Accordingly, Mr. Barwell removed the left side of the lower jaw by a rapid operation; the bone was divided at the symphysis and disarticulated behind the tumour, with the skin over it, the sublingual and parotid glands being removed at the same time; the sheath of the carotid vessels was almost laid bare, but there was no great amount of hæmorrhage. The tongue and palate were not involved. When seen three days after operation, the patient was going on well.

Subcutaneous Osteotomy.—A healthy man aged 60 was much troubled by the deformity of one leg, which had resulted from a previous compound fracture. Both bones were divided with the chisel above the ankle-joint. Some little difficulty occurred at the time of the operation in getting the limb straight after the section, as both bones were united together, and there was much old callus. The bones were, however, brought into good position and immobilised. He has made a good recovery, with a straight limb, notwithstanding his age.

DR. GREEN'S WARDS.

Intrathoracic Abscess.—A strumous-looking boy presented an abscess as large as an orange at the upper part of the right chest; it pointed above the right clavicle, and the skin over it was inflamed. The pus was evacuated with antiseptic precautions, and the boy has made a good recovery. Dr. Green considered the question as to whether the abscess was probably local and extrapleural, or a localised empyema. In favour of the former view, were the facts that the physical examination of the chest indicated a strict localisation of the cavity of the abscess to the upper anterior and lateral regions of the right chest, the other regions of the thorax presenting normal signs. Also a localised empyema is usually preceded by the history and signs of general pleurisy; in this case, the lung and pleural cavity appeared healthy, and there was no history of disturbance previous to the appearance of the abscess. The boy had shown a strumous tendency, having suffered from a popliteal abscess a year before. There were no signs of disease of bone or of the clavicular joints.

Quinine in Enteric Fever.—A woman aged 34, suffering from enteric fever, was admitted to the hospital on the eighteenth day of the disease. There was a distinct rash and the diagnosis was complete. There was no special intestinal trouble or complication; but the temperature averaged 105 deg. Fahr., without remissions, till the end of the third week. The patient became exceedingly ill by that time, extremely prostrated, unable to take nourishment, failing circulation, delirious, and falling into the condition described as "the typhoid state". On the twenty-second day of the disease, at 3 P.M., the patient was in the condition described, and appeared as if she would soon sink; temperature 103.5 deg. Fahr. Dr. Green then ordered twenty grains of quinine, with two ounces of brandy and an equal quantity of warm water, to be taken at once; within two hours, the temperature had fallen to 102.3 deg. Fahr., the pulse had improved, and the patient seemed in every way better. The dose of quinine was repeated twice, with brandy, during the day; at the same time, beef-tea, eggs, and milk were given at short intervals, with intermediate doses of brandy, of which she took thirty ounces in all within twenty-four hours. At the end of that time, the temperature had fallen to 98 deg. Fahr., and the patient was in every way better: the delirium passed off, and convalescence was soon established. Though the temperature rose again to 102 deg. Fahr., there have been daily remissions, and the patient has progressed satisfactorily.

ELECTRIC TREATMENT OF BURNS AND SCALDS.—*A propos* of cures for burns and scalds, I extract the following from the second edition of James Ferguson's *Introduction to Electricity*, 1775. "One time my wife happened to scald her wrist by boiling water. I set her upon the glass stool directly, and took sparks from the wrist. In a short time, the redness of the skin (occasioned by the scald) began to disappear and she felt immediate relief. A linen bandage was then put round her wrist, and in a few hours after, I repeated the operation, which entirely cured her, and there was not the least blister on the skin, nor any difference in its colour from what it had before the accident. If it had not been taken immediately, and before a blister had risen, perhaps electrifying would have been of little or no service."

F. W. COCK, JUN.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 12TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

AN ANALYSIS OF SEVENTY-FIVE CASES OF "WRITERS' CRAMP" AND IMPAIRED WRITING POWER. BY G. V. POORE, M.D.

IN seventy-four of these cases, the condition of the hand completely overshadowed any other disease, whether general or local, from which patients were at the time suffering. Most of the cases merited the name of "writers' cramp", or had been so-called; but the author purposely included a few cases which obviously did not merit that name, because the study of them threw some light on the main question. The cases fell naturally into six groups: 1. Paralytic (six cases); 2. Spasmodic (five cases); 3. Degenerative (nine cases); 4. Neuralgic or neuritic (nineteen cases); 5. Writers' cramp (thirty-two cases); 6. Anomalous (four cases). The cases were arranged in a tabulated form. It was shown that, since the ulnar nerve supplies thirteen and a half out of the eighteen intrinsic muscles of the hand, its integrity is very necessary (more necessary than that of any other nerve of the hand) for all delicate manipulation, especially writing. The spasms which affect the hand, and which are particularly prone to follow attacks of hemiplegia, owe sometimes, there is good reason to believe, their character, if not their origin, to a faulty antagonism (due to a secondary paralysis or paresis) among the muscles of the paralysed limb. Although it is commonly received that such spasms are due to disturbance of the grey cerebral matter, it is well to look also to the peripheral aspects of the question. Provided a nervous impulse issuing from the brain be distributed in a limb to equally irritable muscles which mutually antagonise each other, it is difficult to conceive that spasm of definite form should be produced; but, should the equilibrium of antagonisation in the limb be destroyed by a secondary lesion, the production of definite spasm is easily conceivable, especially when voluntary control is lessened by a lesion of the central ganglia. In some cases of localised spasm, there is no evidence of central change, and it is theoretically possible that the action of a disordered centre on a healthy periphery and the reaction of a disordered periphery to a healthy centre may be identical in their results. Loss of writing power is often the first and most prominent symptom of degenerative change occurring in the spinal cord or brain. The neuritic or neuralgic group is characterised by a painful and tender condition of the nerves of the limb, which may be induced solely by overwork, but more frequently by a strain or similar injury combined with exposure to cold and a depressed state of health. Of the nineteen cases in this group, twelve were females. Any attempt to use the arm either for coarse or fine acts produced fatigue, pain, and neuralgia. It is not always easy to distinguish these cases from true "writers' cramp", and, indeed, there cannot be said to be any hard and fast line between the two groups; but it is characteristic of the neuralgic group that—1. The symptoms involve a wider area; 2. The symptoms are sometimes induced without excessive exercise of any function; 3. Nerve-tenderness or neuralgia is a prominent symptom. In the group of true "writers' cramp", considerable care is necessary to detect peripheral evidence of mischief; but the author stated that, in every case of impaired writing power which he had seen, there had been evidence more or less marked of derangement of one or more of the muscles used for writing. This evidence consisted of—1. Obvious failure to use certain muscles efficiently either for writing or for some other less complicated act; 2. The occurrence of consentaneous movements or tremor when certain muscles were put in action; 3. Depressed or exalted electric irritability; and 4. The occurrence of sensory derangement or nerve-tenderness. The muscles which are most frequently involved are those of pen-prehension rather than those of pen-movement. Reviewing the cases as a whole, attention was directed—1. To the inferences which may be drawn from an inspection of the handwriting; 2. To the fact that joints were found to be implicated no less than twenty-one times, the joint-affection being rheumatic, neuropathic, gouty, or due to strained position; 3. To the fact that a difficulty in writing is not very infrequently hereditary, or developed very early in life; and that 4. Any evidence of involvement of the nerve-centres is decidedly rare. "Writers' cramp" has been spoken of as a disease of "faulty co-ordination", and there can be no doubt that such is the case, for it is evident that the muscles used for writing fail to work orderly to-

gether. We are not, however, justified in assuming the existence of a special co-ordinating centre for the controlling of the act of writing; and the author had been unable to find evidence that this centre (supposing it to exist) ever gives way, leaving the periphery, except for the special co-ordinated act, in a state of perfect health. The existence of such a centre appeared to the author to be improbable, for the following reasons. 1. He had never seen a case of writers' cramp without peripheral evidence of change; and in the majority of cases there had been no evidence of any change other than peripheral. 2. If there be a co-ordinating centre for writing, it must be created, as it were, by education. The co-ordination of writing, which we are many years in acquiring, must be distinguished from those co-ordinated movements (such as the symmetrical movement of the two eyes) which are wholly independent of education. The fact that no two people hold their pens exactly alike, and that it is scarcely more difficult to write with the toes than with the fingers is much against the probability of the existence of a writing centre. 3. Writers' cramp is never suddenly established, as aphasia sometimes is. 4. It is almost certain that a purely peripheral lesion may cause all the symptoms of writers' cramp. 5. The fact that the left hand (if used for writing) sometimes suffers as well as the right, is no evidence that the change is central. In previous writings, the author had spoken of "writers' cramp" as a "fatigue disease", and he was still inclined to adhere to the word "fatigue" as a convenient expression for an easily recognisable and familiar condition of the pathology of which we are uncertain. He was inclined to think that occasionally fatigue is the expression of hyperæmia or mild inflammation of a motor nerve, and that the same condition may be produced either by overwork or by accidental causes, such as cold, strain, "rheumatism", or injury. Fatigue especially attacks those muscles which are subjected to prolonged strain; and it is probable that the relative frequency of "writers' cramp", as compared with other professional ailments, is due to the fact that prolonged strain of certain muscles (those which hold and steady the pen) is inseparable from the act of writing. Finally, as to the position of "writers' cramp" in the catalogue of diseases, the author would feel inclined to class it with neuralgia; that is, with a disease, the phenomena of which are purely local, but which we recognise as being due not only to conditions affecting the sensory area involved, but also to molecular change affecting any part of the sensory fibre, whether before or after its function with the nerve-centre. The author concluded by laying down certain principles of treatment for the various forms of impaired writing power.

Dr. BUZZARD, after complimenting Dr. Poore on the complete and exhaustive character of his paper, said that he had seen many cases of so-called writers' cramp, and quite agreed with Dr. Poore that it could not be regarded as a disease *sui generis*. It presented itself in different conditions and required different modes of treatment. There was one cause of writers' cramp to which Dr. Poore had not referred—the wasting of muscles from lead. He had found in one case almost complete loss of irritability in the thenar eminence. It could not be traced to traumatic lesion or muscular atrophy, but, on examining the water which the patient used for drinking, he found it to contain lead. In several cases which he had seen, the electric irritability was increased on the affected side; these were connected with gout, and were relieved by the proper remedies for that condition. Dr. Poore regarded true writers' cramp as a fatigue disease of the periphery, and not of the centre. He (Dr. Buzzard) thought that the tendency of the disease to spread to the muscles of the arm and shoulder, and sometimes to affect also the left hand, indicated a central rather than a peripheral origin. There was no doubt that special centres for certain co-ordinated actions, such as writing, could be formed in the course of generations by education. He had always thought writers' cramp a central lesion, produced in the following way. An undue use of the special act caused congestion of the centre, and this led to interference with the nutrition of the muscle over which the nervous centre presided. Centres of recent formation—such as that for writing—would be more liable to disturbance than that for the co-ordination of the movements of the eyes, which had existed as long as man himself.—Dr. BROADBENT agreed with Dr. Poore that writers' cramp was a peripheral and not a central disease. The author of the paper had made a great step in advance in directing attention to peripheral nervous diseases, which were too much neglected. He would reject the idea of a special centre of co-ordination for writing. There was too much readiness to postulate centres of co-ordination.—Dr. JOHN HARLEY asked what the author meant by the term peripheral, seeing that he regarded the disease as affecting both the muscle and the nerve.—Dr. POORE, in replying, said that if there were a special centre it must have some locality, and there would be some indication of this, such as pain, etc., but he had never been able to find any.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 5TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Two Cases of Psoriasis (Living Specimens)—the one treated by prolonged daily Immersions, the other treated by an Ointment of Chrysophanic Acid.—MR. BALMANNO SQUIRE exhibited these cases. One was that of a gentleman aged 32, who had been extensively affected with psoriasis for nine years. He was kept under treatment by prolonged daily immersion in tepid water for exactly six weeks, during which time he submitted on the average to five hours' daily immersion. The temperature most readily borne by the patient during a prolonged immersion was about 90 deg. Fahr. By the end of six weeks, without other treatment of any kind, the patient had lost by far the greater part of his eruption, which presented now only a fiftieth, or at the most a thirtieth, of its original area, and had also got rid of the nocturnal itching which accompanied it. He was now treated with phosphorus "perles" and chrysophanic acid ointment; and in ten days, time presented only such insignificant traces of the disease that he decided to return home to his duties. Prolonged daily immersion in tepid water had for very many years been employed in the treatment of skin-disease at Leukerbad in Switzerland and at Baden near Vienna; but this case would seem to show that the less irksome ordeal of spending some hours daily in the bath, could suffice to produce fairly good results. The other case of psoriasis was that of a gentleman aged 34, who had been affected with the disease for twelve years. The eruption was chiefly massed over the belly and the loins. He was ordered the use of chrysophanic acid ointment, of a strength of twelve grains of the acid to the ounce of lard; and he was furthermore directed to take two phosphorus "perles" (containing each one-thirtieth of a grain of phosphorus dissolved in oil) three times a-day. On the fourteenth day of treatment, the patient conceived an impression that the phosphorus was impairing his mental energy, and accordingly he was permitted to discontinue taking the perles. By this time also, the erythema, excited by the chrysophanic acid, had entirely subsided. The patient was therefore ordered to resume the use of chrysophanic acid ointment, now made stronger than before; namely, a drachm of the acid to the ounce of lard. In three days' time, that is to say, on the seventeenth day of treatment, all trace of the eruption on his body had completely disappeared, the chrysophanic acid ointment having again excited some erythema. On the twenty-fourth day of treatment, the disease still existed on the arms and legs, local treatment with the chrysophanic acid ointment having been still persevered with to the limbs, although, since the seventeenth day of treatment, no further applications had been made to the body, inasmuch as every sign of the disease had gone from the trunk. The patient still exhibited traces of the disease on the limbs.

Dr. TILBURY FOX said that the case cured by immersion confirmed what was already known on that subject, but in private practice the method was hardly applicable. Few could afford the time necessary. The case recorded was one of indolent and chronic psoriasis, and the treatment succeeded, but generally failed when fresh crops were coming out. The other was similar in character, and more than one remedy would suit such cases. For instance, mercurial and carboic acid ointments would do, so would alkaline baths, and so on. The earlier and more acute stages were more difficult to treat, and here a specific could hardly be sought for. For instance, one form was apt to occur in married women from oversuckling; others, again, in gouty subjects, where totally different lines of treatment were demanded. Again, there was the rupioid form, tending to occur in children, where cod-liver oil suited best; and still, again, the malady was apt to occur among overwrought city men, where the digestion was the chief thing to be looked to. It was only in the essentially chronic form that chrysophanic acid could be said to do good, but it stained both the skin and the clothes, and patients did not like it.—MR. HUTCHINSON said patients should be warned of the effects of the acid, for often severe erythema followed. What was the real meaning of the word "cure" in psoriasis? It ought to mean relief permanently, or else for a period of years. It was easy to get rid of the scaly symptoms for a period, but what of a longer time? Hebra used bathing, but not the bath referred to; rather a big one, into which half-a-dozen patients may enter, and scrub each other with coal-tar soap for six hours or so at a time. Cures, as he called them, followed. He thought arsenic and tar, both externally and internally, did much good.—Dr. R. LIVEING could confirm what had been said as to the objections to chrysophanic acid—patients would hardly put up with it. He himself had long used it for ringworm, but the patients complained of the dirty mahogany colour it gave to their hair. He had long used baths with soft soap and flannel, and on this

method half-an-hour a-day sometimes sufficed for a cure. Acute cases constituted the real difficulty.—Dr. R. CROCKER said that, while there was no doubt the bath treatment, as adopted by Mr. B. Squire, was very effectual, a similar result might often be obtained by simpler and less inconvenient means, and related a case of severe universal psoriasis, present more or less for twenty years, which was cured, in the sense alluded to by Mr. Hutchinson, in about three months by alkaline baths for half-an-hour twice-a-week, and diuretics internally. As for chrysophanic acid, he had used it somewhat extensively two years ago in cases of ringworm, but had almost abandoned it, except in parts concealed by the clothes, on account of its limited success and unpleasant effects. He had shown a case at the Harveian Society where it had dyed the hair a purplish brown, as mentioned by Dr. Liveing; and, at the time when he was using it extensively, he often recognised his patients in the street by the colour of their hair. Moreover, its effects were not confined to the part to which it was applied. In some cases in which only the scalp was treated, a coppery red erythema spread over the face and neck, accompanied by oedema of the eyelids and sometimes slight conjunctivitis, the eruption terminating in a few days in a dirty-looking desquamation. Being such a powerful irritant, it was only suitable for carefully selected chronic cases, whilst many would be aggravated by it.—MR. MORRANT BAKER had used the acid, and thought it the most rapidly acting remedy for psoriasis, but it acted on other parts of the skin than those to which it was applied. This might in the end turn out a valuable property. One of the cases he could hardly call psoriasis, it seemed more like a parasitic disorder.—Dr. H. WEBER referred to his experience of patients sent to bathe at Leuk (Louèche), where it was the custom to pass from four to six hours in the water in the morning, and again from two to three in the afternoon. In some cases, this lasted from four to eight months; but all his cases were of long duration. Only one of his cases was cured, and that was the most recent. In all the others, the malady returned within two years.—Dr. WHIPHAM considered that the acid should be used with caution. In one girl, who had suffered from psoriasis for five years, the acid was applied to the eruption only, yet the face swelled up as in erysipelas. In a more recent case, in the person of a flour-miller, where the disease chiefly prevailed where there was rubbing, on the arms and legs, the ointment caused pustules and boils on the skin round about.—MR. B. SQUIRE, in reply, said he considered the balance was decidedly in favour of chrysophanic acid. He could hardly think it more easy to cure a chronic than an acute case, though the latter yielded better to internal remedies. He did not like the use of arsenic, but preferred external treatment. The acid, no doubt, required careful handling; but other things did the same. The hair only became discoloured after the use of soap and water, and the dye could readily be removed by means of benzole.

A Case of Eruption from Bromide and Iodide of Potassium.—Dr. RADCLIFFE CROCKER read the report of this case. The patient, a labourer, married, aged 49, was sent from the hospital in Queen Square to University College Hospital on February 5th, with a peculiar eruption for diagnosis. Recognising it at once as a bromide of potassium rash, Dr. Crocker obtained the following history. He was treated at Queen Square Hospital four years ago for right hemiplegia with aphasia. He never had rheumatic fever nor syphilis. On January 5th, 1878, he was readmitted as out-patient at the Queen Square Hospital under Dr. Bastian, having had a fit of an epileptiform character the day before, which left slight weakness of the right side and dropping of the right angle of the mouth. For this, ten grains of bromide and five of iodide of potassium were prescribed three times a-day. This was continued up to February 4th, i.e., nearly a month, when it was changed for an effervescent mixture. The eruption began in the form of "pimples" on the cheeks on January 23rd, and developed into patches, as now seen, by the 27th. When Dr. Crocker first saw the case, on February 5th, it presented the following characters. On each cheek was an irregular considerably raised patch about the size of a crownpiece, of a dull, livid, red colour, giving a boggy almost fluctuating feel to the finger. The central part was occupied by a brownish-yellow scab, but at the periphery numerous yellow points were observable, which, on close inspection, could be seen to be the apices of partially coalesced papules. On pressure, fluid exuded, which being examined under the microscope, was found to consist of pus-cells, epithelium, and sebaceous matter dissolving in ether, with some blood-corpuses. Smaller patches of evidently aggregated papules were present on the end and side of the nose, and a few discrete round pink papules a quarter of an inch in diameter, some of them with yellow apices and softened bases, were seen on the cheek, nose, and upper lip. As seen at the Society on February 5th, the yellow points were no longer visible, and the composition of the patch by the aggregation of papules could not be made out. The right patch, which came out four days

before the other, was now covered with a thick brownish yellow and blood-stained scab, bleeding, which was described as spurring out, having occurred twice. On the left cheek, only the lower half had the crust upon it; the rest was livid, red, and fluctuating, and the solitary pimples had also dried into crusts, while their bases were softened. There was no eruption in any other part of the body. Dr. Bell of the Birkbeck Laboratory at University College was kind enough to examine the urine, and found iodine, but could not detect any bromine; its specific gravity was 1030; it was very acid, contained much lithates, but no albumen or sugar. This case formed a pendant to that of an infant with a similar eruption which Dr. Crocker showed to the Pathological Society about a month ago. The following points were of special interest: 1. The moderate dose of bromide of potassium; only ten grains three times a-day for a month; 2. The fact of iodide being given with it; 3. Absence of eruption on the limbs; 4. Its being really only an aggregated form of acne; 5. The absence of bromine in the urine. Dr. Crocker alluded to many other cases described by English and continental observers; in many of which, when the rash appeared, it was believed there was some iodide present as an impurity in the bromide. But Dr. Crocker thought there was no doubt, from recorded cases, that bromide of potassium alone would produce it.

Mr. NUNN had never seen such a case, though he had given both bromide and iodide very largely. They could only be sure it was a bromide rash if it ceased with the cessation of the administering of the drug.—Dr. TILBURY FOX said there could be no doubt that the rash was a bromide rash. He had seen many such. Both the bromide and iodide rashes were of the same kind; but the rash was most likely to follow where both were given in combination.—Dr. GLOVER referred to the case of a child, mentioned by Dr. Tilbury Fox. It was six or eight weeks old, and was not taking bromide; but the mother was, and had been doing so for a long time. There was no doubt as to the nature of the case.—Mr. HUTCHINSON also confirmed the diagnosis. He had seen some very bad cases, in some of which the eruption ensued again and again. It was not a question of dose, but of idiosyncrasy.—Mr. BAKER thought there was no doubt as to the nature of the case. There was no bromine or iodine in the urine that might help to account for it.—Dr. MAHOMED referred to a case he had seen at St. Mary's Hospital. The patient died of chronic Bright's disease. He suggested that this man too had contracted kidneys.—Dr. CROCKER was glad that there was an unanimity as to the nature of the disease. Idiosyncrasy was, no doubt, the clue to these cases, though probably the urine might have something to do with it; but it was not likely. In France, the cases referred to were far more common and more severe, the dose given being apparently larger. It was not easy to separate bromine from urea.

Two Cases of Cancer of the Breast of Opposite Extremes of Duration.—Mr. NUNN read a paper on this subject. He commenced by referring to two cases of a parallel character, particulars of which were communicated to the Society on November 22nd, 1872, and to the questions, amongst others, that appeared to press for consideration, namely, What was it that rendered cancer-cells stationary, and retaining them *in situ* permitted their undergoing degeneration without encroaching upon and infiltrating contiguous parts? and what, on the other hand, caused their wide distribution and proliferation in distant regions? What share had inflammatory action in stimulating proliferation and promoting diffusion? The two cases now brought before the Society presented opposite features; one terminated fatally within eight months, the other continuing to live on after the lapse of six years, four of which had been spent in the Middlesex Hospital under the author's observation. Case I, aged 45, had a lump form in the breast after a blow that had almost been forgotten; rapid solidification of the entire mamma, and brawny cedema of the side of the thorax and upper extremity, followed, accompanied by excessive painfulness. The *post mortem* examination showed that the whole mamma was the seat of cancerous deposit, that the axillary glands of both sides were affected, the right lung adherent, the left patched with cancer-deposit, the pleural cavity containing sixteen ounces of turbid fluid.—Case II was admitted in November 1873 into the Middlesex Hospital, where she still remained. The tumour was about the size of a duck's egg, and no axillary glandular complication existed on admission. The tumour, after a year's residence in the hospital, inflamed; and an axillary gland was found to have enlarged in April 1877; and, in January 1878, acute necrosis destroyed first the centre, and secondly a part of the circumference, of the tumour, a delicate cicatrization having covered the cavity left by the slough after the first attack. The author expressed his belief that, in cases of the early appearance of brawny swelling of the upper extremity, commencing at the side of the thorax and extending downwards, the lymph-canalicular system was the structure primarily involved. The observations of Köster of Würzburg were alluded to (*Die Entwicklung der Carcinome*,

1862), and the criticism of Waldeyer (*Sammlung Klinischer Vorträge*, 1872) was mentioned. The author urged the importance of shielding a cancerous tumour, previously to operation, from all mechanical and other violence, and the adoption of such remedies and measures as would tend to obviate inflammatory action. And he submitted that, when a cancer was brought in the very earliest stage to the surgeon, it was more judicious to watch it for a time, so as to avoid operating in those cases where, by the peculiar nature of the disease, operation could do no good, and would inevitably appear to the patient and patient's friends to have done harm. The author referred to the valuable statistics of Mr. Sibley and Mr. Morrant Baker as affording us the average duration of life under varying circumstances in cancer; but he thought, nevertheless, the study of individual cases was requisite to be able to enable one to attempt or confidently declare a prognosis—prognosis having often an importance beyond its scientific interest in making provision for the welfare and comfort of the patient.

After a few remarks from Dr. GLOVER and Mr. MAUNDER, the PRESIDENT suggested it might be a good subject to take up for discussion.

Specimens of Tendon Ligatures.—The PRESIDENT exhibited some specimens of the kind. It was certain, he remarked, that doubt existed as to the trustworthiness of catgut for the ligature of arteries in their continuity. A material that occasionally failed to arrest the blood-stream for a sufficient time to ensure the cure of an aneurism, could not be recommended with confidence. He hoped a more extended trial would confirm the promise that we had in fine tendon ligatures, that they would resist the solvent action of their surroundings in a wound, so that, although they were eventually dissolved, they lasted longer than catgut. And these ligatures tied better knots than the catgut, and the knots did not slip. Their strength, too, was sufficient; and, as they dissolved slowly, they answered well for sutures, especially where some strain was put on them, catgut quickly yielding under such an influence. The specimens of ligatures handed round had been sent him by Mr. Hulme of Guildford, who had received them from Mr. T. M. Girdlestone, Surgeon to the Albert Hospital at Melbourne. They were extracted from the tail of a marsupial, and were of various sizes as they grew. They had not been split. Mr. Girdlestone said they made very good sutures, but he had not used them on arteries. The natural tendons, however, had been freely used for ligatures. They were simply washed and dried. Before use, they should be soaked in carbolised oil, and Mr. Girdlestone recommended that they should be softened in carbolised water just before use. As the supply of these tendons was distant, and as he (the President) was unable to find any precisely similar, of sufficient length, in this country, he was having prepared ligatures which were made from tendons of the horse. They had the same characters as the tendons from the marsupial.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 5TH, 1878.

CHARLES MURCHISON, M.D., D.C.L., F.R.S., President, in the Chair.

Rupture of the Aortic Valves.—Dr. BURNEY YEO related the subsequent history of a case of this lesion in a man whom he exhibited at the Clinical Society in May 1874. The man had a loud cardiac murmur, heard first a few weeks after a fall down eight or nine steps, when he had clutched violently at the handrail. He was a healthy fresh-looking man aged 45, and of temperate habits. He had occasionally had some rheumatic pains in his limbs. A loud musical murmur was not only heard all over the chest, but he heard it himself, and it was audible at a distance of three feet from his body. He had no pain, no faintness, and no great dyspnoea. The murmur changed a good deal in character; once it was almost lost, and then again a loud double murmur was heard. In January last year, he was much worse; he had muscular feebleness and impaired sensation and co-ordination, being somewhat ataxic. His heart was hypertrophied, and the area of dulness was very large. In November last, when dressing, he dropped down dead. At this time, he felt so ill that he was dressing to go to the hospital. A *post mortem* examination was held, but the chest only could be examined. The heart was very large, the muscular structure commencing to undergo fatty change, while the aorta was atheromatous. As to the valves, it was found that the anterior segments were separated, and the torn cusp vibrated back and forwards in the blood-current. The duration of the case was three years and a half.—In answer to a question by Dr. Douglas Powell, Dr. YEO said that the pulse was not first aortic and then subsequently mitral, but was an aortic collapsing pulse all through.

Prostatic Tumours Removed by Lithotomy.—Mr. BRYANT related two cases where prostatic tumours had been removed in lithotomy.

The first occurred in a man aged 67, who had had a stone for some time. The prostate was enlarged; and therefore the blunt gorget was used. The stone was found to be a large one; but the resistance offered to its removal was unwontedly great. A portion of prostate was found to be grasped by the forceps, as well as the stone. Both were removed. The stone was one inch and a half in diameter, and was a mulberry calculus covered with uric acid. The case did well, and there was no hæmorrhage. The portion of prostate consisted histologically of gland-tissue with muscular fibre. The second case was that of a man aged 70, who had old bladder-symptoms from a calculus. On performing lithotomy, the prostate was found enlarged, and the stone met with unusual resistance to its withdrawal. A portion of the prostate was grasped by the forceps, and on rotating the forceps a prostatic tumour came along with the stone. In this case, also, there was no hæmorrhage, and the case did well. In the second case, it was thought, from there being some cell-structure in the growth, that it was a malignant adenoma; but the after-history disproved this view, there being no bladder-symptoms now.

Impacted Fracture of Shaft of Femur.—MR. BRYANT gave an account of such an injury, occurring to a man aged 83, who fell down some steps on his right knee. The right thigh was swollen and shortened by two inches. The case went on well till uræmic symptoms set in. On *post mortem* examination, the kidneys were found to be suppurating. The femur was found fractured and the proximal end driven into the distal shaft, splitting it to the condyles; the seat of fracture being at the top of the lower third. Impaction might thus take place into the shaft of the bone, and the injury described could only have taken place through a fall on the knee. Extension failed in these cases to make the limb of normal length. There was a danger of over-manipulation.

The Bacillus of Splenic Fever.—DR. EWART described the bacillus anthracis of splenic fever, specimens of which were shown under the microscope. This form of bacterium is a specific organism, which produces certain lesions and results ending in death. In the first specimen were to be seen rods, of which the capillaries and larger vessels were full, so that the animal seems to die of asphyxia. When blood, containing the bacillus anthracis, is put into a drop of water, the rods are seen to elongate into threads. In twenty-four hours, they are minute stakes. The spores of the bacillus develop at a temperature of 82 deg. Fahr. They are small, and escape from the tube in which they form, the tube at times breaking across. They always set up the same results when introduced into the skin. This bacterium is the cause of splenic fever.—THE PRESIDENT asked how often these spores could be reproduced from solutions of the mother fluid.—DR. EWART said three generations could be so produced. The mouse when infected died in three days. Rods only were found in the mouse.—In answer to Sir Joseph Fayrer, Dr. EWART said the fluid used by him came from Breslau, and was taken from the sheep.

Forms of Cancer of the Throat.—MR. LENNOX BROWNE exhibited four specimens, illustrated by drawings and microscopic preparations, of: 1. Primary cancer of the tonsil; 2. Cancer of the tongue, invading the tonsil (living patient); 3. Pharyngo-laryngeal cancer (living patient); 4. Primary cancer of the larynx. He stated that cancer of the tonsil was of extreme rarity, only one case having been brought before the Society; in that instance, the disease had been discovered only after death, following an operation for removal of enlarged cervical glands; and the disease was hardly mentioned in standard works on pathology or surgery. He had in the last eleven years seen six cases of primary cancer of the tonsil, which number, on a low computation, gave an average of one case to about every five thousand patients suffering from throat-diseases. The variety of cancer in this region had been generally stated to be that of scirrhus; but his own experience had lately led him to believe that it was more frequently encephaloid. All his cases had occurred in male patients of between forty and sixty years of age. Probably the greater tendency of females, of cancerous diathesis, to disease of the mammary glands, to say nothing of the greater frequency of cancer in the female organs of generation than in those of the male, accounted for this immunity of women from tonsillar cancer. The patient from whom the first specimen was taken was a man aged 53, and was under observation from September 17th to December 24th, 1877, the day on which he died. His case well illustrated the ordinary signs, symptoms, and course of the disease, namely: gradually increasing swelling of the affected tonsil and faucial tissues around, with corresponding infiltration and hypertrophy of the sub-maxillary and cervical glands; extreme dysphagia, with constant earache, both relieved on occurrence of ulceration, and by hæmorrhage, which are so frequent, and which, as in this case, usually lead to death. Emaciation is also very rapid. This patient lost twenty-six pounds in ninety-eight days, and seven pounds in the last fourteen days of his life.

Relief had been given by removal on two occasions of portions of the tumour by the galvano-cautery loop, and this was the only surgical treatment which could be safely recommended. The second case was even more rare, and was the first he had seen, although he had since learned that his colleague Dr. Llewellyn Thomas, who kindly transferred this patient to his care, had witnessed another similar to it. It was by no means unfrequent for the pharynx and floor of the mouth to be invaded by contiguity of epitheliomatous ulceration; but, in this instance, the disease was actually of the tonsil itself. The patient had suffered from one or two attacks of severe hæmorrhage, and the termination of the case would probably be the same as in that of the former specimen. The only difference clinically was the greater unintelligibility of speech, due to the lingual disease. The third and fourth specimens were shown in connection with each other, to illustrate the two most usual varieties of cancer of the larynx. In the living specimen, it was seen, on admission, to commence on the pharyngeal border of the larynx, and so to press on the right arytenoid cartilage, the action of which was somewhat paralysed, and against the cricoid. The disease had now extended right across the back wall of the larynx, concealing its posterior border, and greatly diminishing the orifice of the gullet; later, the cartilages would probably undergo carious degeneration. In these cases, the disease was almost invariably epithelioma; there might be only slight laryngeal symptoms, but dysphagia would be chiefly complained of, and death would be by starvation. In the other case, the disease had commenced actually in the cavity of the larynx, and was of much greater rarity. Here dysphagia was by no means extreme, and, on *post mortem* examination, the body of this patient was seen to be covered by a good layer of fat; but the laryngeal symptoms were most severe. In conclusion, it was submitted that both these cases illustrated how difficult it would be, by any radical operation, to remove all the disease in this region; and even if the patient survived its immediate effects, how slight was the chance of ameliorating the symptoms or of preventing recurrence.—THE PRESIDENT asked if the cancer of the tonsil had been examined microscopically, as the diagnosis of cancer from syphilis was difficult clinically.—MR. BROWNE replied that such examination had been made; at first it was thought to be scirrhus, now he could only be sure it was a malignant growth. Specimens were referred to the Morbid Growths Committee.—MR. BUTLIN spoke of a case of primary sarcoma of the tonsil removed by Mr. T. Smith. It was a tumour of the right tonsil. It returned four months after removal, and the glands of the neck were infiltrated. It was again removed, and had not returned. There was no hæmorrhage at either operation, each of which was performed with the *écraseur*.

Sequel of a Case of Recurrent Sarcoma.—MR. NUNN said that, eleven years ago, he removed a tumour, twice the size of the fist, from the shoulder of an old man. A section was submitted to the Morbid Growths Committee, and it was decided it was cancerous in its nature; nevertheless, there had been no return.

Plugging of Superior Mesenteric and Femoral Arteries.—MR. HOWSE exhibited a fresh specimen of ulceration of the bowel, with plugging of the superior mesenteric artery. It occurred in an old woman, who had gangrene of the leg. The coils of intestines could be readily seen through the abdominal parietes. The femoral artery had ceased to pulsate, and, as the patient complained of great pain, the thigh was amputated, and no more pain was experienced. The diarrhoea remained. After death, it was found that the femoral artery was plugged up to the external iliac. The superior mesenteric was plugged by a fibrinous clot. The gut was almost sloughing. The colon was adherent to the small intestine, and a perforation had taken place at this spot. There were scars on the great intestine.—THE PRESIDENT asked if the intestinal lesion came first and the plugging after, or *vice versa*.—MR. HOWSE thought the ulceration secondary to the plugging.—DR. COUPLAND asked if the gangrene of the leg were embolic. If a portion of the clot in the superior mesenteric got into the aorta, it might be washed into the femoral artery.—MR. HOWSE said the clot extended into the aorta. The heart and aorta were healthy. She stated that she had passed black stools.

Caries of Spine.—MR. BARKER showed a spine with most extensive caries, taken from a girl aged 15, who came to the hospital on crutches. The abscess which existed was opened antiseptically, but the patient died. The caries extended from the higher dorsal vertebrae down through the lumbar discs. The abscess went down the sheath of the psoas muscle to the thigh. Another abscess was connected with the sacrum, and had sinuses on either side of the perineum. The vertebral discs moved on each other freely. There was right pleurisy. The liver, spleen, and kidneys were amyloid.

Sarcoma in Muscle of Leg.—MR. WALSHAM exhibited, for Dr. Marshall of Nottingham, a tumour in the leg of a female child five months old. There was a swelling in the calf of the left leg till it was twice

the circumference of the right leg. There were no enlarged glands in the groin. A needle was passed in and bright blood followed. The leg was amputated at the knee. The tumour was found to be a spindle-celled sarcoma. The interest lay in the early age at which it had appeared.

Genital Obstruction of the Common Bile-Duct.—Mr. MORGAN related a case. It was in a child of healthy parents. The meconium was healthy, and the cord came away normally. Then the child became yellow, was not well; it improved, but grew more jaundiced. There was no enlargement of the liver. The urine stained the napkins. Several cutaneous hemorrhages took place. The bowels were open, the faeces green; there was no bile in them. The child had convulsions, and died. It was a fairly nourished child. The other viscera were healthy but bile-stained. The liver was enlarged; the gall-bladder small; the duct patent, but empty. The canal of the ductus communis choleodochus was obliterated for half an inch. The intestines were collapsed. The friends would not allow any part to be removed. The lesion was rare. The child lived for ten days without symptoms, and died at nine weeks and a half.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, NOVEMBER 7TH, 1877.

A. RANSOME, M.D., President, in the Chair.

Removal of Metatarsal Bone of Great Toe.—Mr. JONES showed a girl, eleven years of age, the metatarsal bone of whose great toe he had removed in August last. The operation was performed for disease of the bone of more than three years' standing. The wound healed in a fortnight, and the patient was now able to walk without any perceptible lameness. The great toe was shortened and retracted nearly to the extent of the length of the metatarsal bone. The false joint had formed between the metatarsal phalanx and the internal cuneiform bone.

Salivary Calculus.—Mr. BOUTFLOWER exhibited a salivary calculus, of comparatively large size, obtained from the submaxillary duct of a lady patient.

Progressive Pernicious Anæmia.—Dr. SIMON read a paper on progressive pernicious anæmia, and pointed out that there was no pathognomonic symptom of the disease, all the symptoms being merely evidences of an extreme anæmia, and undistinguishable from those produced by anæmia proceeding from any cause whatever. He disputed Lebert's and maintained Addison's claim to priority of description of the disease, and considered several of Lebert's cases to be instances of exaggerated puerperal anæmia. The disease is not confined to one sex, but seems to occur during the period of greatest physical activity; in men, generally between the ages of twenty-five and fifty; and in women, between the ages of twenty and forty. Dr. Simon thought that Dr. Pepper's speculations, as to the part played by the marrow of the bone in the causation of this disease, were negatived by direct recent German researches, as well as by the absence of confirmatory experience from other observers. He thought that, while no positive or peculiar pathological lesions had been discovered, the course of the disease, and its analogy to Addison's disease, pointed to a nervous origin. No treatment has hitherto proved permanently successful: a recent case of recovery under the care of Dr. Bramwell not having, in Dr. Simon's opinion, stood the test of sufficient length of time.

Hemiplegia, with Enlargement of Paralysed Parts.—Dr. ROSS read notes of a case of left hemiplegia, of six months' duration. The peculiarity of the case was that the arm, forearm, and leg on the paralysed side measured one inch more in circumference than the healthy limbs at corresponding points. The left half of the chest also measured one inch more than the right. The muscles of the left arm and forearm, and to a less extent of the legs, were the subjects of "late rigidity". The joints of the index and middle fingers of the left hand were swollen and red. Small portions of muscle were withdrawn by Duchenne's trocar from the forearm, and, on microscopical examination, were found to be similar to portions withdrawn from a case of pseudo-hypertrophic paralysis under examination at the time. Dr. Ross pointed out that, so far as could be judged in the absence of a *post mortem* examination, the hemiplegia was caused by hæmorrhage into the right lenticular nucleus, causing interruption of some of the fibres of the internal capsule. This was followed by descending sclerosis of the lateral column of the cord on the opposite side. The affection of the joints of two fingers of the paralysed hand showed that the left anterior horn of grey matter was affected; and the question which arose was, whether the latter affection also produced the pseudo-hypertrophy of the muscles of the paralysed limbs. The similarity of this case to one related by Barth was noticed. In Barth's case, as pointed out by Charcot, the

muscular pseudo-hypertrophy was associated with primary lateral sclerosis of the cord.

Pseudo-Hypertrophic Paralysis.—Dr. LEECH showed a boy, aged 7, suffering from pseudo-hypertrophic paralysis, in which the hypertrophy was slight and limited to the muscles of the calves. The lordosis was well marked, and the method of walking and standing very characteristic. Indications of weakness of the lower extremities appeared when the boy began to walk. Although, during the past three years, his power of locomotion had much diminished, he could still walk a few yards without assistance.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, DECEMBER 5TH, 1877.

SAMUEL GORDON, M.D., President, in the Chair.

Alternate Paralysis.—Dr. GEORGE SIGERSON made an elaborate communication on this subject, illustrated by the details of a case of sensori-motor Y-shaped paralysis in a rural clergyman, aged 65, a man of athletic frame, sanguine temperament, and active habits. The designation *paralysis alterne*, which Professor Gubler gave to a certain class of diseases, characterises with equal fidelity the relative position of the lesion and the effect produced. It has sometimes been translated "cross paralysis" by British authors, but this name does not accurately render the original. Whilst "cross paralysis" simply indicates phenomena of decussation, the adjective "alternate", borrowed from the science of botany, where it marks a mode of phyllotaxis, not only shows that opposite sides of the body are affected, but also that the central lesion operates at different relative heights. On this account, the author preferred the term to the more familiar designation, which may prove misleading by its very simplicity. Several topics of physiological and pathological interest were suggested by the incidents of the case detailed by Dr. Sigerson. 1. The term facial or hemifacial paralysis was ambiguous. It seemed to imply that one side of the face was completely paralysed, whereas the muscles supplied by the trigeminal nerve might be spared. Where facial paralysis was meant to designate paralysis of the facial nerve, he submitted that, to avoid ambiguity, the expression paralysis facialis might be employed. In the present case, the muscles supplied by the trigeminus were not only spared, but functionally exalted. 2. The liability of the left eye to hyperæmia of the conjunctiva furnished a pathological pendant to the physiological experiments of Magendie, Snellen, and Schiff. It had been proved that section of the trigeminus was not necessarily followed, as at first alleged, by hyperæmia and ulceration of the eye, if only the precaution were taken of keeping it covered. In the present case, of two eyes equally sensitive, one became injured because of the inability to close the eyelids. 3. The closure of the paralysed nostril on inspiration (as mentioned in manuals) was dependent on its form; if normally wide and funnel-shaped, the entrance of a current of air did not necessarily tend to close it. 4. The sense of taste appeared to depend, to some extent at all events, on the lingual branch of the trigeminus, inasmuch as its paralysis was accompanied by a diminution of taste, as well as of tactile sense, in the anterior two-thirds of the tongue. 5. The difficulty of which the patient complained in opening his mouth wide, appeared to be due to two causes. a. Abnormal exaltation of the trigeminus is similar to what Dr. Sigerson had found elsewhere side by side with paralysis. It seems to constitute what M. Vulpian, in reference to another subject, terms a "balancement". Here it was betrayed by hyperæsthesia of the sensory filaments, and by a quicker response of the muscles to the faradic stimulus than is usual. b. Akinesia of the muscles which serve to open the mouth by depressing the lower maxilla is to be expected when the second branch of the seventh is affected. When the muscles in question were specially treated and their strength augmented, the difficulty in opening the mouth diminished. 6. Part of the deformity noticeable in patients affected by facial palsy is due to the weight of the lax muscles and integument, which tends to drag down the lower eyelid and to deviate the ridge of the nose downwards and towards the paralysed side. Part of it is also due to the surviving action of the quadratus menti and depressor anguli oris, which, being animated by the mental branch of the trigeminal nerve, and no longer equipoised by the tonic force of their antagonistic muscles, depress the angle of the mouth, and give an expression of sadness to the face. Hence, not only is that distortion, which is observable when the patient speaks, due in part to the action of healthy muscles, as has been remarked, but the action of other sound muscles, together with the weight of lax tissue, helps to produce the deformity which is observable when the face is in a state of repose.—A discussion followed the reading of Dr. Sigerson's paper, but no point of general or scientific interest was brought forward.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 16TH, 1878.

THE ADMISSION OF LADIES TO THE BRITISH MEDICAL ASSOCIATION.

THE letters which have appeared in our columns from Dr. Wilson Fox, Mr. Lister, Dr. Risdon Bennett, and Mr. Berkeley Hill sufficiently indicate the lively interest excited by the question raised in Dr. Wilson Fox's communication to the Committee of Council, and by the cautious and guarded reply contained in the resolution carried and forwarded to him. What may have been the course of the discussion which led to the adoption of precisely that formula, we have no means of knowing; but, taking it just as it is, we must point out that the position arising out of it is a simple one, and easily admits of satisfactory treatment. The question is one of no very complicated character, although it does not appear to have been fully appreciated by all our correspondents. Dr. Risdon Bennett very clearly points out that the admission of women to the *Medical Register* as qualified practitioners has, with the assent of the General Medical Council, by the influence of Act of Parliament, and by the assistance of the King and Queen's College of Physicians of Ireland, become an accomplished fact. Medical women have also their own medical school, fully equipped with a staff of lecturers chosen from the principal London schools, and a hospital of one hundred and fifty beds in which to complete their practical studies; that question, he points out truly, may therefore be set aside at the present moment.

It is not the matter at issue now, as some writers seem to think, and is not at all raised by the letter of Dr. Wilson Fox or by the answer of the Committee of Council. We have already explained what the facts are in respect to the relation of medical women to this Association, but it may be well to recapitulate them. Two qualified medical women were elected members of the Association: one by the Council of the Metropolitan Counties Branch, and one by the Committee of Council, prior to the Edinburgh meeting in August 1875. At that meeting, the attention of the Association at large was pointedly called to the subject, and a *plébiscite* by circular was ordered to be taken on the question, "Shall women be admitted to the Association as members?" and, out of 4,161 answers received, 3,072 were noes and 1051 ayes.

From the date of the Edinburgh meeting, no women have been proposed or elected, and, of course, would not, or could not, be so in the presence of that decision, although it may possibly legally be necessary and desirable to transform the resolution into a by-law, in order to give it legal effect. The question raised by Dr. Wilson Fox's letter is a retrospective one: What is the position of the Association in respect to ladies who were elected before that decision was taken? To this the Committee answer, that they have no power to prevent these ladies from attending meetings. It is, however, clear enough to us that the members can give them the power which, as a committee, they do not possess; and, under ordinary circumstances, any two members of a voluntary association who found the principle involved in their administration to be negatived by the voice of the great majority of that Association, would feel called upon to respect that voice and retire

from the Society which had declared that their presence was unacceptable. Whether the two ladies in question will be advised to take this course we cannot say, or whether, if so advised, they will be willing to take it; but there can be no doubt that a voluntary body has power to make the regulations for its own conduct of business, and we apprehend that the same majority which declared that in future women should not be admitted to the Association, can, if necessary, also declare that the two ladies who happened to be, prior to the resolution, members of the Association, should be informed that their presence at meetings is not desired, and that corresponding instructions have been given. At any rate, it is obvious that it is extremely undesirable that any considerable discussion should arise on a matter of detail after the principle which must govern it has been decided by a large majority. The question is, except as a matter of sentiment, not a very pressing one, as the occasion of offence cannot arise again until the general meeting next August, and it might then be settled by a decision to be taken, of which any of our correspondents may give notice, or as to which the Committee of Council may in the meantime come to a resolution. We would, however, only once more point out that the question is really a very small one affecting only retrospectively the conduct of two ladies in respect to their exercise of privileges against which the general voice of the Association has very decidedly made itself heard. If necessary, a special meeting of the Association could be called for the purpose; but to do so would, we imagine, be to give too much importance to a matter which is in itself intrinsically trifling.

THE GOVERNMENT OF NAVAL HOSPITALS.

WE gladly admit the protest of the *Army and Navy Gazette* against our assumption of their animosity towards the principal medical officer at one of the naval hospitals, which it detects in our recent observations on the subject; but the animus of the writer who instigated the article on "cemetery hay", jam, and the disposal of boatmen at an undesignated hospital, was too palpable not to call for our comment. We desire to go hand in hand with our naval contemporaries in promoting the interests of the service before those of individuals. If, however, the information which led it to believe in the existence of maladministration in one of our large naval medical establishments was in any way correct, why has no inquiry been made? And how is it that one principal has subsequently retired with an accumulation of honours, after a twice repeated extension of his term of office; and that neither he nor the inspector-general who remains in charge of the other large hospital have had any opportunity afforded to them of clearing themselves from the reproach that has been laid upon them; nor has their administration been in any way called in question? Our remarks upon the discipline in hospitals were mainly directed to the management of the patients, and this has elicited the admission that order has been maintained in the wards since the establishments have been under the control of the medical branch of the service; but to allege, as is now done, that there is no difficulty in doing so, is either making light of one of the most important duties of the superintending officers, or must be accepted as a compliment to their administrative capabilities in being able to rule so satisfactorily an average of nearly five hundred patients and their attendants, amounting to sixty or seventy more persons. These attendants are drawn from the same class of men in the service as the patients themselves. The latter, it must be known, are, as to many of them, kept in hospital with trifling wounds, and are otherwise in good health. As none are discharged to their ships until quite fit to resume their duties, there is always a very large number nearly ready for discharge, more or less impatient of restraint, and with spirits and energy sufficient for any amount of mischief, if inclination led or opportunity offered.

But it is not the sick men who, our contemporary says, require to

be controlled; but the large staff. Now, the medical staff of the largest of our naval hospitals consists of eight or nine officers of various ranks, and of ages from thirty to nearly sixty—gentlemen, and bound by the bond of professional brotherhood and etiquette, as well as by the discipline of the service, to yield a loyal and willing obedience to their chief, and to assist him by carrying out all orders for the comfort and well-being of the inmates. The working staff of the administrative department has for its head a civilian officer of long standing, the agent, with his assisting clerks, all of whose duties are clearly defined, so that no superintending officer can well interfere with them. This department is altogether independent of the medical, except as to the superintending officer, through whom pass all orders for payments or issue of stores. Besides the sick-attendants before named, there are from thirty to forty men-servants and labourers variously employed, as the butler, cooks, gardeners, bathmen, etc.; and, lastly, the laundry women and scrubbers, under the control of the matron. As it is not the sick, then, who require control, it is not difficult to see over whom the "watchful eye" and the "sure check" upon irregularities are to be kept. We wish our naval captains a more appropriate and wider field for testing their utility than this. If employment is to be found for half-pay naval captains, every one would wish for them more useful occupation or less undignified sinecures.

THE TITLE OF SURGEON.

UNDER the new Dental Bill, which is alleged to have been approved by certain of the examining bodies, it is proposed to confer the title of dental surgeon on every chemist or tooth-puller throughout the kingdom; while, on the other hand, it is to be prohibited in future to surgeons who choose to adopt dental surgery as their specialty, unless they take also the dental licence of one of the Colleges. Now, we would very gladly see the dental profession respectably and satisfactorily organised; but it seems clear that they are here asking too great and quite unnecessary sacrifices. The Parliamentary title of surgeon belongs to members, fellows, and licentiates of the Colleges of Surgeons, and to no other persons. Those persons who take out a dental licence may fairly claim the title of dentists, and that title might properly be reserved for them. The title of dental surgeon should obviously be reserved for those members of the Colleges of Surgeons who take a dental licence. The question is one of common sense. A member or fellow of the College of Surgeons is a surgeon; such a member or fellow, if he take a dental licence, may claim a Parliamentary title as dental surgeon. A licentiate in dentistry may equally claim to have the Parliamentary title of dentist. But it is certainly not desirable to do as is now proposed by this Bill, to treat all licentiates of the future as having a Parliamentary and exclusive claim to the title of dental surgeon, whether they be surgeons or not, and to confound in one category the surgeon who has a dental licence and the dentist who has no surgical licence, giving, moreover, to the dentist who has no surgical diploma the exclusive use of the word (dental) surgeon, against the surgeon who has no dental licence. The immediate effect, moreover, would be that some hundreds of small chemists, quacks, and tooth-pullers, all over the country, would, as was pointed out at the meeting this week of the Parliamentary Bills Committee, have the immediate right to inscribe dental surgeon over their doors, and might possibly write the "dental" very small and the "surgeon" very large, and thus a new set of traps would be laid for the unwary and the uneducated. If the College of Surgeons really sanctioned such a measure, it is to be regretted; but it is not the first time that the Councils of the Corporations have gone to sleep over interests which did not immediately appear to be bound up with those of the Corporations themselves. It will be right to offer a very energetic opposition to this Bill as at present worded. On the other hand, if the promoters are wise enough to distinguish in their register "dentists" and "dental surgeons" in different columns, they will avoid the rock on which their Bill is most likely to split. As it

stands, the Bill cannot pass; and we trust the General Medical Council will interpose at once and aid our Parliamentary Bills Committee preventing this abuse of medical titles.

THE REPRESSION OF OBSCENE QUACKS.

WE publish in another column a letter from the Honorary Secretary of the Medical Alliance Association, enclosing a draft of Dr. Lush's Bill for the Amendment of the Medical Acts, so far as relates to the notorious inefficiency of the clause designed to protect the public from the hosts of quacks—many of them of the most dangerous kind—who still prey upon the young and the uneducated of all classes. The preamble of the Medical Act sets forth that it was intended "to enable persons requiring medical aid to distinguish qualified from unqualified persons". Its object has been wholly defeated by the defective wording of the penal clause, which makes the assumption, not of medical titles, but of "registrable" titles only, the subject of penalty. This clause is so badly worded that it has been the subject of numerous conflicting decisions, but has ultimately proved wholly useless as an instrument in carrying out the declared intentions of the Act. The police-magistrates are very sensible of the necessity of this amendment, and the Home Secretary has declared his sense also of the anomaly in wording which has so long left the public and the profession at the mercy of a dangerous class of depredators who hang upon the skirts of the profession, and are among the worst enemies of society. At the last annual meeting of the Association, a resolution was passed declaring the amendment of this clause to be a matter of special urgency, and instructing that, in the conduct of the Parliamentary business relating to medical reform, it should be so treated.

FEVER of a very severe type has appeared in many of the famine districts of Bombay and Madras.

THE annual dinner in aid of the funds of the French Hospital and Dispensary will be held on Saturday next, at Willis's Rooms, when the French ambassador will take the chair.

ONE drop of the oil of eucalyptus, applied on cotton-wool to the sensitive dentine, is alleged to be an excellent local anæsthetic; if so, it should be a valuable remedy for toothache.

DR. GUIDO BACCELLI, Professor of Clinical Medicine in the Roman University, Physician to the late King Victor Emmanuel, has just been decorated with the Grand Order of Saints Maurice and Lazarus, and appointed Honorary Physician to His Majesty King Humbert.

IT is announced that Mr. Mullen, the Herbert Prizeman, who, to the astonishment and much to the delight of the army medical authorities, selected the British Army Medical Service, has now resigned. This is rather a bitter comment, although not an unexpected one, on the extremely unsatisfactory position which the army medical officers hold under the harsh administration of the unification system, and the unsatisfactory arrangements by which medical officers are without due consideration shifted during their term of service from pillar to post, with the ultimate prospect of being turned out of the service altogether at the end of ten years.

WORCESTERSHIRE MEDICAL SOCIETY.

THE annual meeting of this Society was held on February 7th. The report of the Committee showed that the work of the Society continued, in this the eleventh year of its existence, to be successfully carried on. The number of members is fifty-six. The ordinary meetings have been fairly attended. Several new standard works have been added to the library, which is now a very valuable one. Mr. Walsh was elected President; Dr. Sherlock, Vice-President; Dr. Strange, Honorary Librarian; Mr. Hyde, Honorary Secretary. A large party of members and friends dined together at the Star Hotel, Worcester, in the evening.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following are the subjects of the course of nine lectures on the Morphology of the Batrachia now being delivered in the College of Surgeons by Professor W. K. Parker, F.R.S.—February 11th: The Meaning, Aims, and Methods of Morphology.—February 13th: Classification of the Vertebrata.—February 15th: Classification and Geographical Distribution of the Batrachia.—February 18th: Metamorphosis of the Batrachia compared with that of other Vertebrata.—February 20th: Structure of the Skull in the Larva.—February 22nd: Structure of the Skull in the Adult.—February 25th: Consideration of the great Polymorphism of the Group.—February 27th: Structure of the Spine, Limb-girdles, and Limbs.—March 1st: The same, continued; Summary; and Conclusion. This course will be followed by one of nine lectures by Professor Flower, F.R.S., on the Comparative Anatomy of Man (in continuation of his course of last year), on Mondays, Wednesdays, and Fridays, commencing on March 4th and ending on March 22nd. In June, Professor T. Spencer Wells will give six lectures, of which the subject will be announced; and Mr. B. T. Lowne will deliver three lectures on the Physiology of Nerve-Stimulation.

ROYAL FREE HOSPITAL.

THE fiftieth annual meeting of this charity was held last week at the hospital. Mr. James Hopgood presided. In addition to the new wing which we mentioned some time since, the committee have resolved upon erecting another block of the new buildings, which will consist of nurses' room, isolated wards, and board-room. During the year, the hospital has opened its doors to lady medical students, an arrangement having been made that £400 *per annum* be paid to the medical staff for clinical instruction, and an additional £315 annual subscription to the hospital funds by the London School of Medicine for Women. The number of patients received into the in-patient department during the year was 1,369. As regards out-patients, the number in the year, owing to the building operations which had been going on during the year, had decreased to 5,099. Legacies to the amount of £14,037 were announced in the report, and from Hospital Sunday Fund £487 was received, while Hospital Saturday Fund contributed £134. In addition to these amounts, various sums are acknowledged from several city companies, and smaller contributions.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting was held on January 10th, 1878, Dr. Birkett in the chair. The report showed that during the year 1877, £1575 were distributed in grants of immediate relief to distressed medical men, widows, and orphans; 169 persons being directly, and about 195 indirectly relieved, making a total of over 360 persons benefited. Eight annuitants were elected during the year. Mr. Webber, who had held the office of honorary financial secretary for several years, being compelled by ill-health to resign, was unanimously elected a vice-president of the Fund, and a special vote of thanks was most heartily accorded to him. Mr. Herbert W. Page, 28, New Cavendish Street, W., was elected honorary financial secretary. Votes of thanks were accorded to Messrs. Churchill for their kindness in supplying a committee-room; to the auditors, Messrs. T. H. Hills and E. Parker Young; to the editors of the medical journals; to Dr. Jonson as chairman of committee; to the treasurer and honorary secretary; and to Sir George Burrows, the president.

AMBULANCE WORK.

A PUBLIC meeting was held a day or two since at the Pall Mall Restaurant, Regent Street, under the presidency of Sir E. A. H. Lechmere, at which an account was given of the ambulance work of the Order of St. John of Jerusalem. Letters of apology for absence and expressing much interest in the movement were read from the Duke of Manchester, Lord Glasgow, General Viscount Templetown, Lord Percy, the Bishop of St. Alban's, Sir J. M'Garel Hogg, General Sir Charles Daubeney, Mr. Archibald Forbes, Surgeon-General T. Longmore, etc. The

chairman said the Order of St. John was a branch of the Order of the Knights of Malta, and the present Order had been established fifty years. The most recent work undertaken by them was that of ambulance aid in times of peace and war, and aimed at creating throughout the country the skeleton of a body which in an emergency might be called into action at the shortest possible notice. Major Duncan gave an account of the manner in which the Order had inaugurated its work, and said that the first meeting in aid of the cause was held in the dark hall at St. John's Gate, when, though the number present was small, no less than £1000 was subscribed. There are at present three centres, viz., Sevenoaks, Woolwich, and Chelsea. In Woolwich, the movement had met with signal success. The movement invited the aid of persons of all classes, both civil and military, and was taken up heartily by the ladies. Mr. Furley then followed with a paper on the general work of the Order.

WANT OF MEDICAL OFFICERS AT THE CAPE.

ACCORDING to a correspondent at the Cape, the want of army surgeons is very much felt there, and it is stated that there are not even sufficient for all the field hospitals, and the general has authorised the employment of any civil practitioners who can be got.

THE STUDENTS' WAR MEETING.

A MASS meeting of medical students, on the subject of the war, is reported to have been held last week in Trafalgar Square. We are inclined to think that medical students, as such, had better leave politics alone. As citizens, they have the duty of joining with other citizens in expressing their opinions; but as medical students, they have no such duty, and we deprecate meetings of medical students as such except on medical questions.

DEATHS IN PUBLIC INSTITUTIONS.

THE Registrar-General reports that there were registered, in workhouse establishments, hospitals, and public lunatic asylums, 11,741, or 9.4 per cent. of the total number of deaths registered in England and Wales during the last quarter of the year 1877, a proportion which showed a marked increase upon that which had prevailed in recent corresponding quarters. In the twenty large towns, 5,878, or 14.6 per cent. of the deaths were registered in public institutions, against 15.5 per cent. in the corresponding period of 1876; the proportion in these towns last quarter ranged from 4.7 and 7.1 per cent. in Oldham and Sunderland to 15.3 per cent. in Manchester and Bristol, and 17.9 per cent. in London. Excluding the twenty large towns, the proportion of institution deaths in the rest of England and Wales averaged 7.0 per cent. Of the deaths in public institutions in England and Wales in 1876, 63 per cent. occurred in workhouse establishments, 27 per cent. in hospitals, and 10 per cent. in lunatic asylums.

VIOLENT DEATHS.

The quarterly return of the Registrar-General informs us that the deaths referred to different forms of violence, during last quarter, in England and Wales were 4,173, and were fewer than in any previous corresponding period since that of 1872; they were equal to an annual rate of 0.67 per 1,000 persons living, and to 3.4 per cent. of the deaths from all causes. In the agricultural counties of the Eastern registration division, the death-rate from violence did not exceed 0.47 per 1,000, whereas it was equal to 0.90 in Lancashire, 0.70 in the West Riding of Yorkshire, and 0.87 in Durham, where manufacturing industries mainly prevail. In the twenty large towns, the death-rate from violence averaged 0.75 per 1,000; and, while it did not exceed 0.24 and 0.28 in Norwich and Portsmouth, it ranged upwards to 1.04 and 1.21 respectively in Birmingham and Liverpool.

INQUESTS.

DURING the last three months of 1877, the inquest cases registered in England and Wales were 6,432, and equal to 5.2 per cent. of the total deaths; this proportion scarcely differed from the average proportion in

recent years. In the twenty large towns, the proportion of inquest cases averaged 5.9 per cent., but ranged in the various towns from 2.6 in Oldham and 3.3 in Sheffield and Wolverhampton to 8.6 in Manchester and 9.5 in Nottingham. Thus the proportion of inquest cases was nearly four times as great in Nottingham as in Oldham; and the Registrar-General naturally inquires whether too many inquests are held in Nottingham or too few in Oldham? In England and Wales last quarter, the inquest cases exceeded the number of deaths referred to violence by 54 per cent., and in the aggregate of the twenty towns by 78 per cent.; in London by 86 per cent. and in Manchester by 235 per cent.; whereas the excess of inquest cases upon the deaths referred to violence was but 15 per cent. in Oldham, 17 per cent. in Hull, and 43 per cent. in Sheffield.

DEATHS BY MISADVENTURE.

THERE is reason to believe, from the relative frequency of the occurrence of accidents in connection with external washes and powerful medicines at hospitals, that there is much room for improvement in the precautions taken in labelling liniments and other poisonous applications, whether for out-patient or in-patient use. The most recent of the cases referred to was that of Henry Morton, a patient in the Hampstead Small-pox Hospital, upon whose body Dr. Hardwicke held an inquest. The evidence showed that deceased contracted small-pox, and was removed to the above-mentioned establishment. After admission, he was found to be suffering from pleurisy, and Mr. Samuel Bingham, the medical superintendent, ordered an outward application, comprising belladonna, about 10 P.M. on Wednesday last. The nurse, Caroline Cooly, while in the act of attending upon him, heard a summons to open the door of the ward. She hurriedly put down the bottle of lotion on the side-table, and went to the ward door, admitting the visitor. On returning to the bedside, Morton remarked "I have taken what was in the bottle". Cooly immediately summoned assistance, and for four hours antidotes were administered to the young man, but he expired twelve hours after swallowing the lotion. The jury returned the following verdict: "That deceased expired from exhaustion while suffering from small-pox and an effusion into the chest, and the jurors further say that the death took place after taking belladonna by misadventure." It is not stated whether the bottle containing the liniment was a fluted bottle, or whether it was legibly labelled "poison".

CÆSAREAN SECTION.

DR. J. BRAXTON HICKS performed this operation on Tuesday night at Guy's Hospital, upon a woman whose vagina was occupied by a scirrhus mass, which involved the rectum and recto-vaginal septum. The placenta was found beneath the line of incision, and the foetal head at the fundus uteri. However, the membranes were reached from the lower end of the uterine wound, and the head seized and brought out first. There was very little hæmorrhage. The uterus contracted firmly after the removal of the placenta. The uterine wound was brought together by interrupted sutures closely placed; and a large catheter was retained in the uterus, passing through the vagina, to prevent accumulations and facilitate injections in case of need. The child, which was slightly premature, was living when last heard of.

SMALL-POX EPIDEMIC AT HARWICH.

NEWS of a favourable character has been forwarded by our correspondent at Harwich regarding the progress of the recent outbreak of small-pox there. The hospital has now been open for the reception of patients for six weeks. Sixty-one cases have been admitted. Of these, twenty-five have already been discharged cured; fourteen have died in hospital; and twenty-two, all of whom are in a more or less advanced stage of convalescence, remain in the hospital. Thirty-one cases were admitted the week ending January 9th, eight the second week, ten the third, five the fourth, four the fifth, and three the sixth week. The mortality was greatest amongst the earliest cases admitted, as many as six having died of the first twenty cases, which is in a great measure attributable to want of proper accommodation

before being admitted. The proportion of confluent cases was very large, twenty-five of those admitted being of that character; amongst them being a man who was before deeply pitted with the small-pox, having had a severe attack in infancy. This patient died on the eleventh day. There were four hæmorrhagic cases; two complicated with bronchitis, and one with extensive joint-disease. The other fatal cases were confluent. No case where revaccination has been successfully performed has been admitted to hospital, except one where the disease had been already contracted. Four persons were admitted who had not been vaccinated, but only one died; the other cases, although severe, having terminated favourably. In all the modified cases, the cicatrices of vaccination were well marked. It will be seen that the adoption of isolation is producing good results. The time has been very short, yet the abatement in the disease is well marked; and, if things continue to improve in the same ratio, the people of Harwich will have reason to congratulate themselves on the success of their hospital. There have been three or four cases in the town in the fortnight that have not been received into hospital; but, allowing for those, the diminution in the number is marked.

PROVIDENT DISPENSARIES IN BIRMINGHAM.

THE Joint Committee appointed by the Birmingham and Midland Counties' Branch of the British Medical Association and by the Midland Medical Society, to act in the interests of the public and of the profession in reference to the proposed establishment of provident dispensaries in Birmingham, and consisting of forty-eight members chosen in equal numbers by the respective societies, have elected the following officers. *President*: Mr. Sampson Gamgee, F.R.S.Ed. (President of the Branch).—*Vice-Presidents*: Dr. Monckton of Rugeley, and Dr. Sawyer (President of the Midland Medical Society).—*Treasurers*: Mr. Watkin Williams, F.R.C.S. (Treasurer of the Branch), and Mr. Harmer (Treasurer of the Midland Medical Society).—*Honorary Secretaries*: Dr. Savage and Dr. Welch.

THE THROAT HOSPITAL.

THE reports published in the daily papers of the late annual meeting of the governors of the Throat Hospital, in Golden Square, gave a brilliant and harmonious view of the proceedings, but omitted all public reference to the recent withdrawal of His Royal Highness the Prince of Wales and other distinguished persons, as the result of a report to which we have already referred. The following report of some of the omitted proceedings is furnished by a gentleman present, who vouches for its moderation and accuracy.

"The annual meeting of subscribers of the Throat Hospital, in Golden Square, was held at the Beethoven Rooms, Harley Street, on Saturday, the 9th instant; the chair being taken by Lord Calthorpe. The reports of the Committee of Management and the Medical Superintendent were read. The former included a lengthy defence of the action taken by the Committee in resisting the efforts made to reorganise the hospital; and reference was made to the inquiry instituted at the request of His Royal Highness the Prince of Wales, and to the subsequent withdrawal of the patronage of the Prince and Princess of Wales, and the resignation of the Marquis of Bute, the President of the Hospital. After other reports and the balance-sheet had been discussed, the Chairman announced that a requisition, signed by twenty vice-presidents and subscribers, had been forwarded to the Secretary, requesting him to convene a special general meeting of subscribers to receive the report of the Court of Inquiry (of which the Duke of Grafton was President), instituted by the late President at the request of the Prince of Wales; and also to appoint a committee of investigation into the causes which had induced their Royal Highnesses the Prince and Princess of Wales to withdraw their support from the institution. Mr. Bowring (a vice-president of the hospital) proceeded to criticise the report of the Committee, pointing out that many of the statements contained therein were not justified by the facts of the case. He was thereupon interrupted by cries of "Order, order", and, after vainly attempting to gain a hearing, he stated that the character of the meeting was very evident. It was quite clear to him that it was composed largely of the relatives and friends of the medical superintendent. He concluded by expressing his astonishment that Lord Calthorpe should place himself in such a position. He then withdrew amid a great uproar. A member of the

Committee of Management expressed some doubt whether the requisition addressed to the Secretary was signed by a sufficient number of subscribers, and asked the Chairman whether, if this was the case, the special general meeting would be called. A subscriber then stated his extreme surprise that the Committee of Management should be anxious to avoid a thorough investigation into the cause of the withdrawal of the Prince of Wales's patronage. On the motion coming forward, that the retiring members of the Committee should be re-elected, attention was called to the fact that the trustees of the hospital consisted of Dr. Mackenzie, his father-in-law, and his own solicitor, who were *ex officio* members of the Committee of Management; and that, in addition to this, Dr. Mackenzie had a brother and four brothers-in-law on the Committee; and an amendment was moved that the name of one of Dr. Mackenzie's brothers-in-law, who offered himself for re-election, should be omitted. The original motion was, however, carried. Amid some opposition, a subscriber then called attention to the fact that, although the Prince of Wales had severed his connection with the hospital seven or eight months since, yet, during the current month, he had received a receipt bearing the name of His Royal Highness as patron. This raised a storm, but no explanation was offered by any member of the Committee."

A BATCH OF CENTENARIANS.

ACCORDING to Dr. Bertherand, there are one hundred and sixty-six centenarians in Algeria, thus proportioned: eighty-eight individuals 100 years old, one of 101, seven of 102, nine of 103, fifteen of 104, six of 105, six of 106, five of 107, one of 108, three of 109, eight of 110, two of 111, two of 112, one of 113, two of 114, four of 115, one of 117, and one of 118 years.

THE DEATH OF THE POPE.

THE severe illness of the end of last year from which Pius IX was slowly recovering, had left him but little strength to fight against any other complaint. He appeared, however, to be making satisfactory progress, when he was suddenly attacked, on the evening of the 6th instant, with the incipient symptoms of acute pulmonary congestion. He was then thought to be only slightly feverish, and, after going to bed, he slept a little at intervals up to 3 A.M., when his symptoms became aggravated. Some restorative medicine was then given, and he was quiet again for a short time; but, about 5 A.M., he began to be more uneasy, the breathing became much more hurried, and there was a good deal of bronchial secretion, which rapidly accumulated, so that, at 10 A.M., his pulse was nearly imperceptible, though he was quite conscious, and had received the last sacrament and extreme unction. About noon, the breathing became abdominal and the face and extremities livid; and at 3 P.M. he was comatose and in the death-agony, which lasted until a quarter to six. The body has been satisfactorily embalmed, and has been lying in state in the Chapel of the Sacrament at St. Peter's.

RURIAL SOCIETIES.

AT the Chester assizes, Mr. Justice Lush, referring to the Warrington poisoning case, remarked that, if it were murder at all, it had been induced by the temptation held out by insurance societies to poor people to insure the lives of persons at the low premium of a penny weekly. His lordship said it was a thing which he could not characterise as too mischievous, because the insurer had a pecuniary interest in the death of the person insured.

OVARIOTOMY IN AMERICA.

DR. J. MARION SIMS forwards to us from Paris some interesting particulars respecting the late Dr. Peaslee, whose premature death we mentioned last week. We are unable to find space for the manuscript which he forwards us. We gather from it, however, that in the early days of ovariectomy, when it was condemned by the united voice of the profession here and in America, Dr. Peaslee took his stand by Atlee of Philadelphia, and Dunlap of Ohio, in advocating and performing it; and by his lectures, his writings, and his work, he was all-powerful in aiding his co-labourers in the great work of establishing this operation on its present solid basis in his own country. Whatever

Dr. Peaslee did was always thoroughly well done. He filled at various times and in different medical schools the Professorships of Anatomy, of Surgery, of Physiology, and Pathology, of Obstetrics, and last of Gynæcology; and at the time of his death he was President of the American Gynæcological Society, of which he was one of the founders.

THE LONDON FEVER HOSPITAL AND ITS PAYING WARDS.

THE annual report of the London Fever Hospital was presented this week, at the annual meeting, by Dr. Cayley. It stated that, during the year, there had been 629 admissions, and that 723 patients had been treated for enteric, typhus, and scarlet fevers in the year, during which there had been "no marked prevalence of fever", and that there had also been cases of rubeola. From the financial report, it was shown that during the year, in consequence of the falling off in donations, attributed in some degree to the collection for the Indian Famine Fund, the Committee had been obliged to sell out a material part of the small funded capital to meet the current expenses, and they looked with dismay upon the future, as the staff of the hospital has to be kept in an efficient state to meet any emergency arising from epidemic. This institution is one of great utility, inasmuch as it affords means of isolating persons suffering from contagious fevers who are not of the pauper class. It includes some paying wards. It is, however, a noteworthy sign in connection with these wards, that the medical attendance is gratuitous. Such wards, therefore, ought not to be used, except for persons little above the pauper class; and we very much doubt whether, when home hospitals shall be established at which each medical attendant will have the right of attending his own patients, on the usual fees, and of making his own arrangements for payment, these paying wards will have any *raison d'être*. If the patients or their friends are made to pay for their board, lodging, and medicine, it is not clear that they should not pay in proportion for their medical attendance, which is an important item in the benefits which they receive.

DEATHS FROM CHLOROFORM.

FOR a short time, deaths under chloroform appeared to be growing fewer in proportion as the less dangerous anæsthetic ether, to which we have now for several years persistently drawn professional attention, came more and more into extensive use. Chloroform casualties are apparently, however, just now thickening again. The Liverpool coroner held an inquest, on Saturday, on the body of a sailor named Michael Cain. The deceased met with an accident, and was taken to the Northern Hospital, where it was found that he was in danger of losing his sight. An operation was decided upon, and the surgeons administered chloroform; but in a few minutes the patient died from failure of the heart's action. The jury returned a verdict accordingly, and exonerated the surgeons from blame. We have been favoured with further particulars of this case from Mr. R. Hughes Jones, which we will publish next week.—Another death from chloroform took place at Ancaster, Ontario, a few weeks ago. The patient, an elderly lady, was about to undergo an operation for the removal of a tumour in the axilla. Only a small quantity of chloroform had been given when she suddenly died. Fatty degeneration of the heart was discovered at the *post mortem* examination. The medical men were fully exonerated from any reflection.

OXFORD UNIVERSITY.

WE have received this week a copy of the examination papers for the degree of Bachelor of Medicine and for the certificate in Preventive Medicine and Public Health. They reach us at rather an unfortunate moment; for, at another time, we might perhaps have been more disposed to admire the list of examiners and papers, and the pomp with which the list of papers for this examination is published in large print, price one shilling, as though constituting a valuable document for some purpose or other. At the present moment, we are tempted rather

to ask for the benefit of how many is this apparatus collected and this publication made. For the "Certificate in Preventive Medicine", here are ten examiners, headed, of course, by the Regius Professor in his decorative presidential capacity, and including such great outer authorities as Dr. Farr and Captain Galton. We think we remember to have heard that one person presented himself, and that his examination cost a hundred pounds. Where he received his education is, of course, another matter, and one on which we might not be able to express views acceptable to the present advisers of Oxford in the suppression of medical teaching. Only one thing is certain: he could not have learnt much about the subjects of examination in Oxford. As to the examinations for the degree of M.B., we have the same observations to make. The candidate for the final examination is examined in materia medica, pathology, therapeutics, forensic medicine, hygiene, midwifery and diseases of women and children, principles of surgery, clinical examination (at the Radcliffe Infirmary), practical hygiene. It is a strange satire on the "Medical Department" of Oxford that precisely these subjects are utterly ignored in its teaching, and that endowments for the purpose of teaching them, as well as those of anatomy and physiology, including the "first examinations", are applied to any other subjects rather than these. Under these circumstances, we have not derived the pleasure which might have been expected from reading these elaborate examination papers.

CLAUDE BERNARD.

OUR Paris correspondent writes under date February 11th:—It is with profound regret I have to report the death of Claude Bernard, the eminent physiologist, which took place last night at his residence in Paris, in the sixty-fifth year of his age. The death of such a man is a real loss to science; his career has been too short for men of his stamp. He was born at St. Jullien, in the department of the Rhone, in July 1813. In 1839, he was an *interne* or hospital dresser; in 1843, he took his degree of Doctor of Medicine, and in 1853 that of Doctor of Science. In 1854, he was appointed Professor of General Physiology, a chair created on purpose for him. In the same year, he became a Member of the Academy of Sciences; and the following year he succeeded his illustrious master, Magendie, as Professor of Experimental Physiology at the College of France, and continued to hold the post till his death. In 1861, he was almost unanimously elected Member of the Academy of Medicine; and in 1868 he succeeded M. Flourens at the Academy of Sciences. In 1869, he was appointed Senator by Napoleon III, and raised to the dignity of Commander of the Legion of Honour. Thus it may be seen that his career, though comparatively short, was a rapid and most enviable one; for few men had acquired such celebrity in so short a time. Claude Bernard may be considered unrivalled as a physiologist; but he was also a great philosopher and spiritualist. In his researches among the circumvolutions of the brain, it was not the soul he sought, for he knew it was not to be found there, it being the invisible and immaterial part of man, and perhaps of animals; but it was its *modus vivendi* with the body. The problem, however, of the manner in which the soul and body are connected was not for him to solve. His experiments on animals, and his researches on the physiological and therapeutic action of certain substances, are well known; and he it was who first made known in Europe the intrinsic properties of curare. Though by no means cruel in his nature, he was greatly in favour of vivisection; and he more than once said that, though the operation might be cruel, it was necessary for the enlightenment of science, which should not be stopped merely on considerations of affected sentimentality. The death of Claude Bernard leaves a great blank, which it would be difficult to fill, for physiology is an ever-extending science; and, if physiologists are not rare, men like the subject of this notice are unique of their kind. The President of the Chamber of Deputies, on the day following Claude Bernard's death, stated that the funeral would be celebrated at the expense of the State.

ADULTERATION OF WORKHOUSE FOOD.

DURING the past week, John Adams, a farmer supplying the St. Mary-lebone Parochial Schools, Southall, with milk, was fined at Brentford for the adulteration of the article so supplied by him. The workhouse authorities are rather slow in awaking to the fact that, to a very large extent, they are supplied with adulterated and skimmed milk. That fact was brought before them officially a year since by a series of analyses ordered by the Government, performed by Mr. Wanklyn, and issued in the form of a Parliamentary return for public information. We have supplemented it by showing that the hospitals were equally ill-served. Since this, most but not all of the hospitals have taken means to prevent their contractors from defrauding the patients of their fair share of nutriment. The workhouse authorities generally have not taken the same precautions. It is, however, only fair to say that from the manner in which the milk contracts are given out by the parish authorities, they have no right to assume that they can be supplied with pure milk. The whole question is one which we commend to the attention of the Local Government Board, and especially to Dr. Bridges. It is one of the duties of the inspectors of the Local Government Board to see that the food supplied to the paupers is of good quality and represents the amount of nutriment for which it is set down in the official dietary scales. This duty has been neglected by these officials; it certainly should include an analysis from time to time of the various articles of food supplied in workhouses, and especially also in workhouse infirmaries; for if these were done on a large scale, some strange revelations would be made to the public, and the sick poor would largely benefit.

DR. RICHARDSON'S TEMPERANCE LECTURES.

DR. B. W. RICHARDSON gave the first of a series of lectures on Temperance, arranged for the National Temperance League, at Devonshire House, Bishopsgate. After expressing his own strong views in favour of total abstinence, he is reported to have said that he deprecated public conferences of medical men on the alcoholic question, as they were sure to be full of learned disquisition which the public could not understand, and of differences of opinion among the doctors; hence the old saying, "Who shall decide when doctors disagree?" He repeated his conviction that the difficulties of total abstinence were mainly imaginary, and that when they were real they were easily overcome. He believed that before long the whole of the medical profession would acknowledge that the total abstainers were right. The deprecation of public conferences among medical men on the subject of temperance, and the preference for the monopoly of the subject to the public on the part of the learned lecturer is, we imagine, an error in reporting.

THE INSTITUTE OF CHEMISTRY.

THE first meeting of this new institution was held under the chairmanship of Professor Frankland, F.R.S., at the rooms of the Chemical Society, Burlington House. The chairman gave an account of the origin of the Institute. He drew attention to the increasing importance of chemistry in relation to the wants of communities, and suggested the usefulness of an institute that should be to chemists what the Colleges of Physicians and Surgeons are to the medical profession, the Institute of Civil Engineers is for civil engineers, and the Inns of Court are to the legal profession. Although the need of experts in connection with water and gas analysis, legal proceedings, and nuisances, was recognised, and the application of chemistry to agriculture and manufactures was known to be of great importance, the suggestion was not taken up in a practical way until the beginning of 1876, when a meeting to consider the subject was held at the rooms of the Chemical Society on April 26th. The Institute is under 30 and 31 Vict. c. 131, s. 23, and has power to appoint examiners as to the fitness of candidates for its membership. Professor Frankland, in the course of his address, drew attention to the fact that under the Pharmacy Act of 1868 no one, not even the President of the

Chemical Society, may call himself a chemist unless he is duly registered as a pharmaceutical chemist. There are already two hundred and twenty-five members and one hundred and forty-two associates, and a fund of over £1000 for the new Institute.

SCOTLAND.

A FEVER epidemic has broken out at Halbeath, near Dunfermline, and is spreading rapidly. Several deaths have occurred.

THE Senatus of the University of St. Andrew's has conferred the degree of LL.D. upon Dr. W. C. Mackintosh, Medical Superintendent of the Perth County Asylum at Merthly, well known for his researches on British Annelides.

INFORMATION reached Glasgow last week, by a circuitous route, that Dr. John Pinkerton, one of the surgeons who was sent out by Lord Blantyre to attend to the sick and wounded in the Turkish army, has died of typhoid fever at Erzeroum. The deceased gentleman was accompanied to the seat of war by his brother, who, however, returned home some time ago. The letter which announces Dr. Pinkerton's death mentions that fever of a most malignant type is raging in Erzeroum, and that large numbers are dying from its effects.

FATALITY OF MEASLES.

THE epidemic of measles in Edinburgh still continues to spread. Fourteen deaths were returned as due to this cause last week; twelve of these occurred in the old town. There was no death from fever during the same period.

THE ROYAL PUBLIC DISPENSARY OF EDINBURGH.

THE Royal Public Dispensary of Edinburgh continues to hold an useful place among the public charities. From the recently published annual report, we gather that during the past twelve months, seven thousand seven hundred and sixty-three persons had been seen and prescribed for or otherwise treated at the dispensary. This number is less than in former years, in consequence of the dispensary having been shut up for three months, during which time the old building had been entirely remodelled, thanks to an opportune legacy of £1000 received from the late James Mitchell of Kincairney. Last year, the institution celebrated its centenary. Two hundred and twenty-eight women had been attended in confinement at their own homes, from the dispensary; upwards of six hundred children had been vaccinated. The alterations in the building had cost £1500.

ALLEGED FALLACIES OF MILK-ANALYSIS.

AT a monthly meeting of the Kilmarnock Town Council, held last week, the burgh analyst reported that he had, during the quarter ending December 14th, examined fourteen samples of milk, of which four were pronounced genuine, and ten adulterated by the addition of water to an extent varying from 0.2 per cent. to 9.8 per cent.; and two of buttermilk, one of which contained 11 per cent. and the other 19.5 per cent. of added water. Some discussion took place as to the value of the analyses, in which it transpired that one of the dealers, whose milk was reported as containing 4 per cent. of added water, on being remonstrated with, denied the charge and challenged inquiry. The inspector thereupon obtained a sample, milked in his own presence, and sent it for analysis, the result being that it also was reported as containing 4 per cent. of added water. It was explained that prosecutions were raised only in extreme cases. It was agreed that the Sanitary Committee should continue to exercise forbearance in carrying out the provisions of the Act.

ACTION AGAINST THE MANAGERS OF THE ABERDEEN INFIRMARY.

AN action was recently brought, in the Court of Session, by the Inspector of Poor in the parish of St. Nicholas, Aberdeen, against the managers of the Aberdeen Infirmary, in which he sought to have it found and declared that they, as managers of the Lunatic Asylum of

Aberdeen, were bound to maintain gratuitously the lunatics of the city, in so far as their funds would admit. This claim was founded on a minute of June 14th, 1798, in the original foundation documents of the asylum. The Lord Ordinary, however, gave judgment in favour of the defenders, with expenses, holding that the hospital was founded upon a larger basis, and for the alleviation of the insane in a wider district than the town of Aberdeen.

THE MILK-SUPPLY OF TOWNS.

THE committee appointed at the recent public meeting in Glasgow, called after the report on the milk-typhoid, to consider the best means of having the city supplied with pure milk, have now invited the co-operation of dairymen, farmers, and others, who may be prepared to furnish such a supply under sanitary regulations and inspections. It is stated, however, that very little can be done in this direction, from the fact that most of the farmers in the vicinity of the city have contracts with dairymen. It is understood that the formation of a limited company for the purpose of securing the end in view is contemplated, on the model of the Aylesbury Dairy Company of London.

SANITARY TEACHING.

THE increased interest taken in sanitary matters by the citizens of Edinburgh, and which recently led to the formation of the Sanitary Protection Association for the Inspection of Dwellings, has now led to arrangements being made for the systematic instruction of those engaged in designing and constructing. The directors of the Watt Institution have instituted a class of sanitation for the benefit of artisans, clerks of works, and architects' assistants. The course embraces what is usually known as sanitary engineering, as it deals with water-supply and the details of domestic sanitation, but is intended mainly to expound the principles applicable to sanitary arrangements and appliances which ought to govern the execution of work. The directors requested Dr. J. A. Russell to give the first course of twelve or fifteen lectures, delivered twice a week. These lectures were begun last week, with good prospects of success. Dr. Russell apologised in advance for any slips he might make in engineering details, but said that it was more important for his audience that the medical aspects of the questions discussed should be correctly put before them, which an engineer might not do so well. We believe that, with the exception of the lectures to the Royal Engineers at Chatham, this is the first course of technical sanitary lectures delivered in the kingdom.

BETTER ENDOWMENT OF THE UNIVERSITY OF EDINBURGH.

AT a recent meeting of the Association for the Better Endowment of the University of Edinburgh, a report was read announcing, among other things, two donations for special purposes. One of these was in the Faculty of Law; the other donation is by Dr. John Stark, of Auchtermuchty, who has entrusted the Association with £1400 for the foundation ultimately of a competitive scholarship in medicine, to bear his name. Dr. Stark has for the present retained his life-rent of the fund. The whole arrangements for the foundation of this scholarship, and the terms on which it is to be bestowed, are left in the hands of the Association. The acting committee expressed their approval of the proposed object, accepted the fund, and now hold it on behalf of the Association. A few days ago, the committee received intimation, from the trustees of the late Dr. J. P. Macartney of London, of a bequest by him to the Association of £500, free of legacy duty. The average salary of the old-established chairs is, in the Faculty of Arts, only £280 a year; in the Faculty of Law, £176; and in the Faculty of Medicine, £120. One chair has no salary. Since the last annual report, the following (among other) new foundations in the University have been intimated: 1. The Beane prize in Anatomy and Surgery, endowed with a sum of £1000 by Dr. Beane, F.R.C.S.E., Surgeon to the Melbourne Hospital; 2. The Thomson bursaries in the various faculties, ultimately to be twenty in number, founded by the late Andrew Thomson, M.D., Edinburgh, with an endowment which will probably amount to about £13,000.

IRELAND.

DR. CHARLES GRAHAM, late House-Surgeon to the Convalescent Home, died recently in the Belfast Royal Hospital from typhus fever. The funeral took place last week, and was numerously attended. Behind the hearse walked the medical staff, several professors of the Queen's College, the house-surgeon, and a large body of students, as a mark of respect to the deceased.

THE REGIUS PROFESSORSHIP OF PHYSIC.

DR. ALFRED HUDSON, Physician to the Queen in Ireland, and ex-President of the Dublin Branch of the British Medical Association, has been nominated, by the Academic Council, Regius Professor of Physic in the University of Dublin. The salary of the professorship has been reduced to £100 *per annum*, being the same as that of the Regius Professor of Surgery.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

IN answer to a petition of the King and Queen's College of Physicians, the Lord Lieutenant has signified that he sees no objection to grant them a supplemental charter, enabling them to institute an order of members, and also permitting the election of fellows by ballot. The College met yesterday (Friday) to consider the details of the supplemental charter.

THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

LAST week, Dr. T. H. Purdon presided at the annual meeting of the Belfast branch of the Royal Medical Benevolent Fund Society of Ireland. Dr. W. Arnold, honorary secretary, read the minutes of the previous meeting, which were confirmed. The financial statement, submitted by Dr. Browne, J. P., was adopted. A deputation, consisting of the President, Dr. Browne, Dr. Wilberforce Arnold, and Dr. Moore, was appointed to represent the branch in Dublin at the annual meeting of the parent society, to be held in June; and auditors, honorary office-bearers, and a committee of management, were appointed for the ensuing year. This society has already accomplished a vast amount of useful work, and continues to receive the adherence of a large number of members of the medical profession. The society deserves the sympathy and support not only of the members of the profession, but of the public generally, who are largely benefited by the frequently badly remunerated services of professional men.

WATERFORD DISTRICT LUNATIC ASYLUM.

WE are glad to state that Dr. Ringrose Atkins, Assistant-Medical Officer of the Cork District Asylum, has been appointed resident Medical Superintendent of the Waterford Lunatic Asylum. Dr. Atkins is a Master of Arts, Gold Medallist, and a graduate in Medicine of the Queen's University in Ireland, and the author of various contributions relating to mental affections. The appointment is one which will be regarded with satisfaction, and the Government have made an excellent selection.

SMALL-POX AT HOWTH.

AT a meeting of the guardians of the North Dublin Union, held on the 6th instant, a communication was received from the Local Government Board, suggesting that, if this disease continued to spread at Howth, it would be advisable to use the Cholera Hospital for the reception of patients.

THE PUBLIC HEALTH ACT.

A SPECIAL meeting of the Town Commissioners of Ballinasloe was held last Monday to consider a communication from Mr. Gray, M.P., Chairman of the Public Health Committee of the Corporation of Dublin, in reference to the new Public Health Act. Mr. Gray stated that the Act of 1874 deprived town commissioners, in towns with a population under six thousand, of their jurisdiction as the sanitary

authority; that the same arrangement existed in the present Bill, whilst no such exclusion existed in England. The matter having been discussed, it was unanimously resolved that a memorial should be presented in favour of altering the objectionable clause and transferring the authority to the Commissioners. The Bangor Town Commissioners have also approved of the proposal of Mr. Gray, who intends moving an amendment to that effect in Parliament.

SMALL-POX IN DUBLIN.

WE regret to learn that a serious increase has taken place in the number of persons attacked by the present epidemic, and that it has spread from the city to some of the country districts. There are at present, we believe, over thirty small-pox patients in the Cork Street Fever Hospital, and about half as many more in the Hardwicke.

THE ADELAIDE HOSPITAL.

MR. WALSH, as we announced a fortnight ago, having resigned the surgeoncy to this hospital, has been unanimously elected its consulting-surgeon. The Managing Committee, at their last weekly meeting, unanimously adopted the following resolution:

"The Committee, having received the announcement of the retirement of Albert J. Walsh, Esq., F.R.C.S.I., Surgeon to the Adelaide Hospital, cannot accept his resignation without expressing their strong sense of the valuable and energetic services he has rendered to the institution, and their great regret that he has found it necessary to withdraw from the position he has so long filled with such earnestness, kindness, and ability."

Mr. M. A. Ward, one of the numerous candidates for the vacant surgeoncy, has resigned his position as assistant-surgeon of the hospital, because, as we are informed by a contemporary, "he had reason to believe that the appointment of a young gentleman, now resident in North Wales, had been decided upon by the ruling party in the medical board". However this may be, the medical board have decided not to appoint another assistant-surgeon. The students of the hospital have presented Mr. Ward with a flattering address on his retirement. The election to the surgeoncy will be in May.

SCIENTIFIC LECTURES.

THE second lecture of this year's course of annual scientific lectures in the King and Queen's College of Physicians was delivered on Monday, February 11th, by Dr. Walter Smith. After adverting to the principal reasons for the pre-eminence now accorded to the galvanic currents, the lecturer referred to the methods followed in the application of galvanisation, and the opinion was expressed that, from a clinical point of view, far less importance attaches to the influence of the direction of a current than is often taught. The lecturer next discussed the questions of the direct action of electric currents upon the central nervous organs, and the arguments were detailed, which demonstrate that it is possible to pass a galvanic current directly through the brain and spinal cord; and that the intensity of the current is greatest in the right line joining the two poles. In reference to galvanisation of the cervical sympathetic, Dr. Smith endeavoured to show that, as matters stand at present, the gravest doubts beset the possibility of directly irritating the sympathetic to any purpose, as well as the results to be gained from such a procedure upon physiological and pathological conditions. A summary of the principal relations of the motor system to electricity was given, and the lecturer then proceeded to treat of the applications of electricity to diagnosis and prognosis. His remarks referred to four groups of cases: *a.* Central cerebral affections; *b.* Central spinal affections; *c.* Peripheral nerve-lesions; and *d.* Myopathic lesions. In relation to spinal affections, attention was called to Charcot's recently published views, as affording a clue to the seemingly perplexing diversities met with in the course of electrical examinations. The concluding part of the lecture dealt with the modes in which the beneficial action of electricity is exercised. These were grouped under four heads: 1. Counterirritation; 2. Modifying and sedative action; 3. Direct and reflex stimulation; 4. Trophic influence.

PARLIAMENTARY BILLS COMMITTEE.

At a meeting of the Parliamentary Bills Committee held on Tuesday, the 12th instant, at the offices of the Association, present, Mr. Ernest Hart (Chairman), Mr. Sibley, Mr. Holder (Hull), Dr. Grigg, Dr. Henry, Mr. Alford, and Mr. Nelson Hardy,

The minutes of the previous meeting were read and confirmed.

The CHAIRMAN reported progress on the subject of the inquiry into the amendment of the coroner's court, and mentioned that Sir Robert Christison, Dr. A. S. Taylor, and others, had forwarded documents for the information of the Committee.

It was ordered that the memoranda and correspondence relating to the subject be reprinted for circulation among the Committee and others interested in the subject.

Dental Practitioners' Bill.—The Dental Practitioners' Bill was considered. After much discussion, it was moved by Dr. GRIGG and seconded by Mr. NELSON HARDY:

"That this Committee is of opinion that the title of surgeon should not be conferred by law on any others than Members and Fellows of the College of Surgeons.

"That the clauses of the Dental Registration Bill which provide that registered surgeons should not be entitled to call themselves dental surgeons, and that licentiates in dentistry in the College shall be so entitled, are opposed to the best interests of the public and the profession.

"That the Committee recommend that this Bill be so modified that the title of dental surgeon in future and in respect to practitioners not now on the *Register* shall be restricted to Members and Fellows of the College of Surgeons, and that persons holding the licence of any college in dentistry shall be registered only as dentists, and not entitled to use the appellation of surgeon."

Mr. SIBLEY moved an amendment in favour of confining the title of dentist or dental surgeon in future to those who had obtained the licence in dentistry of the College of Surgeons.

The amendment was not seconded.

Mr. HART moved that Dr. Grigg's resolution be amended by adding, after the words "Members and Fellows of the College of Surgeons", in the second paragraph, "also the licentiates in dentistry".

The amendment was carried, and being then put as a substantive motion, was also carried, with one dissentient. The effect of it is to recommend that all persons holding a licence in dentistry should be entitled to be registered as dentists, and that surgeons taking licences in dentistry should be registered as dental surgeons, but that no persons who are not surgeons shall be entitled to call themselves so.

The Medical Acts Amendment Bill.—The CHAIRMAN said that on the table and in the possession of the Committee were two Bills—one by Dr. Lush and the other by Mr. Errington—relating to the amendment of the Medical Act; but he had always advised the Committee, since the institution of the Medical Reform Committee, to leave the consideration of such Bills for the amendment of the Medical Act to that Committee, and he now repeated that advice.

Mr. HOLDER and Mr. SIBLEY, however, expressed their objection to that course.

Mr. HARDY pointed out that Dr. Lush's Bill would, if it had effect, carry out the precise instructions conveyed in the resolution at the General Meeting at Sheffield; and, in consequence of the correspondence which had passed between Dr. Waters of Chester and Mr. Carpenter, the Secretary of the Medical Alliance Association, which had promoted this Bill, he felt bound to urge that the Committee ought to take cognisance of Dr. Lush's Bill, which he believed to be a good one, and in accordance with the resolution passed at Manchester, and he believed with the general feeling of the Association.

The CHAIRMAN said, having stated his views, he could not pretend to overrule what appeared to be the unanimous wish of the Committee.

Mr. SIBLEY stated that the insufficiency of the existing law, in failing to enable the public to distinguish between quacks and qualified practitioners, and the consequent injury, both to the public and the profession, had been brought prominently under his notice, in consequence of a recent case at a metropolitan police-court, in which the magistrate had acquainted him with the imperfectness of the law with regard to his inability to afford that protection to the public, which the preamble of the Medical Act showed that it was designed to afford. In this case a man with a bogus diploma, carrying on very objectionable proceedings, had escaped all punishment, and was pursuing his practices with impunity.

Mr. HARDY stated that the Home Secretary had, last year, expressed a strong opinion that such a state of law should not be allowed to con-

tinue. He stated this as a distinct grievance, quite apart from any other.

Mr. HOLDER (Hull) concurred, and concluded his observations by moving that this Committee approves of the Bill introduced by Dr. Lush, under the title of the Medical Acts Amendment Bill, and recommends it to the branches, for their approval and support, and that copies of the Bill be accordingly forwarded to the secretaries and presidents of the branches.

This motion was adopted; and the proceedings terminated.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH.

AN ordinary meeting of this Branch will be held at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, February 27th, at 8 P.M.; when Mr. T. HOLMES, F.R.C.S., will read a paper on Provident Dispensaries, to be followed by a discussion.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*
W. CHAPMAN GRIGG, M.D. }

London, February 7th, 1878.

STAFFORDSHIRE BRANCH.

THE second ordinary meeting of the Session will be held at the London and North Western Hotel, Stafford, on Thursday, February 28th, at 4.30 o'clock P.M. The Chair will be taken by Dr. Arldige.

Members wishing to read papers or show specimens are earnestly requested to communicate at once with either of the Secretaries.

VINCENT JACKSON, } *Honorary Secretaries.*
J. G. U. WEST, }

Wolverhampton, February 12th, 1878.

LANCASHIRE AND CHESHIRE BRANCH.

THE first intermediate meeting of this Branch will be held at the Town Hall, Oldham, on Tuesday, March 5th, at 3.30 P.M.

Dr. W. H. Broadbent (London) has kindly consented to read a paper on the Mechanism of Speech and Thought as illustrated by Pathology.

Members wishing to read papers or to exhibit specimens are requested to communicate with the Honorary Secretary as soon as possible.

Dinner will be provided at 6 o'clock.

D. J. LEECH, M.D., *Honorary Secretary.*

96, Mosley Street, Manchester, January 31st, 1878.

THAMES VALLEY BRANCH.

THE next meeting of the above Branch will take place at the Griffin Hotel, Kingston, on March 14th, at 5 o'clock.

Members who may be willing to read papers are requested to communicate with the Honorary Secretary as soon as possible.

There will be a dinner after the meeting (7 o'clock) at the above hotel. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary.*

Kingston-on-Thames, February 12th, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:
SPECIAL MEETING.

A SPECIAL general meeting of the Branch was held in the Queen's College, Birmingham, on January 31st, called, in obedience to a requisition, "to consider the position of the profession in reference to the establishment of provident dispensaries in Birmingham". Present, Mr. SAMPSON GAMGEE, President, in the Chair, and about one hundred members and visitors.

The following resolutions were carried unanimously.

"1. That the rules of the Birmingham Provident Dispensary, and the letter from the honorary secretaries of the proposed institution (January 3rd, 1878), be referred to a Special Committee of this Branch of the British Medical Association; and that it be an instruction to such Special Committee to take such steps as they may deem necessary in the twofold interest of the public and of the profession, and to report.

"2. That the Special Committee on Provident Dispensaries consist of the following gentlemen, with power to add to their number: Mr.

Archer, Mr. Bailey, Mr. Bartleet, Dr. Bassett, Dr. B. W. Foster, Mr. Gamgee, Mr. W. C. Garman, Mr. J. Garner, Dr. Hickinbotham, Dr. Johnston, Mr. Maberly, Dr. Monckton, Mr. Newnham, Mr. Oakes, Mr. O. Pemberton, Dr. Russell, Mr. L. Owen, Dr. Savage, Dr. Thompson (Leamington), Dr. T. Underhill, Dr. Vinrace, Dr. Wade, Mr. W. Williams, and Dr. Welch.

"3. That the best thanks of this meeting be and are hereby tendered to the Council of the Midland Medical Society for their valued offer of full and hearty co-operation on behalf of the members of that Society; that such offer is cordially reciprocated; and that it be a recommendation to that Society to consider the propriety of appointing a Committee to act with the Special Committee appointed at this meeting in the matter of provident dispensaries.

"4. That the sum of £10 be placed at the disposal of the Special Committee.

"5. That this special general meeting be adjourned to the call of the Chairman."

CORRESPONDENCE.

THE PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

SIR,—I have been waiting with some interest for the appearance in the official columns of the JOURNAL of the report of the proceedings of the Committee of Council of the meeting of January 9th last; for they included subjects of great importance to all the members of the Association, to some of which it has seemed to me desirable that general attention should be directed. To my surprise and disappointment, I have looked in vain for the report of the proceedings until this time. They appear in the last JOURNAL (February 9th), exactly one month after date. I have not only to complain of this delay, but I have to add the still more serious complaint that the report is so abbreviated, and is so marred by large omissions, that it gives no adequate idea of the actual proceedings; and this makes it extremely difficult for me to bring under the notice of our associates some of the questions arising out of those proceedings, which may with great advantage, I think, be submitted to immediate discussion.

I take first of all Dr. Wilson's Fox's letter on the admission of ladies to the meetings of the Association, and the answer given. To this an amendment was moved, seconded, and discussed, of which no notice whatever appears in what purports to be the official report of the proceedings published in the JOURNAL. Thus there is omitted the due intimation to members that there were those on the Council who did not think the answer given to Dr. Fox adequate to the occasion. The delay in the publication and the omission in report are here, I think, both open to censure. In consequence of the delay, Dr. Wilson Fox's letter of resignation actually appeared in all the medical papers (including our own) before the publication of the resolution to which it was an answer; and, in consequence of the omission, the inadequacy of the reply pointed out in Professor Lister's very pertinent letter appears to be unfairly exaggerated.

I see that our editor appends a note of explanation to Professor Lister's letter, which *post factum* supplies the gap. Is this an official authoritative statement, or the mere private opinion of the editor?

11. The next important item in the report of the proceedings is a long and formal resolution setting forth and approving the terms of the lease of premises in the Strand at a yearly rental of £320, followed by another announcing in detail the insurance of the above premises, together with the amount of a year's rent: a considerable display of minute business care. Could any one have supposed from this the actual facts, which are, that the Committee of Council also decided at this meeting, without consulting or even informing the members, to take upon the Association the business of printers; to expend £1,000 of the funds of the Association in alterations and structural repairs of these premises; besides having in contemplation the expenditure of about another £1,000 in the purchase of printers' material and machines, shop and office fittings and furniture? So important and serious a step and so large an outlay might with advantage, I think, have been submitted for the opinion of the members at large—if necessary, at a special general meeting—before it was adopted and put in force. In any case, I am unable to understand the propriety of arranging the report of its proceedings published in the JOURNAL in such a manner as to set forth in great apparent business detail, only the ordinary fact that a house is to be rented (as at present) and to omit altogether the much more important fact that the Association is about to take up the trade of printing, and especially that it is going

to expend £2,000 of its moneys in house-repairs, fittings, and type. Some satisfactory explanation of the reason of this omission is, I think, fairly due to the members of the Association.

I am anxious that the whole matter should be fully put before and considered by the members, before it is too late for them to express their views for the guidance of the Committee; because, as a Secretary of the Metropolitan Counties Branch recently entering upon office, I learn now that, prior to my accession to office, the Council of the Branch had under consideration a proposal for providing a reception-room for medical visitors to London.

Moreover, at a meeting of the Council of the Branch held three weeks ago, a resolution was unanimously carried, suggesting to the Committee of Council to provide a central office for the use of members of the Association visiting London; and a strong feeling was expressed by some of the most eminent members of the Council, that the central office should be of a kind and in a position suitable to a great professional Association, and not a mere appendage to a printing and publishing office.

I am personally cognisant of an excellent printing and publishing office close to that now selected, and in the same thoroughfare, at a rental, not of £320 *per annum*, but of only £200 a year, and not requiring one shilling of outlay for repairs, etc., such as those on which it is now proposed to expend £1,000 of our money, with immediate possession, entailing no loss of rent during structural alterations and repairs, which, in the present premises, will be a serious item. I am acquainted also with excellent premises in Spring Gardens, Charing Cross, which could be secured at a moderate rent, and which are in good order, which would afford an excellent house and central office for the Association and for the meetings of its Committee of Council, with reading and meeting rooms for its members worthy of a scientific body of gentlemen, who may, I think, reasonably object, as some of our members have already objected to me, to being relegated, as the result of so great an outlay as that now proposed, to a back room over a printing-office.

What I wish especially to call attention to is that, by the omission of the published report of proceedings, essentially important facts, to the welfare of the Association at large, are held back from the knowledge of the members, from whom most valuable expression of opinions might be expected on so vitally important a subject as this.

111. We read next, in the published proceedings, a bare statement that—"The minutes of the Habitual Drunkards Committee were read, and an amendment was moved. Resolved: That in the event", etc.

Irrespective of the defective wording of this minute (which leaves it doubtful whether the amendment moved was or was not the resolution carried), I must here again ask, Why are the minutes so read omitted from the report? Is not this a matter of public interest to all the members? Have not all the members of the Association a right to know at the time what the Committee proposes? Will not, whatever is done by it, be done in the name and with the influence of the Association at large? Why, then, is the knowledge of these views withheld in the meantime from the members?

IV. Finally, I am greatly struck with the fact that all mention whatever is omitted from the report of the proceedings of a most important series of regulations adopted for the general conduct of the annual meetings of the members, and dealing with the rights of members at these meetings. One of them especially is of a character which, I fear, will be found to abrogate a primary and important privilege of members, heretofore in force, and to *interfere with the power which they have hitherto possessed of moving resolutions at the annual meetings*. Earnestly trust that these regulations will not be withheld from discussion, and I suggest that they be at once restored to what purports to be the report to the members of the proceedings of the meeting.

I claim permission to ask, through the medium of the JOURNAL, of my fellow-Secretaries of Branches and the members of the Association generally, whether they approve of the way in which the proceedings of the Committee of Council are published, or whether they share generally the views which I have expressed.

I claim permission also to ask, in the same manner, the President of Council to state, for the information of my fellow-members in the Association, (1) whence the great delay in the publication of these most important proceedings; (2) by whose authority the omissions were ordered; (3) whether he will not at once direct that the Secretary publish in the official column of the JOURNAL a fuller and more complete report of these proceedings, the most important parts of which are omitted in what has been published last week.

Apologising for occupying so much space,

I am, sir, yours truly, W. C. GRIGG, M.D.,
Honorary Secretary Metropolitan Counties Branch,
6, Curzon Street, Mayfair, February 9th, 1878.

THE ADMISSION OF WOMEN TO THE MEMBERSHIP OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—The position of the British Medical Association with regard to female medical practitioners, as shown by the communications of Dr. Wilson Fox and Mr. Lister, compels me to ask permission to express very briefly my views on the subject. I have been so anxious to avoid giving, even in appearance, any ground for the assertion, often made, that our profession is actuated by an illiberal protection spirit of trades-unionism, that I have hitherto abstained from taking any public part in the discussion of the question of admitting women to the ranks of the profession. But, in the General Medical Council, and in the various and protracted conferences in which I have for many years taken an active part, I have always and strenuously opposed mixed medical education of the sexes, and the admission of women to our medical corporations. When, however, it appeared that public opinion was largely in favour of granting to women the opportunity of earning a living as medical practitioners, it did not appear to me right to refuse them their urgent demand for admission to the *Medical Register*, however undesirable, in my opinion, for their own sakes such a step might be. It must now be assumed that a certain number of women will enter the ranks of the medical profession as legally qualified practitioners. How many will avail themselves of this privilege, remains to be seen. For the credit of British women, and our general social comfort and well being, it may be hoped, and confidently expected, that the number will be few.

The question for the male division of our profession now is, What shall be their relation to the female division? Are we to imperil the efficient working of our educational arrangements and medical institutions, founded and adapted to supply the public with twenty thousand well-educated male practitioners, for the sake of twenty, or say even one hundred women? Are we to deter the best class of our medical students from entering our schools, by compelling them to pursue their anatomical and physiological studies side by side with women? Are we to taboo certain subjects of discussion in our medical societies, or compel a certain number at least of our associates, even at the risk of being considered squeamish, to vacate their seats, for the sake of the advantage to be obtained from the acumen and ready criticism of a certain number of female adjoints? To these and many similar queries an answer must now be given by the profession; and I, for one, must reply in the negative.

The admission of women to the register of legally qualified practitioners being conceded, there will not, I trust, be any lack of chivalry manifested by the male division towards their fair competitors, nor any petty obstacles thrown in the way of their success. But their educational requirements must be supplied by their own exertions, with such aid as they will doubtless be able to induce the public to afford them. Hospitals and schools must be provided for them, where their education can be carried on with the least detriment to their own character, and without endangering existing institutions, established for the professional education of men and the good of the State. The public advantage to be derived from the creation of female doctors is, as yet, too problematical and uncertain to justify the risk of subverting existing institutions of vital importance to our profession, and essential to the welfare of the community. That such a risk is not imaginary, the present position of the British Medical Association is a sufficient proof. A disruption of this, our largest and most prosperous medical association, is inevitable if its council determine that females are to be admitted as members. Such would also be the effect of any similar determination in the case of any of our large medical societies. It must be left to each man's own judgment whether he can, with propriety and comfort to himself and with due regard to the welfare of the patient, join in medical consultation with women. But the conduct of the business of our public bodies must be regulated by what, in the estimation of the majority, is consistent with decorum and moral propriety.—I am, Sir, yours obediently,
JAS. RISDON BENNETT.
22, Cavendish Square, February 13th, 1878.

STR,—The acknowledgment of the Council of our Association that it is incompetent to prevent the admission of women to the membership of our Association, after a great majority of the members had expressed themselves adverse to such additions to their body, shows that legislation on this point is needed. Now that the letters of Dr. Wilson Fox and Mr. Joseph Lister have directed the attention of the Association to the consequences that admission of women to the British Medical Association entails, it is more than ever incumbent on the Council to call upon the Association to discuss the matter, and legislate in such wise that the laws shall accord with the general opinion of the Associa-

tion. A considerable body—probably a majority—believe that the interests of society are best served by preventing public discussions of medical topics between the sexes. Others think that this drawback may be counterbalanced by the advantages to society that follow the removal of sex from the disqualifications for practising medicine and enjoying all privileges of medical practitioners, among which the full enjoyment of the membership of our Association is no mean one. It would appear that the general opinion is against the admission of women; and therefore it is only fair that, before more are admitted to our body, this question should be formally discussed and settled in accordance with the prevailing opinion, whatever that may prove to be. Contravention of the general opinion of the Association is not to be tolerated simply because the Council has no legal power to prevent it. For this reason, I have no doubt that the JOURNAL will speedily report that the Council is proceeding with due despatch to bring the question before the Association.—I am, sir, etc.,

Wimpole Street, February 9th, 1878.

BERKELEY HILL.

THE STUDY OF MEDICINE AND NATURAL SCIENCE AT CAMBRIDGE.

SIR,—Among the recent changes which have contributed to facilitate the pursuit of natural science and medicine at Cambridge, and the obtaining degrees in medicine and surgery, is the regulation permitting the "previous examination" in classics and mathematics to be passed in the first term of residence, instead of, as formerly, in the fourth term, so that the student who accomplishes this is enabled to devote all the remainder of his time in the University to natural science and medicine. Many of those who came up last October, all those who were well prepared to come up, took advantage of this regulation, and are now at work at chemistry and the other preliminary medical subjects. I would be glad to call attention to a further step which has been taken in the same direction, by a regulation permitting the examination in classics and mathematics to take place through the Cambridge senior local examination, or the higher local examination of the Oxford and Cambridge schools board examination, before the University course has commenced. Thus the student may obtain the requisite certificates (the certificates which are accepted in lieu of the previous examination); may register as a medical student; and may, immediately on coming to the University and through the whole time of his residence, devote himself to natural science and medical subjects. He has the advantage of beginning when the courses of instruction, for the most part, commence, viz., in October, and he can obtain his degree in medicine at an earlier period. The examinations for these certificates are probably somewhat more difficult than the previous examination, and demand a good knowledge of the subjects required; not more, however, than a lad who has been well trained at school should be able to show at the age of seventeen, which is a very good age to come to the University. Any period which may intervene between the obtaining the requisite certificates, and the commencement of residence at the University, will be well spent in the study of physics, chemistry, or botany.

Information respecting these examinations, the previous examination, and other points, may be obtained through the *Students' Handbook to the University of Cambridge*, published by Messrs. Deighton, Cambridge, price 1s. 6d.

By taking the course thus suggested, the well educated and industrious student may, very well and at moderate expense, pass through the University, and obtain the B.A. and M.B. degrees by the age of twenty-two.—I am, etc.,

G. M. HUMPHRY.

Cambridge, February 8th, 1878.

MEDICAL EDUCATION AT OXFORD.

SIR,—Your correspondents, Dr. William M. Ord and "M.D. Edin.", have raised in the discussion concerning medical education at Oxford a side-issue which, I hope, may not be allowed to distract attention from the real matter in hand. The object of both these gentlemen is to express their high estimation of the merits of the young men who come from Oxford to London; but one may ask, as "M.D. Edin." himself seems inclined to do, "What has this to do with the question of the desirability or urgent need of proper organisation of the medical faculty of Oxford?" Dr. Ord appears to think that it is a proper and satisfactory function for the richest university in the kingdom to keep young men until they are old enough to set an example of manners and industry to the medical students of a London hospital. No doubt elderly students, who have been matured by the prolongation of school-boy life at Oxford, are less troublesome in some ways to their teachers than the lads of seventeen or eighteen who form the majority of London first-

year students. But I am unable, after an experience of some years in teaching both London and Oxford students, to admit that there is any preference on the score of good manners, good feeling, or hard work, to be given to the Oxford undergraduate. The more extended study of the preliminary subjects of medical education by the students of those London schools where these subjects are not sufficiently taught, would render them as amenable to further instruction as the Oxford men are now found to be by Dr. Ord and "M.D. Edin." This appears to me to be the practical conclusion from the observations of those gentlemen, and certainly not that Oxford is to eject her students of medicine, with their education only just initiated, in order that they may form among the London students an "aristocracy" possessing "the invaluable culture and refinement of academic life". The introduction of these phrases into the question is instructive, as illustrating what I venture to pronounce a delusion with regard to the results of residence at Oxford and Cambridge. A few of our best men (on the average four annually), necessarily either men whose exceptional ability has gained for them college-pensions, or men whose homes have the social advantages of wealth, study medicine in London after leaving Oxford. Only men thus fortunately placed in regard to pecuniary matters can afford, whilst things are arranged as at present, to pass through the preliminary three or four years' residence at Oxford before commencing distinctly medical study. It is a mistake, therefore, to attribute the exceptional abilities and the culture of these gentlemen to any specific virtue of academic life. Here, as very commonly elsewhere in reference to the same matter, there seems to be a confusion of *post hoc* with *propter hoc*. I confess that my most ardent desire is that the work of Oxford as an university may, ere long, cease to be restricted, by misguided friends and contemptuous enemies, to "refinement" and "culture", qualities which will surely enough attend in due measure upon all healthy activity; my hope is that nothing short of the most vigorous performance of all those functions in relation to study and professional training of all kinds, elsewhere discharged by universities, will be admitted as worthy of the venerable "mother of sciences", who is surely capable of doing more than teaching manners.

The general question as to the advisability of separating the preliminary, introductory, and technical parts of a medical education is raised in Dr. Ord's letter. I do not think that it is possible to bring forward a single argument in favour of their being separated as to place, though a proper succession in these studies as to time is necessary. On the other hand, there are the strongest reasons for keeping them united in place. The mere talk of separating them encourages an attitude towards these studies which is, I venture to submit, entirely erroneous and injurious. Dr. Ord says, "It is with medicine as with seamanship—in both, science and practice are appropriately taught in different places". The analogy, to hold good, requires that there should be the same absence of sick persons on whom to practise medicine in the neighbourhood of the school of medical science, as there is absence of sea from the neighbourhood of the school of naval science. So far as Oxford is concerned this is not the case. The Radcliffe Infirmary (and here I regret to have to contradict Dr. Chambers, whose remarks must be understood as referring to one set of beds only, viz., Dr. Acland's) is notoriously (as its annual reports exhibit) one of the best fields for clinical instruction in the kingdom, not excluding the London hospitals. It has 200 beds, into which are received a considerable variety of interesting surgical cases, as well as a large number of fever cases, besides the usual cases of chronic disease. But my objection to Dr. Ord's view goes beyond the objection to his analogy. I cannot admit that there is any such sharp line as he would draw between "science" and "hospital work". I would quote the opinion expressed by Professor Billroth, in support of my contention that there is but one method (call it science or call it practice) of investigating nature. The very same faculties of the mind, and even the same technical processes, are made use of in observation and reasoning at the sick-bed and in the chemical laboratory. It is very desirable in order that the medical student may have the full advantage of the scientific method, that he be not encouraged to divorce his more special from his more general studies under the names of "practice" and "science" respectively, and that the association of the two in one university town be maintained so that the students and the teachers of all branches of science may mingle and give aid to one another. It is, moreover, desirable that the more special and professional part of a medical education, the part which Dr. Ord calls "practice" be given in the same place as the more general parts of medical education, because in this way there is the surest guarantee that these more general parts are efficiently carried through, and in such a way as the due training of a medical man demands. The local proximity of the teaching of the special studies need in no wise injure such a thing as a biological school, unless the two institutions are brought into competi-

tion by a poverty of pecuniary resources. This, of course, need never occur in Oxford, whilst the juxtaposition alluded to is calculated to give a seriousness, a professional dignity, to the preliminary and general studies, resulting in a thoroughness and purpose which they otherwise must lack.

The point at which a line between science and practice may with justice be drawn is when the medical student has completed his curriculum, and actually, as the common use of language puts it, "enters into practice". This might, perhaps, be regarded as the equivalent of the scientifically taught sailor's putting to sea, though I do not think the analogy a serviceable one.

Let me, in conclusion, say that there is an increasing number of fellows of colleges resident in Oxford, and of other graduates resident in the university, who have very serious cause to regret the fact that it is not possible to pursue their medical studies in the Radcliffe Infirmary and to proceed to graduate in medicine. These persons, and the graduates who form the resident portion of the governing bodies of the Colleges, are amongst those who are best able to judge of one aspect of the question whether it is desirable that Oxford should have a medical faculty. In some respects they may give a more impartial verdict than can be expected of those who have taken the Oxford degree in medicine and have ceased to have an intimate connection with the place.—I am, Sir, your obedient servant,

E. RAY LANKESTER, M.A., F.R.S.,
Fellow of Exeter College, Oxford.

THE REPRESSION OF QUACKS.

SIR,—Herewith you will find a draft of a Bill* now before Parliament for the Amendment of the Medical Act, 1858. It is wished merely to have the means of carrying out effectively the spirit of the Act, as intended by the Legislature when the Act was passed, whilst, at the same time, a provision is desired to be made for the recognition and registration of respectable foreign diplomats.

The Act, as expressed in its preamble, was intended to "enable persons requiring medical aid to distinguish qualified from unqualified practitioners", but, in consequence of the looseness of the wording of its penal clause, this object has been frustrated, and the public, especially the poorer classes, are still exposed to the danger of falling into the hands of ignorant medical impostors who are practising in swarms under the cover of high-sounding and attractive titles pretended to be conferred by purchased fictitious and disreputable foreign qualifications.†

To show the conflicting constructions put upon the penal clause of the Act by some magistrates when dismissing, and others when convicting in the same class of offences, and so to illustrate its nugatory purposes, a few cases have been selected for your information, and will be found on one of the following pages.—I am, sir, your obedient servant,

R. H. S. CARPENTER, Honorary Secretary.

Medical Alliance Association,
130, Stockwell Road, S.W., February 1878.

DRAFT OF A BILL PROPOSED BY THE MEDICAL ALLIANCE ASSOCIATION FOR THE AMENDMENT OF THE MEDICAL ACT, 1858.

An Act to Amend an Act passed in the twenty-first and twenty-second years of the reign of Her Majesty, "to regulate the qualifications of Practitioners in Medicine and Surgery", and commonly known as the Medical Act, 1858.

WHEREAS an Act was passed in the twenty-first and twenty-second years of the reign of Her Majesty "to regulate the qualifications of Practitioners in Medicine and Surgery"; and whereas it is expedient to amend the said Act:

* This Bill was introduced into the House of Commons by Dr. Lush, Sir Trevor Lawrence, Mr. Ritchie, and Mr. Sanuda, and read a first time on the 13th January last.

† The Medical Act (1858) unintentionally permits persons who have received no medical education, to purchase "bogus" diplomas, to assume foreign medical titles, to attach those titles to their residences, and to indecent pamphlets, which they may distribute by thousands through the post and by hand. Illustrative case: A man calling himself "Dr. Harrison, F.S.A., Member of the Royal College of Physicians and Surgeons, N.Y., U.S.A.; de la Société de Médecine de Rouen; National Academy of Sciences; Fellow Institute of France, of England, etc.", was charged at the Clerkenwell Police Court, in February last, under Lord Campbell's Act, with distributing through the post, and otherwise, indecent pamphlets. Five bags full of these papers had been seized by the police, and in one bag were one thousand six hundred and seventy pamphlets, in envelopes, already directed and ready for posting. Notwithstanding that the contents of the five bags were ordered by the magistrate to be destroyed, this man cannot be convicted under the Medical Act, for the reason that he is not assuming medical titles recognised by that Act. The consequence is that he is left, as are all like him, to practise on the public under cover of his long string of spurious medical qualifications, without having any cause to fear a prosecution under the Medical Act.

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows.

1. Section 40* of the said recited Act is hereby repealed; and in lieu thereof it is enacted: Any person who, for the purpose of gain, shall take or use the name or title of physician, doctor of medicine, licentiate in medicine, licentiate in surgery, bachelor of medicine, surgeon, general practitioner, apothecary, or any other medical or surgical name, title, or description purporting to authorise the practice of medicine or surgery, unless such person holds a qualification or qualifications entitling him to take or use such name, title, or description, and such qualification or qualifications be also registered under the said recited Act, shall, upon summary conviction for either or any such offence, pay a sum of twenty pounds.

Any person who, for the purpose of procuring the registration of the cause of death of any deceased person, shall make, fill up, or sign, any medical certificate of the cause of such death, unless he personally attended such deceased person during his or her last illness, and holds a qualification in medicine or surgery duly registered under the said recited Act, shall, upon summary conviction for either or any such offence, pay a sum of twenty pounds.

If any person shows that he is not a British subject and not ordinarily resident in the United Kingdom, and holds a medical diploma, degree, or title from some university, college, or body in any British possession or foreign country entitled to grant the same, such person shall not be liable to any penalty under this Section.

2. To Section 42† of the said recited Act, the following words shall be added, viz., anything to the contrary in any Act passed before the passing of this Act notwithstanding.

3. To Schedule A of the said recited Act, this Section shall be added: When the General Medical Council are satisfied that any medical diploma, degree, or title granted by any university, college, or body in any British possession or in any foreign country is granted in respect of a degree of knowledge in both medicine and surgery equal to that required for obtaining a licence in both medicine and surgery under the said recited Act, they may from time to time, if they think fit so to do, place such diploma, degree, or title upon the *Medical Register*, and if at any time any such medical diploma, degree, or title ceases to be granted in respect of such degree of knowledge as aforesaid they may remove the same from such *Register*.

4. This Act to be read with, and form part of, the same recited Act.

5. This Act may be recited for all purposes as the Medical Acts Amendment Act, 1878.

CONTRASTING CASES.

Convictions.—A few years since, a gentleman in good social position, named T—, and holding one of the best medical qualifications—that of the Society of Apothecaries—was fined £20 in the Lambeth Police-Court for using the title of "Surgeon", instead of "Apothecary".—In the Clerkenwell Police-Court, a man named Kerr, who held an American diploma, was fined £5 for falsely pretending to be a Doctor of Medicine, the magistrate (Mr. Cooke) saying at the time that he convicted him that "no diploma from abroad would give the defendant the right to use the title of Doctor".—In the Hammersmith Police-Court, a man named Swallow, who held an American diploma, was fined £5 for using the title of Doctor of Medicine.—In the Clerkenwell Police-Court, a man named Kahn, who held an American diploma, was convicted in a penalty of £5 for falsely pretending to be a Doctor of Medicine.—At Bolton, a man named Foulds, who holds two American qualifications, was convicted by the magistrates for taking the title of "Doctor".

Dismissals.—In the Marlborough Police-Court, a charge against a man named Hamilton of falsely pretending to be a Doctor of Medicine, under cover of a sham American diploma, was dismissed, the magistrate (Mr. Mansfield) observing at the time that "a person might call himself a Doctor the same as a Captain, if he pleased".—In the Marl-

borough Police-Court, a man named Hamilton was charged with falsely pretending to be a Doctor of Medicine, upon the faith of his holding a diploma from an American college, there being no such college. Mr. Knox dismissed the charge, saying at the time that, "unless a title recognised by the Medical Act was assumed, no offence would be committed under the Act".—In the Thames Police-Court, a charge against a man named Dixon (who held a foreign qualification in dental surgery), for falsely pretending to be a Doctor of Medicine, was dismissed, apparently because he had not described himself to be registered.—A charge against a man named Le Page (who held no medical qualifications whatever), of falsely pretending to be a Surgeon and Physician, and signing a certificate as such, was dismissed by the Durham magistrates, who refused to accede to the request of the solicitor for the prosecution to grant a case for a superior court.—In Liverpool, a charge brought against a Mr. Hamilton, for having signed a death-certificate under the title of "Botanic Surgeon", and otherwise using the title of "Surgeon", was dismissed by the magistrate. The defendant proved that he held an American diploma (?) in "Botanic Surgery".

MILITARY AND NAVAL MEDICAL SERVICES.

NEW REGULATIONS FOR THE HOSPITAL CORPS OF THE ARMY.

NEW regulations, embodying very important changes in the constitution, and in the functions of some of the officers of, the Army Hospital Corps, have just been issued by the War Office. Hitherto the captains and lieutenants of orderlies have been alone invested with command, and held responsible for the maintenance of discipline in the corps; these duties and responsibilities have now, by the present regulations, been formally delegated in the first instance to the medical officers, under whose direction and orders the officers of orderlies will act in all capacities in future. The medical officers are placed, by these fresh rules, in an entirely new position, and it is one which will demand the exercise of special tact, diligence, and discretion, for the trusts and responsibilities imposed on them by it to be satisfactorily discharged. We are not, however, among those who have a dread that medical officers, by being invested with command, will estimate unduly the military functions, and at the same time underrate and neglect their strictly professional duties; we rather indulge the hope that the increased authority conferred on them will be merely regarded as a means of enabling them to apply their professional knowledge and directions with more practical effect and in a more systematic manner, and in the best interests of their patients.

The regulation just issued for the Army Hospital Corps, entering as they necessarily do into many details of duty, form a rather lengthy pamphlet of nearly fifty pages, but a brief analysis of them will sufficiently explain their general scope and bearing. The duties for which the corps has been organised, the mode of recruiting the corps, the manner in which disciplinary control is to be exercised in it, and its interior economy to be administered, are laid down in the first section. The corps has been organised for duties in connection with the hospital service of the army, and is an integral part of the Army Medical Department. The administrative charge of the corps is vested in the Director-General, and the principal medical officer of each military district, subject to the general officer commanding it, will represent the Director-General and exercise supreme authority in all matters of discipline affecting the corps in his district. The medical officer in charge of each general station and field hospital will have disciplinary control over the officers, non-commissioned officers, and privates of the Army Hospital Corps attached to the hospital. The head-quarters of the corps are at the office of the Director-General of the Army Medical Department, where all the records of the corps are to be preserved. In keeping up these records, the Director-General is to be assisted by a functionary entitled the "staff-officer" of the corps. The dépôt of the corps is placed at Aldershot, under the immediate command of a medical officer appointed by the Director-General. This is a very important establishment. The medical officer commanding has under his orders an adjutant, quarter-master, and officer of orderlies in charge of the equipment stores. The instructor and assistant-instructors of the corps also form part of the dépôt. All recruits joining the corps are, in the first instance, to be sent to this dépôt and put through a course of recruit drill. As soon as they are dismissed from this drill they are to be placed at the disposal of the medical instructor, for the purpose of going through a course of professional instruction, and of stretcher and bearer-column drill. They remain at this dépôt during the whole course of training, and it is specially laid down in the regulations that they are not to be removed from the dépôt for any purpose

* Section 40, which it is proposed to repeal, is thus worded: "Any person who shall wilfully and falsely pretend to be, or take or use the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, surgeon, general practitioner, or apothecary, or any name, title, addition or description implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or licentiate in medicine or surgery, or a practitioner in medicine, or an apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds."

† Section 2 merely carries out the intention of the 42nd section of the Medical Act (1858), which says: "Any sum or sums of money arising from conviction and recovery of penalties as aforesaid, shall be paid to the treasurer of the Medical Council." The penalties hitherto recovered in the metropolitan police district, under this clause, have been claimed and retained by the metropolitan police receiver under the provisions of an old Act of Parliament.

without the express sanction of the Director-General. These regulations ought to ensure that every hospital orderly in future shall be thoroughly prepared for the efficient discharge of hospital duties, whether he be employed in the stationary hospitals of peace-time, or in those adapted to meet the wants of active service in the field.

The sections of the regulations which follow define the function and responsibilities of the district officers, of orderlies, of those attached to station-hospitals for duty under the medical officers in charge, and, lastly, of the non-commissioned officers and privates of the corps. One section is devoted to an explanation of the qualifications required in those non-commissioned officers who desire to undergo a course of training and instruction to fit them for being employed as compounders of medicines, and of the plan of proceedings by which their knowledge of the subjects in which they are required to be proficient is to be tested. A list of the various forms of returns and books which are required to be kept up in connection with the corps, and which appear to be sufficiently numerous, is appended to the regulations. The sections just referred to enter into many particulars which it is, doubtless, essential to define with precision in a code of regulations; and which, consequently, occupy a considerable amount of space in description. It would be out of place to notice them further in these pages. Sufficient has been quoted to show the nature of the new regulations, and to indicate the great change which they involve as regards the status and powers of the medical officers of the army. We congratulate the Director-General in having achieved such an important elevation of the officers of his department in army *prestige*; and we hopefully trust that the medical officers will show their appreciation of it by hereafter making manifest that the administration of the hospitals, and the discharge of all their other professional duties—so far from suffering by the change, as some would like to see—have, on the contrary, improved in proportion to the increased power in the control and direction of their professional concerns with which they have now been vested.

OBITUARY.

FLEETWOOD CHURCHILL, M.D.

IT is with no ordinary sorrow we chronicle the death of this eminent obstetrician, briefly announced in the *JOURNAL* of February 2nd. The sad event took place on the 31st ult. at Ardrea Rectory, County Tyrone (the residence of his son-in-law, the Rev. Dr. Mead), where Dr. Churchill lived since his retirement from practice in June 1875.

Except that of Simpson, there is, perhaps, no name so widely known to the obstetric world as that of Fleetwood Churchill. His writings on every branch of the third estate of medicine—viz., on the Diseases of Women, on the Diseases of Children, and on Pure Midwifery—had a world-wide fame. Although an Englishman by birth, yet Ireland was the country of his adoption and of his warmest affections.

In 1831, Dr. Churchill obtained his degree of M.D. at Edinburgh, and, in the following year, he became a Licentiate of the King and Queen's College of Physicians of Ireland, and took out the Licence in Midwifery of the same College. Having contracted by marriage a close tie to Dublin, he settled down to practise there, and from the very first devoted himself to the obstetric branch of medicine. In furtherance of this object, he, in conjunction with the late Dr. Speedy, started a small lying-in hospital on Arran Quay—"The Western Lying-in Hospital"—where, for some years, they instructed a class of students in midwifery. Interesting clinical reports of the practice of this hospital were published by Churchill in the pages of the *Dublin Medical Journal* for the years 1838-9-43.

In 1848, the honorary degree of M.D. was conferred upon him by the University of Dublin. About the same time, he was elected an Honorary Fellow of the King and Queen's College of Physicians; and in 1851, a Fellow of the same College. In 1856, he succeeded Dr. Montgomery as King's Professor of Midwifery in the School of Physic. This professorship he held till 1864, when his increasing practice compelled him to resign it, whereupon Dr. Sinclair, the present professor, was appointed in his stead.

Dr. Churchill was twice elected President of the Dublin Obstetrical Society; namely, in 1856 and again in 1864; and at the time of his death was an Honorary President of the Society. During the years 1867-8, he filled the Presidential Chair of the College of Physicians. The important duties of this position he discharged with ability, courtesy, and exemplary diligence. His *obstetric* predecessors in this chair were Beatty, Evory Kennedy, Montgomery, and Collins.

At the annual meeting of the British Medical Association, in 1874, at Norwich, he was chosen President of the Obstetric Section. A severe illness prevented his attending; but the address he had pre-

pared, on the Hygiene of Lying-in Hospitals, was read by the Vice-President and excited much interest, as the questions to which it related were then being keenly discussed both within and without the profession. He was also an ex-President of the Dublin Pathological Society.

To his intimate friends, Churchill always expressed his determination to give up professional work whenever he found his bodily health unequal to the faithful and honest discharge of the duties required of him. True to this resolution, he relinquished the responsibilities and cares of practice in June 1875, left Dublin, and settled with his married daughter in the County Tyrone. It required no ordinary effort to make up his mind to this step, as he had many intimate ties and warm friendships in Dublin. He frequently expressed to the writer of this sketch that it was "a terrible wrench"; but he felt it was the right thing to do; and, having once made up his mind on this point, all conflict was over and he entered on the new path with resignation and cheerfulness. He never revisited Dublin.

Churchill was a great lover of books, and had made, in the course of his life, a very large and valuable collection of works, ancient and modern, upon every branch of Obstetrics. His writings abundantly testify to what good account he turned his study of these works. With true public spirit, Churchill presented the above rare collection of books to the College of Physicians on his retirement from practice; and the College, in return, presented him with an address couched in the most flattering terms; and also directed his portrait to be painted and placed in the grand hall of the College. This portrait, executed by Mr. Jones, President of the Royal Hibernian Academy, is a speaking likeness, and occupies an honourable position among the marble and canvas effigies of Graves, Stokes, Marsh, and Corrigan, and of Sir Patrick Dun, Beatty, Mayne, and Percival.

The Obstetrical Society was also forward to do him honour, and conveyed the expression of their deep regret at his departure, and of their respect and esteem towards himself, in a highly complimentary address. He was one of the few surviving original members of this society, and for thirty-seven years had been a regular attendant at its meetings, always taking an active but temperate part in the discussions. Many of his numerous essays and memoirs made their first appearance in public at the reunions of this Society.

His voluminous works on the Diseases of Women, Midwifery, and the Diseases of Children are so long and so well known to the obstetricians of all countries, that we need do no more than mention them. For over twenty years, they were the established text-books on these subjects. They are all characterised by great erudition and research, and by full acknowledgment of every author from whom he borrowed a quotation or an opinion. It deserves here to be stated that, though largely availing himself of the writings of others, he was always scrupulously particular in acknowledging his obligations. The charge of plagiarism was once made against him, but it signally failed and recoiled upon the head of its author.

His celebrated *Treatise on Midwifery* possessed, in addition, this feature: that he used the published statistics of all authors of any repute, in the elucidation of very many practical questions. These results he carefully tabulated much in the same manner that Collins had previously done with regard to his hospital cases. The amount of work thus compressed into a small compass by Churchill was simply enormous; but he was a man of extraordinary industry, and never was a moment idle. He was, moreover, a rapid writer, and so strict an economist of time, that he got through a great amount of reading in his carriage, when driving from place to place, and in this way chiefly he kept *au courant* with the literature of the day.

A great deal of the material of which his works are made up originally appeared, in a detached form, in the pages of the *Dublin Medical and Surgical Journal*, especially in the first and second series of this long established periodical. The number of his communications to the Obstetrical Society was also very considerable, scarcely a session passing without one or two. Even after his departure from Dublin, he forwarded two papers to the Society, which were read by his son Dr. F. Churchill. The latter of these papers, *On Uterine Polypus*, was read at the meeting of May 12th, 1877.

The Council of the *Old Sydenham Society* appointed Churchill, in the year 1848, to edit certain monographs on Diseases of Women. This volume appeared in 1849. The greater part of it is occupied by tracts on puerperal fever, to which the editor prefixed an historical sketch of the epidemics of that malady. "I have collected," he says, "with some labour, all the information within my reach, and I trust that the summary will be found tolerably complete." This sketch occupies forty-two pages, and is a very valuable contribution to the literature of the subject of which it treats, up to the time when it was written.

For some years before his retirement, Dr. Churchill was largely en-

gaged in practice, and enjoyed alike the confidence of the public and of his professional brethren. He had a wide circle of attached friends both within and without the profession; for his sterling rectitude of character, coupled with his kindness and urbanity of manner, won the respect and esteem of all who knew him. Though a man of deep earnest religious feeling, he was singularly free from cant or sectarianism; and preferred that his religion should be an operative principle, influencing and controlling his words, acts, and conduct, rather than a mere matter of talk and ostentation. He has often said to the writer of this sketch that "he would not give a fig for a man's religious principle, if it did not make him strive to be a better doctor, lawyer, or soldier, as the case might be".

As might be expected in a man actuated by such principles, Churchill's professional conduct and bearing, especially towards his brother practitioners, were consonant with the strictest rules of medical ethics. In this sense, he was indeed a man:

"Totus, teres, atque rotundus."

His fame will be perpetuated by his writings, and his remembrance will be fondly cherished in the hearts of those who knew him.

For many years, he had a very extensive midwifery practice, which he gave up some time previously to his retirement from Dublin. He submitted a long and detailed account of this series of cases to the Obstetrical Society, which was subsequently published in the *Dublin Medical Journal* for June 1872. This report extends over thirty-nine years, and exhibits the results of 2,547 cases of labour, exclusive of abortion and premature cases. As a record of the results of practice among the better classes of society in a great city, this report is most valuable.

Churchill's whole career furnishes a bright and encouraging example of success attained solely by industry, application, and honourable conduct. The influence such a man must exert in upholding the tone and standard of professional feeling amongst his contemporaries can hardly be overestimated.

For some years back, Dr. Churchill suffered from chronic rheumatic arthritis of the hip-joints; and also was known to have a weak heart, so that the slightest fatigue brought on faintness or was followed by prostration. The immediate cause of his death, however, seems to have been an acute attack of bronchopneumonia, under which the vital powers rapidly broken down. He died in the last month of his seventieth year.

In fine, to quote from the Address of the Dublin Obstetrical Society, his was a "lengthened career not less distinguished for the conscientious discharge of every professional obligation than for the successful cultivation of all the branches of obstetric science and for the promotion of every useful and philanthropic work that came within his reach."

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, February 11th, 1878.

The Medical Students and the War.—Dr. WARD defended the course adopted by the deputation of medical students of London to the Home Secretary, which had been warmly assailed by Mr. Hubbard. That right honourable gentleman had said that the course they had pursued was most deplorable, and that they were evidently looking forward to an opportunity of exercising their profession. In his opinion, that was a most unfair charge to bring against a number of young men who, in their collective capacity, had thought it right in this grave crisis to express their confidence in Her Majesty's Government.—Mr. HUBBARD explained that the only fault he had found with the deputation of medical students was, that they had passed a resolution, amid vociferous cheers, in favour of war with Russia. He approved their passing a vote of confidence in Her Majesty's Government, inasmuch as he had himself voted in their favour.

Tuesday, February 12th.

Sale of Food and Drugs.—Mr. ANDERSON asked the President of the Local Government Board whether his attention had been called to a recent decision of the High Court of Justiciary, Scotland, concerning the Sale of Food and Drugs Act, 1875, by which five judges had decided that no offence could be proved on evidence taken from any article specially bought for analysis, the buyer in such case not having been prejudiced in the purpose for which he bought it; and, further, that two of the judges—Lords Moncreiff and Young—expressed the opinion that the sixth section did not prevent tampering with an article to the deterioration of its quality, if without the addition of extraneous matter; and whether he purposed taking any steps to prevent the Act in question becoming a dead letter.—Mr. SCLATER-BOOTH: My attention has been called to the decision of the High Court of Justiciary in

Scotland to which the honourable gentleman refers, and I regret that I have not had an opportunity of conferring with the Lord-Advocate on the subject. It seems that, previous to the Scottish case alluded to, no question had been raised in England as to the validity of a prosecution under the Sale of Food and Drugs Act by a person who purchases only with a view to analysis, and in the cases which have occurred since the magistrates have decided against the objection when raised. I concur in that view, which, be it observed, is also the view of some of the Scottish judges; and I cannot believe that the High Court of Justice, if appealed to, will come to any other decision. I am, therefore, not prepared, as at present advised, to introduce an amending Bill, though, if my anticipations were disappointed, such a step might be necessary.

MEDICAL NEWS.

MEDICAL VACANCIES.

The following vacancies are announced:—

- DOWNPATRICK UNION**—Medical Officer of Strangford Dispensary District. Salary, £100 a year as Medical Officer, and £15 as Sanitary Officer, with the usual Registration and Vaccination Fees. Election to take place on the 21st instant.
- GENERAL INFIRMARY, Hertford**—Medical Resident and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before March 6th.
- GENERAL INFIRMARY, Northampton**—Surgeon. Applications to be made on or before the 27th instant.
- GORT UNION**—Medical Officer of Ardahan Dispensary District. Salary, £140 a year as Medical Officer, and £10 as Sanitary Officer, with Registration and Vaccination Fees. Election on March 14th.
- IPSWICH BOROUGH LUNATIC ASYLUM**—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.
- KILLALA UNION**—Medical Officer of Killala Dispensary District. Salary, £60 yearly, and £20 as Sanitary Officer. Applications to the 2nd prox.
- LINCOLN LUNATIC HOSPITAL**—Resident Medical Superintendent. Salary, £150 per annum, with board, lodging, and washing. Applications to be made on or before the 16th instant.
- LIVERPOOL ROYAL SOUTHERN HOSPITAL**—Two Honorary Surgeons. Election in February. For particulars, apply to Honorary Treasurer.
- NARBERTH UNION**—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.
- NORTHAMPTON GENERAL INFIRMARY**—Physician. Applications to be made on or before the 20th instant.
- WESTMINSTER HOSPITAL**—Aural Surgeon and Assistant Surgeon. Applications to be made on or before the 26th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

TOMKINS, Henry, M.D., appointed Senior House-Surgeon to the Manchester Royal Infirmary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

- ***GRIFFITH**,—On February 9th, at Portmadoc, North Wales, the wife of Samuel Griffith, M.D., of a daughter.
- THOMSON**,—On February 6th, at Algiers, the wife of W. Thomson, M.D., of a son.

MARRIAGES.

- APPLEYARD**—DEACON.—On the 9th instant, at Christ Church, Banbury, John Appleyard, F.R.C.S., M.B., to Matilda, daughter of the late Grosvenor Deacon.—No cards.
- HENNING**—STRICKLAND.—On the 12th instant, at St. James, Norland (W), *Wm. Douglas Henning, M.R.C.S., of Notting Hill Terrace, Senior Assistant Surgeon to the Central London Throat and Ear Hospital, to Harriet Isabella, daughter of Major Strickland, and granddaughter and adopted child of Mrs. Major Dickson, of Notting Hill.
- JONES**—ROBERTS.—On February 2nd, by License, at Saint Chad's Church, Shrewsbury, by the Rev. Ed. Lloyd Edwards, M.A., John Jones, Esq., M.R.C.S. Eng., L.S.A., to Sarah, only daughter of John Roberts, Esq., of Bryn End, Ruabon.

DEATH.

- TIBBITS**.—On the 10th instant, at 11, Eldon Place, Bradford, Yorkshire, Charlotte Bankes, the wife of Edward T. Tibbits, M.D. Lond., in her 39th year.

DONATION.—The Misses Brooke have given £100 to the Rathdown Hospital, Monkstown.

DR. CORNELIUS B. FOX, Medical Officer of Health of East, Central, and South Essex, has been elected a Fellow of the Chemical Society.

A LIFE-SIZED portrait of the late Dr. Parkes, F.R.S., intended for the Refectory at Netley, has just been completed by Messrs. Barrand and Jerrard, and is on view up to the 16th instant, at 96, Gloucester Place, Portman Square.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 1.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Balmanno Squire, "Two Cases of Flat Vascular Nevus successfully treated by repeated Linear Scarifications"; Mr. William Adams will exhibit Improved Instruments for the Treatment of Broken Nose; and Mr. Spencer Watson Improved Instruments for the Treatment of Distortion of the Nose; Mr. Wordsworth, "On the Treatment of Squinting without Operation".

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Knowsley Thornton (for Mr. Taylor of Guildford): Tumours of both Ovaries. Mr. Thornton: Cysts from the Peritoneum. Mr. John Wood: Cystic Disease of the Thyroid. Dr. Penock: Malformation of the Heart. Dr. Samuel West: Thrombosis of the Vena Cava, with Secondary Thrombosis of the Portal Vein. Dr. Wickham Legg: 1. Aneurysm of the Right Auricle; 2. Melanotic Liver. Dr. Goodhart: 1. Dilatation of the Aorta from old Spinal Disease; 2. A Case of general Arterial Disease. Mr. Charles Coles: Worms in the Heart, Liver, and Larynx of a Dog. Mr. B. Squire: Drawings—1. A rare form of Psoriasis; 2. A Case of Nevus complicated with Molluscum. Mr. Sangster: Case of Hypertrophied Lupus. Dr. Ord: 1. Renal Calculus containing Indigo; 2. Renal Calculus of mixed Carbonate and Phosphate; 3. Spontaneous Disintegration of Calculi; and other specimens.

THURSDAY.—Harveian Society of London, 8 P.M. Dr. G. de G. Griffith, "A Case of Hydrannios"; 8.30 P.M., Mr. Knowsley Thornton, "On Unsuccessful Ovariectomy: with Cases".

FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Ordinary Meeting.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

The letters of Mr. W. J. Marsh, Dr. Ogle, Dr. Donkin, Dr. Campbell, and many others, are unavoidably postponed for want of space.

AN APPEAL.

SIR,—On behalf of the family of a distressed medical man, I have to thank those who have so kindly responded to my appeal. Lay subscriptions I have acknowledged elsewhere. At the same time, I shall feel greatly obliged for further assistance, which is needed and deserved.—Yours faithfully,
JOHN J. EBERLE.

G. Shann, M.D.	..	..	..	£2	0	0
C. Coates, M.D.	..	..	..	2	2	0
A. Clark, M.D.	..	..	..	2	2	0
T. C. Allbutt, M.D.	..	..	..	1	1	0
G. T. B. Watters, M.B.	..	..	..	1	1	0
T. W.	..	..	..	1	1	0
T. M. Beaumont, M.D.	..	..	..	1	0	0
William Stewart, M.D.	..	..	..	0	10	0
J. Baker, M.D.	..	..	..	0	10	0

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a Post Office.

THE POPULATION QUESTION.

SIR,—With reference to Mr. Allbutt's pertinent remarks in your impression of February 2nd, 1878, allow me to say his penultimate sentence would seem to do what it is impossible he can have intended—viz., to qualify, repudiate, or negative all he has urged with regard to the principles under discussion. To urge, "Surely there is sufficient poverty and evil in the world without bringing in more to share it than can be provided for," implies either begging the question at issue—a direct imputation that the world is at present very badly managed—or that all persons should take it upon themselves to say how much poverty and evil will exist in any part of the world in the future, or limit the productiveness of any race because inadequate means of feeding, clothing, or employing them may be adopted in that part of time sometimes called unborn eternity. As a rule, the result usually has been, limit the increase of population without adequate cause, and the reaction causes deterioration or annihilation.—Yours, etc.,
J. A. P. BAIN.

Aberdeen, February 4th, 1878.

BIRMINGHAM PROVIDENT DISPENSARY.

SIR,—My attention has been directed to some remarks in your last issue on the proposed dispensaries in Birmingham, and on my conduct as one of the honorary secretaries of these institutions. Were it not that the remarks to which I refer are utterly without foundation in fact, I should not venture to ask you to give me space to contradict them, for of course the dispensary scheme and its promoters are open to fair criticism. You allege that "the lay committee on provident dispensaries went on with their work without taking counsel with the medical profession, and they published about a fortnight ago their scheme of rules for the Birmingham dispensaries". Neither of these statements has the merit of being true. Our committee did not consult the medical societies for several reasons—among others, because those societies do not include all the medical practitioners likely to be affected by our scheme, and they do include many specialists and rural surgeons not directly concerned in it. But it ought not to be forgotten that the town's meeting called by the mayor to establish provident dispensaries was open to the medical profession as to any other class of the community; and yet, with the exception of a few consulting surgeons who allowed their names to go on the committee, the medical men were not present to show any interest in the movement. They stood entirely aloof till they thought our committee was formulating a scheme that would touch their professional interests, though the committee had no desire to do anything hurtful to the status of a class of men who are deservedly respected, and who are everywhere overworked and badly remunerated for what they do. The committee has from the first recognised the necessity of sooner or later consulting the profession—at any rate, that portion of it directly affected by their scheme—but they have been at a loss to know how this might best be done. With regard to the publication of our scheme, I can only say that it has not been published by us. Up to the present time, a complete scheme does not even exist. The draft of one was issued to the medical charities, and to the officers of large industrial societies, but it was never intended to be published as a finished scheme. We owe the publication of our rules in their present imperfect state to what I cannot but regard as a questionable trick. The President of the Branch of the British Medical Association, without consulting our committee, went to our printers and got four hundred copies struck off from our type, which is still standing for further corrections. There was really no occasion for an act of this kind, since he could have had copies from us by simply asking for them.

As to our scale of remuneration for professional services, that was determined on the evidence of labour representatives on our committee, who are also officers of large provident and sick societies; and if the statements of the honorary secretary of the Birmingham General Provident and Benevolent Institution, which appear in the *Daily Post* of to-day, be correct, our scale of remuneration will bear favourable comparison with that of existing dispensaries. The following is an extract from his letter.

"I beg to point out that this is not a new idea. It has not only been long felt, but, by the exertions of the late Mr. Sanders, M.R.C.S., it was put into practice, and ever since 1833 has been carried out by the Birmingham General Provident and Benevolent Institution, the chief office being No. 49, Ann Street, and it numbers now over five thousand members. In this self-supporting, not charitable, institution, any party, male or female, can provide for themselves medical attendance and medicine in case of illness by the payment of 4d. per month or 4s. per year, and for their children at a lower rate. For the payment of 4d. per month, or 4s. a year, the members have the right to call in the attendance of any one on a list of twenty-four surgeons (and as a list I may say it is second to none), and residing in all parts of the town; thus giving the members the privilege, on changing their residence, to select a surgeon in their own immediate locality. Another privilege, which I believe no other society can offer, is that a member, on changing his residence, can pay his contributions without having far to go, the society having about twenty offices scattered all about the town."

The other statement to which I would refer is altogether personal, and affects myself. It is as follows. "The Town Hall Committee decided that the first dispensary should be established at Hockley, and that it should begin with a staff of four surgeons: the honorary secretary of the committee, an Unitarian minister, thereupon visited three members of the Birmingham Branch of the Association, and proposed that they should become surgeons to the projected dispensary." Nearly the whole of this paragraph is pure romance. The committee did propose to open an experimental dispensary in Hockley after consultation with all the medical men in that district, but did not resolve that they would begin with a staff of four surgeons; and the honorary secretary was not empowered to make proposals to any surgeon, and he never made any. The committee has not even considered the immediate appointment of surgeons, and has not, therefore, passed any resolution on the subject, and my interview with four medical men was entirely unofficial. These gentlemen could not have understood that it was in my power to treat with them. My object in consulting them was simply to know for myself the nature and extent of professional objections to our scheme, and to dispose of the gentlemen, as far as I was able, to give our movement fair and generous consideration. They were most distinctly told that the laws were open to amendment, and were by no means finally

settled. But it surely must be obvious to every one, that if our committee wanted a medical staff for a branch dispensary, it would not send one of its secretaries to make proposals to three out of the score surgeons in the district, and eligible for such work.

Before closing this lengthy explanation, permit me to say that the Dispensary Committee has not slighted the profession, and has no interest hostile to it; and if a joint committee be formed, consisting of representatives from the medical societies and our committee, they will soon make short work of those disputed points, which relate chiefly to matters of detail, and are of no particular importance.—I am, sir, yours very respectfully,
J. CUCKSON, Hon. Sec. Birmingham
36, Northampton Street, Feb. 5th, 1878. Provident Dispensary.

. The first portion of the paragraph which Mr. Cuckson says is not true—viz., "the lay committee went on with their work without taking counsel with the medical profession", was perfectly true up to the middle of last week. We are glad that his committee has at last seen its error, and is now trying to rectify it. We accept Mr. Cuckson's statement that his draft laws have never been, in the technical sense, "published"; but he himself shows that they were, by the act of his committee, in the hands of many persons, both lay and medical, and if not "published", were at all events very public, so that copies might have been had from them "by simply asking for them". It is quite true that Mr. Cuckson called on several members of the Branch, who believed that he did so with the view of inducing them to become surgeons to one of the new dispensaries. We of course accept his statement that these gentlemen were mistaken; but so natural a mistake cannot be properly designated "pure romance". We learn from his letter that there already exists in Birmingham a thriving provident dispensary. Why does not Mr. Cuckson endeavour to co-operate with this institution? It would *prima facie* be better to extend its operations, enlarge its sphere, and, if needful, amend its organisation, than to establish a rival. Mr. Cuckson's committee have already responded to our appeal to consult the Branch; perhaps they will now take our last suggestion into their favourable consideration.—Ed. B. M. J.

JUDICIAL POST MORTEM EXAMINATIONS IN SCOTLAND.

SIR,—I am sorry that you should have so far misunderstood and misrepresented the complaint made by me in the correspondence on which you commented in your JOURNAL of Saturday last. The principal ground of my complaint was, not "that the *post mortem* was handed to another", but that the Fiscal caused an unnecessary examination to be made in a way very offensive to the feelings of the family of the deceased; and that, too, without taking the trouble to follow what he himself says is his usual course—namely, to inquire of the medical man called by the friends whether or not there was "a notable absence of the characteristics of death from natural causes". He has laid down a rule, in a circular sent to all the medical men in this town, that a judicial remit is justifiable only when there is an absence of such characteristics, or "facts or rumours connected with the death pointing to criminal blame". No such facts or rumours, as far as I know, existed in the case under discussion. But even admitting the grounds you go on, I cannot allow that the Fiscal followed a *courteous* mode of procedure; and I think the majority of my professional brethren will agree with me. It is true that the Fiscal has a right "to nominate whom he pleases to conduct the examination"; but I think the queries addressed by me to Dr. Littlejohn of Edinburgh (the principal medico-legal adviser of the Crown in Scotland), and his replies, show very clearly that, in Edinburgh at least, in a similar case to this one a different course would have been followed. You are also mistaken in saying that the examination was made "under the superintendence of" Professor Ogston. That gentleman never even saw the dead body. His only connection with the case was, that a remit to make a *post mortem* examination was made to him, and that he *did not* carry that remit out.—I am, yours truly,
ANGUS FRASER, M.D.

Aberdeen, February 11th, 1878.

. We have not misunderstood, and we trust we have not misrepresented, Dr. A. Fraser's complaint. Had the Fiscal directed him to make the *post mortem* examination, we should have heard nothing of the case. As it happened, the order or remit was sent to another medical man without any intentional slight to our correspondent; and, as no objection is made on this point, we infer that the *post mortem* examination was properly and satisfactorily conducted. If the Fiscal knew that Dr. Fraser had seen the body of the deceased, and that he had already made an arrangement with the widow to inspect it, it would have been courteous on his part to have consulted Dr. Fraser on the subject before sending a remit to another professional man. It seems to us, however, that the Fiscal and Dr. Fraser acted in ignorance of each other's proceedings.

PROFESSIONAL FEES.

SIR,—In reply to your correspondent on the above subject, I contend that the patient who sends for a doctor a long journey should pay the fee for such, and that any others requiring attention in the vicinity should pay according to the distance from the patient first visited, the medicines for both being at the usual rate, as given by Mr. J. mes Brown. I consider, however, that it is undesirable to meet in consultation below double the ordinary charge for a visit, and equally so to visit even a neighbour and make no charge, unless it be an understood case of charity, which every medical man has opportunities for. My own fees for visits in a country town are 2s. 6d., 3s. 6d., 5s., 7s. 6d., etc., according to the supposed income of the patient, long distances being charged in proportion, and I do not think any one justified in accepting anything less in the present state of professional and social life. The compulsory adoption of any particular scale is, I trust, as impossible as uncalled for; and as an article is generally worth what it will fetch, so a doctor is often valued and appreciated according to his charge. It is not improbable that the status held by medicine among the professions, as well as in other quarters needless to mention, is greatly owing to its own valuation, as shown by the active correspondence now before us upon the fees of our leaders. It is pleasing to find accusations of surcharge so seldom in our ranks, but equally disappointing to notice

the tendency of the bulk of practitioners, town and country, to value themselves at a rate lowering to the tone of any profession, and which many hackney coach societies would scorn. There are already in circulation numerous scales of fees recommended by various bodies and societies, which might be obtained through any good publisher. It needs only the will to carry them out.—I am, sir, faithfully yours,
A RURAL PRACTITIONER.

SORE NIPPLES.

SIR,—I would recommend your correspondent to try during lactation Dr. Blacqnère's remedy, of ten grains of extract of rhethany, with one hundred and fifty of cocoa-butter.—Your obedient servant,
W. WADSWORTH LUSH, M.D.
Weymouth, January 30th, 1878.

SIR,—In reply to E. R. S., women who have small nipples, with numerous folds of thin delicate epidermis at the base and tip, are much more prone to chaps than those whose nipples are smooth, prominent, and well developed. These folds are frequently bridged over by cakes of colostrum and dirt, which render them still more tender; and, on separating them out, one may generally discover moist red spots, which are very painful on pressure, and readily give way to chaps when the cakes are removed and the folds opened up their entire length by the child's struggles with the short nipple. The prophylactic treatment, therefore, consists in hardening the epidermis, removing the folds, and making the nipples as prominent as possible; and to obtain these results, it is best to begin some few weeks before the end of pregnancy. The nipples may be rendered prominent and smooth by being occasionally drawn out with the fingers or sucking glasses; and the epidermis becomes less delicate by being kept clean and dry, and being frequently washed in cold water and spirits of wine; and during lactation more especially should it be carefully dried each time after use. If, however, in spite of all this, chaps do form, I have found no treatment equal to passing a sharp point of nitrate of silver well down to the deepest portion of the chap and freely canterising it all round, and then giving the nipple as long a rest as possible. In addition to the caustic, which should be used once a day, a little glycerine and tannic acid may be applied; and the nipple should be well washed before the child is again put to the breast.—Faithfully yours,
JAMES MURPHY, M.D.

R. T. C., M.D.—Paper in type.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Brinton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; The Western Mail; The Bath Chronicle; The Bolton Chronicle; The Lincolnshire Chronicle; The Chippenham Chronicle; The Crewe Guardian; The West Sussex Gazette; The High Peak News; The Cardiff Times; etc.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. John Simon, London; Dr. George Johnson, London; Mr. Savory, London; Mr. Berkeley Hill, London; Dr. Leeper, Dublin; Mr. J. Cuckson, Birmingham; Dr. Bond, Gloucester; Dr. Wright, Hodnet; Dr. F. Warner, London; Dr. Q. Rossi, Rome; Mr. Block, London; Our Paris Correspondent; Mr. J. W. B. Alder, Gosport; Dr. Mahomed, London; Dr. Arnold, Belfast; Mr. G. Eastes, London; Mr. Howard Marsh, London; Dr. Brown, Rochester; Dr. J. Milner Fothergill, London; The Secretary of Apothecaries' Hall; Dr. Brabazon, Bath; The Secretary of the Medical Society of London; Mr. T. H. Bartleet, Birmingham; Mr. Wanklyn, London; The Registrar-General of England; Mr. J. B. Sanderson, London; Dr. Bradbury, Cambridge; The Registrar-General of Ireland; M.R.C.S. Eng.; Mr. Callender, London; Mr. Nunn, London; Mr. Balmanno Squire, London; Dr. H. R. Crocker, London; Dr. F. P. Atkinson, Kingston-on-Thames; Mr. J. G. U. West, Stoke-on-Trent; Dr. W. C. Grigg, London; Mr. T. Vincent Jackson, Wolverhampton; Dr. Angus Fraser, Aberdeen; Mr. Reginald Harrison, Liverpool; Mr. Alban Doran, London; Mr. Ray Lankester, Oxford; Dr. Cassells, Glasgow; Dr. J. A. Campbell, Carlisle; The Secretary of the Pathological Society; Dr. Wm. Ogle, Derby; Dr. Alex. Robertson, Glasgow; Dr. C. C. Gibbs, Surbiton; Mr. S. Gamage, Birmingham; Mr. J. Cosley, Cheltenham; Mr. G. E. Hyde, Worcester; A. M. D.; Our Edinburgh Correspondent; Dr. J. Smith, Dumfries; Dr. A. S. Taylor, London; M.D. Ed.; Dr. Waters, Chester; Dr. J. W. Moore, Dublin; Mr. J. Hinton, Warminster; Mr. P. Le Neve Foster, London; The Editor of the "Statist"; Dr. Donkin, London; The Secretary of the Harveian Society; Dr. Saundby, Birmingham; Dr. C. B. Fox, Chelmsford; Mr. Fowler, Bath; Dr. M. M. Bradley, Jarro-on-Tyne; Mr. J. E. Ingpen, London; Dr. G. Hett, London; Mr. R. S. Carpenter, London; Dr. Joseph Rogers, London; Dr. R. D. Beresford, Oswestry; Dr. E. T. Tibbits, Bradford; Mr. T. M. Stone, London; Dr. R. T. Cooper, London; Messrs. Probyn and Co., London; Dr. J. Sawyer, Birmingham; Dr. Risdon Bennett, London; Dr. H. Tomkins, Manchester; Mr. R. H. Jones, Liverpool; Mr. Herbert Jones, London; Mr. Arthur Roberts, Birmingham; Dr. G. de G. Griffith, London; Dr. L. P. Vandell, Louisville; Dr. M'Clintock, Dublin; etc.

A LECTURE ON RHYTHMICAL HYSTERIC CHOREA.

BY PROFESSOR CHARCOT,
Physician to the Salpêtrière Hospital, Paris.*

HAVING recognised the case which now occupies our attention as a well-marked example of rhythmical chorea, we must now show that the title of hysterical is further applicable to it; or, in other terms, that the choreiform affection is here under the influence of an anterior malady—hysteria—of which it represents one of the multiple and varied manifestations. To establish the existence of the hysterical basis in our patient will be an easy task; the proofs in support of our assertion will be found in abundance.

The study of her antecedents teaches us that in G. convulsive hysteria began to manifest itself from the age of thirteen. We have seen this young girl present daily in this hospital for a period of two years, from about the age of fifteen to seventeen, and, in the most marked fashion, the permanent local symptoms of the form of hysteria which we propose to call ovarian, although menstruation had not yet appeared. The appearance of the menses, which took place about two years ago, has not modified the clinical picture in any essential respect. The convulsive paroxysms and the local phenomena have persisted as before, and I will presently prove to you their actual existence. I might cite to you several other cases of ovarian hysteria developed several years before menstruation; and, on the other hand, I shall presently show to you two women in this hospital in whom the hystero-epileptic crises, as well as the series of symptoms of local hysteria which are almost inevitable in such cases, have persisted, without any other modification than a slight diminution, for several years after the occurrence of the menopause. These facts in the pathological domain agree, I may remark in passing, with the physiological facts, which are now numerous, tending to demonstrate that the activity of the ovary is far anterior to the menstrual function, and survives it.†

Here is the enumeration of the principal symptoms of local hysteria, of which the presence may be actually recognised in our patient. There exists an *ovaralgia* or *ovaric* on the right side, very distinctly marked; the pain by which it is manifested is fixed, always present in a certain degree, and is spontaneously increased at the approach of the attacks. At all times, it is increased by pressure. It is at this painful point that the sensation of premonitory aura of the attacks seems to take origin, ascending then to the epigastrium, præcordial region, neck, head, etc. All the right side of the body—head, neck, and trunk and limbs—is in a state of complete, absolute anaesthesia. You see, in fact, how a large and not well-pointed needle may be passed through thick folds of the skin of the forearm, of the nape of the neck, of the leg, and of the interdigital folds of the right hand, without the patient having the least idea of what is being done. On the right side, there is also thermo-anaesthesia; and, further, the special senses are also all affected, although in different degrees.

There are anosmia in the right nostril; absolute loss of taste in the right half of the tongue from the point to the base; diminution of the auditory power of the right ear; amblyopia with dyschromatopsia of the right eye. In this eye, G. has completely lost the perception of colours called central—violet and green; while she still distinguishes quite clearly the peripheral colours—red, orange, yellow, and blue. To this hemianæsthesia corresponds, as is usual in such cases, a certain degree of hemiamyasthesia. Thus, whilst for the left hand the dynamometric pressure is 25 kilogrammes (nearly 54 lbs.), it is represented for the right hand by only 15 kilogrammes (a little more than 32 lbs.).

Let us take the opportunity of noticing once more the remarkable concordance, on which I have many times insisted, between the seat of the iliac pain and the mode of localisation of the concomitant symptoms. The ovaralgia is seated on the right side; and it is the right side that suffers from anaesthesia and cachexia. It is also on the right side that in G. is manifested the contraction of the limbs when it follows the attacks; and you have been able to observe that it is the limbs of the right side that are to-day agitated by rhythmical

choreiform movements. It is at least very probable that these phenomena would occupy the left side of the body, if the ovaralgia were seated on the left.*

I limit myself to this summary exposition, and I spare you the details which my previous studies on the subject will have already brought before you. My object has been only to show you that, so far as concerns the local symptoms, the case of G. is a very regular, very classic example in the category of ovarian hysteria. There, however, is still one point upon which I desire to comment an instant, because it relates to some questions now under discussion. Our patient, to speak the language of Dr. Burq, is a polymetallic hysteric. She is sensitive to gold and to tin; that is to say, if you apply to her, in any region of the anaesthetised parts, either a plate of tin or some pieces of gold, you find, at the end of ten or fifteen minutes from the application, that sensation has returned in all its forms, not only under the metallic plate itself, but also above and below it within a certain limit. There are, you know, according to the observations of Dr. Burq—observations now recognised as perfectly accurate at least on this point—hysterical persons who are sensitive exclusively to gold, others to iron, others to copper, or zinc, or silver. There are also—as you see here, for example, under our eyes—polymetallic hysterical persons; that is to say, sensitive to several metals. The fact of being influenced in the manner just indicated by the simple metallic application is not, contrary to the opinion hitherto expressed by Trousseau, a character exclusively peculiar to the hemianæsthesia of hysterics. We have seen, in fact, two cases of complete cerebral hemianæsthesia of old date connected with an organic lesion, in which applications of metals have, as in hysteria, had the result of causing the return of normal sensibility. But whilst in these two cases the results have been definite and permanent, so far that they still exist at the end of more than a year, they have always been transitory in the cases of hysterical hemianæsthesia which we have observed. In cases of the latter kind, half an hour, two hours, or twenty hours after the pieces of metal have been removed, the anaesthesia returns just as it was before the application. This very mobility, this transitory character of the phenomena, is perhaps a feature which really distinguishes hysterical hemianæsthesia from cerebral hemianæsthesia of organic origin.

So far as results to the convulsive crises, I shall limit myself to saying that in this matter also G. may be considered as a true subject for study. In her, in fact, the diverse phases which, according to the description that I have given you, make up the hysterical epileptic attack in its type of complete development, succeed each other with remarkable regularity: 1. A phase of generalised epileptiform convulsions terminated by a short period of stertor; 2. A clonic phase *par excellence*, consisting of extensive movements of the body—of contortions; 3. A phase of attitudes, of passions, or, if you prefer it, of *poses plastiques*. The period of consecutive delirium after the crises, which in other subjects is so pronounced, is, on the contrary, in this case hardly noticeable. Such is the series of phenomena which constantly in all the attacks, and in the intercurrent attacks, the chain of which constitutes a state of disease, are reproduced in G. always after the same method and in the same order. I will add, finally—it is a symptom, in my opinion, of the first order—that methodic compression of the right ovarian region, provided always that it is conducted according to rule,† always immediately arrests in her the phenomena of the attack, whatever they may be, and whatever may be the period at which the manœuvre is performed.

I have said enough, I hope, to enable you to recognise that our patient, as I have already told you, presents all the characters of ovarian hysteria under the most regular, most classic form. I shall now endeavour to show you that the rhythmical chorea with which she is to-day tormented does not represent a fortuitous complication, a foreign episode in the history of a great nervous malady, but that it is attached, on the contrary, to the hysterical diathesis by very close bonds as a subordinate affection, in the same manner as paralysis and contractions and the convulsive crises themselves.

I will point out, in the first place, that the chorea began to manifest itself ten days ago, immediately after the cessation of an attack; that is to say, in circumstances in which the various motor phenomena, paralysis, and contractions of the limbs belonging to the ordinary hysterical series are frequently developed. I will further bring to your notice that the crisis, as the sequel of which the chorea has been produced, was remarkable for its short duration and the relative slightness of all its symptoms. It was not followed by that feeling of relaxation of which

* Concluded from page 225 of last number.

† See among others on this subject De Sinety, *Arch. de Physiologie*, 1875, p. 501; Barker, *Philadelphia Medical Times*, 1874; and *Jahresbericht*, 1874, p. 773.

* There are some rare exceptions to this rule. I have once seen hemianæsthesia occupy the left side, whilst the ovaralgia occupied the right. Dr. Barlow of London has published a fact of the same nature.

† *Maladies du Système Nerveux*.

patients of this kind generally complain when the attack has really terminated. Hence, from this point of view, choreiform agitation might be considered as the continuation, the prolongation under a new form, of an abortive hysterical paroxysm. But there is a stronger argument, as we have assured ourselves during the last few days by repeated experiments, and as you are about to ascertain yourselves *de visu*. Methodic compression of the right ovarian region has for its certain and constant result in our patient the complete arrest of the rhythmic movements. I practise the manoeuvre in question. Some complaints, a swelling of the anterior region of the neck, some noisy movements of deglutition, and the protrusion of the tongue, indicate that the expected result is about to be produced. You see, in fact, the rhythmic movement of the body, then of the limbs, stop suddenly, as by enchantment. But, although delivered from the agitation to which they were just now a prey, the limbs do not on that account recover their normal functions. They have become, especially the lower limbs, the seat of considerable muscular rigidity, comparable at all points to the contraction which, I have remarked to you before, is produced every morning temporarily at the moment of waking, before the agitation renews its course.

I proposed to you just now to recognise in the rhythmic chorea an hysterical attack in some sort prolonged and transformed. Might not one now, having regard to what precedes, connect the chorea with the contraction, and regard them as symptoms of the same pathological value, as equivalents, capable of being substituted one for the other in the series of hysterical affections?

This remarkable arrest of the choreiform movements under the influence of ovarian compression is nevertheless, gentlemen, only a suspension, a truce, which lasts so long as the compression is continued; immediately that it is suspended, you see the contraction disappear and the rhythmic movements of the trunk and limbs, just now extended and rigid, recommence as actively as ever. To convince you the better of this, I repeat the compression four or five times, and each time you see the whole series of phenomena reproduced exactly as in the first experiment.

From all this, I believe I can conclude that the rhythmic chorea observed in our patient is related to the condition of the ovary in the same way as the ordinary and convulsive crises, and that it ought to take rank among the many varied manifestations of diathesis.

It is time to look at the practical side of the subject. Developed as the sequel of an attack, that is, in the conditions in which paralysis and contractions are very ordinarily manifested, may not these choreiform movements be expected to persist just as they are until the final attack, which may not occur for a long time? Is it not possible by appropriate intervention to alter the situation, to deliver the patient from the agitation which exhausts her, to restore her, while waiting for better things, to the state in which she was ten days ago. The effects of the ovarian compression on those symptoms which are due to hysteria are not always fugitive and temporary. I shall show you on another occasion that by persisting in the compression, or by repeating it at short intervals during several hours, we sometimes succeed in causing these symptoms to disappear definitely. By this manoeuvre, we have often succeeded in cutting short the state of hystero-epileptic disorder, which left to itself would have been prolonged for several days. It is possible to succeed also in suddenly dissipating the contraction of the jaw, of the tongue, or of the limbs, when the symptoms have, if I may so speak, been for a long time installed.* Success has also been attained in putting a stop in this way to hysterical dumbness which had lasted already for several months.† Analogy leads us to think that prolonged and repeated ovarian compression would, without doubt, have the result of causing the permanent disappearance of the rhythmical convulsions. This shows, gentlemen, that in the effects of this manoeuvre we have not only a means of diagnosis, an element capable of clearing up the theory of the disease, but also a therapeutic means; its practice is, however, difficult and not very suited to use. Moreover, it is not the only means to which we have thought of having recourse in the present circumstances. According to our observations, the application to the ovarian region of a bag of ice during half an hour, and repeated several times a day for several days, has often the result of arresting the attacks or lessening their intensity. But the effect of these applications is generally slow in production, and the results obtained are not always very striking.

It will be preferable, I think, to have recourse either to the inhalation of ether or of nitrite of amyl. The effects of the inhalation of

ether in hysterical patients have something peculiar. They have not yet been much studied, but certainly deserve to be well known. In certain subjects, for example, such inhalation may, by the production of unequivocal symptoms, reveal the disease which has hitherto remained latent; in others, in which it is, on the contrary, in full activity, we have seen it determine sometimes one and sometimes another phase of the attack, and sometimes the whole series. Now, an attack at a given moment in a hysterical patient may play the part of a favourable crisis, and bring about a sudden cessation of the troublesome symptoms which have, perhaps for a long time, resisted all the agents employed. In respect to nitrite of amyl employed in inhalations, it is, as M. Bourneville has shown, a means of particular efficiency in cutting short, promptly and definitely, a state of hystero-epileptic disorder, even when it presents itself under the most marked form. For this reason, it appears to us rational to propose, the trial in the present case. We shall have recourse to ether first, then to nitrite of amyl, if the former fail; and we shall not omit to keep you informed of the results which we obtain. If we succeed, as we hope, in causing the cessation of the rhythmical convulsions, we shall have delivered our patient from the symptoms which annoy and fatigue her enormously, the duration of which, if they were left to themselves, can hardly be foreseen. That will already be something, no doubt. It is, however, clear that we shall not by that means have modified the fundamental disorder; but I do not desire, at this moment, to stop to consider the treatment of the hysterical diathesis. That is a subject which requires to be discussed at length, and which I count on having an early opportunity of specially studying with you.

It will not be difficult for you to find in medical literature a certain number of cases which you can compare with this which makes the subject of our conference. Without going farther than the contemporary epoch, I will remind you that the rhythmical chorea of hysterical persons is specially mentioned in the memoir by M. G. Séé. Trousseau has not failed to speak of it at some length in his clinical lectures, and he cites there cases which evidently belong to this category. He rightly emphasises many of the circumstances which characterise the affection, in addition to the antecedents or concomitant hysterical symptoms, the form of the symptoms—viz., specially the harmony, the regularity of the choreiform movements. He appears to attach a certain diagnostic importance to the fact that the patients succeed by an effort of will in lessening, or even in momentarily suspending, these movements. But this could not be recognised as an unequivocal character. You will observe, in fact, that in G., whatever may be the efforts of will which she makes at our solicitation, the rhythmical agitation of the limbs and of the trunk persist unaltered. M. Briquet, in a chapter of his treatise (*Traité d'Hystérie*, p. 420) which he devotes to convulsions arising in hysterical patients outside the period of their attacks, relates also some interesting observations on rhythmical chorea. The case of Mlle. B., in particular, shows that this affection may sometimes persist, as hysterical contraction too often does, for several years. I will quote further an observation of Dr. Murchison, related by Dr. Handfield Jones in his *Studies on Functional Nervous Disorders*. In this case, as in ours, the choreic movements were limited to one side of the body; they were interrupted from time to time by attacks in which the parts just previously agitated were temporarily seized by rigidity. The patient could, as in Trousseau's cases, moderate or arrest them by an effort of will. It seems to me useless to multiply cases.

Before terminating, there is still a point on which I ought to lay stress. I cannot say at present whether all rhythmical chorea is *ipso facto* hysterical; but certainly all chorea is not on that account necessarily rhythmic. In support of my assertion, it will suffice to present to you another patient, W., in whom, as you see, the agitation evidently enters, so far as the form of pathological movements, into the description of ordinary chorea. When she is seated, there is no rest for her; the head, the trunk, the limbs of the two sides are incessantly agitated by contradictory movements. Erect, she cannot support herself without assistance; her limbs bend, and then straighten for a moment. If she walk, she is threatened every minute with falling. The movements in question are irregular, disorderly in principle; you cannot recognise either rhythm or cadence, nor does anything recall an intentional action. In W., however, the characters of hysteria are not less pronounced than in G. Besides the attacks which present themselves here with the three great characteristic phases of hystero-epilepsy, I pointed out the permanent existence of general anesthesia with any anesthesia specially pronounced on the right side and of double ovaralgia, but, as you might foresee, specially pronounced on the right side. W. is a hysterical patient sensitive to zinc. I will add finally (and it is a feature of importance and which cannot escape you) that in her, as in G., methodical compression of the right ovarian region, which in this particular case must be simultaneously performed on the two sides,

* Bourneville, *Progrès Médical*, 1877; and *Iconographie Photographique de la Salpêtrière*.

† Debove and Liouville.

has the effect of momentarily suspending the choreic movements just as it arrests the attacks.

I have, perhaps, already too long detained you over a case the like of which you will doubtless very rarely meet in practice. But the clinical observer must not disdain the exceptionally abnormal cases which furnish him with a special mode of exercising his sagacity; besides, they must not be considered in the light of mere food for vain curiosity. Many a time, in fact, they will be found capable of furnishing to the pathologist the solution of difficult problems.

CLINICAL LECTURE

ON

A CASE OF PHTHISICAL PERFORATION OF THE PLEURA, WITH PNEUMOTHORAX.

By GEORGE JOHNSON, M.D., F.R.S.,

Professor of Clinical Medicine; Senior Physician to King's College Hospital; etc.

GENTLEMEN,—I have now (January 7th, 1878) under my care a case in which there is very conclusive evidence that a softened tuberculous deposit in one lung has caused perforation of the pleura, with resulting pneumothorax—that is, an escape of air into the cavity of the chest. The symptoms and the physical signs which occur in connection with this serious accident are very remarkable and very interesting; and I propose now to give you a brief history of the case, as recorded by my clinical clerk, Mr. Macdonald, with some practical and explanatory comments thereupon.

G. G., aged 26, an Italian stonemason employed at the new Law Courts, was admitted into Sambrooke Ward December 26th, 1877. He came to this country two months ago. For about six weeks, he has had cough, with expectoration of phlegm and occasional slight blood-spitting. Two days before his admission, he was suddenly seized with pain in the right side of the chest and great difficulty of breathing, which confined him at once to his bed. On admission (December 26th), the respirations were 54, pulse 140, temperature 105 deg. He complained of pain below the right nipple, extending through to the back. There was frequent short cough, with scanty muco-purulent expectoration. On inspection, it was seen that, while the left side of the chest moved freely, the right side was nearly motionless. The apex of the heart was seen and felt beating in the sixth interspace external to the left nipple. The liver was felt extending at least two inches below the margin of the ribs on the right side. On percussion, the whole right side of the chest was more resonant than the left, though the resonance had not a tympanitic character. Over the whole left side, there was loud puerile respiration; while on the right side the first impression was that respiratory sounds were entirely absent; but, on careful auscultation below the nipple, I discovered at each inspiration a distinct so called "metallic tinkling"; and some of you will remember that I then expressed my opinion that a tuberculous deposit near the surface of the lung had softened, and perforated the pleura, so that, at each inspiration, air passed into the cavity of the pleura, giving rise to the condition called *pneumothorax*. The inspiratory metallic tinkling is caused by bubbles of air bursting through a small opening on the surface of the lung into the air-filled cavity of the pleura, and there giving rise to a resonant echo. The air enters the cavity of the pleura more freely than it passes out (no expiratory sound was heard). The consequence is, that the right side of the chest has become distended with air, which pushes the heart to the left, and the diaphragm and liver downwards.

There is yet another remarkable physical sign. When the patient speaks or coughs, the voice and the cough are heard to resound with what is called an amphoric echo: a similar echo to that which is heard when we speak with the mouth over the orifice of an empty decanter, or over the bung-hole of an empty—that is, only an air-containing—wooden cask.

The prognosis was very grave. The past history—in particular the hæmoptysis—renders it nearly certain that there is tuberculous disease of the lung; and now the right lung, being compressed by the air upon its surface, has collapsed, and is thus rendered useless; in addition to this, some pus and softened tuberculous matter has escaped into the cavity of the pleura, and acute pleurisy has been the result.

The right side of the chest was ordered to be covered by a linseed

poultice, and fifteen minims of liquor morphine to be given three times a day.

On December 31st, when I saw him for the second time, the metallic tinkling sound, or amphoric crepitation, as it is better called, was replaced by a loud inspiratory amphoric blowing, most distinctly heard below the right mamma in front, and behind in the right inter-scapular region. The amphoric echo of the voice and cough remained as before. The change from amphoric crepitation (metallic tinkling) to amphoric blowing is probably to be explained by the enlargement of the opening in the pleura permitting a fuller current of air to pass at each inspiration into the cavity of the pleura. The sound is exactly imitated by blowing sideways into a decanter, or into a large metal tube, such as a gun-barrel.

January 3rd. The physical signs on the right side remain the same, except that there is some dullness on percussion extending to near the angle of the scapula, indicating liquid effusion into the pleura. On the left side, near the angle of the scapula, a dry friction-sound is heard on inspiration. Inflammation has extended from the right to the left pleura, which is now roughened by lymph.

January 27th (the day on which this lecture was given). The auscultatory signs have again undergone a remarkable change. The amphoric blowing is no longer audible, and no respiratory sound of any kind is heard over the right side of the chest; while the amphoric echo of the cough and voice continue. What is the explanation of this change? The most probable interpretation of it is, that the orifice in the pulmonary pleura has been closed by a recent exudation of lymph, by which the passage of air from the lung into the cavity of the pleura is prevented. The temperature has ranged from 101 to 103 deg. until within the last two days, when, with increasing weakness, it has fallen to 98 deg.; the respirations, from 36 to 54; and the pulse, from 120 to 140. There has been a rapid decline of strength, and it is evident that the disease must soon terminate fatally.

Subsequent History, with a Report of the Inspection of the Body.—Death occurred on January 8th, within twenty-four hours after the preceding lecture was given: and the following is a condensed report of the inspection which was made by the Pathological Registrar, Dr. Barrow, thirty-three hours after death.

On opening the abdomen, the liver was found to be pushed down to within an inch of the umbilicus. The convexity of the diaphragm on the right side was on a level with the ninth rib, while on the left it extended as high as the fifth or sixth rib. The heart was displaced entirely to the left of the median line. On puncturing the right side of the chest, a quantity of air escaped. The right pleural cavity contained about six pints of greenish sero-purulent liquid. The right lung had completely collapsed; its entire surface was covered by a thick layer of recent lymph; and at its base were two masses of soft lymph, the larger one being as large as a kidney. When the lung was inflated by blowing air into the trachea, no air escaped from the surface until the soft lymph had been carefully scraped off, when a circular opening large enough to admit the blunt end of an ordinary probe was discovered at about the middle of the posterior surface of the lower lobe of the lung. Through this opening, after the removal of the recent exudation, air escaped freely when the lung was inflated. On incising the lung at that spot, the opening was found to communicate with a cavity about the size of a large walnut; the cavity being partly filled by a purulent secretion, and surrounded by condensed lung-tissue. The apex of the lung was consolidated, and contained several caseous masses; but in no other part had softening and excavation occurred. The posterior surface of the left lung was partly covered by a thin layer of recent lymph. The apex of the left lung was condensed, of a greyish colour, and having a shotty feel, with here and there a small mass of caseous deposit. No other noteworthy morbid appearance was discovered.

Subsequent Clinical Commentary on the Case.—It will be seen that, in this interesting case, the *post mortem* appearances corresponded very exactly with the physical signs observed during the various stages of the disease; and in particular my bedside interpretation of the replacement of the amphoric crepitation (metallic tinkling) by amphoric blowing, and the final cessation of the latter auscultatory sign, seem to be completely confirmed. The phenomena of this case are entirely in accordance with Fournet's doctrine that, in cases of pneumothorax from perforation of the pleura, the phenomena of metallic tinkling and amphoric blowing will cease if complete closure of the opening be effected. Without doubt, a crepitating echo (metallic tinkling) may occur in a closed pleura containing air and liquid, as a result of the agitation of the liquid by coughing or movement of the body (succession), or the fall of drops of liquid from the upper to the lower parts of the pleural cavity; and perhaps even, as Dr. Walshe suggests, "the echo of rhonchi in the adjacent bronchial tubes may cause tinkling" (*On Dis-*

cases of the Lungs, 4th edition, p. 156). But, for the production of a true amphoric blowing, I am firmly persuaded that a free current of air into a large cavity is essential. In all the cases in which the phenomenon of amphoric blowing has come under my observation, this physical sign has been associated with one or other of the three following conditions: 1. A large cavity in the lung communicating with a bronchus; 2. Perforation of the lung, with an inspiratory current of air into the cavity of the pleura; 3. Pneumothorax, with a fistulous opening in the chest-wall, and a consequent inflow of air during inspiration. Some of you will probably remember a boy named Ratcliffe who was under my care in Sambrooke Ward in the summer of 1875. After being tapped for empyema, he had a fistulous opening in the chest-wall for several weeks, but ultimately recovered completely. While the fistulous opening with pneumothorax continued, we heard sometimes amphoric crepitation (metallic tinkling) caused by air-bubbles bursting through the fluid secretion of the wound into the air-containing cavity of the pleura; at other times, amphoric blowing, when a fuller current of air was inspired through the fistulous opening nearly or quite free from fluid. These phenomena could at any time be temporarily suspended when the fistulous orifice was closed by the pressure of a finger or a plug of lint.

In the great majority of cases of perforation of the pleura with pneumothorax, the diagnosis is attended with little or no difficulty. The physical signs which I have before referred to, occurring in a patient who has been suddenly seized with hurried and difficult breathing and pain in one side of the chest, are in the highest degree conclusive. In some cases, however, the physical signs are not so unequivocal as in that which I have here recorded. Some years since, I had in the hospital two cases in which there was a somewhat perplexing inconsistency of physical signs. In one case, with tympanitic resonance over the lower and back part of the chest, amphoric blowing and amphoric echo of the voice and cough, there was dulness on percussion over the upper and front part, with moist rattling sounds. This was explained after death by a pretty extensive adhesion of the upper lobe of a tuberculous lung to the chest-wall. As these adhesions between the pulmonary and the costal pleurae are the chief protection against perforation, so the forcible tearing asunder of an adhesion during a fit of coughing is the most frequent cause of the accident. The other case of pneumothorax to which I referred was one in which, with tympanitic resonance over the whole of one side, a distinct, though feeble, respiratory murmur could be heard down to the very base of the lung. On inspection, it was found that the centre of the base of the lung, over a surface about two inches in diameter, was firmly adherent to the diaphragm. This adhesion prevented the complete collapse of the lung, and the descent of the diaphragm in inspiration drew a limited amount of air into the lung.

The case which we have been considering affords an illustration of the fact that perforation of the pleura with resulting pneumothorax may occur in an early stage of phthisis. Many years ago, I saw, with my old friend the late Mr. Lavies, a case in which this fatal accident occurred at a yet earlier stage. An adult male prisoner in the Westminster House of Correction, having had a cough for a few weeks, was suddenly seized with pain in the right side and distressing rapidity of breathing. There was excessive resonance on percussion over the affected side, while the normal respiratory sound was replaced by a loud amphoric blowing. The diagnosis of perforation of the pleura with pneumothorax was obvious. The man died in a few days, and in the apex of the lung was a scanty caseous deposit, the only part that had undergone softening being a piece not larger than a pea immediately beneath the perforated pleura. In all cases, perforation of the pleura with pneumothorax is attended by the sudden onset of symptoms of more or less intensity. The collapse of the lung and the consequent sudden great diminution of the vital capacity of the chest always causes more or less urgent dyspnoea. The pain and the other symptoms associated with the onset of acute pleurisy are, I believe, mainly influenced by the amount of purulent secretion which escapes from the lung into the cavity of the pleura. When a pus-secreting cavity of considerable size opens into the pleura, the escape of its contents rapidly excites intense inflammation in the serous cavity; while, on the other hand, a perforation which does not communicate with a cavity is attended with little or no pleuritic inflammation. On looking back to some notes of cases seen when I was physician to the Public Dispensary, I find that, in the case of a man whom I saw in March 1847, although he lived for five days after the occurrence of perforation with pneumothorax, no liquid in the pleura or other evidence of pleurisy was found after death. In that case, a very small perforation had occurred at the apex of the left lung in contact with a piece of softening tubercle, but not communicating with a cavity; and this, as I believe, explains the absence of pleuritic complication.

In that case, there was absence of amphoric blowing, explained, as I then believed and noted, and as I still believe, by the extreme smallness of the aperture in the pleura. The diagnosis of perforation with pneumothorax was based upon the sudden onset of pain and dyspnoea in a phthisical subject, exaggerated percussion resonance over the left side, very feeble breath-sounds and crepitation, which was attended with amphoric echo, beneath the clavicle. From this, I inferred that the apex of the lung was partially adherent to the chest-wall; and this diagnosis was verified by the *post mortem* examination.

You are aware that when there is a mixture of air and liquid in the pleura, a sudden jerk (succussion) of the patient's body when he is standing or sitting causes a splashing sound, which is easily heard when the ear is applied over the affected side. This physical sign has been known to the profession since the time of Hippocrates. We did not seek for it in our patient's case. We had abundant diagnostic evidence without it; and the patient's feebleness and suffering were so great, that it was undesirable to add to his distress by the rather rough procedure which is requisite to develop the phenomena in question. An over-zealous auscultator is in some danger of forgetting that a minute and prolonged, and especially a rough, examination of the chest may be a source of fatigue, distress, and even danger to the patient. A short time since, a case of aneurism of the aorta came under my care in the hospital. After two or three days' stay in the ward, the patient discharged himself, and wrote me an impertinent letter complaining of the repeated and prolonged examinations to which he had been subjected. This man, although he had a very serious disease, was not suffering acutely either from pain or from weakness; and I consider that he had no sufficient cause for complaint against me, or against any of you who may have examined him in my absence. I refer to the case only to remind you of the need for so tempering your diagnostic zeal with discretion, that you may avoid giving just ground for complaint even to a captious and querulous patient, such as we sometimes though rarely meet with either in public or in private practice.

FEEDING VERSUS FASTING.

By J. A. CAMPBELL, M.D., Medical Superintendent, Garlands Asylum, Carlisle.

In the JOURNAL of February 2nd, the case of "the Market Harborough Fasting Girl" appears. An account of the symptoms of the malady, the treatment pursued, the result, and the *post mortem* appearances of the thoracic and abdominal viscera, are given. Now, when cases are published in the medical journals, it is understood that they may be made use of, if such be possible, discussed from all points of view, and fairly criticised. From an asylum physician's point of view, a short *résumé* of the salient points of this case, the treatment it received, and the result, a consideration of the subject of "fasting girls" generally, and some remarks on the subject of persistent refusal of food and its proper treatment, may not be out of place.

1. *The Market Harborough Case.*—Martha White had been healthy up to 1872; then she had an attack of real or feigned illness, during which she thought she could not swallow. An explanation of the mode of using, and a threat of the use of, the stomach-pump made her swallow. She recovered and went to work. In 1873, another attack is reported, which was considered principally, if not entirely, hysterical; "but, on this occasion, moral force was futile, and all we could do was of no avail". After this had gone on for some weeks, hypodermic injection of morphia and nutritive enemata were recommended, "as the girl seemed sinking for want of food". At this time, she took nothing but butter-candy, of which she sucked nearly one pound daily. In April 1874, the patient had convulsions; after which she took no food, and died on December 15th, 1877. No urine or feces were supposed to be passed for twelve months. The account of the body and the viscera examined was what might be expected. The body was very emaciated; the organs are reported to have been free of organic disease, and the stomach and intestines from contents, except that, in the stomach, there was half an ounce of dirty mucus, and from four to six ounces of the same material in the small intestine, and a few lumps of hard feces in the rectum. The urinary bladder is reported as atrophied.

In the remarks made on this case by Mr. Frederick Grant, he states that there was no difficulty of diagnosis; and that there can be no doubt that it was hysteria; and he calls attention to the singular point of the prolonged starvation.

2. *The Welsh Fasting Girl.*—In vol. ii of the BRITISH MEDICAL JOURNAL for 1869, at page 685, particulars concerning this case are to be found. It suffices for my purpose to say that, after much wonder was excited by reports of the case, four trained nurses were set to

watch the girl, in order to detect imposture, if it existed. The patient was well watched for eight days, and then died. She never asked for food from the nurses, and it was never given to her by them during this time. This girl had attacks of hysterical crying and sobbing, and went off into what was called "a fainting fit". The *post mortem* appearances stated at the inquest were that the organs were healthy; no obstruction in the alimentary canal; a small quantity of semi-gelatinous fluid in the stomach; small intestine empty; half a pound of hard excrement in the large intestine and rectum.

To my mind, these two cases were much alike, and were both cases of hysterical insanity. No one can be considered sane who, without cause, starves so as to endanger health and life. Should cases of "fasting girls" continue to crop up, I think it would be well if the subject were brought under the notice of the Commissioners in Lunacy, as, at their instance, inquiries are at times made into cases where sanity is dubious.

It is quite admitted that the standard of sanity and insanity varies much in different parts of the United Kingdom; but when, as the result of some mental change, a patient acts in such a way as to endanger his own life, or even to become a local nuisance, it would be well at least to make a careful examination into his sanity. Old ladies who keep a house full of cats in town, thinking that they have souls, find it now-a-days scarcely safe to carry out their opinions; and the race of hermits who lived in dirt and discomfort has become almost extinct by the active discharge of duty of the country relieving officers.

In the case of the Welsh girl, eight days of careful watching and the death of the girl clearly prove that even "fasting girls" cannot live on air. I think that there can be little doubt among medical men or others that human life can only exist for a short period (limited to days) without nourishment; and that, if ordinary food be taken into the system, evacuations must follow, though, of course, they may be lessened by the nature and quantity of the food, and the alvine evacuations may be at very considerable intervals. Though it may be interesting to know how long cases may exist with very little food, yet this treatment does not conduce to recovery.

In the present state of our knowledge of the vagaries, the simulations of diseases, and the moral depravity noticed in patients suffering under the hysteric state, I think that no more "fasting girls" should occur. I do not see why many cases of mental disorder should not be treated at home, and by any medical practitioners who choose to treat them; but I certainly think that the necessary physical as well as moral force should be used, and that the treatment which has proved efficacious in asylums should be applied to similar cases when treated outside.

In the JOURNAL for February 9th, I notice that another "fasting girl" is reported from Wales. Surely efforts will be made to prevent her from starving herself to death. If the patient be not rich enough to afford proper home treatment (which, to my mind, would consist principally of at least two good meals a day, and the attendance of a sensible, intelligent, strong-minded woman, who would do all in her power to help the girl to get rid of the idea of making herself notorious and ill), the proper mode to pursue in such a case would be to give notice to the relieving officer, who is bound to call in the medical officer of the union; the mental state of the patient would be inquired into, and the case sent to the county asylum.

3. *Persistent Refusal of Food.*—In this asylum, it is and has been the practice that, in all cases of refusal of food for two full days, it should be administered artificially; of course, in feeble cases, one does not wait so long. I quote the following from Dr. Clouston of Edinburgh, my predecessor in office, under whom I acted as assistant for several years:—"Forcible Feeding" (*Lancet*, November 30th, 1872): "Hundreds of patients are fed with the stomach-pump in our asylums every year, and no bad result follows to them; but quite the contrary; in a prolonged case, I have scarcely known anyone who did not take to the stomach-pump. I have myself so fed thirty patients in the last ten years, all of whose lives were probably saved by this means; ten of whom recovered, and a large number of whom gained weight during its use; one to the extent of a stone. I am sure that a thousand patients are allowed to die by the gradual process of starvation, because they are not fed in time with good full meals regularly given by the stomach-pump, for one who is injured by using it." Dr. Clouston mentions that Dr. Maclaren of Carlisle suggested to him the use of a stomach-tube made of India-rubber, like the French flexible catheters, which, he considered, would completely obviate any risk of injury even in clumsy hands. Shortly after that date, I got tubes made of this material, and have used them since and found them most satisfactory. During the last five years, thirty-five cases have been fed in this asylum; one of them for a continuous period of two years and one month. I may mention that this patient was

phthisical, and ultimately died of phthisis. She took her food herself for five months prior to her death.

Among these cases, four were hysterical cases in girls; three of them recovered, and the fourth was removed to another asylum; and three were youths in a somewhat similar state, produced by sexual causes (the latter were all discharged recovered): the principal feature of their cases being silly emotional excitement, alternating with a trance-like or cataleptic-like state, in which the patient would lie for hours, taking no notice of what went on around, and apparently unconscious of pain or discomfort, and refusal of food for considerable periods.

Considerable numbers of girls in the hysteric state, who had refused food at home, when they were brought here, and the means and manner of giving it were explained to them, have at once given in and taken their food. I always make a point of taking such patients to see another fed with the pump, if one is being fed in the house at the time.

I believe that in certain cases persistent refusal of food may be caused by disease, or by the sequelæ of former diseases. I reported in the *Journal of Mental Science* (January 1875) two cases of melancholia presenting similar mental manifestations to each other, evidently the result of visceral lesion. Great depression, suicidal longings, abdominal discomfort, and refusal of food, were the chief symptoms. Both died above sixty years of age. In one, a stricture of the large intestine was found; in the other, occlusion of the bile-duct.

In conclusion, I admit that there are three apertures by which food can be introduced into the alimentary canal (I refer to the nose, mouth, and anus), independently of the will of the patient, and a variety of instruments are available. Under any but extraordinary circumstances, I certainly prefer the use of the natural entrance, with the stomach-pump and soft tube as appliances. I however admit that rare cases may arise where the other methods may present advantages, almost solely where cut-throat or disease of the œsophagus exists. Dr. Brown-Séquard, in the *Lancet* of January 26th, 1878, records cases where nutritive enemata were employed for periods of three, six, and eight days. Two were cases of hysterical spasm of the œsophagus, and recovered. A case of severe cut-throat was treated in this asylum in 1874, and recovered. The patient was sustained entirely by enemata for twenty-one days, and only lost 1.6 lb. in weight. The case, in full, was reported by Dr. Macleod of this asylum in the *Journal of Mental Science* for July 1875.

ON THE TREATMENT OF UPWARD DISPLACEMENT OF THE ARMS IN HEAD-LAST DELIVERY.

By GEORGE ROPER, M.D., M.R.C.P.,

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WHOEVER has had much experience in complex labours must have observed that in head-last deliveries, the upward displacement of the arms constitutes a great difficulty in the completion of delivery—a difficulty exceedingly perplexing to the operator, very painful to the mother, and often making the difference between life and death to the child. Smellie had observed this difficulty, for he says, "If one of the child's arms, instead of being placed along the side of the head, is turned in between the face and sacrum, or between the hind head and os pubis, the same difficulty of extracting occurs as in a large head or a narrow pelvis" (McClintock's edition, New Sydenham Society, vol. 1, p. 309). This upward displacement of the arms is at times attributable to the unskillful procedure of the operator, who, from eagerness to expedite delivery, for the purpose of saving the life of the child, brings about this very difficulty, which to a fatal degree retards delivery. Such an accident, however, frequently occurs independently of unskillful treatment. I believe it unavoidably occurs in breech-cases, and in cases of podalic version, when the child is of an unusually large size, rendering the case one of disproportion; so that we have a large child with a large head *plus* the arms upwardly displaced jammed in the pelvic brim.

The upward displacement to which I refer is one of such degree, that the arms are so entirely extended above the head, after the trunk is born, that only the anterior folds of the axillæ can be felt, tightly stretched, and it is simply impossible, without injury to the child, to get down an arm. My chief object in remarking on this difficulty is to call attention to a very simple contrivance by which it is to be prevented. It consists in passing a noose of narrow tape round the wrist of the child. In presentations of the upper extremity, when an arm can easily be secured, this can be done at once. In the severe forms of breech-presentations, as where the legs are extended on the thighs, or where podalic version is to be effected in head-presentations, the

tape must then be passed up on the fingers of the operator, and placed on the child's wrist *in utero*. This, of course, is not so easy as when the arm is down in the vagina. For snaring an arm *in utero*, I pass the tape through a tube of flexible metal; the arm is thus more easily caught; and when the noose is securely fixed round the wrist of the child, the arm can be brought down by traction on the tape at any period of the labour. When one arm is thus brought down, the other can easily be secured. The tape must always be sufficiently long that a portion of it hangs down externally after the presenting hand has gone up. Whenever delivery is to terminate head-last, it is always well to adopt this contrivance.

I am desirous of recording this little device, because I believe it is not mentioned in any of the English text-books on obstetric practice, nor is it taught in our midwifery schools. I learned it from my friend Mr. F. Gordon Brown, one of my colleagues in the Royal Maternity Charity. He obtained a knowledge of it while attending the lectures of M. Dubois, in Paris, in 1863.

ANTISEPTIC SURGERY.*

By S. MESSENGER BRADLEY, F.R.C.S.,

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ANTISEPTICITY, like Christianity, has more professing believers than sincere disciples; still it is something for a creed to be so generally accepted in this sceptical age, and my object to-night is not to discuss the value or importance of antiseptic surgery, but rather to criticise some of the methods of carrying it out in practice. We are, perhaps, too much in the habit of confusing antiseptic surgery with Lister's name and Lister's method. Mr. Lister neither discovered the true cause of septicity, nor was he the first to suggest carbolic acid as the most convenient agent for preventing it. He has popularised the subject in the minds of surgeons, and invented an ingenious method of dressing. I do not think that more can be justly claimed for the part he has played. Years before he wrote, Pasteur had investigated and ascertained the true cause of putrefaction; and, amongst other writers prior to Lister on the subject, Jules Lemaire, in a considerable work (*De l'Acide Phénique*), insisted upon the fact that putrefaction was caused by bacteria, and that we had in carbolic acid an efficient and convenient means of destroying these organisms, or rendering them innocuous.

Again, the dry earth system of dressing advocated by Mr. Hewson of Philadelphia, the anhydrous dressings ably handled by Mr. Hamilton and others, the terebene scab-dressing recommended by Mr. Waddy, are all scientifically directed to combat or to prevent septicity. These various agents may, and indeed do, act in different ways, as I shall endeavour by-and-by to explain; but all aim at the same object—the prevention of putrefaction. The essential difference between Lister's position and that of other antisepticians lies in this: that he claims for his method an infallible and invariable result.

Lister does not deny that other plans may occasionally succeed; but he does deny to them the certainty of success which he claims for his own. He may be represented not unfairly as saying: "Of course, a patient dressed according to my method may die; he may die of hæmorrhage, or of shock, or of embolism, etc.; but he shall not die of putrefaction or any of its effects, such as septicæmia." Now, gentlemen, the object of this paper briefly is to consider whether Lister's plan is entitled to this unique position.

And here, I think, it becomes necessary for us to discuss a little in detail the true cause and nature of putrefaction; for, though putrefaction does not necessarily include septic poisoning, no form of septic poisoning can occur without previous putrefaction.

There are two theories by which putrefaction is explained: the chemical theory and the germ-theory. The chemical theory is thus described by Neudorfer, from whose recent work, *Die chirurgische Behandlung der Wunden*, I make the following free translation. "Such albuminous bodies as blood, serum, and lymph possess a very unstable chemical constitution, and are only capable of resisting change whilst contained within their proper vessels. As soon as these boundaries are passed, they undergo molecular change, fermentation, and decomposition. As excitors of these changes, we must regard:—
1. All altered albuminous bodies which belong to the animal kingdom, since they have the property of inducing this molecular change and decomposition in unchanged albuminous bodies with which they come in contact; 2. Altered albuminous bodies met with in the vegetable

kingdom, such as lint, cotton, charpie, and other surgical appliances; 3. Water, even distilled water, coming into contact with albuminous matter, induces the changes above referred to; 4. Mechanical causes, such as blows, etc.; 5. Dynamic causes, like pain, etc." (Page 154.) Such, shortly, is the chemical theory of putrefaction, concerning which I shall content myself with saying that this explanation is no explanation at all, since the changes referred to by Neudorfer never occur unless there is some means of access for the air. Keep out the air, and these unstable albuminous bodies never do putrefy. They may escape from their boundaries; they do escape every day in simple fractures and other subcutaneous injuries, yet we confidently predict that there will be no putrefaction; for we know that, without a *primum movens*, these fluids are incapable of change. Neudorfer himself admits as much when he speaks of these changes being excited by other albuminous bodies which have themselves already undergone a change. This fact led observers to examine the air, and to inquire whether it was the air itself, or something in the air, which induced the putrefactive change; and ere long it was discovered that, if the air were carefully filtered, putrefaction never occurred. The search for this *tertium quid* led on to the detection and indictment of bacteria as the *vera causa* of putrefaction. This naturally leads me, then, to consider the second theory of which I spoke; viz., the germ-theory of putrefaction. It is true that as yet there is a link missing. We know, from the beautiful experiments of Tyndall, that air optically pure is incapable of producing putrefaction; we know that, wherever there is putrefaction, there are bacteria; but the origin of these organisms, the germs of the bacteria, are beyond our ken, and, from what I know of the matter, are likely to remain so. This, however, no more proves their non-existence than the apparent identity of embryological cells proves their similarity: the facts equally point to the conclusion that our vision, even aided with the microscope, is very limited.

Permit me to dwell for a few moments upon certain points in the life-history of these little organisms. And, first, I would remark that, like the higher animals, they are a mixed lot; sheep and goats are to be found amongst them. Of them, it may be truly said, "By their fruits shall ye know them"; for, while some are innocuous to the human system, others are lethal, giving rise to various specific diseases. Already the microscope has done much towards branding the various kinds of bacteria; much more, however, remains to be done in this direction.

The important fact for us to bear in mind in connection with the matter in hand is this: that, while some are harmless and others are harmful, all alike are capable of producing putrefactive change. Such tiny things as bacteria are, of course, difficult bodies to study; but we have learnt some important principles of their mode of living: *inter alia*, we know that they multiply exceedingly; we know that they prefer swimming to flying; we know what will kill them and what will keep them alive, and, of course, it is the study of this last fact that has led to the elaboration of antiseptic surgery. Bacteria depend, like we do, for their sustenance upon oxygen; but, like us again, they can only bear a certain quantity; too much kills them, and, for this reason, ozone is a powerful germicide and true antiseptic. I will, with your permission, refer to an experiment with this body, which I made last year in company with Mr. Harrison.

On February 5th, 1876, we took these two bottles, each containing some turnip-water just passing into putrescence; through the one, a stream of ozone was passed; in the other, the air was left untouched. Through each cork, bent tubes were inserted. These bottles are now before you. The fluid through which the ozone was passed is little changed; the fluid in the other is green and thick. I have little doubt that the turbidity of the ozonised solution would have been quite obviated, if, instead of corks, we had used plugs of cotton-wool, and so filtered the air which subsequently found ingress to our bottle. This experiment may, however, be taken as sufficient evidence of the antiseptic properties of ozone, and it is by virtue of their ozone-evolving properties that some agents employed in surgery have antiseptic powers; for example, Dr. Angus Smith informs me that all the essential oils give off ozone, and he has proved that they all possess antiputrescent properties. Of these, he tells me the oil of mustard, the oil of bitter almonds, and the oil of the eucalyptus globulus are the most powerful; and with these I intend to experiment. From recent investigation, indeed, it would appear that the eucalyptus globulus (I mean the tree itself) really merits its character of malaria-killer. May we not fairly infer that this is due to the ozone given off from its fragrant leaves? It has sometimes occurred to me that the sacred groves of Scripture had a similar value; if so, we may readily understand that the heathen's god would avenge the desecration of his temple, when these groves were destroyed, by sweeping as a pestilence over the land. Turpentine owes its antiseptic properties

* Read before the Manchester Medical Society.

to a similar cause. I do not know whether this is true of tincture of benzoin, but think it very likely.*

So much for the effects of too much oxygen upon bacteria; destruction equally awaits them if they get too little: by the one process, they are killed; by the other, they are starved: *voilà la différence*. It is on this latter account that all hydrocarbons, such as the fixed oils, are antiseptic, and, therefore, good surgical dressings; likewise it is by starvation, I imagine, that the anhydrous system of dressing wounds secures such immunity from putrefaction.

Turning to germicides proper, we find many substances capable of killing bacteria; boracic acid, iodine, and carbolic acid are the most in vogue. I do not know, nor do I think that it is accurately ascertained, in what proportions these substances kill bacteria; suffice it to say that, from my own experiments, I differ from Lister in saying that the No. 20 solution of carbolic acid (*i.e.*, 5 per cent. of the acid) is "as certain death to them as the gas-flame".

Before passing on to criticise Lister's special method of dressing, I wish to mention one other phenomenon attending the process of putrefaction. I refer to the evolution of ammonia. This may be taken as constant. It is true that Dr. Angus Smith, who most kindly has given me much information upon the subject of putrefaction, informs me that the presence of ammonia is not an absolute proof of putrefaction, although it comes very near it; on the other hand, he says, "its absence is to be regarded as proof positive of the absence of putrefaction". Be its origin what it may, we have these two capital facts apart from all theories: putrefaction is invariably associated with the presence of bacteria; "surgical" putrefaction is invariably accompanied by the evolution of ammonia; the microscope reveals to us the presence of the one, chemistry the presence of the other.

I am inclined to think we may go further, and say that, where we have ammonia, there we shall find bacteria; where we find bacteria, there we shall find ammonia; and, the contrary to these two propositions, where there is no ammonia there are no bacteria, and where no bacteria are present there is no ammonia. To place this entire statement, however, on the basis of proved problems, further research is needed.

I now desire to address myself more specially to that method of practising antiseptic surgery introduced by Lister, with the direct purpose of seeing if its claims to the title "antiseptic" are pre-eminent; and, first, I would inquire whether it is correct to say that this plan always defies putrefaction. It may not go for much to say that, in my hands, it has occasionally, like other plans, failed to do so; but it is a good deal to say that it fails in the hands of such a master of all the details as Mr. Lund, yet such is the case; I do not say often; I do not know whether often or seldom; but, even in his skilful and careful hands, Listerism will not always succeed in warding off putrefaction. Some little time ago, Mr. Lund undertook an operation for the radical cure of hernia. I looked upon this operation with interest, as affording an excellent proof of the value of Lister's method; and, having shortly before had a case of hernia, where I had removed a large quantity of omentum, and where putrefaction had followed, I was almost prepared to accept the superiority of Lister's plan on the score of success in this case alone. I stated as much beforehand to Mr. Whitehead, and asked Mr. Lund, at the time of operation, if he would kindly let me examine the discharges following the operation, to which request he at once acceded. The operation was a long and serious one, involving the removal of a considerable portion of omentum, and the stitching together of the pillars of the external abdominal ring. Mr. Lund himself dressed the wound on every subsequent occasion. I did not think it worth while to examine the discharge for the first week or so; but, about the eighth day, I was present at the dressing, and, at my request, Mr. Lund touched the microscope-slide held ready with the end of the drainage-tube, which he drew from the wound. At this time, the incision had nearly healed, and the wound looked very clean and healthy, though I thought there was some detectable fetor about the pus; of this, however, it was difficult to speak, owing to the prevailing odour of carbolic acid volatilised in the spray. Under the microscope, the discharge was found to swarm with bacteria, and the patient died some days later of septicæmia. Now, gentlemen, although this is but a single case, it serves sufficiently my purpose to prove that there is no infallibility about Listerism. To admit that it does fail from time to time, even in the hands of so perfect a manipulator as Mr. Lund, is to admit that it must fail, and, therefore, its claims to our acceptance as the one true method must be based upon other grounds than its universal success.

To what, then, do we turn? Naturally, to statistics; but here we

* Perfumes may thus come to play a part beyond "my lady's chamber"; and to surround a wound with attar of roses would be not merely æsthetical, but practical antiseptic.

are met with a difficulty. Lister himself, so far as I know, has not published his statistics, and so we must be content to compare the statistics of his followers with those of surgeons who dress on other plans. Well, gentlemen, I do not think that any marked superiority is to be made out for Lister on this score; *e.g.*, the results obtained by Callender are fairly equal to those of any follower of Lister. I would crave permission, by way of further information on this head, to quote my own statistics of amputations and excisions from January 1876 up to the present date, during which time I have employed open dressings, according to the method shortly to be described.

During the period mentioned, I find that I have had fifty-five amputations and excisions, with the following results. I only quote cases under my care at the Infirmary.

Amputations.	Recovered.	Died.	Total.
Forearm	3 ..	0 ..	3
Elbow-joint	0 ..	1 ..	1
Arm	4 ..	0 ..	4
Shoulder-joint ..	1 ..	0 ..	1
Hip-joint	1 ..	0 ..	1
Thigh	12 ..	3 ..	15
Leg	2 ..	0 ..	2
Ankle	8 ..	0 ..	8
Excisions.			
Elbow	2 ..	0 ..	2
Hip	2 ..	0 ..	2
Knee	4 ..	1 ..	5
Wrist	2 ..	0 ..	2
Removal of loose cartilage from knee	1 ..	0 ..	1
Operation for ununited fracture of forearm.	1 ..	0 ..	1
Total	50 ..	5 ..	55*

The important question here arises, Were any of these five deaths attributable to putrefaction or its septic consequences? and to this query I confidently reply, No, not one. The death following amputation at the elbow-joint occurred on the second day following the operation, and was distinctly due to shock, the patient, an old toper, never rallying. Of the three deaths following amputation of the thigh, one was the case of a woman, whose thigh I amputated, on account of gangrene sequential to typhoid fever, and in whose limb the artery was found blocked right up into the groin; the second was a case of diffuse aneurism, in which I had previously tied the common femoral and afterwards amputated; the man died of hæmorrhage, but the stump had healed; the third was an old Irish woman aged 72, who made a good recovery up to the third week, the stump being nearly healed, when she received bad news from home and sank. The death following excision of the knee was in a little girl of two years of age. She became sufficiently convalescent from the operation to be sent to Chesham; but I afterwards learned that she died there from, I believe, diathetic causes. Such are the statistics I have to submit to you; but you may say: Well, you have a fair percentage of recoveries; but have you not exposed your patients to greater risk than you would have done had you dressed them *à la Lister*? To this question, I scarcely know how to reply better than by submitting the temperature-charts of each patient; this, indeed, I hoped to do; but some have been lost and others I never received; what I have, however, I place before you, and I think I may say that, so far as they go, they afford no evidence of septicæmia, nor, I think, will you find amongst them one which shows an unnaturally high febrile condition as consequent upon any of these capital operations.

So much for the infallibility claim and the statistical question. I now come to positive objections to Lister's method, chief amongst which I place my objections to the spray. My objections to the spray are partly theoretical and partly practical. For some time past, I have thought it probable that the spray, instead of keeping off bacteria, really drove them into the wound; creating currents and vortices in the air, it seemed likely to me that the skirts of these little whirlwinds would be caught, and any contained microzymes entangled and driven along the lines of spray; for be it remembered the spray is not a continuous sheet of vapour, but only a good thick douche, with plenty of room for thousands of bacteria to dance between each and every atom. Many of you have seen, in the experiments with vibrating sand-plates, how the light lycopodium is caught and held in the very centre of the sites of greatest vibration, while the heavier sand is driven through into the lines of rest; similarly, I thought the bacteria might be trapped by the very means adopted to keep them at a distance.

Again, I thought the water mixed with the carbolic acid might be a fertile source of mischief; it is true the solution used is a strong one; but, as I have before mentioned, I have reason to question Lister's

* I take this entry from my own case-book. On referring to the record of our surgical registrar, I find myself accredited with the case of a lad who died of septicæmia following amputation of the thigh. Though I have no recollection of the case, I take it to be a correct report, and wish the case to be considered along with the rest.

dictum as to the fatal effect of this No. 20 solution, as it is called, upon the lives of bacteria. Over and over again, I have seen bacteria moving as vigorously as before, after two hours' immersion in this solution. Holding these opinions, I was anxious to test their accuracy, and, therefore, I performed the following experiment.

On October 20th, 1877—that is, six weeks ago—I cut off two pieces of muscle from the leg of a girl whose thigh I had just previously amputated. One piece was removed under the spray, placed upon this board, quite new, and wiped with a sponge soaked in No. 20 carbolic acid solution, and dressed strictly according to Lister's plan. The other piece of muscle was cut off in the common air and dressed with lint saturated with glycerine and carbolic acid, in the proportion of one part of glycerine to eleven parts of carbolic acid. From that date to this, my dresser (Mr. French) has taken charge of these specimens, and dressed them each on the method first adopted about every third or fourth day. Last Friday but one, I saw them for the last time until to-night. I found the muscle dressed *à la* Lister whitish in colour, flabby, and soft; the other dark in colour, firm, dry, and semitransparent. I then Nesslerised both specimens, and found that the one dressed with the spray gave ammonia, and was therefore putrefactive, while the other gave no ammonia, and was therefore sound. Mr. French is present, and can verify what I state. I will now repeat this experiment before you, and we will note the result.

You perceive that this specimen, the Listerised one, is, as I said, pale, soft, and watery; the other is dry, firm, and nearer muscle in colour. Cutting off a piece from each, and dropping them into these portions of Nessler's solution, which you know is an exceedingly delicate test for ammonia, you notice that the first gives a brown colour, and thereby shows the presence of ammonia; the other fluid remains uncoloured, and thereby proves that no ammonia is present.* I desire to be clearly understood in reference to the bearing of this experiment upon my argument. In my opinion, it demonstrates accurately the evil influence of the spray; but it by no means proves that these exact conditions are likely to be, or even can possibly be, imitated by so treating the living organism. You cannot, in the living subject, prevent the constant access of fresh fluids to the part, and so strictly anhydrous dressing becomes an impossibility; but it is no reason because all water cannot be excluded that we should not keep as much away as possible. It must always be remembered that two factors are needed to produce putrefaction: the seed and the soil. We will suppose, if you like, that the seed is ever present, although bacteria are much more aquatic than aerial in their habits; still, granting the presence of the seed, it will remain as the seed in the hand of the mummy, unchanged by time, until it is awakened into life by the proper soil.

It is perfectly true that it is wiser and easier, to borrow an expression of Mr. Lund's, to be *antiseptic* than *antisepic*; but, for all this, it is interesting to notice how materially you will lessen a discharge, both in quantity and putrescence, by stopping the use of water in the dressings, and mopping up the secretion with dry lint. It is, therefore, perfectly consistent and sensible to dress as nearly anhydrously as possible, although we know that the animal juices themselves form a suitable pabulum for the growth of bacteria. A more curious fact than this is connected with the influence of these organisms upon the human body, which, I confess, I am totally at a loss to understand. I refer to the fact that the effect, the septic effect, produced is in direct proportion to the quantity introduced. Recalling the extraordinary powers of multiplication of bacteria, it would seem to be a matter of indifference whether one or a million were introduced into the system; not so, however; the severity of the septicæmia is proportionate to the numbers of bacteria. The most evident proof of this is conveyed by the results of vaccination, which may be regarded as a sort of benign septicæmia, one vesicle producing very little prophylactic effects on the system as regards variola, while four or five bestow an almost absolute immunity; perhaps it is less familiar, but it is, I believe, equally true, that exactly the same holds good with what, by contrast, may be termed the lethal forms of septicæmia. These two facts taken together teach us to keep a wound as free from discharge as possible, and as dry as possible.

So much for my objections to the spray. My next objection to Lister's method is, that it tends to cover up and keep confined putrefactive matter. If you must have putrefaction, by all means have it externally; it does little or no harm, if it have free vent. Whoever heard of septicæmia caused by an ulcerated leg? Yet all of us have had unpleasant experience of ulcers so foul, of putrefying sores so extensive, that they would poison an army, if the matter were properly economised; yet the owners of these dreadful legs live and move and have

their being for years and years, with a normal temperature, a clean tongue, and a healthy appetite. One of the members here present has given me permission to mention a little circumstance which is quite *à propos*. This little girl had a trifling sore upon the eyelid, which, one day last week, scabbed over, soon after which she became feverish and ill. This state of things continued for two days, when her father removed the scab and gave exit to a few drops of pus; directly after this, she felt better, her temperature fell to normal, and, in an hour or two, she was quite well. Now, Lister's dressing is, I believe, apt to lead us into a fool's paradise: everything looks so nice and is so clean, that it is hard to believe any mischief can be lurking there, and so, while our noses are effectually hindered from detecting anything wrong by the cloud of carbolic spray, we confidently reswathe the part in the voluminous folds of gauze, etc., and perhaps leave it for a couple of days or more, during which the evil is wrought, and that may be beyond repair. It is not correct to say the drainage-tube sufficiently guards against a *contretemps* of this kind; drainage-tubes only very imperfectly guard against such accidents; it is common enough to see a stream of matter follow the withdrawal of the drainage-tube, which the latter has evidently only served to keep confined. To obviate this cork-like action, I suggested the use of vulcanite tubes which were incompressible; but, though better than the others, I cannot say they are perfect. Chiene's catgut method of drainage, which acts by capillary attraction, is perhaps the most inefficient of all. By way of illustrating this part of my argument, let me remind you of Mr. Lund's case of radical cure, which, to some extent, is the "motive", as artists say, of this criticism. His patient died of septicæmia, of which there is no outward and visible sign until the microscope is consulted, yet who will venture to say that this had not been going on for some days before detection? Again, let me recall my own case of femoral hernia, which I mentioned as having occurred about the same time, and where I had removed a large piece, a pound or more, of omentum. I do not mean to say that my case was at all comparable in gravity to his; but what I do say is this: putrefaction occurred in both; but, in my own case, the incision was kept freely open, the dressings were changed twice a day, and the patient recovered, without any septicæmic symptoms.

There are other objections to Lister's method, such as its greater expense and the inconvenience of having to keep a large stock of what may be looked upon as patent dressings on hand, procurable only through a few channels; but these are small matters compared with the two graver charges mentioned above, and with them I shall not further deal, but pass on to speak of the mode I myself employ.

It is unnecessary for me to say there is nothing original about my plan; it is necessary, however, that I describe it. In the first place, I thoroughly cleanse the skin with carbolic soap, even rubbing off the outer layer of cuticle, thus removing all clinging germs. I take care that all instruments, etc., are perfectly clean. After performing the operation, I fill the wound with some antiseptic, generally selecting No. 20 solution of carbolic acid, although many other preparations, such as chloride of zinc, or sulphate of iron, or nitrate of silver, seem to possess equal germicidal powers. I then take pains to render the wound as dry as possible, after which the sutures are introduced and the wound dressed with four or five folds of lint thoroughly well saturated in a mixture of carbolic acid and glycerine. Over all, I place either a pledget of carbolised tow, or dry lint, or cotton-wool. If the subsequent discharge be abundant, I at once liberate some of the sutures, to give free vent to the discharge, and have the wound dressed at least twice a day, otherwise the wound is dressed once a day. I carefully avoid using water in any shape or form, squeezing the matter out, not syringing it out, and wiping with dry, not with wet, lint. It will easily be understood that there are cases where the position of the pus, etc., renders it impossible to remove it altogether by pressure; this, for instance, is the case when the knee joint, or indeed any joint except the hip-joint, is opened; then it becomes necessary to wash out the discharge with the syringe. When this has to be done, I am in the habit of using a solution of permanganate of potash in preference to carbolic acid, and take care that the syringing is thorough, and performed twice in the twenty-four hours, so as to give little time for decomposition to take place. Irrigation in this case is good; indeed, is excellent; but it is somewhat messy and involves some exposure to cold, which is not always desirable or safe. There are two other conditions where the syringe comes into play, which I may take this opportunity of alluding to; I refer to the treatment of sinuses and abscesses. Speaking of the first, and supposing that all dead bone, etc., is removed from the bottom of the sinus, and that the granulation-tissue round the orifice is removed with the knife or scissors, I believe the best plan to secure closure of the entire sinus is to thoroughly flush it every day with a mixture of tincture of iodine and water (one to seven). Abscesses

* I ought to state that on the Friday mentioned above I did not direct Mr. French to uncover or recover the Listerised specimen under the spray; therefore the experiment before the meeting did not be taken into account.

are, in my opinion, much better and more successfully treated on Calender's plan of superdistension, especially if pressure be exercised afterwards, than by the method of Lister. This at least is my experience, which in this respect, I believe, is in accord with that of some of my colleagues. You, of course, will ask me what proof I have that such a plan as the one I have detailed merits the term antiseptic equally with Lister's, and my answer is: I have given you my statistics, which, I think, will bear comparison with those of his followers; but I chiefly rely upon experimental proof.

You will please to bear in mind the two mutually supporting evidences we have of putrefaction: the presence of bacteria and the exhalation of ammonia. I make no mention of such questionable evidence as the smell or colour of the discharge.

Well, gentlemen, submitting my cases to this double test, I believe I am entitled to say that I practise antiseptic surgery; e.g., among several similar experiments, permit me to mention the following. A fortnight ago, I took the first four operation cases in the female wards, and, with two of my dressers (Mr. Challinor and Mr. Pownall), examined the discharges by the double test of the microscope and Nessler's solution. The cases chanced to be an amputation of the thigh performed three weeks before, a carcinoma on the chest, a lipoma of the neck, and an excision of the elbow, all operated on ten days prior to the examination. Besides these, we examined a case of ligature of the subclavian artery with another of my dressers, Mr. Williams, in the men's wards, of a week's standing. In none of these were bacteria to be found, and in none was ammonia to be detected. But understand my position: I do not claim for this plan that it will certainly prevent putrefaction; for I know that, in some cases, putrefaction does occur, and, in my opinion, do what we will, ever will occur from time to time. What I allege of it, is, that it is just as efficient as the more costly and cumbersome plan of Lister; and, in my opinion, this is no small boon. To the army surgeon, toiling in such a terrible war as is now raging, the simpler method I advocate is surely incomparably better, inasmuch as it is practical, while the other is not. But, even to the surgeon engaged in hospital and general practice, the advantage of simplifying Lister's plan is considerable; for I am daily more and more convinced that such matters as the mysterious spray, and the patent character of the dressings, act as a real hindrance to the comprehension and general adoption of the true principles of antiseptic surgery.

British Med. J.

OBSTETRIC MEMORANDA.

THE TREATMENT OF OBSTINATE VOMITING OF PREGNANCY BY DR. COPEMAN'S METHOD.

On the evening of January 25th, 1878, Mr. X. called on me, to ask me to go next day some distance into the country to see his wife, a lady aged 33, who, he said, was about two months gone in pregnancy and was troubled with constant vomiting, which had continued for the two months, and for which she had been treated by her former medical man, going up to London to stay on purpose to see him (she had lived in London till about four months since). Since her return home, however, she had become so much worse that her doctor advised her to get some one near to see her.

On the morning of January 26th, I went to see her, and found that she had never been strong; she had had five children and five miscarriages. She was somewhat stout; of strumous diathesis. It was a habit of hers to vomit on the slightest provocation; bad news would make her vomit, also her monthly periods. Four years since, the vomiting was so severe that, when she had reached eight months in pregnancy, she had become so exhausted that, as a last resource, under consultation, premature labour was procured. She had vomited during the last two months, and throughout the day and night for the last week, having no respite whatever. Once she had fainted, and several times had been quite prostrate and cold. She could keep nothing down at all; vomited every four minutes food or mucus, and, if there were nothing to bring up, simply retched violently. She looked much worn; pulse 120 (normally a quick pulse) and very feeble. I prescribed some oxalate of cerium in pill, and the usual diet in very small quantities, often repeated, and gave her an opiate at night to try to obtain some rest from the sickness. I promised to see her again in two days, so as to give the remedies a sufficient trial. On January 27th, however, at twelve o'clock, an urgent messenger arrived to summon me directly. I took with me all I needed to procure a miscarriage. I found her very prostrate; vomiting incessantly every few minutes through the day and night; she had vomited just before I entered her room, and vomited

twice during the few minutes I was then talking to her. She was so ill, and her husband had such unpleasant recollections of her former illness, when she was almost *in extremis* before premature labour was induced, that I obtained his consent to do what I thought necessary. On proceeding to examine the os, I found it very hard and cartilaginous, but I dilated it with my finger as well as I could. I then left her, begging her to take the nourishment I indicated, and prescribed some bromide of potassium, but with the understanding that I should be fetched if urgent symptoms appeared. Not expecting success, I asked to be allowed to obtain a skilled nurse for her, and made arrangements to go next day. On January 28th, I arrived at three P.M., and was rejoiced to find that, from the time I left on the previous day at two P.M., the sickness had ceased. She had eaten and slept well. This morning, she vomited once when she first put her foot to the ground for her bed to be made, but not since. She had eaten a mutton-cutlet for her lunch at one o'clock.

January 30th. I did not see her at all yesterday; but ascertained, on visiting her this morning, that she had had no return of sickness whatever, and only retched once when she first got up to dress this morning. She is able to be up and to eat fairly well, and, as the sun was shining brightly, I ordered her a little drive out; and regarding her as convalescent, at all events for the time, I have ceased to attend.

CLEMENT DUKES, M.D., B.S.,

Medical Officer to Rugby School, etc.

POST PARTUM HÆMORRHAGE.

VARIOUS remedies have from time to time been recommended in the JOURNAL for the treatment of *post partum hæmorrhage*; but I do not remember to have seen large doses of turpentine ever advocated. Some time since, when discussing the subject with a friend, he told me he knew an old practitioner of large midwifery experience who never went to a case without taking two draughts, each containing half an ounce of spirit of turpentine; and he never knew them fail.

On February 10th, I attended a Mrs. W., aged 36, a stout woman, but of loose flabby muscular fibre. The labour progressed favourably, and the placenta came away about five minutes after the child was born. I had previously given a full dose of ergot (as she flooded last time), and kept my hand upon the uterus externally. In a few minutes, flooding commenced profusely, and continued notwithstanding the use of ergot, cold-water injections, kneading the uterus, removing clots, and keeping my hand as a plug, etc. The uterus would contract a little, then become again relaxed; the hæmorrhage continuing as badly as ever. She became cold and almost pulseless. At this stage, I gave half an ounce of turpentine beaten up with an egg; and in less than five minutes I felt the uterus contracting. It soon became firm, hard as a ball, and all flooding ceased. The patient rallied very quickly, and from that time has progressed most satisfactorily. I therefore consider the treatment by turpentine worthy of a trial, and shall hope to see the result of other cases recorded, as I feel convinced that the remedy is a good one, and to be relied upon.

JAMES POLLARD, Torquay.

THERAPEUTIC MEMORANDA.

TREATMENT OF DELIRIUM TREMENS.

SURGEON-MAJOR WILLIS's note on the treatment of this disease with thirty-grain doses of powdered capsicum is interesting and of much practical value. But on what therapeutic principle are we to account for the capsicum having so powerful an effect? I have recently had similar effects with less than five-drop doses of the tincture of capsicum. Can it be that in both cases the capsicum, as an acceptable and innocent substitute for alcohol, merely put the long splint, so to speak, on the patient's stomach and nervous system, thus securing his quiet acquiescence in what was for the time the *rest of total abstinence*? I confess it was with this impression that I administered the drug; but some special features of the case, and a desire to present to the patient a palatable beverage as nearly as possible in the form of his accustomed tippie, suggested the following prescription.

R. Sodæ phosphatis 5j; syrupi ferri phosphatis, syrupi limonis, aa ʒiiss; mucilaginis acaciæ ʒij; tincture cardamom. co. ʒj; aque ad ʒxxiv. M.

Sig.—*The wine of capsicum.* A wineglassful as required. This was put in a common wine-bottle, and was much relished by the patient, who took it at once, and next day passed into a refreshing unbroken sleep of nearly twenty-four hours' duration.

D. TOLMY MASSON, M.D., Edinburgh.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS.

JANUARY 17TH.—*Chronic Synovitis: Suppuration within Knee-joint.*—Mr. HOLDEN exhibited in the operating theatre a girl aged 12, of very delicate appearance, fair-haired, with a pink complexion. When four years of age, her right knee was injured by a fall. She had been lame ever since. Eight months ago, abscesses formed both within and around the articulation. The suppuration, after long rest in hospital, had ceased, and the child certainly required some surgical operation, as she could not be discharged with her knee-joint disorganised, though in a state of passive disease; but Mr. Holden thought that amputation was as yet too extreme a measure, whilst he hesitated to excise the joint on account of the patient's feeble constitution. He thought that she should be sent to Margate, and excision performed at that locality.—Mr. SAVORY agreed with Mr. Holden in every particular, except that he thought it better that the girl should be operated upon in London after a prolonged visit to Margate.—Mr. SMITH believed that, if Mr. Holden directed a dresser to apply an immovable apparatus to the affected limb and then sent the child to Margate, the joint might very probably become ankylosed.—Mr. WILLETT thought that the child should decidedly be sent to Margate; but then it remained to be seen what local effect would be produced before any surgeon could determine the choice of any operation.—Mr. LANGTON was averse to excision in this case, and agreed with Mr. Smith's recommendation.—Mr. BAKER also was not in favour of excision.—It was decided that the patient should be sent to Margate for a few weeks, and her case reconsidered after her return.

January 31st.—*Extreme Genu Valga.*—Mr. CALLENDER brought forward a girl aged 16, who had been afflicted for several years with knock-knees. She had been ten months under treatment, but the most skilfully constructed apparatus had failed to remedy the deformity. Mr. Callender believed, as the distortion was extreme, that nothing remained but to remove a wedge-shaped portion of the lower end of the femur.—Mr. SAVORY, after referring to Verneuil's discovery, that the internal condyle is hypertrophied in genu valgum, expressed his belief that a cutting operation might make matters much worse, and thought it would be preferable to apply an apparatus which would enable the patient to walk.—Mr. SMITH was aware that the very best results had followed removal of wedges of bone in this deformity, and believed the case under consideration to be very favourable for operation.—Mr. CALLENDER stated his determination to abide by his already expressed decision.

February 7th.—*Tumour of uncertain nature in Superior Maxilla.*—A man aged 65 had noticed for two years a prominence of the right side of his nose towards the cheek and inner canthus of the right eye. From the first, much mucus and matter ran from the nostril; and a year ago a surgeon removed some polypi, which relieved the feeling of tension in the nose, and the pain which had existed in the right cheek and eye. At present, the right nasal bone and nasal process of the superior maxilla are very prominent, and the eye protrudes. Both nostrils are obstructed; no swelling can be seen from the mouth, but the right nasal fossa can be felt to be completely blocked up. There is no enlargement of the lymphatics of the neck.—Mr. T. SMITH was certain of the presence of a tumour, but doubtful of its nature. If the polypi were of the simple mucous variety, the tumour might be innocent; if malignant, the growth extended so much towards the pharynx that its removal would be both difficult and dangerous.—Mr. HOLDEN recommended, as the former operation had done good, that the nose should be laid open and the cavities explored.—Mr. SAVORY felt pretty certain that the tumour was carcinomatous. He doubted that it could be extirpated entirely: if attempted, the whole right superior maxilla, if not more bone, should be deliberately removed.—Mr. MARSH was not in favour of any operation: the patient, he thought, was too old, and not healthy even for his age.—Mr. SMITH intended to represent to the patient the serious nature of his complaint, and to remove the right upper jaw-bone, if pressed to do so.

Multiple Sarcomata in a Boy.—Mr. HOLDEN once more exhibited this patient (see BRITISH MEDICAL JOURNAL, vol. ii, 1877, p. 807,

and p. 128 in the present volume). It was fortunate (said Mr. Holden) that the right ulna was not removed, for a day or two after the last consultation another growth was detected on the right humerus; besides, there was an enlarged axillary gland, the first evidence of lymphatic infection, no such symptom having been observed in connection with the sarcomata on the trunk and lower extremity.

Obscure Injury to the Shoulder-joint.—Mr. BAKER, on behalf of an old student of this hospital, practising in the country, exhibited a man that gentleman had sent to him, who had fallen nine weeks previously on his right side. The swelling of the right shoulder was so great at first that no accurate diagnosis could be made. At present, no fracture nor dislocation could be positively detected; but the patient was sent to St. Bartholomew's Hospital for the benefit of a consultation. The surgeons failed to detect any injury to the bones around the joint: there was a slight amount of synovitis, but no dislocation.—Mr. HOLDEN remarked to the students that nothing in surgery required more careful clinical examination and more deliberate judgment than injuries to the shoulder-joint. A due consideration of all negative symptoms was most important, and the diagnosis and prognosis should not be made till after consultation. These precautions were rendered all the more necessary, on account of the frequent medico-legal complications which too often occur in association with these injuries.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 19TH, 1878.

CHARLES MURCHISON, M.D., D.C.L., F.R.S., President, in the Chair.

Tumours of both Ovaries.—Mr. KNOWSLEY THORNTON exhibited for Mr. TAYLOR of Guildford a specimen of double ovarian disease. There was a solid tumour of the left ovary, and the right ovary was enlarged. They came from a woman aged 60, who had suffered from colicky pains and obstruction of the bowels. The tumour became abdominal, but the obstruction became finally entire. On *post mortem* examination, the tumour was found flattened against the sacrum, with a coil of small intestine tied to it. The tumour was brain-like and lobulated. On section, it was found to consist of spindle-shaped cells. The right ovary had similar cells in it to those found in the ovaries after the menopause, a deposit in the meshes of the stroma; a degeneration of the structure of the corpora lutea. It was found to be a change in the coats of the blood-vessels. Organic changes were not rarely the outcome and result of functional changes. Solid tumour of the ovary is a very rare form of disease.

Cysts from the Peritoneum.—Mr. THORNTON showed some cysts of the peritoneum, which are so rare that no account of any is to be found in the Society's *Transactions*. They are stated to arise from peritoneal inflammation. They came from a married woman aged 32, who noticed an increase of bulk after a fall. They were taken for an ovarian tumour, and eight pints of fluid were evacuated by tapping. She had low fever and bowel inflammation. There was dysuria before tapping. In the left side, a hard mass could be felt behind the uterus, which was thought to be an ovarian tumour, probably multilocular. An incision was made, and a cyst was found which was adherent in front. It was tapped; in the cavity left, no intestine could be felt, and a thick membrane could be distinguished betwixt the finger and the viscera. In the left ovary was a blood-cyst. The right ovary was removed, and hemorrhage occurred from the sac. The vessels could not be tied, so the abdomen was closed. The case was dressed antiseptically, and did well; in a day or two, pyrexia set in, and the contents of the sac were let out, and found to consist of blood, sweet and not putrescent. The temperature fell, its rise being due to the tension within the sac. Cysts were found in the broad ligaments and in the layer of peritoneum over them.—Dr. WILTSHIRE inquired if any hooklets were found.—Mr. THORNTON replied that none were found.

Cystic Disease of the Thyroid.—Mr. JOHN WOOD brought before the Society a cyst which extended from the middle of the thyroid gland down to the middle of the sternum. It was twenty-four inches in circumference. It overlapped the sterno-mastoid muscles. It was elastic to the touch, and a large venous trunk ran over it. There was no fluctuation. The tumour could be lifted up. It moved in deglutition. The superior and inferior thyroid arteries were large and pulsating. Small hard nodular masses were felt along the veins. There was great tension in the cyst. It occurred in a female aged 28, who was pale and languid. It had existed fourteen years, and had grown rapidly of late. The cyst was emptied by the aspirator, and forty ounces of dark fluid

were drawn off. Depression of the tumour followed. The needles were connected with a galvanic battery, but the tumour re-formed. Then, thirty-six ounces of fluid were drawn off, and the cyst was injected with iodine and glycerine, but it refilled. Darting pains set in, with giddiness and palpitation; and the woman begged to have it removed. It was removed antiseptically. The operation and the after-history were described by Mr. Wood with much exactitude. The woman is now nearly well. A drawing was exhibited, which showed the manner in which the blood-vessels made their entry through the capsules of the cyst. In the interior of the cyst were found projections, probably portions or remains of old partition-walls. The lining membrane otherwise was smooth.—The PRESIDENT asked as to the histological characters of the cyst.—Mr. WOOD replied that it consisted of ordinary glandular elements, but that a more searching examination should be made.—Mr. LENNIX BROWNE said such cysts were formed usually by colloid growth breaking down.—Mr. SPENCER WATSON had met a like case, where granular corpuscles were found in the fluid removed by tapping.

Malformation of the Heart: Large Aperture in the Septum of the Auricles.—Dr. PEACOCK showed a specimen removed from the body of a girl aged 10, who was admitted into St. Thomas's Hospital on November 28th, 1876. She had always been a puny delicate child, and was slightly cyanotic, the lips being purple and the face flushed; but the hands and feet were not livid. She suffered from dyspnoea, and had some oedema of the lower extremities. The temperature was generally below the normal standard; a loud systolic murmur was heard more particularly at the upper part of the sternum, and a decided purring tumour was felt over a large space around the left nipple. She died on February 24th, 1877. On examination after death, the heart was of large size, but the enlargement was rather due to dilatation than to hypertrophy. The pulmonary artery was very large; the aorta, on the contrary, throughout its thoracic portion, was unusually small. In the septum of the auricles, there was an opening sufficiently large to have allowed the passage of a florin. The foramen ovale was entirely closed, and the ductus arteriosus was also impervious. There was no material valvular disease. The lungs were very dark, firm, and fleshy. The case was interesting: first, as an example of a very considerable congenital defect in the septum of the auricles, with, however, complete closure of the foramen ovale. A case very similar is reported by Rokitsansky in his recent work. Secondly, it was interesting from the very slight degree of cyanosis which had existed during life, notwithstanding the very free communication between the cavities of the auricles; the slowness of the cyanosis being doubtless due to the absence of any valvular disease causing obstruction to the flow of the blood from the right ventricle.

Imperfect Muscular Development of the Septum Ventriculorum.—Dr. PEARSON IRVINE showed a specimen of imperfect development of the septum of the ventricles. It was taken from the body of a man aged 50, who died of phthisis, and was not known to have had syphilis. During life, the man had a systolic murmur over the left heart, this murmur not being heard in the axilla. After death, it was found that the upper part of the ventricular septum was membranous over a triangular space an inch long, with its base over the "undefended spot", which, so to speak, was unnaturally large. Here the wall had yielded into an aneurismal pouch, which projected into the right ventricle, and was big enough to admit half a large hazel-nut. One segment of the aortic valve and the large flap of the mitral were attached to the orifice of the pouch in the left ventricle, and one cusp of the tricuspid was attached to the most prominent part of the projection into the right ventricle. The aneurismal pouch was thus at that part of the ventricular septum which is last developed, and where complete imperfections are most often found. Dr. Irvine thought it likely that the aneurismal pouch was produced by the dragging of the cusp (attached in its usual position) on a membranous septum, as well as to the blood-pressure on the latter. The sac thus dragged upon had also displaced the adjacent aortic segment, and in consequence the orifice of its opposite coronary artery was completely unprotected by valve, and was distorted and dilated. The systolic murmur heard over the heart must have been due to eddying of blood-currents in the aneurismal dilatation of the membranous septum.—Dr. DOUGLAS POWELL said the adhesion of the tricuspid flap might be due to disease and not be primary.—Dr. IRVINE said that the chordæ tendineæ were not affected.—Dr. FREDERICK TAYLOR took Dr. Powell's view.—Dr. GREENFIELD took the same view, or it might be an aneurism of the undefended space of Dr. Peacock.—Dr. PEACOCK said that it was probably a malformation. The fold was expanded into a sac, and thus might be described as an aneurism.

Thrombosis of the Vena Cava, with Secondary Thrombosis of the Portal Vein.—Dr. SAMUEL WEST described the course of the disease

in a girl aged 17. Her legs swelled, not from the feet upwards, but generally. Then the arms and face became swollen. The left leg grew less and the right larger. Then came shivering fits, with suppression of urine, and some dyspnoea. Thrombosis with secondary nephritis was diagnosed. Ascites set in, indicating thrombosis of the portal vein. On *post mortem* examination, the diagnosis was confirmed. The abdomen was full of fluid. There was no peritonitis. The veins were enlarged, especially the anastomoses of the portal vein. A vein passing to the umbilicus was of the size of a goose-quill. There were old thromboses in the portal and mesenteric veins. The liver was small and its surface granular; the spleen was enlarged. There was an abscess behind the right kidney. There was a thrombus in the vena cava, which extended down to the common iliac. The questions which arose were these: What was the relation of the thrombus in the vena cava to that in the portal vein? and what the relation of the nephritis to the thrombus in the vena cava? He thought both were secondary. The cirrhosis of the liver was secondary to the portal thrombosis. Large granular cirrhosis of the liver is regarded as associated with portal obstruction.—The PRESIDENT said the case was one of great interest. Was there any urgent diarrhoea? In a like case he had seen, there was diarrhoea. The patient recovered after free leeching at the anus.—Dr. WEST said there was diarrhoea as a late symptom.—Sir JOSEPH FAYRER said he had seen a number of cases like this where there was malarious poisoning. The spleen became enlarged, and there was "the splenic cachexia", and thromboses were common after surgical operations and many diseases. Thromboses were found in various parts.

Aneurism of the Right Auricle.—Dr. WICKHAM LEGG exhibited such a lesion. It occurred in a person with emphysema and dropsy. There was a projection of the size of half a marble; it contained an old coagulum. The cavity communicated with the right auricle. There was no fatty degeneration. As to its etiology, there were two hypotheses possible: one that it was congenital, and the other that it was due to interauricular pressure on the undefended spot. It was very rare.

Melanotic Liver.—Dr. LEGG showed a melanotic liver which came from a female aged 39, who had an eye cut out previously for some disease, which, on investigation, was found to be a melanotic sarcoma. On *post mortem* examination, it was found that there was no return of disease in the other eye or in the brain; but there were growths in the pleura, pericardium, peritoneum, and omentum. In the liver were pigmented traces of spindle-celled sarcoma and colourless patches of round-celled sarcoma. The lower portion of the liver was the least affected. It was the largest liver ever shown to the Society, weighing twenty-eight pounds.—Mr. SPENCER WATSON asked if the first growth was outside the sclerotic.—The answer was, that it was inside.

Ulceration of a large Biliary Calculus from the Gall-Bladder into the Duodenum.—Mr. A. E. BARKER exhibited a biliary calculus resembling a green walnut, which was found in the ileum of a lady. It weighed five drachms, and measured four inches by four inches and a half. There were other small calculi. The duct was blocked, and the gall-bladder became adherent to the duodenum. Through this adherent part the stone had, by producing ulceration, found its way into the bowel and descended as far as the ileo-cæcal valve.

Sequel to a Case of Cancer of the Tongue.—Mr. LENNIX BROWNE related the sequel of the case of the patient who had been exhibited at the last meeting of the Society, suffering from cancer of the tongue invading the tonsil. Three days afterwards, he had been attacked with another violent hæmorrhage, which was somewhat arrested, though slight sanguineous oozing continued to occur for some days whenever food was taken. The patient became very weak, and the sloughing considerably extended. Early on the morning of the present meeting, he had died after a very short attack of suffocation which awoke him from sleep. Most unfortunately, a necropsy had not been permitted; but a portion of the tonsil and of the tongue were brought fresh to the Society, in order that they might be examined under the most favourable circumstances by the Morbid Growths Committee, to which they were referred.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 7TH, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Gunshot Injury of the Elbow-joint.—Mr. HORNSEY CASSON related the case of a Circassian officer, whose elbow was smashed by a Russian bullet, which lodged in the condyles of the humerus. An old servant had been vigorously sucking the wound to extract the bullet, but without success. The bullet was removed, and also the loose pieces of bone; complete resection not being attempted for want of the requisite

appliances. The case was treated antiseptically, and did well. The arm was put up at a right angle; and in six weeks there was free movement of the joint, with some power of rotation.—The PRESIDENT and Mr. MAUNDER spoke; after which Mr. CASSON replied.

The System of Drainage existing in West End Houses, and Cases of Zymotic Diseases arising therefrom.—Dr. FITZPATRICK read a long and interesting paper on the above subject. Diagrams showing sections of houses with their forms of drainage were used to illustrate the subject. The arrangement of West End houses are well adapted for the removal of filth, but are apt to poison the inmates with sewer-gas. Sewer-gas is a product of decaying matter, and is readily absorbed by water. It is apt to enter houses by the water-closets. In too many instances, the soil-pipe of a house passes underneath it. Frequently the waste-pipe of the cistern opens directly into the soil-pipe or drain. The rain-water pipes often enter in the same manner. By such means, sewer-gas mixes its pestilential breath with the odours of the flowers in the conservatory. Traps are used to interpose a stratum of water betwixt the house and the sewer. The D-trap is bad; is, in fact, a little cesspool. The proper drainage of a house was then described. Disconnection should always be attained; and the ventilating-pipe should be of the same diameter as the soil-pipe. Cases of zymotic disease clearly traceable to defective drainage were then related; the disease not spreading when the drainage was looked to. Six points should be attended to in sewerage. 1. Is there a D-trap? 2. Are the water-closets old and foul? 3. Is the ventilating-pipe carried to the roof? 4. Are the water and other pipes disconnected with the soil-pipe? 5. Are the drains under the house of glazed tile? 6. Is there a good syphon-trap betwixt the house and the main drain?—The PRESIDENT, Dr. BROADBENT, Mr. MAUNDER, Dr. EASTON, Mr. OWEN, Dr. SYMES THOMPSON, Mr. HORNSEY CASSON, and Dr. DANFORD THOMAS spoke; after which Dr. FITZPATRICK replied.

OBSTETRICAL SOCIETY OF DUBLIN.

SATURDAY, DECEMBER 8TH, 1877.

THOMAS DARBY, F.R.C.S.I., President, in the Chair.

Fibrous Polypus.—Dr. McCLINTOCK exhibited a small specimen of this disease, which he had removed from one of his patients. The woman had four years previously been the subject of an exactly similar tumour, which had been removed.

The Influence of the Uterus in Eye-Diseases.—Mr. H. R. SWANZY read a paper on this subject. He said that most eye-diseases were dependent on some distant organs, such as the heart, kidneys, spleen, and the uterus. Up to the present, very little was known concerning the relationship existing between the eyes and the uterus. He thought that this was due chiefly to the fact of few ophthalmologists being experienced gynaecologists, and *vice versa*. The first disease which Mr. Swanzy brought under notice as having its primary cause in the uterus was iritis, occurring in young girls from about the eleventh to the seventeenth year of age—*i.e.*, within a period varying from two or three years prior to the establishment of menstruation up to two or three years after they commenced to menstruate. Mr. Swanzy was unable positively to connect this disease of the eye with the uterus, but was inclined to believe the uterus the starting-point of the iritis, for three reasons. 1. Iritis was extremely rare at such an early time of life, unless dependent on congenital syphilis, or secondary to corneal diseases. 2. He had never seen a similar case in the male. 3. When the disease was found to occur with a certain frequency at a time of life when the uterus was approaching maturity or had lately reached it, and when all other causes were excluded, the inference was fair that the uterus had given rise to the iritis. The form of iritis in all these cases was similar; there was little or no pain, and but little vascular injection of the eye or photophobia. The treatment Mr. Swanzy used in these cases was chiefly local during the acute stages of the inflammation; and, when the inflammation had subsided, he gave iron. Inflammation of the optic nerve and retina might depend on disturbances of menstruation. In 1873, Mr. Swanzy had under his care a girl aged 19 suffering from neuro-retinitis, whose menstruation was sparse and painful, and in whom the eye affection always became aggravated at the monthly periods. Cases of optic neuritis had been seen where menstrual disturbances had gone before. Von Gräfe recognised the existence of such a connection. Mooren had seen cases of neuro-retinitis after suppression of menstruation, and he was of opinion that retroflexions of the uterus and ovarian tumours might give rise to the same affection. Atrophy of the optic nerve had been noted repeatedly by Pagenstecher as occurring in women who had suffered from severe menstrual disturbances, which he regarded as the cause of the eye-disease. Retinal apoplexies were sometimes the consequences of cessa-

tion or suppression of the menses. Kopia hysteria had till lately been classed among eye-diseases, but it was now known to be nothing more than a symptom of an uterine disease. It was not a common disease; and it was only quite lately that it had been fully described by Professor Förster in his article in von Gräfe and Sämisch's new *Handbook of Ophthalmology*; and the pathological conditions of the uterine apparatus invariably found accompanying it by Professor Freund of Breslau were mentioned by him. Dr. Freund had found, by means of a large number of *post mortem* examinations of women who had complained of these eye-symptoms, that they were uniformly affected with uterine disease, which he claims to have been the first to have recognised.—Dr. KIDD considered the relationship that existed between the eyes and uterus to be most important. He said that all women had a feeling of delicacy in their eyes during the puerperal state.—Dr. MACAN thought that when the state of the uterus during pregnancy was sometimes accompanied by loss of sight, it was easy to conceive that lesser affections of the uterus might also lead to less severe disturbance of vision.—After some further remarks by Dr. MacSwiney, Dr. Henry Kennedy, and the President, Mr. SWANZY replied.

Treatment of Post Partum Hemorrhage.—A paper on the treatment of *post partum* hæmorrhage by the injection of hot water into the uterus was then read by Dr. ATTHILL. He said that, of course, in *post partum* hæmorrhage, the most valuable means of stopping bleeding was the perchloride of iron; but, in cases where practitioners objected to the use of this styptic, and where the perchloride could not be obtained, he strongly recommended the trial of hot water injections into the uterus. Dr. Atthill approved of the routine treatment by cold in cases where a sudden loss of blood occurred in an otherwise healthy woman, but he strongly disapproved of it in cases where the patient had been debilitated by previous disease, or exhausted by frequent, though it might be small, losses of blood. He recorded the cases of two women with whom he had tried his method with the most satisfactory results. He considered that the injection of hot water powerfully stimulated the uterus to contract, and thus rapidly checked the hæmorrhage, and thought that it even acted as a general stimulant. The effect on the pulse in the cases in which he tried this method was most marked; indeed, the pulse was affected more rapidly than by the hypodermic injection of ether, and it did not flag again. Dr. Atthill would give two directions to those trying the treatment. 1. The water used should be at a temperature of 110 deg. 2. The tube of the syringe used should be passed up to the fundus of the uterus.—The PRESIDENT agreed with Dr. Atthill that the injection of cold water was not always reliable. He had no experience himself of the use of hot water in such cases.—Dr. KIDD thought the suggestion a most important one on account of the ease with which hot water could always be obtained.—Dr. McCLINTOCK had occasionally ventured to follow Baudelocque's suggestion of applying warmth to the sacrum and pubes, but had never tried the injection of hot water. He was encouraged to try the method recommended by Dr. Atthill, but should prefer to use the cold first, as the warmth would have an additional power of giving a shock to the uterus after the stimulating power of the cold had been exhausted.—Dr. ATTHILL replied; and the proceedings then terminated.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 4TH, 1878.

ROBERT McDONNELL, M.D., F.R.S., President, in the Chair.

Restoration of the Eyelid after Excision for Intractable Ulceration.—Mr. E. W. COLLINS read a paper on this subject. He gave the following history of a case which had come under his notice. S. D., aged 68, was admitted to the Jervis Street Hospital in last March. He was an asthmatic, intemperate man. There had been no history of syphilis. He complained of a small pimple on the lower lid of his left eye. This pimple had appeared seven years ago. It was for a long time painless, but about the time of his admission it became very painful. It ulcerated in a short time. It bled frequently, and at regular intervals. This ulceration gradually spread, till the whole lid was involved. The palpebral ligament and the cartilage of the lid were engaged; this being shown by the fixity of the lid. There was no glandular enlargement. The diagnosis made was rodent ulcer. Mr. Collins determined to remove the entire lid with the knife, preferring that method to the use of caustics. On March 8th last, the operation was performed; the entire lid being cut away. On account of the deformity caused by the operation, plastic aid was decided upon. Dieffenbach's method was adopted; but, instead of making the edges of the cut straight, Mr. Collins cut them in a curved manner. A thick flap was dissected up over the wound, and the parts were then covered with salicylic dressings. Erysipelas broke out in the ward in which the man was placed, and he

was attacked; however, no harm was done, as the flap was not at all injured. The fourteenth day after the operation, Mr. Collins commenced skin-grafting the raw surface; this process was repeated every third day till the whole surface was healed. The man left the hospital in a month after admission, being now perfectly well. The cicatrix which marked the place from which the skin was taken was very slight; in fact, it was almost quite imperceptible, and it was only on very close inspection that any sign of the former condition of the lid could be guessed at. Mr. Collins then entered into the pathological conditions of the ulcer; he had been unable to examine it microscopically on account of an accident having occurred to the specimen. He did not agree with Mackenzie (who disapproved of any plastic operation after excision, especially of the lower lid, giving as his reason that, if left to itself, the deformity would be slight), as he could not imagine the deformity being slight after the removal of an entire eyelid. Mr. Collins considered that the success of the flap very much depended on its thickness and on its form, so that it might lie in its new bed without being subject to any tension.—Dr. BIGGER knew Dieffenbach, and had often seen him perform the operation. The chief feature about Dieffenbach's operations was the immense number of pins he used in fixing the flap. He considered any operation beneficial which would do away with the unpleasant appearance caused by the disease. His experience of such cases was that in all instances, no matter how well the operation had been performed, there was a narrowing of the aperture, and he considered Mr. Collins singularly fortunate in having prevented this.—Dr. KENNEDY approved of the use of caustics externally, and tonics internally. Hemlock he had seen used in similar cases with great benefit.—Mr. RICHARDSON quoted the opinion of Sir James Paget to show that no epitheliomatous cells whatever existed in true rodent ulcer.—The PRESIDENT regretted that there was a great deal of confusion and doubt existing about ulcers of the eye. He considered the term Jacob's ulcer a very wide one.

Extraction of a Foreign Body from the Left Leg.—A paper on this subject was read by Mr. F. F. PORTER, who gave the history of the following case. In June 1877, a little girl aged 13 came under his observation. She had been running down some stairs about six weeks before this date with a crochet-needle in her hand, when she fell, and, the needle breaking, a large portion of it was pushed into the leg just below the popliteal space. The needle could readily be felt. She had been under treatment for six weeks previously, but no steps had been taken to remove the foreign body. Mr. Porter found the position of the foreign substance by means of a magnetised needle. He cut down on it, and removed it. The case turned out satisfactorily in every way.—The PRESIDENT considered the magnetised needle a most valuable aid to diagnosis, but said that the test was such a delicate one that it was difficult in its application.

Deformities of the Bladder, with Experiments.—Mr. WHEELER read a paper on deformities of the bladder, and operations for their removal; and described experiments to test the length of the intervals between the absorption of medicines and their excretion by the kidneys; as well as to test the influence of certain drugs on the secretion of vesical mucus. The chief interest of this paper consisted in the history of some cases which Mr. Wheeler had under his care in the City of Dublin Hospital, in which he had operated with good results; also for a list of interesting experiments made by him, which were in every way satisfactory.—Mr. R. MACNAMARA considered the paper valuable; and moved the adjournment of the debate.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 19TH, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Spontaneous Amputation.—Dr. KIDD showed a remarkable instance in a hydrocephalic fetus, with double hare-lip and cleft palate. The fingers and toes on the right side were deformed. A fine cord passed across the top of the fingers of the right hand. The tips of the fingers were cut off, and the fingers had united with each other. A band of attachment passed from the dorsum of the great toe to a circular indentation above the right ankle. The contraction of the lymph was gradually causing amputation of the leg at the site of indentation. Dr. Kidd said that in this case the amputation which had taken place in the upper extremity illustrated the late Dr. W. F. Montgomery's views as to the etiology of spontaneous amputation, while that in progress in the lower extremity bore out the views held by Professor Gurlt of Berlin, who considered these amputations to be produced by the contraction of lymph-bands connected with the amnion.

Melanotic Carcinoma.—Dr. E. H. BENNETT presented a set of specimens of this variety of carcinoma from the sole of the foot, the popliteal space, and the groin of a boy aged 11. He had been ad-

mitted to hospital on June 15th, 1877, complaining of a painless swelling behind the left knee. It appeared that three weeks previously he had been struck in this situation by a handball at school. Closer examination showed a globular mass of greatly enlarged glands in the corresponding groin, non-inflammatory, but evidently the result of some new growth. The sole of the same foot was distended, the fascia being drawn tight. A malignant tumour had clearly developed under, and probably from, the plantar fascia. The evolution of the three tumours had, therefore, occurred almost synchronously. The affected limb at last assumed the appearance of phlegmasia dolens, although no pain was felt until a fungous condition of the swelling on the foot set in. The lad died, owing to the supervention of hectic with diarrhoea, a month after the increasing weight of the limb prevented his going about. There was no trace of thoracic or other visceral disease, although the glands up to the thorax were all secondarily engaged. The thymus gland was affected; but the mesenteric glands and those in the opposite iliac fossa were absolutely healthy. The tumours were in parts cystic in character, with spots of black pigment, which proved, on microscopic examination, to be melanotic cells arranged in the pattern of a carcinoma.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SEABURY AND JOHNSON'S PLAISTERS.

MESSRS. SEABURY AND JOHNSON, pharmaceutical chemists, of 28, Red Lion Square, London, and of New York, have forwarded to us specimens of their specialities in plaisters. Their salicylated isinglass plaister, applied by wetting and spreading on strong waterproofed cotton-cloth, is alleged to possess the combined qualities of strength of material, and to be antiseptic, non-irritating, susceptible to the slightest wetting, very adhesive, quickly applied, and waterproof. They further state that it can be applied without heat, that it does not spoil in any climate for any length of time, and that it can be sold at a very moderate price—viz., five-yard rolls, eleven inches and a half wide, at six shillings; and one-yard rolls at one shilling and sixpence. It is prepared by impregnating the meshes of strong cotton-cloth with India-rubber; this adds strength to the tissue, and makes it perfectly waterproof. A solution of chemically pure gelatine is then charged with salicylic acid and spread on the waterproofed cloth, thereby rendering it non-irritating, antiseptic, susceptible to the slightest moisture, and very adhesive. From the specimens of this plaister which have been submitted to our notice, we can recommend its employment by the surgeon in hospital or private practice, as by its use the trouble, etc., of applying the ordinary adhesive plaister, with its irritant effect on many skins, is got rid of. All that is necessary to do in using it is to damp the surface with a sponge, when it adheres at once. Not the least advantage is, that it is mildly antiseptic. Next among their pharmacopoeial and medicinal plaisters in India-rubber combination may be found opium, belladonna, capsicum, blister camphorated, Burgundy pitch, mustard, and many others. The mustard plaister spread on cotton-cloth appears to be a most admirable preparation. The distinctive feature of these plaisters consists in utilising India-rubber as the basis on which they are spread, which gives them greater pliability and ready adhesion without heat or moisture, whilst the process of rendering them porous enables them to be worn a greater length of time without their becoming detached as the effect of perspiration.

HAY'S PREPARATIONS OF GINGER.

MR. W. HAY, operative chemist, of 4, Regent's Terrace, Anlaby Road, Hull, has forwarded to us three preparations of ginger: 1. A tincture of the finest Jamaica ginger, made with great care after the formula of the *British Pharmacopæia*; 2. A transparent essence entirely free from resin, being a solution of the essential oil; 3. A resin of Jamaica ginger of the consistence of treacle. These preparations are worthy of commendation for certain special excellence, especially the resin, which possesses in a remarkable degree the pungency and flavour of ginger, a very small portion when placed on the tongue inducing, as it slowly melts away, a biting sensation of warmth, etc., in the mouth. As an adjunct to aloetic pills and compounds, or to the preparations of senna or rhubarb, it would probably usefully assist in diminishing the tendency to griping.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 23RD, 1878.

THE INFECTIVE PROCESSES OF DISEASE.

Now that our readers have had the opportunity of perusing the admirable lectures delivered by Dr. Burdon Sanderson at the London University, we may with advantage refer to some of the principal facts mentioned in them, and point out briefly the conclusions to which they lead. Those of our readers who have already made a careful study of the four lectures must feel deeply indebted to Dr. Sanderson, not only for devoting much time and energy, in order to make himself thoroughly acquainted with the mass of foreign literature bearing on the questions he has so ably discussed, but especially for stating shortly and in simple language the results of his own and other investigations: results at which many, for want of time, granting they had the inclination, would not easily have arrived for themselves.

From a careful study of the lectures, we believe that three facts of especial importance may be noted. 1. Ordinary bacteria are in themselves innocuous when introduced into a healthy organism, probably because of a colytic action of the blood and tissues. 2. When bacteria are provided with fluids, either in or out of the system, which have lost their colytic action, they, as the yeast-plant in the presence of grape-sugar sets up the vinous fermentation, by their growth and development set up fermentative changes, the result of which is the production of a virus, which, when it finds its way into the bloodstream, causes septicæmia. 3. The growth and development of specific organisms in the system cause specific diseases. Keeping these facts in mind, it is evident that it is of the greatest moment that septicæmia, in its cause and effects, be understood to be something very different from such a specific disease as splenic fever; and that the theory employed to explain the *rationale* of the latter—the theory of *contagium vivum*—is very different from the germ-theory.

Septicæmia, being the result of a virus elaborated by bacteria, a virus which does not increase in the system, is only fatal when a sufficient quantity has been introduced; whereas such a specific disease as splenic fever results from a specific organism which increases in the system, and proves fatal when it has sufficiently multiplied. Every one is now so well acquainted with splenic fever and with the already famous organism *Bacillus anthracis*, which produces it, that it would be out of place at any length to refer to it; but, as it is the first specific disease which we can without doubt or hesitation attribute to a specific bacterium, it must ever be alike interesting to the physician and the scientific investigator. Since proving that, when an animal is inoculated with the spores or rods of *Bacillus anthracis*, splenic fever is sure to result, Mr. Lister has shown that another specific organism—*Bacterium lactis*—always leads to a particular fermentation, the lactic acid fermentation; and, just recently, Dr. Klein has made out that the so-called pig-typhoid is produced by another specific organism similar in its growth and development to the bacillus above mentioned. If we have at last found a bacterium which we can see and handle, which we can watch passing through all its phases on the warm stage of a microscope, and if, at any moment, by introducing it into an animal, we can set up a distinct disease, and one only, may we not hope that, at no distant period, Dr. Sanderson may be able to tell us, in a similar course of lectures, that many of the maladies met with in every-day

practice are due to similar causes; that many of them are the result of the growth and development of specific organisms?

Dr. Sanderson, having considered the effects of septicæmia, passed on to the causes; and, we think, clearly made out that probably all but the nervous symptoms and pathological appearances accompanying and resulting from the introduction of a virus into an organism, are due to the disintegration of the colourless blood-corpuscles, leading to the formation and deposit of clots in the smaller vessels of the mucous membranes.

Another important consideration was the relation between septicæmia in the lower animals to the septicæmia we have accompanying—*e.g.*, a compound fracture in man. The chief difference is, that the virus, instead of being produced outside the system, it may be from an infusion of muscle in a glass beaker, is elaborated at the seat of the fracture and reaches the blood through the lymphatics. Here, as before, two things are necessary: in the first place, we must have tissues or fluids which have lost their colytic action; and, into contact with these, we must bring bacteria. Dead tissues alone are not enough; for, if kept free from bacteria, they remain unchanged. Bacteria alone are not enough; for, without dead tissues, they remain inactive.

This naturally leads us to the germ-theory, which teaches that putrefaction is the result of fermentative changes set up in a wound by living particles always found in the atmosphere. We may discern in the course of time that there are different kinds of putrefaction, and that each is set up by a special organism, just as the lactic acid and vinous fermentations are caused by specific ferments.

For the antiseptic method of treating wounds, no one has said so much in this country as Dr. Sanderson; but we fear much of the good which might have resulted from his strong testimony in its favour has been crippled by the statements which followed, showing that he was not able to endorse the theory on which the method has been built up. Dr. Sanderson, if we understand him aright, thinks that bacteria have not so much to do with putrefaction in a wound as the organised fluids and tissues in and around the wound itself; yet he believes that it would be impossible to have putrefaction without them, just as it is impossible to have septicæmia without them. In a fracture, compound or simple, there are always broken down tissues enough and extravasated blood enough, so that it is only necessary to allow bacteria to come into contact with these in order to have fermentative changes set up; but it seems that Dr. Sanderson believes that bacteria are always present; hence we should always expect fermentative changes to take place even in simple fractures, and that, if for a short time a wound be exposed to the ordinary air, no harm would follow; and, further, that heaping layer after layer of gauze over a wound cannot be of much use. Why endeavour to keep bacteria out when they are already present? But, if present, how is it that Mr. Lister cannot find them? How is it that clots of blood lying in the wound become organised instead of breaking down, as they always do when, even for a few minutes, they are exposed to the ordinary atmosphere?

Dr. Sanderson offers no explanation, but states that the principles which underlie success are deeper than the surface, and ventures to suggest that free drainage, in order to prevent infectivity; scrupulous cleanliness, so as to prevent the organisms from finding a convenient substratum to develop in; and, lastly, the use of disinfectants, may account for the wonderful results obtained.

Those who think with Dr. Sanderson bring forward in favour of their views the statements made by Volkmann, Fischer, Ranke, and others, which go to prove that bacteria are found in the discharges from antiseptic wounds, and say, further, that the existence of bacteria in the kidneys and other abdominal organs is inconsistent with the germ-theory.

In answer to the latter statement, seeing that healthy blood, when kept from the air, like milk, does not putrefy, and that healthy tissues have a colytic action, may they together not so act on the bacteria that enter them from the liver and kidneys, that they prevent their growth and development? May they not be looked upon as so many

layers of antiseptic gauze protecting the wound from *within*, as the gauze over the wound protects it from the bacteria *without*? If it be not so, how can we explain why one abscess should remain aseptic and free from bacteria when another abscess, only a few inches removed from it, is teeming with bacteria? And how can we explain why for months a psoas abscess should remain aseptic; for there is no drainage before it is opened, and no colytic of any kind comes into contact with the cavity of the abscess after it is opened?

After *bistournage*, there was no putrefaction unless bacteria—not a virus simply—were introduced into the blood-stream, and why then? May it not be that so many bacteria were introduced at a time that they were deposited amongst the degenerated tissues before the blood was able to render them inactive? If the bacteria were introduced some time previously to the twisting of the cord, they might be rendered inactive before a convenient substratum was provided for them, and thus no inflammation, pain, etc., would ensue.

If, then, bacteria do exist in antiseptic wounds, and if they cannot, in healthy patients, reach the wound in an active condition from within, they must from without; but, seeing that, in absolutely aseptic cases, no bacteria are found, we must conclude that, when they were present, it is for the same reason that the most careful experimenter sometimes finds them in flasks which, had sufficient care been taken, would have remained sterile. Some time ago, one of the writers who stated that bacteria were found under antiseptic dressings, confessed that he had mistaken small innocuous particles for active living organisms. That bacteria are sometimes present even in Professor Lister's cases, we do not for a moment doubt; but their existence can generally be accounted for, and their presence is invariably accompanied with slight indications of fermentative changes; and such cases, although the results are nearly as good as need be desired, are never to be considered absolutely aseptic. From what we have seen of antiseptic cases, so called in London and on the Continent, we are not surprised to hear that bacteria are sometimes, yea often, if not always, found; that results at all approaching the best results of Mr. Lister are obtained even in the presence of bacteria, is a still stronger argument in favour of antiseptics even in a modified form.

Everyone knows that good results are obtained without following Lister's method; but, as Professor Tyndall has said, the good results are obtained because the surgeons in principle carry out or have anticipated parts of that method; but those acquainted with London hospitals know well that, notwithstanding all the care and cleanliness, pyæmia is far from being extinct.

In answer to the statements about drainage, cleanliness, and the use of carbolic acid, we must say that, in several hospitals, we have seen the freest possible drainage practised, the wounds kept scrupulously clean, and quantities of carbolic acid used, not to mention piles of gauze, and yet no better results than might have been obtained by leaving the wound exposed to the air or simply covered by a layer of dry lint. Nurses and dressers well know that the scrupulous cleanliness for which Mr. Lister so often gets credit, almost entirely exists in the imagination of those not *practically* acquainted with the method. In wards where the antiseptic treatment is not carried out, or where it is practised in a mechanical way, double the care and oft-repeated dressings at the best produce results which cannot for a moment be compared with those far more easily obtained by practising in an enlightened way the antiseptic method.

THE CHOLERA.

THE latest news from Egypt state that cholera has ceased at Mecca and Jeddah; and that, although the disease has been carried to some as yet undetermined extent seawards towards Suez, cases have not been observed nearer to that town than the quarantine station at Tor. Indeed, it is now doubted whether any cases have occurred at Tor. It would appear to be difficult, in fact, at present, to get at the exact truth respecting the occurrence of cholera on the route of the pilgrims returning northwards by

sea from Jeddah and Yembo; but it may be taken that as yet, either owing to the measures adopted by the Egyptian Government or to the local conditions north of Yembo being unfavourable to the dissemination of the disease, cholera has not to the present shown itself in Egypt.

It is not difficult to predicate the position which this outbreak of cholera in Western Arabia will hold with regard to cholera in India. Towards the close of 1874, cholera became epidemically active in the easternmost districts of Bengal, and in the next two years (1875-76) it spread over almost the whole of Hindostan. Whilst this extension was in progress, the disease extended eastwards from India into Birmah and the countries beyond; and towards the close of 1876 it passed the north-western frontier into Beluchistan and Afghanistan. With the extension of cholera into the countries eastwards of India, the disease being then epidemic over a large portion of our great dependency, the fear arose among epidemiologists in this country that we were probably about to witness another general diffusion of the pestilence, or at least a diffusion which would involve a much larger portion of the world's surface than Hindostan. When Beluchistan and Afghanistan were invaded, the probability became greater, and a westward extension of the malady was looked for with some certainty. For it was highly improbable that a dissemination to the eastwards and the northwards would not be accompanied by a dissemination westwards. A southward extension, it should have been mentioned, involving Ceylon, took place early in the dissemination. In August of last year (1877), the first evidence of a westward extension of cholera was furnished by the importation of cholera into the Gulf of Suez by a French transport ship (the *Corraze*) coming from Saigon, in Cochin China. This ship, it was known, was but a little in advance of the fleet of ships coming from India and the Eastern Archipelago laden with pilgrims for Mecca. That the whole of these ships should escape becoming carriers of the malady which had established itself in the first instance in a French transport, seemed improbable; and those who were familiar with the subject looked anxiously for news of the meeting of the pilgrims at Mecca. Moreover, there was the probability that what had happened in Beluchistan and Afghanistan, had happened also in Arabia, namely, that cholera had extended there direct from India, imported into Hadramant or Gesneh, or both provinces. When, then, in January of the present year, the telegraph wires from Egypt flashed the news of cholera at Mecca and Jeddah, it took no one who had given heed to what had been going on in regard to cholera since 1874 by surprise. By what particular route cholera has been introduced into Western Arabia—whether by the sea-route from the Eastern Archipelago, or by the sea-route from India, Mecca and Jeddah being infected subsequently to Southern Arabia—has yet to be ascertained, and we may have to wait long for the facts.

The great day of the rites at Mecca, in the recent pilgrimage—the assembly at Arafat—occurred on the 15th of December last. The next day, the 16th—the day of “the slaying of victims”—the pilgrimage ended; and the day following the pilgrims began to return homewards. The first defined knowledge of the existence of cholera in Mecca in this outbreak that we yet have dates from December 24th; in Jeddah, from December 25th. At the former date, in Mecca, one hundred and two deaths from cholera were recorded during the day: a significant indication that there must have been a very serious outbreak at the time of the rites. In Jeddah, on the 25th, thirteen deaths from cholera were reported, showing that the disease had been most probably carried to that town by the returning pilgrims flocking into it from Mecca. During the seven days ending December 30th, four hundred and ninety-four deaths from cholera were reported in Mecca; during the six days ending December 30th, one hundred and sixty deaths at Jeddah. It is stated that the different caravans leaving Mecca to the east, west, and north, carried cholera with them. Of the southern caravans, nothing is said. The disease was carried by the northern caravans into Medina; and there, between December 31st and January 5th, one hundred and one deaths were recorded from

cholera. From Medina, the disease was imported into Yembo, where the departure of pilgrims for the opposite coast of the Red Sea and for Suez was for a while put a stop to. There is some reason to believe that, during the stay of the pilgrims at Jeddah and Yembo before embarkation, the disease in a great measure wrought itself out; but it would be premature to believe that they were wholly purged from it.

The detailed history of this outbreak in Western Arabia cannot fail to be of the greatest interest when it shall be forthcoming. Unfortunately, the state neither of the Ottoman nor of the Egyptian Government is such at the present moment as to give much hope that the outbreak will be subjected to so close an investigation as might be desired. The disturbed state of the Egyptian provinces and the condition of Turkey have had a most unfortunate effect upon the arrangements of the pilgrims held in quarantine at Tor and Yembo. There is little doubt that the provisions made for them, both as to shelter and food, have been most inadequate; and that they have in consequence been subjected to great sufferings. It is understood in Alexandria that strong protests have been made to the Egyptian and Ottoman Governments on this subject, by the representatives of the different European Governments.

CONTEMPLATED CHANGE IN THE CONSTITUTION OF THE INDIA MEDICAL SERVICE.

It has long been known that a measure to abolish the double medical administration of the British and India Medical Services has been incubating in India. We have reason to believe that this measure has been for some time before the authorities at the India Office, and that ere long the new scheme will be published. No one can deny that, on the face of it, it is absurd to have one set of medical advisers for the civil and military administrators for white and another for black troops, as if the general principles of sanitary science were so essentially different for the two races that separate experts were required to expound them. We have reason to believe that all the medical officers of the India services will be called on to elect whether they will serve in a civil or a military capacity. The civil medical administration will be placed under officers selected exclusively from the India services, and will have nothing to do with the military branch of the service. Those who elect to serve in the army will, as a matter of course, be under military medical officers selected entirely from the two services, British and Indian; and the troops, without distinction of race or colour, will be under one sanitary authority.

We see that some alarm has been created in the minds of the India services by a rumour regarded in India as "ominous", that all promotion is to cease pending the promulgation of the new scheme. We think the fear is groundless, and that, if any such notice have been given to the authorities in India, it has reference only to promotion to administrative rank. It would be a flagrant breach of faith on the part of the Government of India to delay the promotion of a single surgeon for one hour beyond the promised twelve years, to which the Government is pledged on the faith of a Royal Warrant, which the Indian Government, unlike the War Office and Horse Guards, have always respected. We presume that medical officers now in India electing to serve in the military branch, will do duty either with British or with Native troops, as the exigencies of the service require. They cannot, of course, against their will, be made to serve out of India; whether those who, after the publication of the new scheme, enter the India service will, on selecting the military branch, be under an obligation to serve at home, we do not know.

One thing we venture to hope is, that the Government of India will keep in mind, in framing the new scheme, so to shape it as not to injure the prestige of the service. It is notorious—we have only to look at the London and Netley marks to see it—that the India service commands the ablest men in the market; and we trust that Lord

Salisbury and his advisers will not, under evil counsel, suffer the medical service of India to be dragged into the mire pit in which, thanks to the bad faith and the cynical indifference of those in high places, the medical service of the British Army now flounders.

THE FACTORY ACT AMENDMENT BILL.

WE specially call the attention of our members to the unsatisfactory provisions of the Factory Act Amendment Bill affecting certifying surgeons. These provisions have been fully discussed in the papers issued in the JOURNAL of last year, and in the report of the Parliamentary Bills Committee. Among the most obnoxious of them was the proposition of paying a fee of sixpence as the certifying fee for factory children. This, it will be remembered, Mr. Lowe, in remonstrating with Mr. Cross last year on the subject, aptly described as a base fee; Mr. Cross's resolution to indulge certifying surgeons with none other than base fees has not, however, been shaken. If any of his medical or surgical constituents have any influence with him, we trust that they will not fail, at this critical moment, to write to Mr. Cross and to beg him to give some fair consideration to the claims of, perhaps, one of the most useful body of public servants, and to abstain from doing them so great an injury and offering so pitiful an insult to the profession as are implied in the existing clauses of this Bill. Mr. Lyon Playfair and Dr. Cameron will move amendments on the subject, and we hope all the members will write to their representatives asking them to support the action of Mr. Playfair and Dr. Cameron. The chairman of the Parliamentary Bills Committee has, in pursuance of a resolution of the Committee of last year, been in active communication with the latter gentlemen during the last few days, and they have undertaken respectively to impress upon Mr. Cross the amendments most desired by the Scotch and English certifying surgeons; they will, however, require all the assistance which can be given them from without as well as in Parliament.

WE have reason to know that the course which the Government will take this session in respect to Medical Reform is not yet decided.

THE St. Mary's Hospital Medical Society has issued cards for a *conversazione* on the 27th instant, at 8 o'clock.

AT an inquest held recently at Harpur Hill, it was found that only four of the jurymen, when they were requested to append their signatures to their verdict, could write their names.

A DEPUTATION from the Municipal Corporations Association waited upon Mr. Slater-Booth on the subject of the registration of infectious diseases as practised in Bolton, with the view of giving similar powers to those possessed there to other towns. In reply, the President of the Local Government Board concurred in the desirability of such a measure, but wished to take further medical opinion on the subject.

AT a recent meeting of the Academy of Sciences of Paris, M. Cyon presented a note showing that there are intimate relations between the semicircular canals and the centres of innervation of the muscles of the eye. He considers that the sensations caused by excitations (through the otoliths) of the nerve-endings in the ampullæ of these canals serve, through movements of the head, to form our notions of the three dimensions of space.

A COLLECTION of ambulance-wagons, their sides and felt covers bearing conspicuously the Red Cross of Geneva, has been placed on the wharf of the Royal Arsenal. The ambulances are very light on their wheels, but their construction is simple compared with that of some ambulances which have been occasionally on view at the Arsenal, and they appear well calculated for hard service. The Royal Carriage Department has received an order for a number of medical service

wagons, elaborately fitted with all requisites of the surgery and operating-room adapted for field use. This carriage and its fittings have been designed and improved by the united labours of many eminent and experienced military officers and medical men.

THE CONJOINT SCHEME.

THERE will be another meeting of the Committee of Reference, appointed under this scheme, at the College of Surgeons, on Monday next, the 25th instant, to further consider the reports to be made to the several medical authorities on the regulations for carrying out the scheme.

ESSAY PRIZES.

IT is a remarkable fact, as showing how little such prizes sometimes do to provoke research, that no award for the Triennial Prize of fifty guineas, offered for competition by the Council of the Royal College of Surgeons to its members, has been made since 1858, when it was awarded to Dr. George Harley. According to the *Calendar*, it appears that no dissertations were received in 1861, 1867, or 1873, and no award made in 1864 or 1870. The report for 1876 appears to have been omitted on the part of the compilers of this publication. The subject for the prize to be awarded in 1879 is "The Anatomy and Physiology of the third, fourth, and sixth Nerves, as illustrated by observation and experiment in health, and by reference to the effects of injury and disease". Candidates must be members of the College, not on the Council.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

At the annual meeting of this Society, held on January 24th, the office-bearers were elected for the year 1878. *President*: Peter Royle, M.D. *Vice-Presidents*: J. Thorburn, M.D.; I. A. Franklin, Esq.; C. H. Braddon, M.D.; D. Noble, M.D. *Treasurer*: J. Stone, M.D. *Honorary Secretaries*: A. Wahlutich, M.D., and J. Broadbent, Esq. *Committee*: W. H. Barlow, M.D.; E. Bishop, Esq.; J. B. Brierley, M.D.; Shelton Daly, Esq.; J. Hardie, M.D.; O. Dean, Esq.; C. J. Rix, Esq.; J. Roberts, M.D.; R. B. Smart, M.D.; W. T. Sinclair, M.D.; J. F. Tatham, M.D.; J. Watson, M.D.

CREMATION.

MR. W. EASSIE, C.E., read an exhaustive paper, at the Society of Arts, last week, on Cremation as practised in many parts of the Continent; and in a very able manner reviewed the work that had been done in this respect in various parts of the continent, and graphically described the apparatus and *modus operandi* of the several exponents of modern cremation. By one apparatus, cremation was completed in two hours, at the expense of three shillings.

THE DENTAL PRACTITIONERS' BILL.

THE Dental Practitioners' Bill was nearly carried through the second reading by a surprise on Tuesday last, Mr. Lyon Playfair having been induced to withdraw his intended opposition by an unfounded statement made to him, to the effect that the Parliamentary Bills Committee of the British Medical Association did not make any objection to the Bill. Bound by the pledge which he had given, upon this statement being made to him, Mr. Playfair was unable to oppose the second reading. Dr. Cameron of Glasgow, with whom the Chairman of the Parliamentary Bills Committee had communicated during the day, kindly rendered efficient service, with other members who were opposed to the plan of this Bill, in succeeding in defeating its second reading. Time will now be given for organising such opposition to this Bill as will, we hope, satisfy the promoters of it that they have no chance of carrying any such measure in the teeth of the wishes of the medical profession. Extensively signed petitions against it are in preparation, and will be presented before the Bill comes on again for discussion. Meantime, we advise our Branches also to petition against the measure, which proposes to degrade the title of surgeon and to lessen the dignity of the character which should belong to that title. We see that the chemists

also are taking the alarm, and they are right. This Bill proposes to put every existing chemist who has ever pulled a tooth in the position to claim the title of (dental) surgeon; and they think it reasonable that their successors in business should all have the same privilege. For that matter, if they have it, there is no reason why their successors should not have it; the latter have as much right to it as the former, and will probably make as good use of it.

DISEASE IN RUSSIA.

As a consequence of the want of precaution in the transport of fever-stricken prisoners and invalid soldiers from Bulgaria to the interior of Russia, it is said that the whole of the interior of European Russia is fermenting with fever, small-pox, and a deadly species of measles, and the contagion has developed in such a regular manner as to leave no possibility of doubt as to its original source. Commencing on the one side with Bulgaria, the disease follows the track of the Roumanian railways, developing in strength at each stage of its progress until, on reaching the central towns of Russia, it becomes a decided epidemic. The second line starts from Odessa, whither all the invalids from the Dobrudscha were despatched in the autumn. The third, and most virulent of all, is the Caucasian track, leading from Tiflis, with its typhus fever in every house, to Penza in the north, where disease has compelled the authorities to close all the public schools and institutes in the town. Along these three lines of evacuation, since the war began, have been conveyed more than 120,000 invalids and prisoners, all more or less stricken or infected with disease.

OPIUM-POISONING SUCCESSFULLY TREATED BY ATROPINE.

THE utility of our knowledge of the physiological antagonism of certain drugs received a practical illustration of a striking character on the 14th instant, at the West London Hospital. A woman had taken, as nearly as could be ascertained, from twelve to seventeen grains of opium in the form of laudanum. This was at 11 A.M. She was sick with an emetic at 11.30, after which she was sent to the hospital. Again she was made sick, had strong coffee given her, and was walked about. At 2 P.M., the respiration was rapidly failing, when Dr. Milner Fothergill made his usual visit. Being familiar with the treatment of failing respiration by the injection of atropine from his experiments performed for the British Medical Association (see the *JOURNAL* for August 4th, 1877), he determined to try a large dose at once, and had one grain of sulphate of atropia injected under the skin of the forearm at 2.15. As was the case with animals, the effect was not instantaneous, and for ten minutes the respiration fell till it became imperceptible. As the woman was becoming very cold (for with the imperfect respiratory efforts in opium-poisoning the temperature falls considerably), she was put into a warm bed, with a hot-water bottle to her feet. About ten minutes more were thus taken up, when the breathing was observed to return—about five shallow respirations per minute, with a deep sigh at intervals. The pupils, from a state of extreme contraction, became widely dilated in a few minutes. The pulse had never failed, being rhythmical, but small, at the very worst. At 4.30, the woman was breathing steadily, 13 to the minute, the respiratory act being long and deep. Her pulse was 132, full, but compressible; while her temperature was still but 97.5, showing how it had fallen. The case progressed steadily without any mishap but a small blister on each leg from the hot bottle. At 8.30, the pulse was 128, the temperature 100.4 deg., and the respirations 24 per minute. She had slept deeply. At 1 A.M., on the 15th, she was able to talk, though not rationally; the respirations 25, temperature 100.3, and pulse 120. The pupils were natural. She was rather restless at times through the night. At 10 A.M., she was conscious and thirsty, but did not complain of much dryness of the throat. The recovery was complete, and no symptoms of belladonna-poisoning ensued from the large dose given. This case will exercise a distinct influence on the future treatment of opium-poisoning; and shows, as Wood points out in his work on *Therapeutics*, that it is not the unconsciousness, but the failing respira-

tion, which is to be dreaded in this poisoning. It illustrates, too, how experiments on animals can be utilised for the benefit of man, Dr. Fothergill's experience inducing him to give the antagonist in full dose at once to arrest the falling of the respiration. The results tend to show that in many cases the atropia has been given in doses too small to be effective. The dose was large, but the results justify it. This is probably the first time that a fatal, or what is thought to be a fatal, dose of one drug has been administered at once, to arrest and antagonise the lethal action of another drug, to a human being. The case illustrates also the danger in opium-poisoning from loss of body-heat. The contrast betwixt the poor woman being dragged about, gradually chilling to a point incompatible with life, and lying in bed calmly sleeping her poisons off, was very striking.

SMALL-POX AT HARWICH.

ONLY one case was admitted to the Temporary Hospital last week; but, as it was one which had developed itself in the previous week, and had not been reported, it can scarcely be considered as having occurred last week; so that, in reality, no case has occurred in the town since the 8th instant, a satisfactory proof that the hospital has done its work well, and that we may not unreasonably hope for the extinction of the disease very soon. Of the sixty-two in the course of the epidemic admitted, thirty-six have been discharged cured; fourteen have died; and twelve remain in hospital, but are convalescent.

EDINBURGH UNIVERSITY CLUB.

THE fourteenth annual meeting of the Edinburgh University Club was held on Wednesday, February 20th, at the Grosvenor Gallery, Dr. Sieveking occupying the chair. The report of the Honorary Secretary showed that the Club now consists of 307 members; that 12 have been added to the lists during the past year; and that 5 have been removed by death. The budget of the Honorary Treasurer gave a highly satisfactory account of the present financial position. The usual quarterly dinner followed, under the presidency of the Right Hon. Lyon Playfair, covers being laid for one hundred and thirty. The Marquis of Hartington was the principal guest of the evening; and this being the first public occasion on which he has appeared before the graduates since his election as "Rector magnificus" of the University, the reception accorded him was of a peculiarly hearty and enthusiastic character. Among other visitors present were Mr. Grant Duff, M.P., Professor Huxley, Mr. Froude, Dr. Acland, Sir George Yool, Dr. Allen Thomson, Dr. Buchanan, Lieut.-Col. Holt, Professor Longmore, etc.; and most of the leading members attended to do honour to the noble Marquis in his double capacity of Lord Rector and honorary member of the Club.

THE JURY OF MATRONS IN CRIMINAL CASES.

WHEN shall we hear the last of this ancient method of determining the question of pregnancy for legal purposes? In the recent trial at Chester, the woman Heeson, who was proved to have destroyed by poison her mother and two of her children, pleaded pregnancy in bar of execution. Thereupon, according to the provision of the criminal law, a jury of women was taken from among those casually present in court (*de circumstantibus*); and they were sworn to try not only whether the convict was pregnant, but whether she was quick with child or not. The learned judge who tried the case very properly directed that the surgeon of the gaol, Dr. McEwen, should be associated with the twelve matrons or discreet women required by the law. He was sworn to assist the jury; and, after due consultation, they returned a verdict that the woman was with child of a quick nature; whereupon, although judgment was passed upon her, her execution was suspended until she had been delivered, and until a reasonable time after that event, or until such a time after that it is proved by the course of nature she could not have been with child at all. The law does not provide for a medical assessor to assist the matrons or mothers taken by chance on these occasions; but few judges now place reliance upon the opinion expressed by them unless it has been confirmed by the

judgment of a medical man. It would be better, in order to prevent mistakes and ensure a proper verdict, that the duty of examining a woman under these circumstances should be assigned to two local medical men nominated by the judge. A short Act of Parliament might be introduced to dispense with the services of the jury of matrons altogether.

HOSPITAL ADMINISTRATION.

THE authorities of the London Hospital would do well not altogether to ignore the statement of Mr. A. S. Crowder of Portland Place, that he and many other residents in the West End, well acquainted by personal experience with the wants and sufferings of the East End, are deterred from contributing to the funds of the London Hospital by the mismanagement of the out-patient department and by the want of due inquiry into the circumstances of patients relieved. The indiscriminate relief afforded by the London Hospital has a pauperising effect on the whole neighbourhood, and by none is this more strongly felt than by the most intelligently charitable persons. Some time since, the London Hospital authorities asked, we believe, the Charity Organisation Society to institute an inquiry into the out-patient relief, and we believe that they also received a report on the subject. Why is not that report published for the information of the Governors, the subscribers, and the public generally? The London Hospital is, it is said, about £20,000 in debt on the last year's operations. We appeal to its managers to put those operations beyond the reach of suspicion as to their beneficence.

SANITARY CONDITION OF HORSHAM.

DR. ASHBURNER has just issued a report on this town, showing that overcrowding, bad drainage, a want of proper hospital accommodation and a mortuary, are causing much injury; whilst he also says that the water-supply is largely contaminated by sewage from pigsties, refuse-pits, and cesspools; that dead bodies have to remain in the same room with the sick and healthy; and that the town is thereby brought under conditions the most favourable to the spread of epidemic diseases. We should have thought that such a catalogue of evils would have stirred up any sanitary authority, and that the local journals would have cried out loudly against such a state of things continuing; but, instead of that, the statement is met with jibes and jeers, and the low death-rate and high birth-rate of Horsham are brought forward to prove that nothing should be done. As a sample of the line of argument adopted, we reproduce the following sentence: "Very much drained towns are frequently most objectionable, whereas other places which continue their primitive systems are stubbornly healthy." Comment on such a sentence is superfluous, and we can only leave the writer to his own meditations.

WAR MEDICAL SERVICES.

ON no occasion, perhaps, has the services of the surgeons of the Red Cross ambulances been performed under circumstances of so much difficulty and danger, so much self-sacrifice, as during the Russo-Turkish war. We fear that the loss of life and suffering from disease among the English surgeons who have given their services in the Stafford House ambulances is unprecedented in any war. The Committee report that their surgeons in Erzeroum, Drs. Ryan, Morisot, and Williams, who were stated by last accounts to be dangerously ill, were recovering, and would be removed to Constantinople as soon as possible. The Rustchuk section was on its way to Constantinople, as the authorities at Varna stated that they have more doctors than were required. The three ambulance sections which accompanied Suleiman Pasha's army on its retreat from Philippopolis to Port Lagos arrived at Constantinople on the 3rd instant. It is very gratifying to know that not only were their ambulances able to render great assistance on the field and during the long retreat, but that many of the wounded soldiers dressed on the field beyond Samarkof were actually brought the entire way in charge of the Stafford House surgeons. At Philippopolis some wounded collected from the fight at Adakeni were trans-

ported by them to the Stafford House hospital, and left there in charge of the staff. From Semlin, Dr. Busby telegraphed on the 3rd instant to say that he was *en route* to Trieste with his party, and they would arrive in Constantinople on Monday, the 11th. The total list of casualties in the medical department of the ambulances will, we fear, be very great. The English profession have, however, good reason to be proud of the heroic manner in which these gentlemen have performed their duties, of which constant testimony has been offered by the correspondents of the papers, who have been the eye-witnesses of their devotion, as well as by the officials of both sides. They have flinched neither from pestilence nor from privation; they have never shrunk from performing their duties under fire; they have always been at the post of duty in danger, and never deserted it. We trust that a special record may be published presently of the achievements of the medical staff of the ambulance, for we are sure that it will form one of the brightest pages in the history of war, and will reflect honour not only upon those who have so nobly performed most dangerous duties, but on the profession to which they belong.

M. VOILLEMIER.

OUR Paris correspondent writes: We have to deplore the loss of a distinguished *confrère* in the person of Dr. Voillemier, whose death has just taken place, at his residence in Paris, in the sixty-ninth year of his age. Dr. Voillemier was a very able surgeon; but it was with the diseases connected with the genito-urinary organs that he mostly distinguished himself. He was for a long time surgeon to the Hôtel Dieu, from which he had to retire on reaching the age limited for hospital surgeons—viz., sixty-four; being, however, allowed to retain the title of honorary surgeon. He took his degree in 1842, and was elected Member of the Academy of Medicine in 1873. He was raised to the dignity of Commander of the Legion of Honour for his distinguished services.

THE FUNERAL OF CLAUDE BERNARD.

ALL that was mortal of the remains of Claude Bernard now reposes in the cemetery of Père la Chaise. His funeral took place on the 16th instant, at the expense of the State, in recognition of the great service he had rendered to science. The religious ceremony was performed at the church of St. Sulpice; and the body was accompanied to the grave by a great concourse of mourners, and with the military honours due to the deceased as Commander of the Legion of Honour. The *cortège* was a most imposing one; there were at least 3,000 persons, representing members of all classes and of both sexes. The pall was held by MM. Bardoux, the Minister of Public Instruction, Camille Doucet, Blanchard, Mézières, Laboulaye, and Fizeau, followed by medical students and by the representatives of the different learned bodies and members of the Chamber of Deputies and the Municipal Council of Paris. Five funeral discourses were pronounced over the grave: by M. Dumas, in the name of the Academy of Sciences; by M. Mézières, in the name of the French Academy; by M. Bouillaud, in the name of the Academy of Medicine; by M. Vulpian, in the name of the Faculty of Medicine; and by M. Laboulaye, in the name of the College of France. Marshal MacMahon was represented by an aide-de-camp at the funeral.

THE SIGNIFICANCE OF THE CÆCUM.

DR. DUREAU (*Thèses de Paris*, 1877) discusses anew this subject by the light of comparative anatomy. The cæcum is rudimentary in man, carnivora, quadrumana, amphibia, insectivora, etc.; in rodents, pachyderms, and ruminants, it is of capital importance. Among birds, it is similarly reduced to a simple tubercle among the rapacious birds (essentially carnivorous), and is prodigiously developed among the gallinaceous and certain of the palmipeds. Among herbivorous animals and birds, it appears to serve as a reservoir of elaboration and absorption of the food, its removal leading to extreme emaciation. In man and other carnivores, it does not seem to be of any use. It exists, one might say, as an anatomical protest against vegetarianism.

LARYNGOSTROSCOPY.

PROFESSOR OERTEL of Munich, in a preliminary communication to the *Centralblatt für die Medicinischen Wissenschaften* of February 2nd, announces that he has, by a method which he describes as the laryngostroboscopic investigation of the larynx, invented the means of showing the independent action of each of the vocal cords separately, and of distinguishing the velocities of their vibrations during the utterance of the notes of the chest and falsetto-register, inequalities in their vibrations, and various physiological and pathological conditions not previously accessible to observation. In the next number, he describes the method by which he retards the movements of the cords and observes them by powerful but intermittent artificial light, and simultaneously compares the movements of the cords with those of a revolving "stroboscopic" disc, or the vibrations of a tuning-fork set opposite to the mirror.

SCOTLAND.

At a meeting of the Fife and Kinross Lunacy Board, held last week, the resignation of the Superintendent of the Asylum, Dr. John Fraser, was accepted, as also that of his assistant Dr. Watson. Dr. Fraser has been appointed by Mr. Cross one of the Deputy Commissioners in Lunacy in Scotland. Dr. J. J. Brown, senior assistant at Morning-side, is the only candidate as yet spoken of for the vacancy.

THE Medical Officer of Health for Glasgow reports that, during the fortnight ending February 9th, there had been 594 deaths in the city, or at the annual rate of 27 per 1,000 living; 42 per cent. had been due to pulmonary diseases. There had been 12 deaths from fever, 11 of which were from typhus. One death had occurred from small-pox, that of a young gentleman, who had caught the disease in London.

SEVERAL stone coffins have recently been discovered near Dundee. They contained human bones, which were in a fairly good state of preservation. In one case, the bones were those of a man over six feet in height. The coffins are composed of rough slabs, measuring six feet and a half in length. The remains have been interred in the Eastern Necropolis, Dundee.

HEALTH OF EDINBURGH.

IN his monthly report of the health of Edinburgh for January, the Medical Officer of Health shows that the death-rate was higher than usual; the number of deaths was 491, equal to an annual death-rate of 27.49 per 1,000. This high mortality was partly accounted for by additional deaths from measles and whooping cough, which amounted to 50. The city was reported to be otherwise healthy. No deaths had taken place from typhus fever, and there had been only three fatal cases of typhoid. Since February began, the deaths from measles have shown a weekly increase in numbers, having been 12 in the week ending February 2nd, 14 in that ending February 9th, and reaching the high total of 16 during the week ending on Saturday last.

HEALTH OF ABERDEEN.

AT a meeting of the Aberdeen Town Council, last Monday, it was stated that there were three cases of small-pox in the Cunningham-hill Hospital, and that one death had taken place at Woodside from small-pox. All these cases had been traced to one and the same source, viz., the paper-mills at Stonewood. It was also mentioned that, since the January meeting of the Council, typhus fever had increased greatly and was still on the increase. During January, there had been 22 deaths in Aberdeen from zymotic diseases, eight of which had been the result of typhus and seven of scarlatina. One of the Council called attention to the report on the sanitary condition of Aberdeen, which had been read by Mr. Chadwick at the summer meeting of the Social

Science Congress in Aberdeen, but only published a short time ago. It stated that Mr. Chadwick considered the sanitary condition of Aberdeen superior to that of any other town in Scotland, and that he only remarked that something might yet be done to reduce the already small death-rate. It was agreed to remit to the Public Health Committee to consider as to the propriety of providing a Reception-house, in which members of poor families in crowded houses where infectious disease had appeared, and who had not as yet been attacked, might be temporarily accommodated until it was ascertained that the house was free from infection.

TYPHUS FEVER EPIDEMIC.

We learn that the typhus fever epidemic is still unabated in Paisley, and has spread to other districts of the town besides the west-end. In the Infirmary, there were twenty-six cases; and, although several patients were discharged during the week cured, the rate of admissions is still very high. The fever is of a malignant type, and is proving exceedingly fatal among the patients being treated outside the Infirmary. The deaths in town for the week ending February 2nd were thirty-nine, against twenty in the corresponding week of 1877.

THE MILK-EPIDEMIC OF ENTERIC FEVER IN GLASGOW.

Now that this epidemic is virtually at an end, Dr. Russell has reported to the Board the actual extent and fatality of it. In this report are only included cases which have actually been traced to infection by the suspected milk, and they amount to 163 in all. Of these, 72 were in Glasgow proper, 13 among students in the University, and 78 in neighbouring west-end suburbs. The death-rate was comparatively low, about 9.2 per cent., or 15 in all. It is noteworthy that the mortality among the students was very high, there being 3 deaths among 13 cases, or at the rate of 23 per cent. The Council passed a vote of thanks to Dr. Russell for his energy and care in tracing this epidemic.

CROWDING OF THE INFIRMARIES IN GLASGOW.

It is quite apparent that, even with the addition of the Western Infirmary, the hospital accommodation in Glasgow is still deficient in amount. A deputation, which waited on the Town Council on Monday, informed them that there were 80 patients waiting for admission to the Royal Infirmary and 60 to the Western, and they asked the Town Council to utilise their epidemic hospitals to accommodate some of this surplus. Such an arrangement can hardly be a satisfactory one, unless it be gone into on a permanent footing; and we suspect that the Council will hesitate before committing themselves to the treatment of general medical and surgical cases out of the public rates. The Western Infirmary has recently had a large sum of money left to add to its accommodation, and it would be a pity, in view of the apparently urgent need, that any delay should take place in beginning operations. We believe that the sum left will enable the infirmary to add nearly 200 beds, or about double its present accommodation.

IRELAND.

Two concerts will take place at Parsonstown on the 28th instant and 1st proximo, in aid of the funds of St. Mark's Ophthalmic Hospital, Dublin.

THE LATE DR. DONOVAN.

A PETITION has been presented to the Earl of Beaconsfield, praying him to grant a pension from the Civil List to the widow and unmarried daughters of the late Dr. Daniel Donovan, late medical officer of Skibbereen Workhouse and Dispensary, for whom he was unable to make any provision, in consequence of having suffered for eight years previously to his death from a disease which incapacitated him for work, and of the failure of the Albert Insurance Company, in which his life was largely insured. This appeal is more particularly founded upon the energy displayed by Dr. Donovan in grappling with the great Irish famine of 1846-47, which was more generally felt in Skibbereen than

elsewhere, and upon the value of the medical records of the famine made by Dr. Donovan during that period, which have been of great service in similar calamities of a like nature, and notably in the great famine in Madras. For these great services, Dr. Donovan received no reward.

ZYMOTIC DISEASES IN CORK.

DURING the past year, the deaths registered from measles amounted to 98 (96 of which were registered in the December quarter); diarrhoea, 74; fever, 66; diphtheria, 8; and scarlatina, 3. It is remarkable that there was not a death from whooping-cough registered during the year, whilst the mortality from scarlatina was extremely low.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

At the annual meeting of this Branch recently held, the following office-bearers were elected for the ensuing year:—*Committee*: Drs. Cuming, Drennan, Ferguson, Filson, Gray, Harkin, Higginson, H. M. Johnston, McCleery, McClelland, McGee, James Moore, John Moore, Murney, Musgrave, C. D. Purdon, Ross, Brice Smith, J. T. N. Smith, Spedding, and Whitaker. *Honorary Secretary*: Dr. Wilberforce Arnold. *Honorary Treasurer*: Dr. Browne, J.P.

ZYMOTIC DISEASES IN BELFAST, 1877.

DURING the past year, but one death took place from small-pox; the deaths from the six other principal zymotic diseases being as follows:—Measles, 221 deaths; fever, 209; diarrhoea, 162; whooping-cough, 118; scarlet fever, 90; and diphtheria, 22. The total mortality from these causes was equal to 4.5 per 1,000 of the population, according to the census of 1871, or, allowing for the probable increase since that year, 4.0 per 1,000.

THE SAMARITAN HOSPITAL, BELFAST.

THE annual meeting of the friends of this useful institution was lately held in Belfast, the Chair being occupied by the President of the Queen's College. The hospital, which is intended for the treatment of diseases of women and children, is the only institution of its kind in the North of Ireland for the special objects for which it has been established. Since the last meeting, the hospital has been completely furnished, the wards now containing twenty-three beds; and an operating-room has been provided with a valuable collection of surgical instruments. Since the opening of the new building, three thousand two hundred and twenty-four persons have been treated in the extern department, and two hundred and forty-five patients have been relieved in the wards since the opening of the intern department. During the year, upwards of £400 were derived from paying patients. A vote of thanks to Drs. McMorris and Cuming, for their untiring zeal in promoting the objects of the hospital, terminated the proceedings.

THE LATE DR. PELLY.

A SPECIAL meeting of the Eyre Court Dispensary Committee was held recently to express their regret at the death of their medical officer, Dr. Pelly, who lately died of fever. The following resolution was unanimously adopted:—"That this Committee do express the most profound regret at the death of their truly kind, attentive, and talented medical officer, Dr. Pelly. During the fifteen years Dr. Pelly attended the dispensary districts of Eyre Court and Killimore, he discharged his duties to the sick and suffering poor faithfully and well. We deplore his death the more, as his fatal disease was caught in the fearless discharge of his professional duty. We tender to his afflicted widow and her helpless charge, also to his other relatives, our deepest sympathy in their irreparable loss."

ENNISCORTHY UNION.

At a recent meeting of the Board of Guardians of this Union, a petition was received from the dispensary medical officers, calling the attention of the Board to the insufficiency of their present salaries, and soliciting a moderate increase. It appears that many years ago their salaries were

fixed at an uniform rate of £90 yearly; but since then the cost of every necessary of life has greatly increased, and in the neighbouring unions a corresponding increase has been given to the salaries of the dispensary medical officers. Notice has been given by one of the guardians that, on the 28th instant, he will move that all the salaries of the dispensary medical officers of the union be increased to £100 *per annum*; and we trust this instalment of justice will be obtained, as the medical officers of this union are the worst paid of any in the district.

CORK DISTRICT LUNATIC ASYLUM.

THE office of assistant to the medical superintendent of this asylum is now vacant by the promotion of Dr. Atkins. The appointment lies with the Board of Governors, who will select a successor on March 1st. Candidates must not be under 23, or above 35, unmarried, and are required to reside in the asylum. The salary is £110 *per annum*, with partly furnished house, coal, etc., and £50 in lieu of rations and attendance.

PHARMACEUTICAL SOCIETY OF IRELAND.

THIS society, which was incorporated by Act of Parliament on August 11th, 1875, has already on its register one hundred and fifty-eight pharmaceutical chemists and one hundred and one members. The first examination of candidates for the licence to act as pharmaceutical chemists was held on March 1st, 1876; and, from a statement recently published, we learn that sixty-nine candidates have passed their preliminary examination to come up for examination as pharmaceutical chemists under the new regulations at a future date. The Society may, therefore, be congratulated on their having shown in so short a time a very satisfactory *raison d'être*. Its financial position is also apparently established, since, although it commenced operations without any funds, it has now a balance to its credit of upwards of £300.

SCIENTIFIC LECTURES.

THE third lecture of this year's annual course of scientific lectures in the King and Queen's College of Physicians was delivered on Monday, February 18th, by Dr. Purser, King's Professor of the Institutes of Medicine in the University School of Physic. The subject chosen for the and the succeeding lecture was the anatomy and physiology of the white columns of the spinal cord. It was shown that, while anatomical examination of the fully developed cord gave little information as to the course of the fibres, the entire white matter appearing to form one whole, embryological investigation demonstrated that the white matter was highly complex, and consisted of seven distinct tracts which differed widely in the time of their first appearance and subsequent development. Four of these tracts were, for the most part, made up of fibres of the nerve-roots before they finally terminated in the grey matter, and of commissural fibres which connected portions of the grey substance lying at different levels. The tracts of this class varied in size in different regions of the cord, according to the amount of grey matter in, and the number of nerve-fibres entering or leaving, each part. The three remaining tracts were developed later, and differed from those of the first class in connecting the spinal cord with the brain. They increased steadily in size from below upwards. 1. The continuation of the anterior pyramids in the cord which, according to the amount of crossing of the fibres that occurs at the decussation, have a somewhat variable arrangement, connects the cerebrum (cortex and basal ganglia) with the grey matter of the spinal cord, the connection being probably, for the most part, with the cells of the anterior horn. 2. The direct lateral cerebellar tract, which lies at the periphery of the posterior part of the lateral column, effects a communication between the cells of Clarke's column and the cerebellum. 3. Goll's column, which appears to terminate alone in the post-pyramidal nucleus, has an uncertain spinal connection. The facts of human and experimental pathology were shown to confirm in a striking manner the results of embryological research.

SCIENTIFIC ENDOWMENTS FOR THE BRITISH MEDICAL ASSOCIATION.

THE following communication, giving particulars of his munificent proposition expressed in his letter published under the signature of "A Retired Surgeon" in the JOURNAL of December 15th, has been forwarded to the editor by Mr. Middlemore of Birmingham, and placed in the hands of the General Secretary, Mr. Fowke, for transmission to the Committee of Council. We feel sure that this generous offer will be warmly appreciated by that body, as well as by the Association at large. It will take its place by the side of, but separate from, the Stewart Prize Fund and the Hastings Memorial Fund.

"Richard Middlemore, F.R.C.S., Consulting Surgeon to the Birmingham Eye Hospital, is desirous of presenting to the Council of the British Medical Association the sum of five hundred pounds (£500) in trust for the following purpose.

"To found a prize to be awarded to the author of the best essay on the scientific and practical value of the improvements which have taken place in ophthalmic medicine and surgery during the previous three years.

"The prize to be adjudged every three years.

"If no essay of sufficient merit be sent in on any one occasion, then the award to be made the following year, and to be always so arranged that the triennial character of the prize shall be maintained, and that an unbroken series of records of the progress of ophthalmic science shall be preserved.

"Experience may demonstrate the necessity of altering the conditions of the trust. To provide for this contingency, Richard Middlemore would be happy to give power to the governing body of the British Medical Association to revise and vary the condition of the trust, while maintaining unaltered the object for which it is founded. Such revision to take place at periods of no less than ten (10) years.

"It is the donor's wish that the fund in question shall be kept separate and distinct from any other pecuniary gift which may be presented to the Council for a kindred object.—RICHARD MIDDLEMORE, Temple Row, Birmingham."

MEDICAL EDUCATION IN THE UNIVERSITY OF OXFORD.

A LETTER, of which the following is a translation, has been received from Professor Billroth of Vienna, in answer to one from an English *confrère*, and has been handed to us for publication.

"Although I feel honoured by your inquiries respecting the advisability of extending the Medical Faculty in Oxford, and although I have given much attention to the subject, I hardly venture to express a decided opinion on the point. The development of our German Universities, their relation to the people and to practical life, is in so far different, that with us the *principle* of combining academical and practical instruction at the University is supreme. For myself, I am strongly on the side of those who allow no difference between the study of natural objects and natural laws on the one hand, and the study of the morbid human body on the other hand. In my view, there is only one method of investigating Nature and her laws; and this method is equally applicable to the analysis of a mineral, the examination of a plant, or the thorough investigation of the bodies of men and animals, whether in health or disease. The business of the clinical teacher is to teach this method at the bedside. Treatment is only the sum total, the ultimate conclusion attainable by us as the result of observation. For this study, the number of patients need not be excessively large. The largest number of beds which, in fact, can be applied to purposes of instruction, when two hours' clinical instruction are given daily, would be one hundred beds each for internal and external diseases respectively, and thirty for diseases of the eye; to which must be added the out-patients, whom I hold it important to use concurrently for purposes of instruction. It is possible, however, to give very successful teaching with a clinic of only fifty beds on each side; and most German Universities have clinics of only forty to sixty beds.

"There are diseases which can *only* be studied *rapidly* in large towns. To these belong the social diseases, such as syphilis, contagious skin-diseases, epidemics; also some rarer diseases, which are treated by special methods, such as diseases of the larynx, diseases of the ear, certain nervous diseases which are treated with electricity, etc. With us, most young doctors go for this purpose, when they have

finished their studies and passed their examinations, to Berlin, Vienna, Paris, or London.

"Two years ago, I wrote a book on the *Teaching and Learning of the Medical Sciences (Ueber das Lehren und Lernen der Medizinischen Wissenschaften)*, Gerold, Wien, 1876). You will find there all my views on those points in which you are interested.—I have the honour to be, etc.,

"DR. TH. BILLROTH.

"Vienna, January 31st, 1878."

THE ARMY MEDICAL SERVICE.

MR. HARDY has, under stress of existing circumstances, been compelled to admit to the House of Commons that his scheme for popularising the Army Medical Department with the medical profession has broken down. This is exactly what the Parliamentary Committee of the British Medical Association plainly predicted to him at the moment of the inception of the plan; and they just as plainly pointed out to him the causes and the remedies of the unpopularity. Lord Herbert left the Army Medical Department flourishing, well organised, popular, and efficient; it has been the labour of each of Lord Herbert's successors to destroy his good work, and they have succeeded only too well; while Mr. Hardy only last year sneered at the alleged dissatisfaction of the Army Medical Department, and treated the whole question with a certain cynical contempt which was in itself hardly decorous, and certainly unlikely to contribute to the popularity of the department in the profession. The fact is, however, that there is no department of the public service more easily satisfied or more reasonably disposed; and, when Mr. Hardy sets himself seriously to promote the welfare of the department, he will find no difficulty in accomplishing his task, and he will find ourselves and the profession generally well disposed to meet him in the most cordial spirit, and to assist frankly and heartily in the satisfactory adjustment of the difficulties which have hitherto interfered with the efficiency of the department.

THE YEAR 1877.

THE recent quarterly return of the Registrar-General states that "in the United Kingdom 1,153,398 births and 667,796 deaths were registered during the year 1877, equal to a birth-rate of 34.5, and a death-rate of 20.0 per 1000 persons estimated to be living in the middle of the year. The natural increase of population, by excess of births over deaths, was therefore 485,602, and 7,903 more than the excess in 1876. The actual increase is governed by the balance between immigration and emigration. No complete record of immigration exists, but returns issued by the Board of Trade show that, during 1877, emigrants of British origin to the number of 91,060 left the various ports of the United Kingdom at which emigration officers are stationed. Emigration continues to decline, and the number in 1877 was 11 per cent. lower than that in 1876, which showed a decline of 22 per cent. from the number in 1875. The decline in 1877 from the numbers in 1876 was equal to 11 per cent. in English, 14 per cent. in Scotch, and 12 per cent. in Irish emigrants. Of the 91,060 British emigrants during last year, 45,792 left for the United States, 29,703 for the Australian Colonies, 7,822 for British North America, and 7,743 for all other places.

"In England and Wales 887,055 births and 500,348 deaths were registered during 1877; the birth-rate was 36.1, and the death-rate 20.4 per 1000 persons living. The birth-rate exceeded by 0.5, while the death-rate was 1.6 below, the average rate in the ten preceding years. The death-rate was lower than that which has prevailed in any year since civil registration was established in 1837. The returns of marriages for the last three months of 1877 are not yet available; the marriage-rate in the first nine months of the year showed, however, a further decline from those which prevailed in the corresponding periods of recent years.

"English mortality may be said to have been stationary during the twenty years 1851-70. It is, however, satisfactory to find that during the first seven years of the current decade, the rate of mortality in England and Wales has showed a decided decline. During the ten years 1851-60, the average annual rate of mortality in England and Wales was equal to 22.2; and in the following ten years, 1861-70, to 25.5 per 1000; during the seven years 1871-7, the average annual rate declined to 21.6. This decline of 0.8 per 1000 in the death-rate during the past seven years, signifies that 132,433 persons have survived whose deaths would have been recorded had the death-rate been equal to that which prevailed during the twenty years 1851-70. There appears good

reason to infer that much of this saving of life, and consequent decrease of sickness, is both directly and indirectly due to the new era of sanitary progress inaugurated by the passing of the Public Health Acts of 1872 and 1875. It is only, however, necessary to point to the marked variations in local death-rates, and to the conclusive evidence of excessive mortality in the manufacturing and mining districts of Lancashire and Yorkshire, and elsewhere, to prove how much may be hoped from still further improvement in sanitary organisation and administration.

"The 500,348 deaths in 1877 included 120,611 of infants under one year of age, and 126,049 of persons aged upwards of 60 years. The rate of infant mortality measured by the proportion of deaths under one year to births registered, was equal to 136 per 1000, against 158 and 146 in 1875 and 1876. Infant mortality in 1877 was lower than in any year since 1837, when civil registration first supplied a satisfactory basis for its calculation. During 1876, and 1877, infant mortality averaged only 141 per 1000, whereas in the five preceding years it had been equal to 153 per 1000. The decline of infant mortality in 1877 was doubtless in some measure due to the moderate temperature during the summer, which caused an unusually low death-rate from infantile diarrhoea; but the decline was not confined to the summer quarter of the year, and therefore appears to afford evidence of improved sanitary condition. The rate of mortality among persons aged upwards of 60 years, was equal to 68.7 per 1,000 persons estimated to be living at those ages, which although almost identical with that which prevailed in 1876, showed a marked decline from the death-rates at similar ages in preceding years.

"The deaths registered in England and Wales during the year, from all causes, included 64,454 which were referred to the seven principal zymotic diseases, showing a further decline of 8,763 from the numbers referred to the same causes in 1875 and 1876. These 64,454 deaths included 4,280 from small-pox, 8,637 from measles, 14,230 from scarlet fever, 2,522 from diphtheria, 10,518 from whooping cough, 9,481 from fever, and 14,786 from diarrhoea. The death-rate from these seven diseases was equal to 2.6 per 1,000, against 3.3 and 3.0 in the two preceding years. The zymotic death-rate in 1877 appears to have been unprecedentedly low, and was no less than 1 per 1000 below the average zymotic rate in the seven years 1870-6; thus it may be estimated that about 24,547 lives survived the year 1877, that would have succumbed to these diseases had the rate equalled that which prevailed in the seven preceding years. The deaths referred to measles, scarlet fever, diphtheria, fever, and diarrhoea, were considerably less numerous than those in 1876, whereas the fatal cases of small-pox and whooping-cough showed an increase. During the seven years 1870-6, the annual death-rate from fever—including typhus, enteric, and simple fevers—showed a steady decline, which was fully maintained during 1877. The annual death-rate from fever, which was equal to 79 per 100,000 persons living in 1870, has since continuously declined, and during 1877 did not exceed 39 per 100,000, or less than half the rate that ruled in 1870. As the proportional mortality in cases of fever averages nearly 20 per cent., it may easily be calculated that the actual reduction of deaths from this disease only partly represents the gain to the community due to the steadily declining prevalence of fever.

"The inquest cases registered in 1877 were 25,623, equal to 5.1 per cent. of the total deaths; this was slightly below the proportion that prevailed in 1876. The deaths referred to different forms of violence were 16,718, and were 854 fewer than those resulting from violence in 1876."

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Curse of Drink.—Iodide of Potassium in the Treatment of Asthma.—Tattooing the Cornea.—Pilocarpine as a Myotic.

DR. LUNIER, a most indefatigable and zealous apostle of temperance, and one of the founders of the Temperance Society of France, has lately brought out a work on the production and consumption of alcoholic drinks in this country, and their influence on the physical and moral health of the populations. The volume under notice, which is the completion of a memoir read by Dr. Lunier before the Temperance Society of Paris in 1873, is, as indeed may be inferred from the title, a most interesting production—interesting alike to the vendors as it is to the consumers of wines and spirits; and even philanthropists, political economists, and the medical profession may derive most useful information from the work. From his official position as Inspector-General

of Lunatic Asylums and Prisons in France, Dr. Lunier has been enabled to consult documents from which he has obtained authentic information on the following points: 1. The proportion of offenders against the law prohibiting drunkenness in public; 2. The proportion of accidental deaths determined by excess of drinking; 3. The proportion of insanity caused by alcohol; the proportion of suicides attributed to alcoholism. On these divers questions, Dr. Lunier has arrived at conclusions which would make one shudder; and he has shown that the abuse of alcohol, whatever the form in which it is taken, will almost surely lead to crime, insanity, and suicide, if not to a lingering disease and eventual death. These, however, are only the immediate or direct consequences of the drunkard's evil habits; but when one contemplates the effects on the innocent victims that surround him, such as misery at home, brutal treatment of wife and children—the latter affected with idiotism, imbecility, convulsions, scrofula, pulmonary phthisis, and a host of other maladies, which are perpetuated even to the third and fourth generations—the picture is something awful, and no punishment can be severe enough for such offenders. Dr. Lunier, therefore, deserves the highest praise and gratitude of all right thinking men and women for his laudable efforts to put down the degrading vice; and if he had but a few more imitators, such scenes as are daily witnessed among drunkards and their families would be reduced to a minimum, society would benefit by the change, and the physical and moral condition of the people be improved in every way. To bring about these conditions, stringent laws and over-taxation of alcoholic beverages would be of no avail, unless, as Dr. Lunier observes, the populations received the benefit of elementary instruction and moral education, so that they might be able to read and learn for themselves the dangerous consequences of the abuse of alcoholic liquors. Dr. Lunier suggests other measures for the suppression of drunkenness, for which I must refer your readers to the work itself. I may, however, observe that, though teetotalism may be useful in its way, Dr. Lunier thinks it would be a waste of time to endeavour to introduce it into this or any other wine-growing country. In fact, Dr. Lunier is no enemy to wine-drinking in moderation; and he asserts that it has been proved, by long practical experience, that natural wine, that is, the unsophisticated juice of the grape after fermentation, is, of all alcoholic beverages, the best; it should not contain more than ten or eleven per cent. of alcohol. After this, comes beer; then cider; but, to be harmless, these also must be pure and natural. As for brandies and other spirituous liquors, he condemns them *in toto* as common beverages, though they may find their utility as therapeutic agents.

If Professor Germain Sée be not an original inventor or discoverer, he certainly deserves great credit as an innovator; for to him is due, in a great measure, the introduction into medical practice in this country of many old drugs and new remedies, which perhaps, but for him, would have been consigned to oblivion. I do not mean to insinuate by this that there are not in France other physicians of equal merit; but, whether from timidity or other cause, they are very slow in adopting any new discovery, unless it be *bona fide* French. For instance, I have only lately had occasion to speak of Professor Sée in connection with salicylic acid and its derivatives, which he popularised in this country, although, as he himself stated before the Academy of Medicine, these substances had been employed in Germany and Great Britain long before he brought them to special notice in France. At a recent meeting of the Academy of Medicine, M. Sée read a paper, in which he rehabilitates the efficacy of the iodide of potassium in the treatment of asthma. I say rehabilitates; because I find that, even on your side of the Channel, the remedy seems to be scarcely noticed, or almost forgotten, in the treatment of this affection. For nearly twenty years back, M. Sée has been employing the iodide of potassium for the cure of asthma; and, according to his experience, it may be looked on as a specific for the disease, if there be such a thing as a specific in medicine. It is true that others had employed it, and are still employing it, in this affection; but as it is invariably prescribed with other substances, such as ipecacuanha, opium, belladonna, ether, etc., it is difficult to say to which to attribute the curative effect. M. Sée has had the idea of trying the iodide of potassium alone, which has been followed with the happiest results. He prescribes it not only during the attack, but enjoins the patient to continue it for weeks, months, or years, according to the severity or duration of the malady. In exceptional cases, he combines it with a little opium, to prevent iodism, and, when the breathing is greatly oppressed, with chloral. During the paroxysm, however, M. Sée employs the iodide of ethyle, a substance discovered in 1825 by Gay-Lussac, and composed of iodine and ether, the new compound possessing the respective properties of both these substances. He administers it by inhalation, and he has often found that a single dose of five or six drops has been sufficient to cut short a paroxysm. The breathing once relieved, he then

trusts to the iodide of potassium to effect a cure. The above treatment has been found useful in all cases of asthma, whatever its origin; and the iodide of ethyle has also proved efficacious in relieving cardiac and laryngeal dyspnoea. For further information on the subject, I must refer your readers to this most interesting report, a full account of which will be found in the *Bulletin* of the Academy of Medicine.

Tattooing the cornea, for the purpose of masking the indelible cicatrices of leucoma, is becoming much in vogue among ophthalmologists in this country. The operation has certainly a great advantage in an æsthetic point of view; but, according to the experience of M. Panas, a distinguished surgeon and ophthalmologist, the operation is not so inoffensive as it is supposed to be, as he found, in a certain number of cases operated on by himself and others, that serious accidents have supervened in the form of irido-cyclitis, which he attributes to the presence of the colouring matter employed in tattooing, which, acting as a foreign body, sets up irritation and subsequent inflammation, as indicated by perikeratic injection, excessive lachrymation, and photophobia; but, when the operation is not followed by accident, M. Panas considers tattooing a great achievement in ophthalmic surgery, as he declared, at a recent meeting of the Société de Chirurgie, that it not only improves the outward appearance of the eye, but that in an optical point of view, and consequently more scientific, the sight is really improved in a notable manner. This fact should counterbalance every other consideration in the interest of the patient.

In connection with ophthalmic therapeutics, I may bring to notice a paper lately read by Dr. Galezowski, before the Biological Society of Paris, on the effects of pilocarpine, the active principle of jaborandi, on the eye. According to this well-known ophthalmologist, we possess in this new alkaloid a powerful myotic, equal in effect to that of eserine; but it has the great advantage over the latter in producing less irritation or other mischief in the eye; for he has noticed, after the use of eserine, that the patients have complained of intense ocular pains, followed by conjunctivitis attended with nausea. He employs pilocarpine in solution, selecting either the nitrate or the sulphate according to circumstances. In the former case, the strength of the solution is twenty centigrammes to ten grammes of distilled water; in the latter, ten centigrammes to six grammes. He prefers cherry laurel-water for the solution, as he has noticed that the pilocarpine loses its myotic properties after a time when it is made up with ordinary distilled water; and care must be taken that, whatever salt is employed, it must be perfectly neutral.

The death of M. Eugène Simmonet took place at Cannes, whither he had gone for the benefit of his health, in the sixty-third year of his age. M. Simmonet was a most enterprising medical publisher in Paris, and was very popular in the profession. He was the founder of the *France Médicale*, which, after being edited by Roubaud and other distinguished men, fell into the hands of Dr. Bontant, its present talented editor and proprietor.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH.

AN ordinary meeting of this Branch will be held at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, February 27th, at 8 P.M.; when Mr. T. HOLMES, F.R.C.S., will read a paper on Provident Dispensaries, to be followed by a discussion.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*
W. CHAPMAN GRIGG, M.D. }

London, February 7th, 1878.

STAFFORDSHIRE BRANCH.

THE second ordinary meeting of the Session will be held at the London and North Western Hotel, Stafford, on Thursday, February 28th, at 4.30 o'clock P.M. The Chair will be taken by Dr. Arlidge.

Members wishing to read papers or show specimens are earnestly requested to communicate at once with either of the Secretaries.

VINCENT JACKSON, } *Honorary Secretaries.*
J. G. U. WEST, }

Wolverhampton, February 12th, 1878.

LANCASHIRE AND CHESHIRE BRANCH.

THE first intermediate meeting of this Branch will be held at the Town Hall, Oldham, on Tuesday, March 5th, at 3.30 P.M.

Dr. W. H. Broadbent (London) has kindly consented to read a

paper on the Mechanism of Speech and Thought as illustrated by Pathology.

The following communications have also been promised.

Dr. G. J. Robertson will read the history of a case of Multiple Mammary Tumour.

Dr. Lloyd Roberts will exhibit some specimens of Distorted Pelves.

Dr. Humphries will read a paper on Scarlatinal Nephritis, and show specimens illustrating its pathology.

Dr. Dreschfeld and Dr. Ross will exhibit, by means of the Oxyhydrogen light, Microscopic Sections illustrative of Disease of the Spinal Cord.

Mr. Jones will show a specimen of Necrosis of the Femur following Acute Suppurative Periostitis.

Dr. Leech and Mr. Cullingworth will show cases of Pseudo-hyper-trophic Paralysis.

Members wishing to read papers or to exhibit specimens, are requested to communicate with the Honorary Secretary as soon as possible.

Dinner will be provided at the Angel Hotel at 6 o'clock. Members intending to dine, are requested to send their names to Dr. G. Thomson, Oldham, on or before March 1st.

D. J. LEECH, M.D., *Honorary Secretary.*

96, Mosley Street, Manchester, February 13th, 1878.

NORTH WALES BRANCH.

THE intermediate meeting of this Branch will be held at the Owen Glyndwr Hotel, Corwen, Merionethshire, on Friday, March 8th, at 1 P.M.: R. ROBERTS, Esq., Portmadoc, President.

The Honorary Secretary will relate a case (with specimens) of Aneurism of the Ascending Aorta.

Members wishing to read papers or exhibit specimens are requested to communicate at once with the Honorary Secretary.

T. EYTON JONES, M.D., *Honorary Secretary.*

Wrexham, February 18th, 1878.

THAMES VALLEY BRANCH.

THE next meeting of the above Branch will take place at the Griffin Hotel, Kingston, on March 14th, at 5 o'clock.

Members who may be willing to read papers are requested to communicate with the Honorary Secretary as soon as possible.

There will be a dinner after the meeting (7 o'clock) at the above hotel. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary.*

Kingston-on-Thames, February 12th, 1878.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE third ordinary meeting of this Branch was held at the York House, Bath, on Wednesday evening, January 30th. In the unavoidable absence of the President (Dr. MARSHALL), Dr. GOODRIDGE presided. There were present forty-one members.

New Members.—The following gentlemen were duly elected members of the Association and of the Branch: A. J. Harrison, M.B. (Clifton); J. G. Smith, Esq. (Bristol); Dudley Loftus Fitzgerald, M.D. (Tewton); Joseph Fuller, Esq. (Shirehampton); William Holman Lower, Esq. (Olveston); J. Ralph Guv, M.B. (Bristol); S. A. Holman, Esq., Deputy Inspector-General (Bath); and Dr. Gardner (Box).

Discussion.—The evening was devoted to a discussion on Hospitalism, which was introduced by Mr. R. W. TIEBTS, and led to an animated debate, in which Drs. Davey and Brabazon, Messrs. W. M. Clarke, Thompson, Crossman, R. S. Fowler, N. Crisp, and Dobson took part.—Mr. TIEBTS summed up in reply.

LIVERPOOL MEDICAL MISSIONARY SOCIETY.—This society held its fifteenth annual meeting in Hope Hall on January 21st. From the report read on that occasion, it appears that 21,190 new cases were entered at the two dispensaries conducted by the society during 1877; and the total of old and new cases together treated during the same period reached the large number of 89,087. In addition, the visits paid to the houses of the sick were 22,361; and the average daily attendance at the combined dispensaries was 347. Short religious services preceded the ordinary medical work each day; and various meetings of a more or less religious character were held in the dispensary premises during the week and on Sundays, which were numerously attended by the patients and their friends. The expenditure during the past year amounted to upwards of £1,700, and the present year commenced with a balance in hand of £9.

CORRESPONDENCE.

THE PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

SIR,—In reply to the questions pointedly put to me by Dr. Grigg, I may state (1) that I am responsible for the delay which occurred in the publication of the recent minutes of the Committee of Council, the delay arising from accidental circumstances. (2.) The selection from the minutes of the Committee of Council for publication has always been entrusted to the President of the Council; and, in discharging this duty, I have always been anxious to follow the practices of my predecessors. As to (3) the publication of a fuller report of the proceedings of the Committee of Council, I shall be ready to give such directions to the General Secretary as may meet with the approval of the Committee of Council.

Dr. Grigg is an *ex officio* member of the Committee of Council, and I trust he will not fail to submit the statements contained in his letter to the consideration of the Committee at its next meeting.—I am, sir, yours, etc.,

R. WILBRAHAM FALCONER, M.D., President of Council.

Bath, February 19th, 1878.

THE LOST MEDICAL SCHOOL.

SIR,—Seeing that graduates of other universities are joining the ranks of those who desire the continued suppression of the Medical Faculty at Oxford, and being one of those who believe that its establishment there would be greatly to the advantage of the profession, of science, and of the University, I ask for space for a few remarks on the subject.

Doubtless, in occasional moments of self-complacency, the few Oxford graduates in medicine (there are now about sixty-six, of all ages, on the University books) may feel gratified at the pleasant things said of them by Dr. Ord and "M.D. Edin." in last week's JOURNAL; still more would they congratulate themselves did they quite realise their steadying and quickening influence on their teachers and fellow-students in London. Granting, however, the fullest weight to these compliments, it yet remains for the question to be considered from an Oxford, not from a London, point of view. Is it the *raison d'être* of the Medical Faculty at Oxford to provide a scattering of good students to the London hospitals, or her highest function to supply leaven and salt to the medical schools? Oxford is, or rather should be, a great centre of learning and education in all branches; and one of the chief advantages of such centralisation of study is the mutual benefit gained by the intercourse of different minds working in different spheres of thought. Surely the good to be gained by the student of the vast and intricate subject of medicine, from opportunities of mental friction and wider general culture than could be obtained at one of the London schools, is no less to be prized than the reciprocal benefit reaped by other classes of students in the University from a larger admixture of the scientific and practical element, which is so useful an antidote to that superficial pedantry and priggishness occasionally attendant on purely literary studies. I am well assured that one who reveres the medical profession, and values the general Oxford training, would recognise a most happy result in their more frequent and intimate combination. This point, as well as many others that I would otherwise touch upon, is so admirably insisted on and clearly argued out by Dr. Michael Foster, in his recent pamphlet on *Medical Education at Cambridge*, that I will not venture to enlarge upon it. The pamphlet will recommend itself to all who love their Alma Mater and their profession. Dr. Foster shows satisfactorily that it is in the latter years of medical study, after the purely scientific course has been taken, and when the mind is engaged on clinical work, that widening influences should be brought to bear. This is the time when there is such imminent danger of a man settling down into a groove, and, studying medical diagnosis, for instance, as though it were as simple and definite as elementary practical chemistry, of becoming a narrow dogmatist, and, therefore, a bad physician. To no subject matter can the adage, "the proper study of mankind is man", be applied with such peculiar force as to that of clinical medicine. And the opportunities for such culture are plentiful in the social and intellectual intercourse of Oxford.

With all that is said of the excellence and value of biological teaching, as it exists at Oxford, most will agree; but the implication that Dr. Ord makes, when speaking of a "retrogressive policy", that scientific study would suffer by the establishment of the Medical Faculty at Oxford is perfectly gratuitous and against experience. The study of science for its own sake is very likely to flag when unallied with some practical element; however pure the idea, however high the aim, it is not consistent with human experience that research, especially in these modern days, will not suffer in the long run, if divorced altogether from some practical bearing. Notoriously, biological and chemical science have owed much to medicine. Dr. Michael Foster, who from a practitioner became a physiologist, says on this context: "Business is no less the nurse of science than science is the mother of business." And it is undeniable that biologists are likely to be in far the largest proportion attracted, as hitherto, from the ranks of medicine. Beginning to study physiology, as ancillary to medicine, many a man is allured by its interest to devote his life to it.

The practical arguments against the possibility of clinical instruction in Oxford, as Dr. Ord would probably admit, are "neither new nor original". They have been already stated and answered more than once; and, considering that good and sound clinical work, although of a voluntary nature, has occasionally been done by a student within the walls of the much depreciated Radcliffe Infirmary, and is being done in other hospitals as small and towns no larger than Oxford, perhaps call for no further comment. As Dr. Payne pointed out, in his letter to you in the early part of this controversy, the school, if properly established, will make this hospital all that is necessary for effective clinical teaching; and the attractions of Oxford, and fair emoluments, would inevitably ensure a staff of teachers worthy of the reputation of the University.

The point of the remarks of your correspondent "M.D. Edin." is somewhat hard to see. After complimenting the Oxford man as "the highest type of candidate for the special study of the medical art", all that can be said of him, when he has entered on that study, is that he "speedily reaches the level of, and in many instances surpasses, the rank and file of ordinary hospital pupils"! Is this a great feat for men of presumably far higher education, and with the start of from four to six years' seniority in age?

The failure of your Edinburgh correspondent to "imagine" Oxford teaching medicine is perhaps of not much argumentative importance; and the flattering consolation to her, for insignificance in number, of possessing the *corps d'élite* of the profession, is too vague to be of value, for it is scarcely in accordance with facts. Owing probably to the small total number of Oxford doctors, but very few attain to eminence; and the prizes of professional success are in the hands of still fewer. It would seem, too, that "M.D." was somewhat at a loss for an additional argument, when, to the statement that the professors at Oxford "had done splendid work and well maintained the character of their chairs", he appended a slight bathos as to "certain facilities offered to himself for study by one of them some years ago".

Lastly, the question seems obvious if, as Dr. Ord implies and "M.D." says, and some Oxford men think, the Oxford medical graduate is the salt of the profession, why not let us have some more of it? Why, instead, is there so much inconsistent opposition to any Oxford rivalry to London clinical teaching? Until there is a complete medical curriculum established at Oxford, so long will her graduates be few and far between. The long course of time alone required for medical graduation, under the present system, debars many from the mixed advantages of Oxford and medical training; and the great concurrent expense goes far to render the Oxford contingent to medicine a plutocracy rather than an aristocracy. But if, this good element in our midst, the Oxford medical man, were allowed to increase, doubtless many, if not most, would come to London to study for a time, even as those who enjoy the "unrivalled" opportunities of London may visit the Continent; and thus ample opportunity would offer itself to the London teacher for acknowledging their quickening influence.—I am, sir, yours faithfully,

HORATIO DONKIN, M.A., B.M.Oxon.,

Senior Assistant-Physician to the Westminster

London, February 12th, 1878. Hospital.

SIR,—In discussing the question of the "Lost Medical School" at Oxford, there lies a fallacy which ought at once to be removed. It is objected that arts and medicine cannot be studied simultaneously; hence there is no use in their being taught in the same place. But surely this objection is vain. By the statutes of the University, no one can present himself at the first examination for the degree in Medicine until after the lapse of nearly two years, at least, after his acquisition of the degree of B.A., unless he has received very especial honour in the Final School of Natural Science. Now, to obtain this

special honour involves such a range and depth of study, that the provision practically nullifies itself; for the examinations in Natural Science are as searching and thorough as the teaching of its professors is sound and excellent. Consequently, in the natural course of things, the Oxford student of medicine of the future—who has a certain academic status at this day as "S.M." if he care to pay the extra fee for proceeding to this somewhat anomalous distinction—would first apply himself exclusively to the attainment of his degree in Arts; the subsequent study of medicine for two years at least in such an atmosphere of learning could not but be of infinite advantage. Only those who know what Oxford can offer to her graduates can fairly realise the value of such an intellectual life.—I am, sir, yours, etc.,

HENRY T. WHARTON, M.A.Oxon.

39, St. George's Road, Kilburn, N.W.

THE ADMISSION OF WOMEN TO THE MEMBERSHIP OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—It will, I believe, be matter for great regret to the best friends of medical women, if any adequate cause have been given for reopening the question of the admission of ladies to the British Medical Association, in the hostile manner which the letters of your correspondents denote. The suggestions which more than one of them contain, as to what is creditable and characteristic of an English lady, prevent me from entering into any discussion with the writers; but I naturally feel called upon to reply to the arguments and plain suggestion in your temperate article on the subject.

In the first place, allow me to disclaim any share whatsoever in any action which may have called forth the present ill feeling, or any knowledge of it, beyond what I have gathered from the JOURNAL. The isolation in which I find myself placed, and the absence of common action between myself and the more prominent representatives of medical women, ought to relieve me from any responsibility they may have incurred. I certainly attended the annual meeting in Edinburgh, where I read a paper on a question of histological chemistry, so framed as not to shock even extraordinary susceptibilities. The antagonistic feeling manifested, and the results of the *plébiscite*, led me to absent myself from the subsequent meetings—a course I should probably have persisted in so long as my privileges as a member were not threatened, as I felt that, by so doing, I should best serve the interests of our cause, even at the expense of personal gratification.

Referring now to your article, I fail to see how any resolution come to by the Association can have any retrospective value in depriving any members of the rights and privileges which, in common with others, they acquired when they entered the Association, and which are still to be enjoyed by the rest of the members. If the privileges referred to could "in honour or equity", to use a phrase in the laws of the Association, be withdrawn, what really would remain of the privileges of membership, seeing that the JOURNAL may be bought for sixpence by anyone, irrespective of membership? The Association is only voluntary in the same sense as other societies are, that is to say, admission is voluntarily sought by the candidate, and as voluntarily accorded or refused by the Association.

I cannot admit that the result of the *plébiscite* was so startling as to call for resignation. Less than one-half of the members of the Association thought it worth while to give their opinion on the question; and of those that did vote, more than one-fourth were in favour of ladies entering the Association on the footing on which they now stand. If there is such a thing as the right of minorities, surely this is a case where it ought to be recognised. I think, moreover, that it is too much to expect that I should resign in deference to the prejudice of enemies, and in opposition to the opinion of 1,051 members; but, my respect for the latter is so great, that I am quite willing to leave my case in their hands. They cannot desire so strongly as I do that I should remain connected with the Association; nevertheless, if they consider, by a majority, that I ought to leave it, I will bow to their decision. In no society that I know of would a majority of less than three-fourths suffice to exclude a member, even for grave misconduct. If, therefore, three-fourths of the whole of the members of the Association vote, without further agitation, that the crime of being a medical woman warrants my being deprived of that membership to which I have already been admitted, and which I claim never to have forfeited, in that case also I will resign. I do not think that anyone could, consistently with self-respect, be willing to do more than I offer to do. I need hardly add that my decision binds no one but myself.—I remain, sir, your obedient servant,

FRANCES ELIZABETH HOGGAN, M.D., L.K.Q.C.P.I.

7, Trevor Terrace, Rutland Gate, S.W., February 15th, 1878.

DENTISTS AND SURGEON-DENTISTS.

SIR,—In addition to the reasons given so forcibly in your leader of Saturday last, why dentists should be registered as dentists, and prevented from using in any way the title "surgeon" without having obtained a surgical diploma, another, and in my opinion a very strong one, remains to be urged on behalf of the public. In a communication I made to the *Lancet* in 1858, I advocated "the elevation of dental practitioners by a recognised qualification, and the consequent protection of the public from those who are unqualified; and that in future they be styled surgeon-dentists or dentists, according to their qualifications"—dental licentiates, dentists; and surgeons, being also dental licentiates, surgeon-dentists—the following passage being the basis of the latter suggestion. "At present, gentlemen practising dentistry style themselves at will surgeon-dentists or dentists, but the public generally do not regard the two designations as synonymous, and have the idea that a surgeon-dentist is a surgeon and also a dentist." That was true twenty years ago, and it is true now. The public, I know, still believe that a surgeon-dentist is a surgeon practising dentistry, and are surprised to learn that most so-called "surgeon-dentists" are only trained to the manufacture of artificial teeth.

There is now an opportunity such as cannot occur again of rescuing the honoured title of surgeon from use by thousands of dentists who have not the slightest right to it, and securing it in future to those who have earned the right; and I trust that your call to arms will be vigorously and universally responded to by the members of the Association.—Yours very truly, ALEXANDER STEWART, F.R.C.S.Ed.

112, Cheapside, February 19th, 1878.

P.S.—Your plan of placing "dentists" and "dental surgeons" on the same register, but in different columns, appears to meet the case effectively, and is so evidently just that members will have no difficulty in getting their representatives and any other members of Parliament they can influence to support it as an amendment.

WEIGHT-EXTENSION IN DISEASE OF THE HIP.

SIR,—In his letter in the *JOURNAL* for February 9th, Mr. Adams somewhat misunderstands my objection to his original statement on this subject. If he will refer back to my first letter (January 26th), he will see that my object was not to contest the priority of an American surgeon in the use of the weight for the purpose of relieving pain, or for any other purpose, but merely to show that this practice, unquestionably useful as it is, is no discovery, whoever may have first adopted it. It is merely an obvious and almost a necessary development of Brodie's practice; and to claim any rights of discovery in a matter of this kind, whether for Dr. Davis or any one else, seems to me not merely to be an abuse of language, but also to foster the prevailing tendency to advance a "claim" to some so-called "discovery" or some special form of treatment or instrument, whereby the name of an individual can be connected with some common disease. I claim, as I said before, no priority or originality whatever for the use of the weight in hip-disease. At the Hospital for Sick Children, we certainly used it, as Mr. Adams says, for the relief of the pain so characteristic of the acute stage of the affection; and there is no doubt, as I stated in my former letter, that the stirrup of strapping by which it is fixed to the leg renders its use much more convenient than it was in Brodie's time; and this is an American invention, which I believed was due to Hancock. But I am quite unaware of anything in the history of weight-extension in this or any other affections of the joints which deserves to be ranked as a discovery.—Yours, etc., T. HOLMES.

London, February 1878.

SIR,—There can be no doubt whatever that Mr. Adams is quite wrong in supposing that the application of a weight to the foot, in the treatment of hip-joint disease, is a modern discovery. Mr. Holmes is perfectly correct in his remarks on this subject in the *JOURNAL* of January 26th. In the year 1860, I forwarded to the Royal Medical and Chirurgical Society a paper on the Treatment of Scrofulous Diseases of Bones, etc., which is endorsed by the Secretary: "Received November 3rd, 1860; read November 27th, 1860." It was read in abstract. In relating the particulars of a case of a boy, which I had under treatment in June 1856, the following paragraph occurs: "I placed the patient on an inclined plane, and fastened to his foot a pound weight, which worked through a pulley fixed to the bottom of the bed." "He bore the weight well, and I gradually increased it to four pounds." Some months back, soon after Mr. Adams's return from America, I mentioned this case to him, and stated there was certainly no novelty in the treatment; for that, about the same date, I well

remembered, a bone-setter at Manchester was tried for manslaughter, because a man had died, in the treatment of whose case (hip-disease) he had employed extension by means of a weight attached to the foot. I need scarcely make the remark that the man was acquitted. When Dr. Sayre was in London, I asked him to call upon me and I should be happy to show him the paper above alluded to, which, although much pressed for time, he kindly did; and in a very courteous manner acknowledged that the mode of treatment was not new, and strongly recommended me to preserve the paper as a valuable confirmation. From my house, Dr. Sayre and his son went with me to visit the children's wards connected with the Samaritan Hospital, where I had at that time five cases of hip-disease in different stages of treatment. After carefully examining them all, he expressed some surprise at not finding that any of them were treated by means of the extension-weight, and asked why I had discontinued its use. My answer was, because I could produce better results by other means, and that, as he had witnessed, my chief reliance was on "Thomas's splint". I may here observe that both Dr. Sayre and his son seemed well pleased, and made some very complimentary remarks. With regard to the treatment of these cases by a combination of motion and extension, I have always considered it not only a mistake, but in many cases most injurious, as long as any disease exists; and this opinion has been strongly confirmed by some cases I have seen lately. I consider Thomas's splint the best for all practical purposes, as, when pain is no longer present, it enables the patient to move about freely on crutches, a patten being fixed to the boot on the sound foot, so that the foot of the diseased limb cannot touch the ground, quite sufficient extension being thus kept up by the hanging of the limb itself. In this way, the general health is in no wise interfered with.—I am, yours, etc., A. WYNN WILLIAMS, M.D.

1, Montagu Square, W., January 28th, 1878.

SIR,—In the *JOURNAL* of January 26th, Mr. Holmes asks for evidence as to the value of the treatment of disease of the hip-joint by Sayre's splint. His experience has led him to believe that this treatment by extension, combined with motion, leads to unsatisfactory results. In this opinion, I can with confidence confirm him. I well remember that, five or six years ago, after a visit of Dr. Sayre to this country, the treatment of hip-disease had in Leeds a fair trial. The apparent benefit which attended the use of the splint at its first application led me, as well as others, to think that it would prove a great acquisition; but, unfortunately, we found that its application, instead of being beneficial, was decidedly the reverse. However carefully the instrument may be applied, the necessary extension soon relaxes, the bones come into apposition, fresh inflammation is induced, and the last state of the child is worse than the first. I can call to mind two cases in which this method of treatment was followed by excision of the joint, both of which would have, in all probability, been cured by rest and extension applied in the usual manner.

Shall we find that the newly introduced treatment of disease of the spine, which also aims at dispensing with rest in bed, is equally unsatisfactory? Time only can show; but some of the cases, in which I have lately used it, make me fear so. I can only hope that my fears will prove ungrounded.—I am, sir, yours, etc., A. F. MCGILL.

Park Square, Leeds, January 26th, 1878.

CEREBRO-SPINAL FEVER.

SIR,—Within the last couple of months, there have been admitted into the Dundee Infirmary a number of cases of the above disease. A detailed account of the outbreak I hope to give on a future occasion. Meantime, I wish only to draw attention to its occurrence.

I do so because it may occur elsewhere than in Dundee; because, from its rarity and from its resemblance to other maladies, the real nature of the ailment may be very readily overlooked, especially in the homes of the poor; and because it is of importance that no opportunity should be lost of studying the natural history of a disease which is so comparatively rare, and of which we know so little.

As it exists here at present, it is undoubtedly contagious, affecting one member of a family after another; and bears, in many respects, so close a resemblance to typhus fever that it may very easily be mistaken for it. Indeed, most of our cases have been sent in as typhus.

The onset of the disease is characterised by rigors, sickness, intense headache, and often pains in the neck, trunk, and limbs. The headache continues; fever is marked; the breathing is specially quick and cerebral in character; the patient is restless, and has a look of great distress; the tongue is dry or furred; the bowels are confined; the urine is high coloured, deficient in chlorides, and sometimes contains a little albumen. There may or may not be an eruption on the skin. This,

when it occurs, more often resembles the typhus rash than any other. It is distinguished from that rash by its earlier appearance, its generally lighter colour, its more varying character, and its tendency to fade or change, rather than become more intense, as the malady advances. The cuticle, too, often desquamates freely in furfuraceous particles after cerebro-spinal fever.

The appearance of the patient is often very like that of a sufferer from typhus. Besides the above characters of the rash, the chief points by which cerebro-spinal fever may be distinguished from typhus are that, in the former, there is more often sickness at the onset; the headache is more intense; the breathing is apt to be cerebral from the commencement of the attack; the intellect is clearer, indeed often quite clear throughout the illness; there is less tendency to delirium and stupor; and the eyes are, as a rule, less suffused and injected.

The two maladies have often so close a general resemblance, that it must frequently be difficult, if not impossible, to make a satisfactory diagnosis in the badly lighted dwellings of many of the poor.

I hope that physicians practising in other localities will be on the outlook for what is always an interesting, and often a most alarming, disease. It is new to our hospital records.—Your obedient servant,

T. J. MACLAGAN, M.D.,

Physician to the Dundee Royal Infirmary; Examiner in Medicine to the University of Aberdeen.

REFORMATION OF THE CORONER'S COURT.

SIR,—Relative to this subject, allow me to call attention to the necessity of selecting a more intelligent class of jurors. These are frequently chosen from the ignorant, illiterate, and idle ranks of society; their selection and appointment being dependent on the coroner, or on his officer through him. Ignorant or incompetent coroners are liable to the temptation of selecting ignorant and incompetent jurors, who, *addicti jurare in verba magistræ*, would never dream of doubting his findings, however foolish. Whether the deliberations of a coroner's court can be aided by the enlightened cogitations of such jurors, or whether any weight or value attach to their verdicts and censures, may be well doubted. Confidence is placed in inquiries conducted in public; but, since prisoners committed for trial on a coroner's warrant have their cases publicly investigated and judged by a jury a second time, it would seem that more publicity is allowed than seems necessary for the ends of justice. By a careful and searching preliminary investigation, or by a consultation in private, or by making use of evidence communicated to the coroner orally or in writing, not only might many unnecessary inquests be avoided, but the cause of death might be ascertained without invoking the assistance of twelve jurors, whose visit to the house of the deceased's friends to view the corpse must be anything but pleasant. The preliminary investigation ought to be made by a competent and qualified person, who should make a report to the coroner. Registrars of deaths might render service in this department, but unfortunately are unacquainted with the words expressing the causes of death which they register. The medical officer of health, in addition to being the "medical referee" or "pathologist assessor", might have a controlling power over the registration of deaths, he being the registrar-in-chief of a district or districts, and the present registrars might be related to him as clerks, or in some cases dispensed with. The registration of deaths would be more efficiently performed by medical men; but it is desirable that it should devolve upon a specialist, such as a medical officer of health, whose time ought not to be occupied by family practice.

Some one of your correspondents wisely remarked that a coroner ought to be "a man of sense". Coroners at inquests frequently avail themselves of this opportunity of talking about themselves and flourishing their supposed excellencies. Frequently these courts are the scene of a teetotal lecture; and I lately read of a coroner who, to the disgust of the public and to the torture of the feelings of the friends of the deceased, stated that the soul of the deceased was now in hell and in hell-fire; and the jury tamely acquiesced in this monstrous outrage. Coroners ought to be summarily called to account for such irrelevant disquisitions, and future legislation ought to limit their *libertas loquendi*.

The remedy to be adopted for the purpose of expunging and weeding out erratic and ignorant coroners, and retaining experienced and efficient members, is that, in future legislation on this subject, the following provisions should be made. 1. The area and amount of their work should be *redistributed*, and small districts should be enlarged in extent, and the amount of work increased. In this way, the number of coroners would be diminished. 2. Present coroners ought to devote themselves *entirely* to the duties of their office, and, if engaged in any other trade or profession, should be compelled to resign it, or resign their coroner-

ship. 3. If they retain their coronership and resign their profession, compensation ought to be made by increased remuneration. 4. Present coroners, who have held the office for a lengthened period and performed its duties in a satisfactory manner, should retire on a superannuation allowance.—I remain, etc.,

G. L.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

COUNTY BOARDS.

It is not very often that we have the satisfaction of agreeing with Mr. Stansfeld in his legislative views. We see, however, with great satisfaction that Mr. Stansfeld has moved as an amendment, on the second reading of the County Government Bill, "That, with a view to simplify and strengthen local self-government, it is desirable, with as little delay as possible, to bring each sanitary district and Poor-law union within the area of one county, and to give to the ratepayers in and of such districts the power of directly electing members to the County Board exceeding in number the representatives of justices". This has so long been the object sought by the leading sanitarians in the country, as expressed in the reports of our Joint State Medicine Committee, that we are a little surprised that that Committee, which has so often urged the necessity of County Boards in connection with sanitary organisation, has not taken action in the matter. We also gently remind that Committee that very little result has yet been seen for the £100 grant which they received from the Association two years since, for a sanitary conference of medical officers and sanitary authorities.

THE TREATMENT OF CASUALS IN GLOSSOP WORKHOUSE.

THE *Sheffield Independent* of the 13th instant gives a report of an inquest held at the Glossop Workhouse, Derbyshire, which merits some comment. It appeared that a professional tramp named Hall had walked from Hayfield to Glossop, accompanied by her three children, reaching the workhouse about 6 P.M. On her admission, she asked to see the doctor, as one of her children complained of being in great pain, and was, as was subsequently shown, very ill. The porter told her there was no doctor in the house; and she was shown, without food of any kind, into the casual ward; the only thing supplied her being some hot water, with which she made some tea from a small quantity she carried in her pocket. This she gave to her sick child. The ward contained no bed or bedding, only some raised boards and a rug with which the mother covered her child. She then, in company with another female and her two other children, lay down to sleep; the sick child continuing to moan and groan. About 9 P.M., the mother heard a rattling noise in the child's throat, and, on getting up to go to him, found that he was dead. The *post mortem* examination showed that the child (whose body gave evidence of being badly nourished) had died of inflammation of the bowels. The medical officer, Mr. Howard, further deposed that, if his attention had been called to the child when first admitted, he might have been relieved; that it was the duty of the master to communicate to him when any inmate or casual was taken ill; and that the mode of admission of casuals into the house was radically bad, for, on examination, he had found that one of the other children had measles; and that it was essential to any chance of life in the deceased that some food should have been given him when first admitted. We are not surprised to learn that, after such evidence, the correctness of which does not appear to have been impugned, the coroner should have commented in language of extreme severity. The whole story reveals a shocking indifference to human life and human suffering on the part of the resident officials; but they are not solely to blame. It is impossible to suppose that the mother and children would have been thus sent supperless to bed, in such a den, if it had not been in accordance with the orders of the board of guardians. We would also ask, Where was the inspector of the district, that he had failed to discover what were the rules and regulations in force in the Glossop casual ward? We perceive that Mr. Basil Cane (who, we presume, is the local inspector) has made an official inquiry. We hope that this will be moved for in the House, and that some question will be put which will elicit whether official inspection in the Derbyshire Poor-law District is or is not an useless but costly sham. A Local Government Board inquiry has been held on the question of the treatment of this woman and her children, but the results have not been reported.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY SURGEONS AND RIDING DRILL.

THE medical establishment at Aldershot has been largely increased by the arrival of twenty-four surgeons who have recently passed out of the Army Medical School at Netley. They have now entered upon a course of instruction in bearer company drill, and are also in regular attendance at the riding-school. This is the first time that riding drill has been ordered for medical officers on starting in the service. Hitherto, when army surgeons have attended military riding-schools—a rare occurrence, however—it has been at their own expense and as a voluntary undertaking. The importance of medical officers being able to ride well when on field-service, is greater than it might at first appear to be to those who have not had opportunities of observing the effects of incapacity in this regard. As pointed out in Professor Longmore's recent work on the treatment of gunshot injuries, familiarity with riding will be especially necessary for those medical officers who may be posted to bearer companies in the field. They must be mounted. This arises from the need that exists for them to keep up constantly with the troops of all arms, in order to be able to attend to men requiring their aid; from the frequency with which they will have to move to-and-fro rapidly while engaged in their special duties; and also in order that they may be spared all avoidable fatigue, so that they may be able to devote full energy to the important work which devolves on them, often at the close of the day, when other officers are free to obtain repose. There is good reason for hoping that the riding drill instruction which has just been initiated by the Director-General, Sir William Muir, will be continued in future with all young army medical officers on their first joining the service.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, February 14th, 1878.

Army Surgeons at the Cape.—Dr. WARD asked the Secretary of State for War whether he had heard the reported dearth of army surgeons at the Cape; whether the report was correct; and in that case, whether he could explain how the emergency had arisen?—Mr. HARDY: Since the breaking out of hostilities at the Cape, two medical officers, whose term of service in that command had expired, were detained there, and six others have been sent from England, some of whom probably had not arrived when the letter referred to was written. Twenty-seven non-commissioned officers and men of the Army Hospital Corps have been despatched as an addition to the existing establishment, and a considerable supply of medical and surgical equipment has been forwarded. The military medical officers are sufficient for the number of troops; but private medical practitioners to the number of twelve are employed with the local volunteer force, and also at several of the base hospitals. The force is divided into so many small detachments, that it is impossible to supply military medical officers to all; but the important appointments and the movable field hospitals are in charge of military medical officers. With regard to the expense of the private medical practitioners, it is only temporary, and will cease with their temporary employment; and the rates of remuneration vary from 12s. to 40s. a day, only one being paid at the rate of three guineas a day. This expense is not greater than if military medical officers were employed, and is, as already stated, only temporary. The military authorities were lately referred to to know if any increase of medical officers or Army Hospital Corps had been asked for by the general officer commanding at the Cape; but the reply was in the negative.

Monday, February 18th.

Her Majesty's Ship "Undaunted."—In answer to Mr. Dodson, Mr. W. H. SMITH said that, since November 1877, there had been on board this vessel, now on the Bombay station, twenty-five cases of fever, of which one had proved fatal. The cases of continued fever were very simple, and easily yielded to treatment. During December, four men were sent home invalided, two from debility, and two from other causes. No officer had been invalided since August last. One case of small-pox was reported on the 27th of December. The number of officers invalided from the *Undaunted* had been considerably less than from the previous flagship during the same period.

Army Medical Department.—Dr. WARD asked the Secretary of State for War whether he would state what was the number of candidates for the recent examination for the Army Medical Department, and what was the number of vacancies advertised.—Mr. HARDY said there were

forty vacancies, and he regretted to say only nineteen candidates. That was a very unsatisfactory state of things, but he would make inquiries into the subject.

Tuesday, February 19th.

Dental Practitioners' Bill.—Sir J. LUBBOCK moved the second reading of the Bill, the object of which, he said, was to protect the public against quacks. The law very wisely provided that any person pretending to be a physician or surgeon, unless properly qualified, was rendered liable to a severe penalty. Chemists and druggists were not allowed to pursue their respective callings unless their qualifications had been tested by examination. It certainly seemed very anomalous that any person might call himself a dentist without the slightest qualification. Yet, the profession of a dentist was by no means simple or easy. The system proposed in the present Bill had been tried in America and in Canada, where it had worked very successfully. It was proposed to respect vested interests; nor, indeed, was it proposed to prevent anyone from pulling out teeth and acting otherwise as a dentist, but only to forbid him from using a title which would imply that he had special qualifications.—Dr. CAMERON moved the adjournment of the debate; and, after a short conversation, the House divided, and the numbers were: For the adjournment, 27; against it, 49; majority, 22.—Sir J. M'KENNA moved the adjournment of the House.—Mr. CROSS opposed the adjournment, which was supported by Dr. CAMERON and Mr. O'SULLIVAN. The House divided: For the adjournment, 11; against it, 61; majority, 50.—Mr. DILLWYN moved the adjournment of the debate.—Sir J. LUBBOCK said he should not further oppose; and the second reading was postponed until the 5th of March.

Russian Prisoners.—Sir J. M'KENNA asked the Under Secretary of State for Foreign Affairs if he could afford any information as to how the Russians disposed, and what has become, of Doctors Armand Leslie and Neville, who were made prisoners by the Russians at Kamarli early in January.—Mr. BOURKE: Drs. Armand Leslie, Neville, and Kirkpatrick were taken prisoners by the Russians at Kamarli and detained as prisoners of war for a month, until, on their arrival at Adrianople, the Grand Duke Nicholas, on the application of Consul Blunt, gave orders for their release. Lord Augustus Loftus was instructed to bring the facts as telegraphed by Mr. Layard before the Russian Government, and he was informed that the Commander-in-Chief regretted what had occurred, and had given orders for a rigorous inquiry, and for the severe punishment of the persons who had ill-treated the doctors. On their release, they proceeded to Constantinople, and Dr. Armand Leslie intended to return to England.*

OBITUARY.

CHARLES BLEECK, F.R.C.S., Warminster.

WITH regret we have to announce the death of Mr. Charles Bleck of Warminster, an old and much esteemed member of the Association, which took place on February 4th. Mr. Bleck was born in Warminster in 1805, and received his early professional education at the Bristol Royal Infirmary; he also studied for a short time at St. George's Hospital. He became a Licentiate of the Society of Apothecaries in 1827, and a Member of the Royal College of Surgeons in 1828; and soon afterwards commenced practice in his native town, where he remained until the end of his life. Soon after he had settled in Warminster, he was appointed a Poor-law medical officer under the old régime; he held the appointment seventeen years, and when he resigned it, had acquired a good share of private practice, which steadily increased until in time he gained the position of leading practitioner in the town and neighbourhood. In 1870, Mr. Bleck was the President of the Bath and Bristol Branch; and two years later, was President of the Salisbury Medical Society. Both these honourable positions he filled with honour to himself and advantage to the Societies.

In his professional life, Mr. Bleck won the esteem of all by his courteousness to his patients of all grades, his kindness to the poor, and his strictly honourable conduct towards other members of his profession. In private life, his hospitality was of the most generous kind. As a townsman, every work that was good or had the semblance of being made useful, obtained his active support; and this not only in Warminster, but sometimes at a distance, as in the case of the Bournemouth Convalescent Home, of the committee of which he was an active member.

A fortnight before his death, he had a very severe attack of gout, to which, it seems, he had been subject. Having rallied from this, he

* The reporters in the daily papers have subjected Dr. Armand Leslie to a process of dichotomy—making him "Drs. Armand and Leslie".

endeavoured to accomplish an object which he had undertaken in connection with the meeting of the British Medical Association in Bath. Congestion of the lung appeared the following day; a few days later, embolism of the left femoral artery came on; and on February 4th, he died. His funeral was attended by a very large concourse of people from the town and neighbourhood for several miles around, who came to bear willing testimony to his worth and character. "His place knows him no more; but the memory of his useful, noble, and generous life will long be cherished in his native town."

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board, on February 12th.

Alexander, Adolphus Benjamin, Hatton Garden
Clements, Thomas, Colville Road, W. (St. Mary's Hospital)
Fort, James Wilson, Lancaster (Middlesex Hospital)
Gurner, John Robert, Brussels
Gillies, David, Londonderry
Hardie, Walter Jackson, Montrose
Rodway, Leonard, Torquay (Middlesex Hospital)

Two candidates having failed to acquit themselves to the satisfaction of the Board, were again referred to their studies.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 7th, 1878.

Davila, Pascoal Manoel, Tavistock Square, Bedford Square
Gledhill, James, Peartree Street, Waterloo, S.E.
Jeram, James William, Waterlooville, Hants
London, Alfred Austin, Maidstone, Kent

The following gentlemen also on the same day passed their primary professional examination.

Good, Frederick Thomas, St. Bartholomew's Hospital
Williams, William, St. Thomas's Hospital

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their first professional examination during the January examinations.

Robert Nelson Jack, County Tyrone; William Watt, Kirriemuir; Frederick Enos Fenton, London; Lindsey Barrett, Donegal; James Mulligan, Dro-more; and Charles A. Bestill, County Wicklow.

On the 1st instant, the following gentlemen passed their final examination and were admitted Licentiates of the College.

John Rankine, Stirling; Thomas Booth, Dublin; Edward Head Moore, Devonport; John Hay Caird, Fort George; Robert Davis Evans, North Wales; Herbert Lionel Reddy, Montreal; and Henry Mackintosh, Westport, Ireland.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

John George Brass, Barnard Castle; Thomas Harrop Roberts, Saddleworth; James Crofts Harris, Cork; John Scott, —; James Ross, Elgin; Henry Powell Williams, Liverpool; John Francis Grayling, Sittingbourne; Thomas Boymer Knight, Lincolnshire; James Hugh Robertson, Alnwick; John Joyner Fraser, Ross-shire; David Melville, Dundee; Isaac William Dalzell, Cumberland; Jones Hill Turner, Kingston-on-Thames; Robert Alexander Shannon, County Kildare; Alfred Emson, Dorchester; Thomas Wallace, Limerick; George Anthony O'Connor, Galway; and John Paxton, Norham.

The following gentlemen passed their final examination, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh.

Walter Lorrain Rankine, Lanarkshire; Henry Ray, Australia; William Taylor M'Comb, Dublin; Samuel Arthur Stoddart Kennedy, Ayrshire; Hugh Williams, Anglesea; John Charles M'Lachlan, Yorkshire; William Ardagh Smyth, Trichinopoly, India; Isaiah George Butters, Devonport; Thomas William Drinkwater, Norwich; Richard Hamer Whiteley, Wakefield; Thomas M'Cormick, Castlederg; Julius Casar, Cork; George Black Craig, Northumberland; James Bruce Macpherson, Londonderry; William Smyth Paterson, Passage West, Cork; William Alina Aylmer Lewis, Chester; Herbert St. Clare Carruthers, Southampton; Philip William George Canning, Jersey; Daniel Stenhouse, Auchterarder; Thomas Cassidy, Cape of Good Hope; Lewis Lloyd Pritchard, Northamptonshire; Alfred Edwin Livsey, Derbyshire; Lombard John Newman Tanner, Cork; and Thomas James M'Loughlin, County Meath.

MEDICAL VACANCIES.

THE following vacancies are announced:—

BALROTHERY UNION.—Medical Officer of Lusk Dispensary District. Salary, £125 a year as Medical Officer, and £20 10s. 8d. as Sanitary Officer, with the usual registration and vaccination fees. Election will take place on March 2nd.

BROMYARD UNION.—Parish of Cradley—Medical Officer and Public Vaccinator. Salary, £50 per annum, and fees. Applications to be made on or before March 9th.

FIFE and KINROSS LUNATIC ASYLUM.—Medical Superintendent. Salary to commence at 350 per annum, with furnished house, coals, gas, vegetables, and washing. Applications to be made on or before the 28th instant.

GENERAL INFIRMARY, Hertford.—Medical Resident and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before March 6th.

GENERAL INFIRMARY, Northampton.—Surgeon. Salary, £20 per annum, with furnished apartments, board, attendance, and washing. Applications to be made on or before the 26th instant.

GORT UNION.—Medical Officer of Ardahan Dispensary District. Salary, £140 a year as Medical Officer, and £10 as Sanitary Officer, with Registration and Vaccination Fees. Election on March 14th.

IPSWICH BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, washing, and attendance.

KENSINGTON DISPENSARY.—Resident Medical Officer. Salary, £125 per annum, with furnished apartments, coals, gas, and attendance. Applications to be made on or before March 4th.

KILLALA UNION.—Medical Officer of Killala Dispensary District. Salary, £60 yearly, and £20 as Sanitary Officer. Applications to the 2nd prox.

MILFORD UNION.—Medical Officer of Ramelton Dispensary District. Salary, £115 yearly, exclusive of vaccination and registration fees; also £25 per annum as Medical Attendant of the Ramelton Fever Hospital. Applications up to the morning of the 25th instant.

NARBERTH UNION.—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

NATIONAL HOSPITAL FOR THE PARALYSED and EPILEPTIC, Bloomsbury.—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and residence. Applications to be made on or before the 28th instant.

NORTHAMPTON GENERAL INFIRMARY.—Junior House-Surgeon. Salary, £80 per annum, with board, furnished apartments, attendance, and washing. Applications to be made on or before the 26th instant.

PORTUMNA UNION.—Medical Officer of Eyrecourt and Killmore Dispensary Districts. Salary, £120 as Medical Officer, and £12 10s. 6d. as Sanitary Officer, with vaccination fees. Election will take place on March 1st.

PUBLIC DISPENSARY, Stanhope Street, Clare Market.—Resident Medical Officer. Salary, £105 per annum, with furnished apartments, coals, and gas. Applications to be made on or before March 4th.

WESTMINSTER HOSPITAL.—Aural Surgeon and Assistant Surgeon. Applications to be made on or before the 26th instant.

WEST NORFOLK and LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before March 1st.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

DEATH.

*PRICHARD, Thomas S., M.D., at Abington Abbey, Northampton, aged 53, on February 14th.

THE HARVEY TRICENTENARY MEMORIAL FUND.—A meeting of the London Executive Committee of this Fund was held yesterday (Thursday) at the Royal College of Physicians, at which Dr. Owen Rees (in the chair), Sir G. Burrows, Dr. Quain, Mr. John Simon, Mr. Prescott Hewett, and Mr. G. Eastes, one of the honorary secretaries, were present. It was resolved to prosecute the appeal for funds with all vigour, and measures were adopted for that purpose.

ST. GEORGE'S HOSPITAL.—Mr. Henry Lee, having recently resigned the post of Surgeon to St. George's Hospital, has been succeeded in that office by Mr. Pick, who was elected yesterday (Thursday) at a joint meeting of members of the lay committee and of the medical and surgical staffs of the Hospital, to which body all such questions of appointment are for the future to be submitted. At the same meeting, Mr. E. C. Stirling was elected Assistant-Surgeon in the vacancy created by Mr. Pick's promotion.

CHARING CROSS HOSPITAL.—The term of office of Mr. Canton and Mr. Hird as surgeons recently expired. Mr. Hird, who is also Dean of the Medical School, is re-appointed for a short term; and Mr. Bellamy succeeds Mr. Canton in the Surgeoncy. The election to the vacant post created by Mr. Bellamy's promotion will take place early next month. There are already various candidates for the office.

THE WILL OF THE LATE DR. BLUNDELL.—The will and codicil (dated April 11th, 1857, and March 27th, 1876) of Dr. James Blundell, formerly of 1, Great George Street, Westminster, but late of 50, Piccadilly, who died on the 15th ult., was proved on the 29th ult., by George Augustus Frederick Wilks, M.D., the nephew, and Samuel Frederick Noyes, the surviving executors, the personal estate being sworn under £550,000. The testator leaves to his sister, Miss Mary Blundell, an annuity of £800, and all his furniture, plate, pictures, household effects, horses, and carriages; to his half-sister, Miss Ann Blundell, an annuity of £250; to his nephew Bezer Blundell, £14,000 Consols; to his nephew Dr. Wilks, all his freehold, copyhold, and leasehold estates, and £35,000 Reduced Bank Annuities; to the London Hospital, £500; to St. Mary's Hospital, Paddington, £250; and there are other legacies and annuities to relatives, friends, and servants. The residue of his personalty is given upon trust for his niece, Mrs. Sarah Haighton Noyes, and her children.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.
FRIDAY	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
ATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—	Medical Society of London, 8.30 P.M. Dr. J. Milner Fothergill, "Case of Opium Poisoning treated by the Hypodermic Injection of Solution of Sulphate of Atropia"; Dr. Day (of Stafford), "Observations and Comments on Certain Convulsive Disorders".
TUESDAY.—	Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Broadbent, "On a Case of Amnesia"; Mr. Brodhurst, "On a Case of Ankylosis of both Knee-joints, with shortening of the Femora". Dr. Dickinson's Microscopic Preparations illustrating the Pathology of Diabetes will be arranged for inspection by 8 P.M.
WEDNESDAY.—	Hunterian Society, 7.30 P.M.: Council Meeting. 8 P.M.: Mr. R. Clement Lucas, "On the Treatment of Lupus by Erasion".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

The following communications have been handed to the General Manager:—Mr. E. Roberts, Wrexham; Mr. J. F. Watson, Norwich; Mr. J. Cuckson, Birmingham; Messrs. Probyn, London; Dr. C. C. Gibbes, Surbiton; Dr. J. W. Moore, Dublin; Dr. E. T. Tibbits, Bradford.

HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN SQUARE.

SIR,—In the report of the annual meeting of this institution, which appears in a medical paper of February 14th, the following startling announcement is made.

"After the Report had been read, the secretary read a requisition purporting to be signed by twenty-one subscribers, amongst whom were several of the nobility, requiring the committee to call a meeting to consider the circumstances connected with the so-called Committee of Inquiry. Lord Calthorpe then stated that he had seen Lord Rosebery in the House of Lords on Friday, and he had stated that he had never signed any document of the kind, and he could not understand how his signature had been appended to the document in question. Lord Calthorpe further stated that he had seen Sir Charles Legard, who, on being asked whether he had signed the requisition, said that he had received a memorial with a letter from Colonel Feilding, and that he had signed it, but he did not know what it had reference to. A subscriber suggested that after the observations of the President, it would be necessary to make inquiries as to the genuineness of the other signatures."

In plain English, a charge of forgery is preferred against some person or persons. I therefore beg to inform that section of the public who take an interest in the above-named institution, through your columns, that Lord Rosebery did sign the requisition, and further, that Sir Charles Legard perfectly understands the purport of the requisition to which he appended his signature, having spoken to him on the subject myself.

Hoping that this letter may serve to quiet the mind of the subscriber who "suggested that after the observations of the President it would be necessary to make inquiries as to the genuineness of the other signatures", I remain, yours faithfully,
Brook Street, February 20th, 1878.

DUNMORE.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the *Post Office* do not allow letters to be addressed to initials and directed to any *Post Office* in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a *Post Office*.

JUDICIAL POST MORTEM EXAMINATIONS IN SCOTLAND.

SIR,—Allow me to correct a mistake you have fallen into in your note appended to my letter in your *JOURNAL* of Saturday last. You imply that the Fiscal did not know that I had seen the body of the deceased, and had made arrangements with the widow to inspect it; but if you will refer to the Fiscal's first letter to me, you will see that at the time he applied for a remit to Dr. Ogston he was aware of both these facts.

As you seem to think that I have put my complaint on too narrow grounds, I may now say that if this had been a solitary case of want of "equity and courtesy" on the part of the Fiscal, "you would have heard nothing of it". That it is not so, is proved by Mr. Cadenhead himself in his circular to the profession here in 1876, in which he states that he had received a statement "formally in writing, to the effect that the medical profession entertains a strong belief, and feels keenly, that in the matter of judicial remits and employments I fail to treat them with that equity and courtesy which the crown intends they should be treated with". To illustrate how this feeling has arisen, I shall briefly narrate, as examples, the two cases which called forth the circular I have just now quoted from. In October 1876, Dr. Jackson, a gentleman who deservedly occupies a foremost position in the profession in Aberdeen, reported to the Fiscal a case of sudden death to which he had been called. Dr. Jackson, whose qualification dates back to 1849, was not named in the remit; but Dr. Frank Ogston, who is the Fiscal's nephew, who occupies no official position whatever, and whose qualification dates only to 1873, carried out the remit. In November 1876, Dr. Jackson again reported a case of supposed infanticide. In this case, also, he was not named in the remit; but Dr. Frank Ogston was again employed in carrying the remit out. I could tell of several similar cases in which other medical men have been treated in a similar fashion; but I think I have said enough to show that there is good ground for the discontent which prevails here about the conduct of the Fiscal in such cases.

I hope you will find room for my queries to Dr. Littlejohn and his replies, as they show how marked the contrast is between the way such matters are managed here and in Edinburgh.

I see an article in your contemporary the *Medical Times and Gazette* on this correspondence. How far this is likely to be impartial, may be judged by the fact that Dr. Frank Ogston was circulating a printed copy of the article here on Friday, before the *Gazette* was published.—I am, yours truly,

Aberdeen, Feb. 18th, 1878. ANGUS FRASER, M.D.

WE are requested to call attention to the fact, that the letter recently published from Leeds, in support of Dr. Drysdale and Mrs. Besant, was from the pen of Mr. Henry Arthur Allbutt, and not from that of Dr. Clifford Allbutt, to whom it has been by some persons quite erroneously and carelessly attributed.

MEDICAL ETIQUETTE.

SIR,—Since Mr. Box's last letter, which cannot be considered an answer to mine of the preceding week, I have consulted many of my friends, and they are unanimously of opinion that the serious charges brought against me—in effect, those of "malice, malpractice, and untruthfulness"—ought to be substantiated by some direct evidence on the part of Mr. Box. Reiteration, negative evidence, and the asking of one question in answer to another, should be inadmissible in support of such serious charges. Mr. Box has been twice before challenged, without effect, to substantiate his charges on my "imagination", to prove that the ulna was not broken, and that the gentlemen in Shrewsbury were of the "unanimous opinion" he states. Till he attempt to do so, I decline to take further notice of him; and as my defence will consist of the *written* evidence of twelve witnesses, it would be folly to trouble you with so lengthy a document in the present state of the case. Mr. Fox's statement about the colliery managers reminds me that the man Morris first came to the hospital with a letter purporting to come from the managers of the colliery in question, with a printed heading, and signed by one of their employers, asking that his case should be attended to. The lady-superintendent sent him to me, as surgeon of the week; and, as the managers are subscribers, I sent him in. I was not aware, nor can I find it in the rules, that arm-cases are not admitted, nor did it come to my knowledge for some weeks that the man was a pauper. As the certificate intended for the colliery has, I am told, been exhibited to the general public, it is only fair the profession should now see it.—I am, yours, etc.,
February 1878. W. D. BERESFORD.

BICARBONATE OF SODA IN BURNS.

CASE I.—On the 2nd of December last, I saw G., aged 18. He was standing in the centre of the room in a state of intense agony. His whole body, from the waist upwards, had been scalded by the overturning of a pot of boiling water. Having seen an account of the soda treatment a short time before, I was induced to give it a trial. Not being able to obtain anything else at the time, I made a strong solution of the ordinary "bread-soda" in warm water: this I applied freely. The relief experienced was immediate, and cure complete in a fortnight.

CASE II.—A short time afterwards, a child in the same neighbourhood fell face forwards on the fire, and a woman who was present when I applied the soda in the first case, made a solution and applied it in the same way, with results equally satisfactory.

CASE III.—A child two years of age had been badly burned by falling on the fire. The whole front of the child's chest was quite skinned and raw. In this case also the soda-solution acted well. All these cases were of a grave nature. The first was so serious that I almost despaired of recovery; yet under the soda-solution they all recovered, without any bad symptoms.

Whitwick, February 16th, 1878. WILLIAM DONOVAN.

POISONOUS DISINFECTANTS.

AT the Liverpool Coroner's Court, Mr. Clarke Aspinall held an inquest a short time ago upon the body of Elizabeth Lavell, forty-two years of age, wife of a stevedore. The deceased, who was said to be addicted to drunkenness, and to have been in liquor at the time, drank some carbolic acid from a cup, saying, "Now I have done it", and died from the effects of the poison next morning. A verdict to the effect that the deceased had committed suicide while labouring under temporary insanity was returned.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATER IN JANUARY 1878.

The following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen used to Oxidise Organic Matter.	Nitrogen As Nitrates, &c.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic.	Before Boiling.	After Boiling.
	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
<i>Thames Water Companies.</i>							
Grand Junction ..	20.40	0.114	0.090	0.000	0.003	13.2	3.7
West Middlesex ..	21.20	0.142	0.126	0.0-0	0.003	14.8	3.7
Southwark and Vauxhall ..	21.40	0.050	0.126	0.002	0.009	13.7	3.7
Chelsea ..	21.40	0.053	0.150	0.002	0.009	14.8	3.7
Lambeth ..	21.40	0.073	0.150	0.002	0.007	14.3	3.7
<i>Other Companies.</i>							
Kent ..	27.40	0.009	0.345	0.001	0.004	18.3	5.5
New River ..	21.90	0.025	0.135	0.001	0.003	15.4	2.8
East London ..	20.90	0.027	0.060	0.000	0.006	12.0	4.2

Note.—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Southwark and Vauxhall, and the Lambeth Companies.

REMOVAL OF FOREIGN BODIES FROM THE AUDITORY CANAL.

SIR,—The ingenious mode of removing foreign bodies from the external auditory meatus, adopted in a case by Dr. Gray, and by him reported in the *JOURNAL* of February 6th, is the invention of Loewenberg of Paris. He described this method in either the *Monatschrift* or *Arch. für Ohrenheilk.* about 1870-71. Certainly, on a visit to Paris in 1872, my friend showed to me several examples of foreign bodies removed by this method. Also, in this *JOURNAL* on the 26th December, 1874, I described the "agglutinate" method of Loewenberg in my paper on the Removal of Foreign Bodies from the Ear.—I am, etc.,

JAS. PATTERSON CASSELLS, M.D., Aural Surgeon
Glasgow Royal Infirmary.

February 1878.

VACCINATION DIRECT FROM THE CALF.

SIR,—Vaccine-lymph, as used in the days of Jenner, being in close relationship to its original source, the heifer was believed by him to afford a perfect protection against small-pox. This lymph has not been generally renewed for eighty years, and in consequence has gradually deteriorated in quality, as is proved by its comparative inefficiency at the present day, as witnessed by the ever recurring epidemics of small-pox. That vaccine-lymph derived from human beings may communicate syphilis, all now admit; and that serious and even fatal erysipelas may also arise from its use, is also admitted. Lymph derived from the hovine race is entirely free from these objections. It cannot possibly convey syphilis; and it has never, when properly obtained and used, been known to cause erysipelas. Moreover, its efficiency is so complete, that no instance has been recorded of any individual so vaccinated having ever taken small-pox afterwards.

Vaccination direct from the calf has been the national system in Belgium during the last ten years, while one million supplies of bovine-lymph have been disposed of by Dr. Henry Martin of Boston, United States, during the last six years. These facts speak for themselves. The success with calf-lymph is about 99 per cent. in cases of primary vaccinations, and our success has been about 75 per cent. in secondary vaccinations. We have successfully vaccinated calves during the last eleven months with pure lymph derived from other calves, and never from small-pox, as some ignorantly suppose; and having visited Belgium, and with Dr. Warlomont's most courteous assistance, made ourselves intimately acquainted with the minute details of the process, we are prepared to guarantee the profession a continuous supply of fresh calf-lymph on points and tubes as advertised.

We have opened an office at 264, Oxford Street, and we invite the medical men to visit us there daily, except Saturday, from two to three o'clock, at which hour cases may be inspected. We would also remind medical men that the anti-vaccination movement is daily gaining strength, and that its only argument—the danger of erysipelas and syphilis—is at once answered by the use of calf-lymph.

We recommend a few punctures or scratches to be made, when the point, being moistened, is rubbed over these marks, the skin being slightly stretched.—We are, etc.,

February 5th, 1878.

GEORGE WYLD, M.D. Edin.
THOMAS WILSON, L.R.C.P. Edin.

JOHN C. O. (Hanson, Durham).—No; only to the ordinary fee for *post mortem* examination.

DR. SOUTHBY'S TROCAR AND CANNULE.

SIR,—This small waistcoat-pocket instrument consists of a minute trocar with four silver cannule, which are inserted into dropsical limbs and left to drain off the serous fluid. They may be left for a length of time without danger or discomfort; and I have been much struck with the large amount of fluid which in a single night will be drained off—in some cases, half a gallon. The instrument, which has been well made by Mr. Hawksley of Oxford Street, will serve the purpose of an exploring trocar; and in a case which I recently saw in Lancashire with Mr. Frederick Nash of Todmorden, that gentleman used it for this purpose in the first instance, where the tumour was abdominal and of doubtful character.

It is impossible to speak too highly of this useful and portable trocar, which every practitioner would find a safe and valuable acquisition.—I am, sir, your obedient servant,

R. G. ALEXANDER, B.A., M.B., Physician to the
Bradford General Infirmary

February 1878.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the *BRITISH MEDICAL JOURNAL*, should arrive at the Office not later than 10 A.M. on Thursday.

TRANSIENT TUMOURS.

SIR,—At present I have under observation the following case. A male child, seventeen months old, well developed, robust, and "usually healthy," is subject, at intervals of a few months, to swellings on different parts of the body; the only exceptions, seemingly, being the front of the thorax and abdomen. It is first noticed that the child is "out of sorts," has no appetite, but without any decidedly severe symptoms. About four days after this, there appears, perhaps on the arm, a tumour, which is accompanied by pain; it increases in size up to the fourth day or so, when it disappears at the same rate, giving place to ecchymosis; and if seen: this period, leads the observer to believe the patient has been bruised. The swelling is of a hard consistence throughout, not freely movable nor well defined, but shading off to adjacent parts, the skin pale and shining, but no pain or tenderness on pressure. The appearance of a small patch of discoloration is the first indication of the decline of the tumour, and it in turn increases in extent until the fourth day, when it passes off in the same order. This is the fourth generation in which it has appeared: it has attacked all the male members of the family, and never the female, and has in every instance hitherto proved fatal in the course of time. There is one fact which may point to the pathology of the lesion—namely, that all the persons so affected have been liable to copious hæmorrhage, even from a mere abrasion of the skin. Have you or any of your readers experience of this disease? If so, can you refer me to any remedies beyond iodide of potassium, iron, and general tonic treatment, which, so far, have had no effect?—I am, sir, yours, etc., M. B.

Lewisham, January 28th, 1878.
* * From our correspondent's description, the tumours appear to be ecchymoses, indicating—in conjunction with the liability to bleeding which he mentions—the existence of the hæmorrhagic diathesis.

THE TREATMENT OF HYDROPHOBIA.

SIR,—I have lately had two cases which appear to me to bear on the subject of the treatment of hydrophobia. Considering that this dreadful disease is uniformly fatal in England, I am at a loss to understand how it is that such a powerful eliminator of animal poisons as mercury should be so much neglected. The first case was that of a medical friend, who inoculated his system with syphilis when operating for phimos. Mercury, given in the usual small doses and in a great variety of form, did not arrest the disease, the secondary eruption steadily increasing. At last calomel, given in five-grain doses, acted like a charm, and the patient is now well. It was given at sufficient intervals, so as to stop short of producing more than slight salivation.

The other case was a poisoned wound of the hand, caused by the edge of a preserved meat-tin. Like the case of syphilis, there was a latent period, and the dangerous symptoms did not come on until about a fortnight or three weeks after the injury—the wound keeping open, and being much indurated at the edges. Finally, there was great constitutional disturbance, with rigors, severe cough, pain in the chest, etc.; and the case looked very serious. The lymphatics of the arm became inflamed, and a small abscess formed over the root of the thumb. Calomel and James's powder were given with the most marked relief, and the man quickly recovered. The calomel produced severe purging.

Many years ago, I tried to save a pointer dog which was suffering from hydrophobia; and, noticing that the power of swallowing both solids and liquids was quite lost after the first day, I gave several injections of beef-tea by the rectum. The treatment, however, was too dangerous, and I gave it up; but after each injection the dog was quite lively, and I became sanguine about his recovery.

To supply water to the blood and to rapidly eliminate the poison are doubtless the indications for treatment, and the calomel vapour-bath may supply them. Why is this course of treatment, which has already proved successful in India, neglected in England? Will not some of your readers give it a trial?—I am, sir, your obedient servant,

A. M. D.

HOW TO STOP A JOURNAL GRACEFULLY.

THE *Louisville Medical News* writes:—There are several formulas for stopping a journal gracefully—all built, however, upon the foundation of "I enclose please find x dollars and y cents." We append examples. "Editor's *News*: Please find enclosed x dollars and y cents in payment of my account to date. Having unfortunately been deprived of my sight and hearing at the same time, so that I can neither read nor be read to, I am forced to request the discontinuance of your admirable journal. Trusting that it may continue uninterrupted on its road to the stars, and that your path may be strewn with life's choicest holly-hocks, I feel my way to subscribe myself, ever devotedly and gratefully yours, SMITH." And again, "Editor's *News*: Inclosed, etc. As executor of Dr. Brown's estate, I am directed to settle his account with your journal, and to direct its discontinuance. I was instructed also by Dr. B. to convey to you his apologies and regrets at this action on my part, and to assure you that but for the accident of his death nothing would have been further from his mind than quitting the *News*, without which life would have been a burden. JONES."—Such assurances of regard are very grateful to our feelings, and do much toward assuaging our grief at the reception of such letters as these, of which we have also had a modicum. "Editor's *News*: Your dun (a modest bill) for two years' subscription to the *News* has been received. Stop sending me the journal, as I am not to be insulted in this manner. (No inclosure.) A. B. C." "Post Office (official): The *L. M. News*, to the address of X., Y., or Z., remains dead in this office. Reason—X., Y., or Z. is dead-beat, removed, or doesn't want it. So-and-so, Postmaster."—But how much better than all these is to open the letter saying, "Keep on with the *News*, and good luck to you!"

SURGICAL SUPERSTITION.

IN his wonderful escape from the castle of St. Angelo, Benvenuto Cellini, besides receiving other injuries, broke his leg about three inches above the ankle. He was ultimately received into the house of the Cardinal Cambrano, who had him attended by the chief physicians of Rome. "Among these was Master Jacopo da Perugia, a very excellent surgeon. He set my leg, and bound my arm (to raise the vein), and with his own hands took blood; but, on account of the vein being more swollen than ordinary, and further because he had made a larger incision than usual occasioned the blood to issue with great force, so that it flew over his face, and he was covered with such profusion, that he could hardly be prevailed on to take further charge of me. And having taken this thing as of bad augury, it was with much ado that he gave me medicine. And many times he would have left me, thinking that he would run not a little risk from having cured me, or rather having finished my cure."—*Vita di Benvenuto Cellini*, lib. ii, cap. xi.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following were the questions on Anatomy and Physiology, and Pathology and Surgery, submitted to the candidates at the written examination on the 8th instant. *Anatomy and Physiology*: 1. Describe the Eustachian tube, its relations to surrounding parts, and its functions. 2. Describe the acts of mastication and deglutition, mentioning the muscles concerned therein, and the nerve-centres by which these muscles are controlled.—*Pathology and Surgery*: 1. Describe the process of separation of a sequestrum in necrosis of the lower jaw, and the mode in which repair is effected. 2. Describe the characteristics of the chief forms of ulcer affecting various parts of the mouth, and their treatment.

The following were the questions on Dental Anatomy and Physiology, and Dental Surgery and Pathology. The candidates were required to answer at least two out of the three questions in each department.—*Dental Anatomy and Physiology*: 1. Describe, in relation to human and comparative anatomy, the chief methods by which teeth are fixed in their place; and give examples. 2. Mention the changes which the lower jaw undergoes during the development of the teeth from birth to puberty, and account for its elongation backwards. 3. Describe the structure of the tooth-pulp in its earliest stages of formation, and in the adult tooth.—*Dental Surgery and Pathology*: 1. Describe, and give the reasons for the manner in which the operation of extraction should be performed on different teeth; and mention the chief reasons which may necessitate the operation. 2. State the symptoms, sequelae, and treatment of dental periostitis; and explain in what respects they differ from those of inflammation of the dental pulp. 3. Enumerate the different irregularities in position which the inferior dentes sapientiae may exhibit. State the symptoms which such irregularities occasion, and what treatment you would adopt.

THE SALE OF POISONS ACT.

SIR,—In the excellent paper by Dr. Althaus in the JOURNAL of February 2nd, on "Physicians' Fees and the Sale of Poisons Act", he has shown clearly the dangers to patients, and losses caused to medical men, by the repeated use of prescriptions. While practising in Scotland for some years, I have seen prescriptions of mine which in the cheap scale of fees then prevalent had cost the patients 2s., used again and again, not only for the patients themselves, but for their friends; the druggist being the only one to benefit, he sometimes getting twenty shillings when I had received two, or even not that. That, and the fact that the same druggist made my prescriptions public property, compelled me, unwillingly at the time, to keep my own drugs. Having now been for some time in England, I consider the English general practitioners' system, of always supplying their own drugs, much the best, both for them and their patients, and would not go back to the Scotch system if I could.

Besides this point, however, I wish to call attention to a very serious defect in the Act above quoted, in the large quantities of drugs containing opium and other dangerous narcotics, which any druggist is at liberty to sell without any prescription, and with no restriction whatever except the putting of a poison-label on the bottle, etc. I have been a severe sufferer by this laxity, my wife, I am sorry to say, having, through ill health, contracted the habit of laudanum drinking—a habit I have found it impossible to check in any way, so long as the law allows and druggists sell, without question, such quantities as one, two, or even three ounces of laudanum, or even more, to one person in a day (I am not certain she ever used so much), and do so to children of seven or eight years without let or hindrance. One scoundrel, even after I had warned him that she was killing herself with it, actually supplied a messenger sent by her, on credit, rather than lose the paltry profit obtainable by selling an ounce.

As you may imagine, the misery caused in a household, as well as the injury done to my practice and the hindrance to scientific work of any kind, are very great; and as I am by no means alone, I believe, in my misfortune, others suffering in the same way, surely something could be done. Were the amount saleable without a prescription limited to, say, one drachm, it would be a great check on such cases as are at all similar to my wife's, as she can only get it hurriedly, and could not possibly get more than about two drachms a day. It is the facility with which she can get any quantity that has ruined her. I now give her half an ounce daily, rather than try to check it any more, but fear that she will only add that to what she gets elsewhere.

Could you kindly favour me by answering the following questions I shall be greatly obliged. 1. Are you aware of any other Act besides the Apothecaries' Act (1868) under which there is any restriction in the quantity of poisons saleable? 2. Having given the druggist of whom I have spoken warning that I am supplying my wife with as much laudanum as I consider safe for her, would he be liable to be indicted for culpable homicide if he knowingly and willfully supplied her, or a messenger known by him to come from her, with such doses as I have spoken of above, and she were to die under the effects of such an overdose? I have several times already had some difficulty in restoring her from overdoses which she has taken herself while under the influence of the drug.—Hoping you will think this matter worth your attention, I remain, yours faithfully,

February 1877.

OHNE HOFFENUNG.

SIR,—Dr. Althaus's well timed article on "Physicians' Prescriptions and the Sale of Poisons Act" will not, I sincerely hope, be permitted to pass unheeded by the profession. In my opinion, there is no more vital point in medical jurisprudence than that referring to the loose and purposeless manner in which poisons are permitted to lie about the dwelling-houses of the population of this country, and the ready way in which these poisons are obtainable by the general public. It seems strange, but it is no less true, that patients now-a-days are not satisfied with medical opinion upon their case, but they must also have a lecture upon the therapeutic action of the drugs contained in their prescription; and if the physician politely and sensibly bow them to the door without giving them the information they look upon as a matter of right by fee, they then appeal to the pharmacist, who soon helps them out of the difficulty. No one but the medical profession and pharmacists can estimate the large amount of evil arising from this cause; in fact, I have known more than one instance where the pharmacist, contrary to his own interest, has declined to place in the hands of his customer the large amount of chloral which had been ordered in a prescription. I am sure there are very few pharmacists who would decline to be guided by the counsel of the medical man in this matter, until some kind of legislation can be framed to help us out of one of the most distressing and increasing evils of our time.—Very truly yours,

Hornsey Lane, N., Feb. 4th, 1878.

THOS. STRETCH DOWSE.

SIR,—An article by Dr. Althaus in the JOURNAL of February 2nd, on "Physicians' Prescriptions and the Sale of Poisons Act", has reminded me of some evasions of the Sale of Poisons Act which have come under my notice within the past twelve months. A grocer in this village has set up an amateur chemist's shop, he not having any licence to do so, and at one time supplied the people in this neighbourhood with laudanum to any amount they chose to ask for—e.g., a patient of mine, who was suffering from cancer, and did suffer great agonies, sent to him for some

and received an ounce and a half bottle full, labelled, "The draught to be taken immediately". Fortunately, the patient was rather a sharp man, and did not "take the draught immediately"; otherwise the consequences can be very easily imagined. On this coming to my notice, I had a stop put to his sale of laudanum; but he still sells paregoric, castor-oil, and other drugs. Since he has stopped the sale of laudanum, the people send to the chemists in Gloucester, and get threepence worth from each of four, so as to get a pretty good supply. I have reason to believe that one man overdosed himself with some obtained in this manner, and went off into a sleep, from which he never awoke. Not very long ago, I was in attendance on a farrier who was ill, and one day, when I was in his room, I saw on the table a pint bottle nearly full of laudanum. I asked him where he got it, and he informed me he could get as much as he liked of it from the chemists. When things like this—which I dare say a great many other surgeons have also noticed—are allowed to go on, the Poisons Acts cannot be of much service.—I remain, sir, yours obediently,

Frampton-on-Severn, Feb. 12th, 1878.

R. E. BURGESS, M.D.

The letters of Dr. Farquharson, Mr. Henry Brown, Dr. Ashburnton Thompson, Dr. Ogle, Mr. Crossman, Mr. W. J. Marsh, etc., are deferred for want of space.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; The Western Mail; The Bath Chronicle; The Bolton Chronicle; The Lincolnshire Chronicle; The Chippenham Chronicle; The Crewe Guardian; The West Sussex Gazette; The High Peak News; The Cardiff Times; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. Balthazar Foster, Birmingham; Dr. J. Burdon Sanderson, London; Dr. Pye-Smith, London; Dr. Earlow, London; Dr. D. J. Leech, Manchester; Dr. R. T. Cooper, Notting Hill; Mr. C. T. Kingzett, London; Dr. W. Fairlie Clarke, Southborough; A. Genevan; Mr. James Weaver, Longton; Mr. T. M. Stone, London; Mr. D. W. Crompton, Birmingham; Dr. J. T. Arlidge, Stoke-on-Trent; X.; Mr. Hugh Robinson, Preston; Dr. Lyon, Glasgow; Dr. A. S. Taylor, London; Mr. Sampson Gamgee, Birmingham; An Associate; Dr. W. B. Cheadle, London; The Secretary of the Medical Society of London; Mr. J. W. Allan, Glasgow; Mr. Francis Vacher, Birkenhead; The Secretary of Apothecaries' Hall; Dr. M. A. Eason Wilkinson, Manchester; The Registrar-General of Ireland; W.; Mr. James Pollard, Torquay; Dr. J. Milner Fothergill, London; M.D.; The Registrar-General of England; Mrs. Howgrave Graham, Enfield; Dr. Tripe, London; Dr. Thomson, Peterborough; Dr. E. Rickards, Birmingham; Dr. Herbert Snow, London; K.; Mr. H. C. Burdett, Greenwich; Dr. A. J. Payne, Calcutta; Mr. Thompson, Victoria; Mr. A. W. M. Robson, Leeds; The Secretary of the Pharmaceutical Society; M.R.C.S. Eng.; Mr. R. Clement Lucas, London; Dr. Clement Godson, London; Dr. J. W. Moore, Dublin; Dr. T. O. Dudfield, London; Mr. C. J. Cullingworth, Manchester; Mr. S. D. Clippingdale, London; Dr. R. H. Taylor, Liverpool; Dr. A. Sheen, Cardiff; Our Paris Correspondent; Dr. George Roper, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. R. W. Falconer, Bath; Dr. Fancourt Barnes, London; Dr. Wahlutuch, Manchester; Our Dublin Correspondent; Mr. E. R. Morgan, Swansea; Our Edinburgh Correspondent; Dr. Angus Fraser, Aberdeen; Mr. A. Waters, London; Mr. Alex. Stewart, London; Mr. S. M. Bradley, Manchester; Mr. Henry Brown, Northallerton; Mr. W. Adams, London; Mr. F. W. Lowndes, Liverpool; The Secretary of the Hunterian Society; Mr. T. Eytton Jones, Wrexham; Dr. Mackey, Birmingham; Mr. G. C. Coles, London; Mr. T. P. Stephens, Westbourne; Mr. J. B. Emmerson, Jarrow; Mr. Alban Doran, London; Dr. J. A. Campbell, Carlisle; Mr. H. S. Bryant, London; Dr. A. Ransome, Bowden; Lord Dunmore, London; Dr. M'Carthy, Harwich; The Secretary of the Brighton, Hove, and Sussex Throat and Ear Hospital; Dr. Saundby, Birmingham; Dr. Joseph Coats, Glasgow; Dr. Dickson, Constantinople; The President of the Odontological Society; etc.

BOOKS, ETC., RECEIVED.

On Ringworm. By Tilbury Fox, M.D. London: Henry Renshaw. 1877.
From Calais to Karlsbad. By T. Louis Oxley. London: Kerby and Edeane. 1877.
Lectures on Diseases of the Nervous System. By Samuel Wilks, M.D. London: J. and A. Churchill. 1877.
St. Bartholomew's Hospital Reports. Edited by W. S. Church, M.D., and Alfred Willett. London: Smith, Elder, and Co. 1878.

CLINICAL REMARKS

ON

THE STUDY AND DIAGNOSIS OF SKIN-DISEASES.

By ROBERT LIVEING, M.D., F.R.C.P.,
Lecturer on Dermatology at the Middlesex Hospital.

IN the following remarks on the best method of observing diseases of the skin, I would point out, in the first place, that the diagnosis of a disease, to be of any practical value, includes much more than assigning to it a name: it involves a correct estimate both of its nature and of its affinities. The great majority of skin-affections are forms of inflammation, and as such are very much alike as regards details, though they may differ altogether in other important respects. Thus, in almost all inflammations of the skin we may chance to find red patches, papules, vesicles, blebs, pustules, scales, or crusts; and, therefore, the first point of importance is the recognition of the fact that these varying phenomena of cutaneous inflammation are simply brought about by the anatomical structure of the skin, and are, therefore, of uncertain value in determining the nature of the inflammation. The extent and degree of the inflammation, the tissue involved, the grouping of the eruption, and the part affected, may all be of more importance than the minute characters of the elementary changes. But, although I wish at the outset to guard against an overestimate of the diagnostic value of minute characteristics, I nevertheless attach considerable importance to them, especially in certain cases, as I shall hereafter explain.

"For the recognition of a disease of the skin," says Hebra, "no other assistance is required than a knowledge of the objective symptoms, which are visible on the surface of the body in each particular case. We do not attach any value whatever either to the history or to the subjective phenomena in investigating a cutaneous affection, for we ought to be guided in this matter only by those symptoms which are appreciable by the sight, the touch, or sometimes by the smell. These afford certain and infallible grounds for the establishment of a diagnosis, for they have their origin in the malady itself. They are, so to speak, the alphabet of which the letters are traced on the skin; and our task is but that of deciphering the writing."

This statement of Hebra, that we do not attach any value whatever either to the history or to the subjective phenomena in investigating a cutaneous affection, must be received with reservation. It is, however, valuable, inasmuch as it tends to impress strongly and, as it were, to exaggerate the leading feature in our means of diagnosis. On the other hand, though an expert of Hebra's experience may possibly dispense with the aid of history and subjective sensations, yet few will doubt that in ordinary practice the history of a case may be of great use in enabling us to arrive at a correct diagnosis. For example, scabies in children is sometimes masked by an unusually copious eruption of eczema. If, however, in a doubtful case, we learn that several members of a family are coincidentally suffering from a similar affection, there will be presumptive evidence that the disease is scabies. No doubt the answer to this is, that we have the means of proving positively the nature of the malady by demonstrating the presence of the acarus. Yes; but this mode of proof is not always convenient, and in some cases where treatment has been already commenced, not even possible. In such a case, the history may be of great diagnostic value. Again, even the "subjective phenomena" are useful in determining the nature of a skin-affection. We have not unfrequently to deal with mild cases of intermittent urticaria, an affection which is often of such a transitory nature that the wheals and even the irritability of the skin may have vanished at the very time when the patient presents himself for examination, and consequently we have to draw our conclusions from the history and the subjective sensations of burning and itching described by the sufferer. I have said enough, however, for the present, to show that Hebra's dictum must not be pressed too closely in actual practice.

1. In order to make a successful examination of a patient suffering from skin-diseases, it is very necessary to have some systematic method of procedure. The rule of the first importance in all cases is, to examine the different parts of the body on which any eruption is present. For this purpose, it is not generally necessary to expose a large cutaneous

surface at one and the same time. The parts of the body should be examined in succession, and the state of each noted at the time of examination. The importance of this rule can scarcely be overestimated; indeed, in some cases, it is almost essential to a correct diagnosis. Everyone is acquainted with the fact that dermato-syphilis may be present in no less than five or six different forms of eruption in one and the same individual; and further—and this is the point—some of these forms may be highly characteristic, while others would hardly serve as means of diagnosis. Under these circumstances, a partial examination might lead to grave error and entail an unsuccessful course of treatment.

II. In conducting an examination, the following points should be kept in mind. Our object is, in the first instance, to take a general view of the efflorescence as a whole, irrespectively of the particular elementary forms of eruption present (vesicular, papular, etc.) We do this almost instinctively, and comprehend at a glance the importance of combination and arrangement, or in other words, that this or that elementary lesion, taken singly, does not constitute the skin-disease. Thus, when we speak of a vesicular, papular, pustular, or squamous skin-disease, we convey but a very imperfect idea of its nature. The parts of the body affected, the tissues involved, the form, arrangement, and grouping of the eruption, the degree of inflammation, and many other points, are often of more importance than the minute anatomical details. The mode, then, of speaking of skin-diseases as papular, vesicular, or pustular, must be regarded as an abridged form only, and analogous to shorthand writing.

Having, however, in the first instance, regarded the skin-disease as a whole, we may proceed, in the second place, to take cognisance of those separate parts which, combined, constitute the affection; or in other words, we may, as it were, dissect the eruption into its component elements.

1. In any given case under observation, we must distinguish what is essential from what is non-essential or accidental; what belongs to the original affection from what has been superadded; and we should select for especial examination those portions of the skin in which the disease is least complicated. For example, in order to demonstrate the presence of the itch-acarus, we do not choose a part of the body that is thickly covered with eczema, but we endeavour to find it in a patch of soft skin nearly free from secondary inflammation. Endless examples might be given of the modifications that skin-diseases undergo from being complicated with such common inflammations as eczema and urticaria, or even from the excoriations produced by constant scratching or injudicious treatment; but enough has been said on this point to suggest the necessity of care in distinguishing the essential from the accidental.

2. We should note the extent to which the anatomical elements of the skin are affected; whether, for example, the disease is merely confined to the cuticular layer, or whether the true skin is also involved; whether the hairs or sebaceous glands are affected; whether there are any alterations in pigmentation and colour. The importance of these inquiries is evident, as they lead us to determine by observation the original anatomical seat of the disease and the extent to which the neighbouring tissues are implicated. In order to ascertain these points, it is necessary to be acquainted with the character of healthy skin—that it is soft, smooth, elastic, and slightly greasy—that great differences in thickness and colour may be natural and compatible with perfect health; that the smoothness and texture of healthy skin vary greatly in different parts of the body, being generally thicker and rougher on the exposed sides than on the flexures or inner aspect of the limbs; that certain variations in the growth, colour, and texture of the hair, as well as of the skin, depend upon the age, sex, or race of the individual, and may be regarded as normal rather than pathological.

Bearing in mind, then, the conditions of healthy skin, we are in a position to examine in detail the abnormal changes in its various component parts.

a. In investigating the condition of the epidermis, it is easy to see whether the surface is unusually roughed, cracked, dry, or scaly; whether it is thickened by the accumulation of epithelium, as in psoriasis, or abnormally thin and transparent, or whether its outer layers are raised by the formation of blisters, vesicles, or pustules. By the aid of a common magnifying glass, we can further determine the state of the orifices of the follicles, whether they are plugged with sebum, as in comedones, or pouring out an abnormal quantity of oily secretion, as in some forms of steorrhœa. And lastly, we may observe whether papules exist, formed either from the hair follicles, or by enlargement of the existing papillæ of the skin.

b. Any alterations in the true skin will also demand our attention; and here the hand may often aid the eye in the process of investigation. The tense and brawny feeling due to excessive infiltration is

better determined by touch than by sight. Again, in furuncular diseases the extent to which the inflammation involves the deeper tissues may be often more easily felt than seen.

c. Our attention should also be directed to the colour of the skin. Divergence from the normal hue may be due to an altered degree of vascularity, to hæmorrhage, irregular pigmentation, jaundice, or other causes. If redness be the result of increased vascularity, it will disappear for the moment under pressure of the finger, as in urticaria. If, on the other hand, the colour be due to hæmorrhage, it will be unaffected by pressure, as in purpura or a bruise; and in this case we further note the various changes which the hæmorrhagic patch undergoes, from different shades of red and purple to green and yellow, until it finally fades away entirely. Pigment-spots do not undergo rapid changes; moreover, the colour is generally some shade of brown, while the absence of pigment is marked by perfectly white patches. Alterations in pigmentation are especially common in dermatosyphilis, elephantiasis Græcorum, chronic eczema, psoriasis, prurigo, and alopecia areata; while, in some leucodermic affections, an irregular or defective pigmentation constitutes the whole disease. In determining the degree and kind of changes met with in pigmentation, some care is required. The extremely dark skin natural to some people may lead us into the error of supposing that the development of pigment is abnormal, while in leucodermic and allied affections we may easily be deceived by the effect of contrast. The skin around a white patch always appears darker than it really is; on the other hand, we must not forget that there is sometimes a true abnormal accumulation of pigment in the neighbourhood of leucoderma. Again, the deficiency of colouring matter in a patch of skin affected with alopecia areata might escape observation, though every one would notice the light colour of the hairs first reproduced.

d. In affections of the beard, scalp, etc., it may be necessary to make an examination of the hair, both shaft and root. By extracting one or two with a pair of forceps, we determine at once whether the force required for their removal is less than in health, and also whether the hair itself is abnormally brittle, as in common ringworm. Subsequently, we may examine one of the hairs under the microscope, first without and then with a little liquor potassæ, which renders it more transparent; we shall thus be able to note any change or abnormal growth in the structure of the hair and its bulb. This is especially important in dealing with doubtful cases of tinea tonsurans or favus.

In most affections of the skin and hair, some cutaneous regions may be found in a healthy condition, and we must use these for comparison with the unhealthy parts, just as in diseases of the lungs we are in the habit of comparing the sound with the unsound side of the body, or as we compare a shortened limb with its fellow of the opposite side.

3. The form or shape of the patches of eruption must be next considered. In order to impress the importance of this point, it will only be necessary to illustrate it by examples. In syphilis, the prevailing shapes assumed by the eruptions and ulcerations are circular, horseshoe, and gyrate. In ringworm, the original patches are circular. Zoster follows the course of particular nerves, hence its characteristic forms. Gutta rosea and erythematous lupus are often butterfly-shaped; the patches of erythema nodosum are rounded or oval and tumid. Many other examples might be given, but enough has been said to call attention to the fact abovementioned, and to indicate its possible value in diagnosis.

Hitherto, I have considered only the component parts and forms of separate patches of eruption, complete in themselves, but occupying, it may be, circumscribed areas. It is often, however, necessary to extend our field of observation and compare or contrast eruptions of one or more kinds met with at the same time in different parts of the body. As I have before stated, the coincident appearance of different kinds of cutaneous eruption in one and the same individual is one of the characteristics of syphilis.

III. I pass on to consider, in the next place, the subject of locality and its bearings on diagnosis. Some skin-affections are strictly local, not only in contradistinction to general, but also as being located in certain regions of the body only. As a rule, when eruptions appear on various parts of the body at the same time, we may suspect either a constitutional tendency to the malady or a specific poison pervading the system. The efflorescence of fevers and syphilis is an example of the latter; that of psoriasis and eczema of the former. Some diseases, however, are invariably confined to certain localities, as, for example, acne rosacea to the head and neck, syccosis to the hairy parts of the face. Other affections never invade certain regions; thus, scabies in adults is never present on the face or scalp, or acne on the soles or palms. By a process of exclusion, then, we should never apply the term acne rosacea to a red patch situated on the thigh, or call an eruption on

the face scabies. Other skin affections, while they are not strictly confined to one locality, yet have a marked preference (if I may use the expression) for certain regions. For example, erythema nodosum is common on the legs, acne on the face and shoulders, pityriasis versicolor on the trunk, lupus on the face, lepra on the extensor sides of the elbows and below the knees, alopecia areata on the scalp and eyebrows; to these many more might be added. Let us take an example in point; if we meet with an eruption, say on the soles of the feet, we know at once that it is either scabies or eczema (probably dry and cracked, and often mis-called psoriasis) or dermatosyphilis, for these are the only diseases (with rare exceptions) that affect the soles. The conclusions I would draw from these remarks is, that the locality of the eruption is an element of importance in our diagnosis.

IV. Hitherto I have dealt exclusively with those phenomena in skin-affections which are at once appreciable by our senses of sight and touch; namely, the character of the eruption, the tissues involved, the degree of inflammation, the shape of the patches, and the regions affected. These are all patent to our observation; and for these observations and the conclusions to be drawn from them we are exclusively responsible. There are, however, other means of diagnosis, less perfect in their nature, and less under our immediate cognisance. I refer to the subjective sensations of the patient himself. The more important of these are sensations of itching, burning or tingling, and darting (neuralgic pains). With regard to the first of these—namely, itching—we are not dependent entirely on the statement of our patient. On the contrary, we may often determine the presence of itching by the well-known marks produced from scratching; and the study of these marks affords a not unimportant field of observation, for some skin-diseases derive their most characteristic features from being scratched. For example, prurigo from pediculi consists of a papular eruption which would often escape observation—does, indeed, in the paralysed—if the process of scratching did not remove the tops of the papules and lead to a slight hæmorrhage. It is the little spots of coagulated blood which especially attract our attention, and give to the disease its most striking and distinctive feature. Sensations of burning and tingling are characteristic of all forms of urticaria and allied affections, and are present also in gutta rosea; while acute neuralgic pains are often attendant upon zoster, and are occasionally met with in alopecia areata and urticaria. The traces of scratching are often, as I have said, very characteristic. In prurigo, scabies, and eczema, we have excoriations and little hæmorrhages produced on the surface of the skin; in urticaria, long red wheals or striæ; while in chronic affections of all kinds, attended with severe pruritus, we find an augmentation of cutaneous pigment, the result of the constant stimulation by scratching. To illustrate the importance of these signs as a means of diagnosis, it is only necessary to remember that, where they are present, we at once conclude that we have probably to deal with one of the following diseases; namely, scabies, eczema, lichen, urticaria or its allies, and prurigo or morbus pedicularis. The sensations of burning and smarting do not lead to any changes in the appearance of the skin, and consequently we depend for our information entirely on the statements of our patient.

V. We all recognise the importance of the history of a case in our ordinary diagnosis of disease; but it is not so obvious that, in dealing with skin-diseases, the same rule applies, and that we require to know the history before we can arrive at a complete diagnosis. Now, if the problem were merely to give a name to any particular skin-disease before us, it may be granted that this can be done without inquiry into the antecedents of the case; but if in a correct diagnosis we include, as we ought to do, something more than this, if we take into consideration all the facts in connection with it that may bear upon treatment or prognosis, then the history and general condition of our patient become matters of real importance. Let me illustrate this point. Suppose, for example, three patients present themselves in succession for examination. The first shows you his arms covered from the back of the hand to the elbow with a minute red papular eruption, attended with sensations of burning and itching. The eruption ends abruptly at the bend of the elbow; it is at once recognised as eczema in the papular stage. From the history, we find that his forearms have been exposed at cricket to a burning sun; we consequently conclude that the eruption is the effect of heat and exposure, and will probably disappear in a few days. In the second patient, there are red, excoriated, and weeping patches of skin on the inner sides of the thighs, the axillæ, and other parts of the body, which are evidently eczema; and we further find that our patient has been for some weeks rubbing into the skin a strong sulphur ointment, with the view of curing a real or supposed scabies. Here, again, we have to deal with an eczema, but one developed from different causes and under different circumstances. In this case, a discontinuance of the use of the sulphur ointment will

probably lead to a rapid cure. In the third case, a middle-aged man suffers from dry, scaly, and very irritable patches about the flexor sides of the limbs. This is still eczema; but we learn that he has had similar patches on several previous occasions, and that he has had gout more than once. We know then that we have to treat chronic eczema in a gouty man, and we adapt our remedies to meet the case. In all these three instances, then, the name of the eruption is identical. In all three, we have to deal with eczema, but eczema of different kinds, and produced in very different ways. Merely, then, to pronounce a skin-affection to be eczema is, I maintain, but a *very imperfect diagnosis of the disease*. We are so apt to be deceived by a mere name! The diagnosis of any malady is only valuable in as far as it leads to correct treatment and prognosis, and any method that stops short of this is a very imperfect one. In other words, the etiology of a disease is in many cases inseparable from the diagnosis.

From what I have said, it will be inferred that I use the expression "history of a case" in a comprehensive sense, and include the following points, which all bear more or less on a full and complete diagnosis: (1) Age and sex of the patient; (2) Occupation or mode of life of the patient; (3) Past history; (4) Present condition.

With regard to (1) the age and sex of the patient, I would only remind you that certain skin-affections, like the diseases of other organs, are almost unknown at particular periods of life, and that some diseases are exclusively confined to one sex. For example, acne is not met with in babies, or syphilis in women. Tinea tonsurans of the scalp is an affection of children, and pityriasis versicolor of adults. True ichthyosis is a congenital affection, and therefore may be excluded when we have to deal with a disease making its first appearance in adult life. (2) With regard to occupation and mode of life, it will be sufficient to indicate that certain skin-affections are produced by particular occupations, and that others are common only amongst certain classes. (3) The past history includes both that of the *patient* and of the *eruption* attack. The past history of the *attack* must be in many instances of primary importance. Thus, for example, we may have to deal with cases of urticaria, in which the visible effects on the skin are the same, but which spring from very different causes. One may be due to poisoning by shell-fish, another to a continued course of copaiba, a third to the irritation of pediculi, and a fourth may be purely an affection of the nerves. To be satisfied, then, with the mere name (urticaria) would be as unreasonable as it would be to treat all four cases in the same way. In order to arrive at the past history of the patient, it will often be advisable to draw our conclusions from indirect questions and observations. Thus, in investigating a suspected syphilitic eruption in a woman, the indirect method is almost always preferable. Often the nature or even the existence of the primary inoculation is unknown to the patient, while she is well aware of having suffered from ulcerated sore-throat, or nocturnal pains, or of having miscarried. But we are not always dependent on the statements of our patients in arriving at conclusions as to their past history. Scars are often left on the skin or about the fauces which are silently eloquent of former disease.

In stating that the general condition of health is inseparable from a comprehensive diagnosis of skin-affections, nothing more is intended than that diseases of the skin, like the diseases of other excreting organs (for example, the kidneys), are often associated with certain constitutional states or diatheses, and sometimes with special diseases of other organs; in other words, that the skin-affection, in many instances, cannot be regarded simply as an uncomplicated local malady. These remarks apply especially to such diseases as small-pox, chicken-pox, syphilis, and elephantiasis Græcorum, where the skin-affection is only a small part of the malady; but also in a less degree to such affections as eczema and psoriasis, which are so often associated with either a gouty or scrofulous diathesis. But, further, we often find skin-affections influenced by disease of particular organs. For example, not long ago, I had under my care in the Middlesex Hospital two severe cases of the pityriasis rubra of Hebra, associated with chronic albuminuria, and we remarked in both cases that when the condition of the skin improved for a time the albumen diminished, and *vice versa*; this occurred so many times that it would be impossible to regard it as an accidental coincidence. It is immaterial for the purpose of my illustration whether the temporary improvement in the action of the kidneys produced a change in the skin, or *vice versa*. The fact that some skin-diseases, such as scabies, are purely local, does not in any way disprove the truth of my proposition, that we must regard a pathological condition of the skin just as we should regard a pathological condition of any other organ of the body, and that without this our *diagnosis is incomplete*.

To sum up the foregoing remarks, we may lay down the following brief rules for our guidance in the examination of diseases of the skin. 1. Examine all parts of the body in which an eruption is present; 2.

Take a general view of the eruption regarded as a whole; 3. Separate it into its component parts, and distinguish what is the essence of the disease from what has been superadded; 4. Notice the tissues involved, and the presence or absence of infiltration, inflammation, etc.; 5. Notice the form or shape of the patches of eruption; 6. Observe the locality affected; 7. Investigate the subjective sensations of itching; 8. Ascertain the past and present history and general condition of the patient.

ON THE ACTION OF MEDICINES, OLD AND NEW.

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IV.

Succus Conii.—Towards the close of my last paper (BRITISH MEDICAL JOURNAL, July 24th, 1875), I directed attention to some preparations in the *Additions to the British Pharmacopæia* of 1867, and I spoke of the value of the juices, or *succi*, that had been lately introduced. It is remarkable how slowly some things win official acceptance. In 1864, Dr. Garrod wrote that these preparations (the *succi*) had been for some time in medical use; for the first time three were then made official, and two more were added in the Appendix. Five juices are the rather meagre resource which pharmacy has offered us in this department of the *Pharmacopæia*. Of more importance, however, than the penury of pharmaceutical skill is the official dosage, which in this case is certainly misleading. What sort of value, asked the late Dr. Austie, can be attached to the statement that the *succus conii* may be given in doses of from thirty to sixty minims? It had been recognised for some years past that four or five drachms may be often given without the production of any marked physiological phenomenon; and even ounce-doses of this juice (prepared by a first-rate manufacturing druggist) have been administered without producing any recognisable effect whatever.

Conceding the possibility of a substance having important therapeutic powers and yet causing little physiological disturbance in the healthy human body, it is at least very unlikely that a fluid drachm-dose of any drug will be of much use if an ounce-dose can be taken with impunity. Now, it has been asserted that no poison, except prussic acid, excels conia in the subtlety and rapidity of its operation; and, when introduced into a vein, the fatal effect is almost instantaneous. Hence we can draw an approximative conclusion of the comparative inertness of the official preparations of conium. Dr. Stillé relates of Dr. Pliny Earle, that he took experimental doses of extract of conium in order to discover how much he could bear. Beginning with a grain three times a day, he gradually augmented the quantity until, on the fifteenth day, he took at each dose twenty-five grains. The effect was "such a fullness in the head as might be caused by a ligature around the neck, together with some vertigo". Forty-five grains on the following day caused a repetition of the same sensations, "with the addition of weakness and weariness of the knees and a vacillating gait". And John Hunter records that, in a case of phagedænic ulcer resulting from bubo, he administered extract of hemlock in doses gradually increased to two ounces and a half a day. Dr. Stillé justly remarks that the enormous doses of conium required to produce the effects described in Dr. Earle's experiments, render it certain that the preparation used by him was very feeble. In an early number of the *American Journal of Medical Science*, Dr. Fountain tells us of very different and even dangerous results from taking twelve grains of an extract prepared from the seeds at a temperature below the boiling-point.

It was Dr. Neligan who first used or praised the *succus conii*; and, when the average dose recommended by so high an authority was only thirty minims, there may be an apology for the official standard being misleading. In my last paper, I gave the outlines of a case of violent "hysterical chorea", occurring in a married lady of forty-six or forty-seven years of age, so turbulent and exhausting as to induce some fears of the possible issue. Three ounces of hemlock-juice were consumed daily for several days with a very happy therapeutic effect; and I am now able to add that since this illness (in 1874) there has not been the slightest return of the malady. I may remark here that in the *United States Dispensatory* there are two preparations, called respectively the alcoholic extract of hemlock and the fluid extract of hemlock.

Hyoscyamia.—Considering that *hyoscyamia* has been lately proposed as a remedy for acute mania, it is rather remarkable that both Hippocrates and Dioscorides speak of large doses of henbane as capable of exciting delirium, which was compared to the delirium of drunkenness. The more valuable of the modern researches on the action of hyoscyamia begin with a contribution by Dr. Oulmont in the *Practi-*

tioner (January 1873); and in the same journal for July 1876 there is a paper by Dr. Robert Lawson on the therapeutic actions of the same alkaloid, discussing chiefly its effects in mental diseases. More recently still, Dr. Ringer has recorded an instance of acute mania treated with hyoscyamia, and its results compared with those of atropia and daturine; the conclusion being that, so far as the production of sleep is concerned, atropia and daturine do nearly as well as hyoscyamia. In my early days of practice (1853), I had under my care a case of acute mania in the person of a dissenting minister, above sixty years of age; his brain had been wrecked by a combination of worry and work. The noisy misery of this poor man is even now vividly before my eyes and ears; and to show the helplessness of therapeutic doctrine in those days, two of the best men I could get in consultation had nothing to propose but the administration of comparatively large and frequent doses of tartar emetic, with the object, I imagine, of forcibly beating down the rebellious nervous system. And very soon quenched in death that nervous system was. The blessings of recent therapeutic inquiry are shown in the new management of these fearful overthrows of brain-function; and to the practitioner of the present day delirium has lost half its terrors. Thirty years ago, delirium tremens was treated with opium, and sometimes more alcohol; and it was not very unusual for the patient to die suddenly in a state of poisoned collapse.

Eczema.—There is a tradition, not yet quite demolished, that grave neurotic and other maladies may be caused by the "retrocession" of certain diseases of the skin, principally of the eczematous group. For instance, a child who is suffering from rather severe eczema of the face and limbs has a feverish attack, and it is found that the eruption partially disappears from the skin; the moisture has dried and the irritation has subsided. When the fever leaves, the cutaneous symptoms recur; and it is possibly inferred that there has been a metastasis to internal organs. Hebra ridicules the theory in his own way, and points out that the abatement of the disease of the skin is caused by the anæmia of the integument which is the result of the febrile attack. Hebra adds that he only wishes that he could cure an eczema so suddenly and so easily! That there is an occasional neurotic element in eczema, as in other vesicular diseases of the skin, may be fairly conceded; for instances are on record in which a neuralgia and an eczema were interchangeable. But there seems no ground for the notion with which some medical men console their patients, that they had better bear their eczema in order to avert some serious internal disease.

In private and dispensary practice, I have seen during the last twenty years a vast deal of eczema, especially as it is seated on the lower limbs. Observation of one disease for so long a time brings to light some little points of pathology and treatment which cannot be learnt from books, even from the interesting monograph of Dr. McCall Anderson—*E libris nemo evasit artifex*. The principal text-books of diseases of the skin are silent about hygienic conditions of the atmosphere, and their influence upon dermo-therapeutics. Yet this influence is not only most real, but is one of the keys to a prompt cure of our patients. Moist warm weather is adverse to the use of ointments, and often compels the application of lotions; while in cold dry weather ointments seldom disagree. But there are some skins, endowed with a special susceptibility, to which all greasy substances, however fresh and pure, are quasi-irritant poisons. However, here is the *crux* in the management of angry vesicular eruptions, that we cannot always tell beforehand what class of remedies will do most good, and most control abnormal tissue-growth. During the four hottest months, anything approaching to *eczema rubrum* ought to be treated with the assiduous application of the common black wash (*lotio hydrargyri nigra*), mixed with a tenth part by measure of glycerine. The application should be renewed three times in the course of twenty-four hours, and the dressing (lint or linen rag) soaked every time with warm water before removal. I discovered by chance the great utility of this method more than sixteen years ago; but I am not aware that it is recognised in any manual of cutaneous diseases. The late Dr. Hughes Bennett gave the very bad advice that wet applications to the skin should be covered with an impervious coat of gutta-percha or oiled silk; forgetting that the pent-up secretions would themselves be sufficient to cause an artificial eczema, and so the original malady might be perpetuated.

As a rule, the drier forms of eczema are quickly cured by the use of a lead ointment. There are several ointments of lead in the *Pharmacopæia*, and the *unguentum plumbi subacetatis compositum* is unquestionably the best. Mr. Balmanno Squire has devised an ingenious glycerole of subacetate of lead, based on the physiological action of glycerine on diseased epidermis. Mr. Wathen of Fishguard recommends strongly an ointment made with the liquor of subacetate of lead, some glycerine being rubbed into the lard before the liquor is added; and as much liquor should be added until the lard becomes

saturated and will not receive any more. In two or three cases, I have found Mr. Wathen's ointment very soothing, but I could not complete the cure with it. There seems, however, to be an entire freedom of risk from lead-poisoning. When the face is the seat of eczema, and there is much swelling around it, the inflammatory œdema should be first reduced by a lotion of oxide of zinc and calamine and lime-water, and then the so-called Kirkland's neutral cerate applied freely at night. A good formula for this cerate is to be found in Mr. Spencer Watson's work on *Diseases of the Nose and its Accessory Cavities*. I have found that the rather objectionable *puttiness* of this ointment may be got rid of by admixture of a little ointment of benzoated zinc. Both in Dr. Tilbury Fox's well-known work and in Dr. Liveing's *Treatment of Skin-Diseases* are some good prescriptions for lead ointment (see especially Dr. Liveing's Formula 83, *unguentum hydrargyri cum plumbo*).

I must not prolong my remarks on eczema; but I may add that it needs a practised eye to recognise the exact shade of this disease which is likely to be benefited by tar, and the strength of the ointment which should be used. As a rule, the drier the eczema the greater the probability that a successful treatment may be based upon tar externally and arsenic internally; for the quality of *dryness* means that all *exudation-process* has ceased, and that we have to deal with an *exudation-product*.

Mercury.—The ointment of mercury, or the old "blue ointment", has most undeservedly passed out of general use, except for the purpose of inunction. But, from twenty to twenty-three years ago, it was employed in some of the Irish hospitals as a local remedy for erysipelas, and was strongly recommended by Dr. James Hughes in the *Dublin Hospital Gazette* for May 15th, 1854. Without considerable caution, salivation may easily occur; but it is remarkable that a rapid improvement of local symptoms has been seen to follow salivation. I have notes of a case of erysipelas which happened in my practice in 1855. The wife of a tradesman, rather beyond middle age, of temperate habits, had general erysipelas of the face and scalp, with much fever. As the disease threatened to extend, I surrounded the neck with a collar (two inches wide) of mercurial ointment, and the application was kept up for quite two days. No redness or swelling appeared on the cardiac side of this boundary-line, and no mercurial intoxication marred the speedy cure of the patient. Dr. Hughes rather rashly covered the whole erysipelatous surface with the ointment, but flexile collodion (mixed with glycerine) is both more convenient and much less dangerous.

What a loss it is that popular, and even some professional, prejudice hinders the full rational employment of mercury. Trousseau describes a rheumatic inflammation now and then limited to a single joint; but there is a single arthritis of a severe kind in which there is no rheumatic pyrexia, and which is treated in a rapidly beneficial way by the administration of mercury in small and frequent doses. Take a case which has occurred to me within the last few days. The cook in a gentleman's family was seized at four o'clock one morning with a most agonising pain in the shoulder-joint, accompanied by some swelling. I saw the patient a few hours afterwards, and found all the local symptoms highly developed; the pulse was slightly quickened, but the thermometer was raised only half a degree. Iodide and acetate of potassium were given in a mixture, and two grains of blue pill with a little Dover's powder every two hours. After eight pills, a slight febrile was smelt in the breath, and they were at once suspended; but the relief of pain was very striking. The other medicines were continued for a short time longer, and the healthy mobility of the joint was quite restored within a week.

A mild "course" of mercury is often of great use in certain forms of chronic bronchitis in elderly people. There is just enough secretion to impede the free passage of air; there is a slight dusky hue of skin; a teasing cough; and often disturbed nights. Putting out of sight the remoter dangers of this state of things, it is clear that an embarrassed pulmonary circulation means delay in the general circulation, limited excretion, and imperfect tissue-change. Ultimately, therefore, bronchorrhœa not only impedes air reaching the blood, but impedes blood getting to the air. An occasional brisk aperient is most useful in counteracting this condition; but three grains of blue pill every night (with perhaps a little powdered digitalis and squill) go to the root of the mischief, and should be continued until the gums are in the slightest degree sore. Constitutional weakness or diathesis may, of course, forbid this treatment; and after the age of threescore and ten it is not to be thought of. Again, during the middle period of life, repeated catarrh in the chest may engender a spasmodic state of air-tubes, a quasi-asthma not very unlike the real disease, and sometimes leading up to it. It is very necessary to arrest this chronic inflammation before the *habit* of spasm is definitely fixed; and to this end no remedial plan

contributes so much as mercury administered carefully for a short time, provided that all other hygienic measures are steadily carried out. These points of practice were illustrated about twenty years ago by Dr. Theophilus Thompson, and more lately by Dr. Thorowgood.

The slightest suspicion of a "tubercular predisposition" would negative the propriety of any mercury being given internally. But I remember as a student the curiosity and wonder excited by Dr. Graves' mercurial treatment of acute miliary tubercle of the lungs, as related in his clinical lectures. Few disciples were so daring as the master; and it may be admitted that Dr. Graves' cases might have been grouped now under the head of syphilitic phthisis.*

Another grand therapeutic use of mercury is in the management of some superficial diseases of the skin. All itching papular eruptions may be beneficially treated with perchloride of mercury; arsenic is poison to them. Some varieties of lichen are more controllable by perchloride of mercury than by any other medicine; and the same drug often drives away chronic forms of urticaria. There are few therapeutic combinations more valuable than perchloride of mercury and colchicum, especially in that chronic eczema in which the neurotic element of irritation causes trouble; and, in relapsing pemphigus, arsenic and perchloride of mercury together will sometimes succeed when the former alone has failed.

I conclude this paper with the expression of a wish that some means could be found of disguising mercury as it appears in prescriptions. The fatal abbreviation *hydr.* tells its own tale. There seems no valid reason why the letter *h.*, or the chemical symbol *Hg.*, might not do medical duty, and prevent practitioners from being embarrassed by the inquisitiveness of their patients. An eclectic therapeutics will learn the true doctrine of all powerful medicines, when to give them and when to refrain; and the right use of mercury, as of venesection, is probably one of the severest tests of therapeutic skill.

BATH THERMAL MINERAL WATERS: THEIR USES AND ABUSES.

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II.

Gout.—I now come to the consideration of the therapeutical powers of these mineral waters as regards gout. In considering the subject, I beg to be understood to refer to gout, only in its subacute or chronic form. Cases of acute gout rarely present themselves for treatment of this kind, though I have heard of *very* unfortunate consequences resulting to patients who, when suffering from acute gout, had been so foolish as to plunge into the thermal baths without previously asking or taking any proper advice. I also include in the category of gout cases of so-called "rheumatic gout".

The number of cases of gout submitted during the year ending May 1877 is comparatively small as compared with rheumatism. There were really ninety-seven cases discharged. For the sake of round numbers, I have taken eighty cases in the order of date of discharge. This number is made up of sixty-six males and fourteen females. The statistical tables are arranged in a similar manner to that adopted in rheumatism; and I will beg my readers to refer to these tables to enable them fully to understand any observations I may have to make. The total percentage of "cured" is not by any means so high in gout as in rheumatism, being in the proportion of 12.5 in the former to 22.1 in the latter. The highest average of "cured" is that among males between 20 and 40, being 24.2; but there is a remarkable diminution of percentage between 40 and 60, amounting then only to 3.2; thus showing the probabilities of cure, as far as immunity from pain and other symptoms may be called a cure, to be about eight times as great in the earlier double decade as in the later. Of females, there is but one discharged as cured, and that one over 60; but, as only two were discharged altogether over 60, we cannot strike a fair average. The total number of cases discharged as "much better" was fifty-eight: fifty-one males and seven females. I will here remark that the difference between the relative terms "cured" and "much better" is much less than is to be understood by the same terms as applied to rheumatism. I mean that, in gout, the "cured" may, in some instances, more probably be considered as "much better"; while, in rheumatism, the terms are much more absolutely distinct and appreciable. We find that twenty-five males were discharged "much better" between 20 and 40, and a similar

number between 40 and 60; this gives a percentage on the total discharged at these periods of 75.7 and 80.6 respectively. Why there should be a more favourable percentage at the later period of life, I cannot explain; but I will vouch for the fact. The percentage of results of treatment as regards females within the periods of life above mentioned is founded on a numerically small proportion of cases; but, taking into account the relative disproportion between the numbers of males and females treated—viz., sixty-six to fourteen—I think we may safely admit the percentages at these periods as equivalent to 66.6 and 44.4 respectively, showing a decided inferiority as to results of treatment as compared with those of the male sex. Under the head of "better", we find no males discharged under 40. From 40 to 60, inclusive, four males were discharged, giving a percentage of 12.9 on the total number of males discharged within this period; viz., thirty-one. On looking into the female statistics as regards the period between 20 and 40, we find one discharged "better" out of three cases; the percentage is 33.3; but I fear that the numbers are almost too low to enable us to draw perfectly reliable conclusions. Between 40 and 60, we may, I think, arrive at satisfactory results on sufficient ground, numerically speaking, and the percentage is 22.2. Thus it appears, regarding the period of life between 40 and 60, females apparently have considerably the advantage, in the proportion of 22.2 to 12.9. This statistical fact may be accounted for in one of two ways: either that really gout is more amenable to treatment in females than in males at this period of life: a fact which, I think, is controverted by the relative percentages under the term of "much better", or that the much larger number of males than females discharged under the heads of "cured" and "much better" leaves a comparatively small number to be accounted for under the terms "better" and "no better", and causes a small percentage accordingly. I myself incline to the latter opinion.

Finally, we arrive at those cases discharged "no better". We have but five cases to deal with—two males and three females—out of a total of eighty; making an average per cent. of 3.03 for males and 21.4 for females, the collective average being 6.2. Comparing this with the collective average per cent. of cases discharged "cured" and "much better"—viz., 12.5 and 72.5 respectively—there cannot be much room for doubt or scepticism as to the effect of the Bath mineral waters in gout, under proper conditions and under favourable circumstances.

It would be an act of presumption on my part to point out the well known complications and consequences of gout; their name is legion. I will venture so far as to say that much which I have said as to the conditions existing in rheumatism is equally applicable to its congener gout; but it should be remembered, in advising thermal baths, that the organic complications and consequences in the latter are, particularly as age advances, more serious than in the former: one is more likely to meet with arterial degeneration and consequent cerebral disease, or with fatty degeneration of the cardiac muscular tissue, or, again, with renal disease, all of which affections, according to degree, more or less affect the probabilities of improvement or the propriety of attempting treatment by thermal baths; but it should also be remembered that many cases in which hot baths might be injurious, or even dangerous, will be materially benefited by the internal administration of the "waters".

My own experience leads me fully to endorse the opinion recorded by Dr. Garrod, that mineral baths should be avoided where there is much structural disease of the heart or kidneys, or when an acute attack of gout is impending; and I think this remark is equally applicable to an impending subacute attack.

I will conclude these few observations by expressing my individual opinion that, as a general rule, the Bath mineral waters will be found more beneficial in cases of atonic gout, or where there is a somewhat debilitated habit of constitution, than in those of the sthenic or acute kind: though I do not mean to say that, under proper conditions, cases of either description will not derive benefit from their careful administration.

The influence of the baths upon the local conditions arising in gout depends, of course, on the degree and kind of these conditions. Thus joints which have been the objects of attack for the first or second time, in which perfect mobility may have been partially and temporarily interfered with, and in which all acute local symptoms have subsided, will, I have no doubt, regain their normal condition under such treatment. But, again, I do not believe that this or any other treatment will restore mobility to joints which have been the seat of disease for a lengthened time, and in which cartilages, synovial membrane, ligamentous structure, and the sheaths of the tendons around these joints, have become the seat of gouty deposits in the concrete form of urate of soda; but, even in these unhappy conditions, the element of pain is to be taken into account, and great relief may be expected from the use of the waters. Between the extreme cases which I have attempted

* A recent monograph by Dr. Charteris affords a clue to the more hopeful treatment of "acute phthisis".

to describe there are very many indeed in which most satisfactory results may be almost confidently expected.

Sciatica; Lumbago; Coxalgia.—I have placed these diseases together because, as far as constitutional causes are concerned, they may be considered to be similar; and any remarks I have made, and any statistical deductions I have drawn, are equally applicable to them; but sciatica, I think, deserves more than this passing notice, both in respect of its comparative frequency and the generally severe pain which accompanies this occasionally intractable affection. Forty-six cases of sciatica were discharged from hospital during the years 1876-77: forty-two males and four females. This fact shows the much greater frequency of the affection in males than females. Under 20 and over 60, the disease appears to be rare. The period between 40 and 60 appears to be most favoured; in fact, the numbers discharged under 20 and over 60 are scarcely sufficient to afford decided results. The percentage on the male side of "cured" under the remaining two periods are sufficiently favourable to attract special notice: 36.5 and 13.2 respectively. The percentage also of those "much better", at the same period, is also remarkable, being 50.0 and 76.6. The contrast between these favourable results and those of patients discharged "no better" is very striking. Taking these same periods, 20 to 40 and 40 to 60, we find the percentage in the latter as 12.5 and 3.3 respectively. On the female side, four cases are scarcely sufficient on which to build an average, and therefore I will leave it to my readers to attach what signification they may think proper to the results as recorded in the table.

Of sciatica generally, and of the purely local or neuralgic forms of the disease particularly, I will say that, as far as my own experience goes, I have found no other form of disease more likely to be cured or relieved by these mineral waters, though occasionally supplemental treatment by galvanism or hypodermic injections of morphine may be advantageously employed.

Lumbago, as a term, is so very general in its application, that I must here limit it to the gouty and rheumatic forms, and also include lumbago as the result of injury or accident. The statistical table of lumbago shows only ten cases; six males and four females. The percentage of "cured" and "no better" among males calculated on total discharged is the same; viz., 16.6; 50 per cent. were discharged "much better". Among females, the percentage of those discharged "much better" and "no better" was in both 25; 50 per cent. were discharged "better". The numbers may be rather too small to arrive at just conclusions; but I fully believe larger numbers would develop statistical results even more favourable, as I am fully impressed with the notion that such affections of what I may be permitted to call fibro-muscular structures are in a high degree favourable for this special form of treatment. I shall not dwell on coxalgia specially; but I will beg of my readers to regard it simply in the light of a gouty or rheumatic affection causing pain in the hip-joint, to which the same remarks are applicable as to other joints similarly affected.

Hemiplegia.—I pass now to a class of diseases so important in their nature, and presenting occasionally such doubt and difficulty in diagnosis, prognosis, and treatment, that it is with great diffidence indeed I approach this part of my subject. I know I may probably express opinions on some points from which my colleagues, and others equally well informed as myself, may differ; but I beg to be understood to give those as derived only from personal observation and founded on personal experience. All the classes of diseases to which I have alluded may be treated with the thermal water, for a time at least, possibly with impunity; no harm beyond loss of time and some expense may accrue, although no good results may be obtained; but affections of the nervous system cannot be thus trifled with, and therapeutic agents even so simple and innocent as, according to some, are the Bath mineral waters will be employed either for "weal or woe" to the patient.

During the year 1876-77, thirty-two cases were discharged marked "hemiplegia": twenty-eight males and four females. No males and but two females were discharged under 20. The largest number discharged as to periods of life, consisting of nineteen males, was between 40 and 60. Out of thirty-two cases discharged there was but one cured—a male between 40 and 60. Probably a fair way of arriving at a legitimate conclusion will be to contrast the "cured" with those discharged as "no better". Taking males, the percentage of "cured" in those discharged between 20 and 40 is *nil*. The percentage of those discharged within the same period as "no better" is 16.6. Again, between the ages of 40 and 60, the percentage of "cured" to that of "no better" is as 5.2 to 36.8. Over 60 there are no cures recorded, nor are any discharged "much better". The percentage at this period of life, as regards those discharged "better" and "no better", is 66.6 to 33.3. The percentage of

"cured" among males total is 3.5; the percentage of those discharged "no better" among males total is 32.1. The percentage of males and females collectively is 3.1 "cured" to 28.1 "no better". I draw attention to the fact that it is only among those discharged under the term "better" that the percentages will be found higher than among those discharged as "no better". I candidly confess that I attach less distinctive signification to the term "better" than to the other three terms into which I have subdivided the cases. I shall submit these statistics to my readers, and leave it to them to judge whether or not they present a very unfavourable aspect as to results when contrasted with those of the diseases before mentioned.

Paraplegia.—As only four cases were discharged during the year, I need scarcely tabulate them in regular form; they were two males and two females. Two were cured, aged 12 and 29 respectively, both females. Of the two males, one was discharged "much better", aged 40, and one was discharged "no better", aged 57. It will be observed that the two cured cases were females, and I beg to draw attention to the ages. One was 12 and the other 29. As regards the one at 12, it is, I think, improbable that serious organic mischief of the spinal cord existed at this age; there are unfortunately no records of the case which I can find; but I would be inclined to suppose that such a case was the result of serous effusion, the consequence of spinal meningitis or possibly of congestion of the cord itself, brought on by cold, rheumatism, or tubercular deposit. Such a case, I can well imagine, would very probably be cured, and certainly improved, by such treatment as thermal baths. In the other case (also a female aged 29), I have no recorded history; but, without one, I confess to scepticism as to organic disease, and I would rather rely on some of the causes just mentioned as sufficient to produce the symptoms; adding to these possible hysteria. Of the case of paraplegia discharged at 40, a male, I have an intimate knowledge, as the patient was under my own care in hospital. He had been an engineer on the Great Western Railway, and, in a railway accident, received severe injuries, concussion of the brain and spinal cord amongst others. He was at first a patient in the United Hospital in Bath, and narrowly escaped fatal consequences of his severe injury. He was thence transferred to the Bath Mineral Water Hospital, with the hope that the symptoms of paralysis which remained might be improved by a system of baths. When admitted, there were symptoms of hemiplegia as regarded his face, which was distorted, and of paraplegia as regarded loss of power over both legs. He certainly left the hospital much better as regarded power of locomotion, and somewhat, but not so much, improved as regarded his articulation, memory, and other cerebral symptoms.

I mention this case particularly, as I consider it a typical one of the kind of paralysis which, I believe, may be and is frequently improved by the use of thermal baths, as contradistinguished from the class which I believe to be incapable of improvement. In the former class, I place cases where paralysis is what one might call acute, arising from mechanical pressure of serous or sanguineous effusion, in which there has been no disintegrative injury to the brain or spinal cord, and in which absorption of the effused material remains completely or partially the dependent consequences. In the latter class I place cases of chronic cerebral or spinal disease, whether it be softening or induration, or the effect of innutrition. I hold that, if disintegration of the tissue of the brain or spinal cord have taken place, it is perfectly useless to submit such cases, with a prospect of improvement, to mineral water treatment, whether applied internally or externally.

Locomotor Ataxy.—During three years, I can only find four patients discharged from hospital having been treated for this disease. They were all males, aged 26, 36, 42, and 57. The two patients, aged respectively 26 and 57, were marked "much better"; the two at the intermediate ages were marked "better". These numbers are too small on which to found legitimate conclusions; I can, however, add two cases which came under my own notice in private practice, and in which I carefully and for some time employed the baths and waters. I confess to having been disappointed in the results in both cases. I should mention that, in these cases, there was a gouty cachexia.

Wasting Palsy.—During the three years 1874-75, 1875-76, 1876-77, seven cases of "wasting palsy" were discharged from hospital: six males and one female. I may add to this case a private patient treated by myself aged 60, making eight in all. The number is scarcely sufficient for a statistical table of age and sex; but we can easily arrive at a practical conclusion as far as these numbers go. Four males were discharged better, aged respectively 33, 34, 35, and 52. Two males and one female, aged respectively 20, 50, and 26, were discharged no better, adding the case treated by myself. Out of eight we have four no better, being 50 per cent. of incurables.

TABLE.—Bath Mineral Water Hospital.—Statistical Results of Treatment of Disease, with Percentages.

	A.—Numbers Discharged at the several Ages.												B.—Percentage of Results of Treatment according to Age, for Males and Females separately.												C.— Percentages in proportion to Discharges for Males and Females separately and collectively.			Number of Cases Discharged.		
	Result.	Males.					Females.					Males.				Females.				M.	F.	Total.								
		Under 20.	20. 40.	40. 60.	Over 60.		Under 20.	20. 40.	40. 60.	Over 60.		Over 20.	20. 40.	40. 60.	Over 60.	Under 20.	20. 40.	40. 60.	Over 60.											
																								Per cent.	Per cent.	Per cent.				
																														Totals.
GOUT.....	Cured.....	..	8	1	..	..	..	..	1	..	24.2	3.2	..	..	66.6	44.4	50	13.6	6.1	12.5				
	Much better..	..	25	25	1	..	2	4	1	..	75.7	80.6	..	..	33.3	22.2	..	77.2	50	72.5								
	Better.....	..	..	4	..	..	1	2	..	..	..	12.3	..	..	..	..	..	6.09	21.4	8.7	
	No better....	..	..	1	1	..	..	3	..	..	..	3.2	..	..	..	33.3	..	3.03	21.4	6.2	
	Total.....	..	33	31	2	..	3	9	2									
SCIATICA.....	Cured.....	..	3	4	2	..	..	..	..	..	35.5	13.2	66.6	..	..	..	..	21.4	..	19.5	
	Much better..	..	4	23	..	..	1	1	1	..	50	70.6	..	..	50	..	..	66.4	75	67.3				
	Better.....	..	..	2	1	..	..	..	..	..	..	6.6	33.3	..	..	..	..	7.1	..	6.5	
	No better....	..	1	1	..	..	1	..	..	..	12.5	3.3	..	..	50	..	..	4.7	25	6.5	
	Total.....	..	8	30	3	..	2	1	1									
LUMBAGO.....	Cured.....	..	1	..	..	..	..	..	..	..	33.3	..	..	..	..	..	..	16.6	..	10	
	Much better..	..	2	1	..	..	1	..	..	..	66.6	33.3	..	..	50	..	..	50	25	40	
	Better.....	..	..	1	..	..	1	1	..	..	..	33.3	..	..	50	50	..	15.6	50	30	
	No better....	..	..	1	..	..	..	1	..	..	..	33.3	..	..	..	50	..	16.6	25	20	
	Total.....	..	3	3	2	2									
HEMIPLEGIA.....	Cured.....	..	..	1	..	..	..	..	..	..	..	5.2	..	..	..	..	..	3.5	..	3.5	
	Much better..	..	1	5	..	..	1	..	..	..	16.6	20.3	..	..	..	..	..	21.4	..	21.4	
	Better.....	..	4	0	2	..	1	1	..	..	66.6	31.5	66.6	..	..	..	..	41.4	..	41.6				
	No better....	..	1	7	1	..	..	..	..	..	15.6	36	33.3	..	..	..	..	32.1	..	32.1	
	Total.....	..	6	19	3	..	2	1	1									
WASTING PALS.....	Cured.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Much better..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Better.....	..	3	1	..	..	..	..	..	..	75.0	50	..	..	..	..	..	65.6	..	57.1	
	No better....	..	1	1	..	..	1	..	..	..	25	50	..	..	..	..	..	33.3	..	42.8	
	Total.....	..	4	2	1									
CHOREA.....	Cured.....	..	2	..	..	10	..	..	..	..	66.6	..	..	..	76.9	..	..	66.6	76.9	75	
	Much better..	..	1	..	..	1	..	..	..	..	33.3	..	..	..	7.6	..	..	33.3	7.6	12.5	
	Better.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	No better....	..	..	..	..	2	..	..	..	..	..	..	..	15.3	..	..	..	15.3	..	12.5	
	Total.....	..	3	13									

When I contrast the percentage total (*vide* Table C) among males, and find that, under the comparative term "better", the percentage is 66.6, while under the positive term (if I may be a little ungrammatical) "no better" it is 33.3, I may be pardoned if I am somewhat sceptical of favourable results from this special treatment in this form of disease.

Chorea.—Sixteen cases of this disease were discharged from hospital during the year terminating May 1877. The records do not give any information as to their complications, or whether they were bilateral or unilateral. My own observations, founded on the cases which have been under my own care, would lead me to the conclusion that most of the cases have been bilateral, uncomplicated with cardiac or cerebro-spinal disease, though frequently associated with hysteria and sometimes with rheumatism. The table of statistics is a short one, as all the cases were under 20 and varied from 9 to 13 years of age. The small proportion of males to females is remarkable: three to thirteen. The percentage of results in this troublesome nervous affection is, I think, very favourable as regards those cured, amounting in females to 76.9 per cent. of females discharged, and in males to 66.6 per cent. of males total. The percentage of females cured in proportion to the total number discharged = 16 is 63.5, and the percentage of cured males and females collectively is seventy-five. The results of treatment of this affection by mineral tepid baths and waters was to me quite unexpected, and, had I not the opportunity of personal observation, I should have been sceptical. I can, however, vouch for the truth of these results as recorded on the patients leaving the hospital, nor have I remarked that choreic cases often apply for readmission. In those cases treated by myself, I have trusted entirely to the effect of the waters, and have not employed any supplementary treatment. It would be difficult to account for the *modus operandi* of the waters in cases of this disease. Of course, there is almost always functional cardiac disturbance.

[To be continued.]

DEATHS FROM ETHER.

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THE following analysis of the reports of deaths under ether is drawn up, not with the intention of comparing them with those under chloroform, it being assumed that the former has fully established itself as by far the safer anæsthetic, but with the object of gathering all the information they afford and learning, if possible, all the preventable dangers, so as to improve the results. If we are satisfied that, although the percentage of deaths from ether is apparently below that of deaths from chloroform, we can yet improve by experience, and help to raise still further, though in a small measure, the science of anæsthesia towards the high standard of perfect safety which we trust is its ultimate position, it is not enough that we read reports of fatal cases at the times they appear in our journals, but we must again and again recall them, place them side by side, compare them with one another, and so scrutinise their every feature with untiring zeal, that, if possible, we may trace certain marks running throughout them, and become so intimate with those marks as to be able to recognise their earliest appearance or prevent their appearance altogether.

In the BRITISH MEDICAL JOURNAL, *Lancet*, and *Medical Times and Gazette*, for the last ten years, there have been recorded one hundred and fifty-one deaths during the administration of anæsthetics. The following table shows the numbers recorded in each year.

In 1868	6 deaths.	In 1873	23 deaths.
" 1869	13 "	" 1874	11 "
" 1870	12 "	" 1875	16 "
" 1871	14 "	" 1876	18 "
" 1872	20 "	" 1877	18 "

For the mere purpose of statistics, these figures are perfectly useless because the journals have not been expected to be, nor have they claimed to be, authorities upon the numbers of deaths. Indeed, previously to the year 1872, there is abundant evidence to show that not only did they repeatedly speak of the deaths from anæsthetics without

reference to their number or individuality, but occasionally hint that many cases were allowed to pass away unnoticed or even unknown, except to those who were responsibly present. But about 1872, just previously to and especially after the time when our American brethren pressed ether upon our notice with strong recommendations, all three journals seemed to have commenced to enter into their pages, and even to solicit from all quarters, every individual record they could lay hold upon. Hence the apparent increase of fatal cases in the years 1872, 1873, etc., which, as was said at the time, must not be regarded as an evidence that such cases were increasing in number from carelessness on the part of the administrators, but is to be accounted for in the importance of recording them being more widely and more fully felt than ever. If, then, the deaths from anaesthetics have been more religiously recorded since 1872 for these general reasons, much more strictly would deaths under the administration of ether be reported for the additional reason of its being used *sub judice* by a cautious and almost sceptical profession. Still, even admitting that the above table includes, in the last five years, all or nearly all the deaths that have taken place in this country under the administration of ether, yet when we find them alone amounting to thirteen, though that number compares well with the number of deaths under chloroform, we feel that either we are not perfect in the art of its administration, or it is not the absolutely safe anaesthetic that we have been repeatedly told it is.

Let us examine the essential features of these thirteen deaths, together with five others that are reported in the same journals to have occurred in America, and compare the eighteen cases with each other.

1. A woman, aged 45, was to be operated upon for fatty tumour on the back, at the West London Hospital on February 18th, 1873. Chloroform was first given on lint, and, the pulse becoming irregular, ether was substituted. It became full and regular again, but suddenly stopped, the face at the same time being "dusky red". The ether used was pure; its specific gravity 700. One ounce of it was given. It was administered on a sponge in the apex of a cone made of felt, the sponge having been previously wrung out in warm water. The *post mortem* examination revealed nothing to account for death; all the organs were fairly healthy, except both lungs being gorged with blood.

2. An old patient had a cancerous submaxillary gland successfully removed under ether. Shortly afterwards, confusion and stupidity were observed, which deepened into unconsciousness with local convulsive seizures, and death supervened forty hours after the operation. The *post mortem* examination showed nothing to account for the mental symptoms. The chest was not examined.

3. S. S., aged 62, was to be operated upon at the Women's Hospital, in Birmingham, for ovarian tumour. After about five drachms of ether had been administered, she became satisfactorily unconscious, but suddenly appeared to revive, opening her eyes, and passing urine: the pupils were largely dilated, and the pulse could not be felt. Some subjective efforts at respiration were made, but they ceased, and Silvester's method of artificial respiration and other means of resuscitation were adopted without avail. At the *post mortem* examination, the cavities of the heart were found to contain a small quantity of dark blood. The other organs were healthy, except the ovaries and uterus. The state of the lungs is not reported. The anaesthetic used was a mixture of McFarlane and Co.'s anhydrous ether, and Heaton, Squire, and Frances' bichloride of methylene.

4. David Newman, aged 14, had iridectomy performed for corneitis. Ether was given in a cone of spongio-piline. Before the operation was commenced, alarming symptoms presented themselves—great struggling, opisthotonos, and feeble pulse. The administration of ether was discontinued; the pulse improved, and the operation was performed. Afterwards, the pulse and breathing stopped altogether, and the patient died. The *post mortem* examination showed the right cavities of the heart to be full of dark fluid blood, the left nearly empty; and the lungs were congested with bright red blood.

5. An old man was etherised by Mr. McGill of Leeds in 1873, and operated upon for hernia. Wild delirium set in afterwards; the patient tore off the dressings, opened the wound, and tore out some of his intestines.

6. J. F., aged 16, was etherised for operation upon diseased bone in the hand on April 3rd, 1875. Four drachms of Robbins's ether were poured upon some lint in a folded towel. The patient inhaled it rapidly, with no cough and with very little struggling. In four minutes, he was ready for operation, when respiration suddenly ceased, the face became pale, the pupils dilated, and the pulse imperceptible. At the *post mortem* examination, the heart was found not to be weak, and the lungs not congested.

7. On June 23rd, 1875, a man was placed under ether at the Cancer Hospital, London. He was thin and pallid, yet moderately healthy. Partial insensibility was first obtained by nitrous oxide; then ether, of the *British Pharmacopæia*, and specific gravity .735, was given in a cone of lint covered with oiled silk. After a slight struggle, the patient got under its influence. In five minutes, the face became dusky, the respiration shallow, a gurgling sound in the throat was heard, and an effort was made to expel blood. The pulse, however, remained remarkably good. Breathing ceased, though Silvester's method was tried; and still the pulse kept beating for some minutes. At the *post mortem* examination, the general blood was found dark, fluid, and containing bubbles like those of air. The lungs were fully inflated and grey. The right auricle was collapsed, and the ventricle empty; the left ventricle nearly so. A clot of blood was found in the trachea.

8. A patient at the Homœopathic College, New York, was etherised for operation upon a necrosed jaw. The pulse was watched all the time by another physician. The face suddenly became blue and the respiration ceased.

9. The *Chicago Medical Journal and Examiner* related a case of the Charitable Eye and Ear Infirmary in Illinois. A man aged 74 was operated upon for cataract by Dr. Holmes. The patient inhaled the ether quietly till half a pound had been used; when a violent coughing commenced, which was followed by extreme lividity of the face and cessation of breathing. The ether was discontinued, and, by appropriate means, respiration was re-established. The lividity partially disappeared, and the action of the heart became stronger. Without any more ether, the operation was concluded. Again the patient ceased to breathe. The face became more livid and the pulse very weak till death ensued, in spite of renewed efforts to avert it.

10. The *Boston Medical and Surgical Journal* gave the particulars of a case in which Dr. Sinclair incised the os uteri for dysmenorrhœa. The patient had been a teacher. She was operated upon at a private hospital on July 19th, 1876. The ether was given on a towel; and, when the patient became unconscious, the doctors present, wishing to be engaged with the operation, entrusted the continuance of the etherisation to a female. When they turned their attention again to the patient's condition, the breath and the pulse were found to have ceased. At the *post mortem* examination, engorgement of the pulmonary artery was found.

11. On September 15th, 1876, a man aged 28 had his right leg amputated for compound fracture, at Guy's Hospital, by Mr. Howse. The house-surgeon began with chloroform; and, when the patient was completely under its influence, substituted ether. After the operation was finished, and as the effects of the ether were passing off, retching came on, and the pulse became feeble. A little brandy was given. Almost immediately afterwards, the patient began to vomit and became blue in the face. A large piece of undigested meat was removed from the back of the mouth; still no air entered the lungs; other pieces of food were removed from the entrance to the larynx with no better results. Tracheotomy was performed, and artificial respiration and other means were attempted; but the patient died. At the *post mortem* examination, the larynx and trachea were found full of partially digested food.

12. The *American Journal of Medical Science* for October 1876 reported a case of death after ether. The patient, nineteen years old, had contracted chest and lungs seriously restricted by adhesions, which bound them down in all directions. The ether was administered for twenty minutes. Death followed about two hours afterwards. At the *post mortem* examination, bronchial mucus, pulmonary and pleural serous effusion were found.

13. The *Boston Medical and Surgical Journal* reported another case of death under ether. It was of an old woman in whom cerebral hemorrhage was afterwards found.

14. A man aged 69 was etherised by Clover's apparatus, for strangulated hernia, at the London Hospital. He commenced by inspiring only his own expired air for about thirty seconds; then he had the ether given in the proportion of from a quarter to a half for a minute. He struggled, and breathed the ether badly. The mouth-piece, therefore, was frequently removed from his face. The amount of ether was diminished, and, as his lips were blue, it was entirely discontinued. His breathing improved a little, but was not quite satisfactory. The pulse became weaker and weaker, and finally stopped; respiration, however, continuing for thirty seconds or more. At the *post mortem* examination, the heart was found flaccid, the left ventricle uncontracted, the lungs extremely emphysematous, the bronchi filled with mucopurulent matter, and other morbid changes were seen.

15. A patient, aged 56, had to be operated upon for a syphilitic caries of the leg at the East Suffolk Hospital. Bichloride of methylene was first administered; and, as the patient did not readily succumb,

methylated ether was substituted. The patient soon became unconscious; but, recovering unduly quickly, the bichloride of methylene was resumed. Great struggling and peculiar epileptiform convulsions ensued, followed by tonic spasm; this spasm relaxed; the breathing became stertorous; the pulse failed; and death supervened. There was no *post mortem* examination.

16. At the Moorfields Hospital, in August 1877, a very stout woman aged 46 was to be operated upon for cataract. A modification of Clover's apparatus was used. Forty minims of chloroform were added to the ether to prevent the choking sensation. The reporter of the case proceeds to say: "She had only breathed the mixture for one minute, when the face became livid, and could, therefore, hardly have been under the influence of the anæsthetic. The pulse and respiration continued fully four minutes after all anæsthetics had been discontinued." The anæsthetic had been applied on and off for some time after the first alarm. At the *post mortem* examination, the heart was found flaccid and empty; the mitral valve contracted; the walls in a state of fatty degeneration; the lungs emphysematous, and congested with blood.

17. Dr. Robert Saundby gave ether with Ormsby's inhaler to a case at Birmingham on October 4th, 1877. M. C., aged 35, had contracted knees. At 12.45 P.M., ether was commenced; only an ounce was used. There were no alarming incidents; very little stertor; no cyanosis; and the respirations were regular and full. Afterwards, the patient was carried out of the theatre across an open court for fifty yards, though well wrapped up. At 2.45 P.M., one hour and a half after leaving the theatre, the patient suddenly became alarmingly ill, cyanotic, and pulseless. Râles were heard over the chest. At 4.15 P.M., he died. At the *post mortem* examination, cedema was found in the membranes of the brain; no thrombus in the pulmonary artery; the heart was healthy, containing a little blood in the right auricle; the ventricles were contracted; the lungs were pale and oedematous; the other organs were healthy. The ether used was of the specific gravity 720.722.

18. At Lincoln, Miss S., aged 45, was etherised by Dr. Mitchinson for an operation upon a cancer of the breast. *Half-an-ounce of brandy was given first.* At three o'clock, pure sulphuric ether was administered by means of an inhaler, formed of a bag of muslin covered with a leather case, which had a valve at the apex and a larger one at the lower edge. The valves were open, and air was allowed free ingress and egress. Another doctor's finger was on the pulse of the patient all the time. Half-an-ounce having been poured into the inhaler, Dr. Mitchinson held it lightly over the patient's face. Immediately, she spoke as if half unconscious, and with two more inhalations became turgid about the face, and her hands pinched and white. There was no pulse. The tongue was dragged forward, and several forcible inspirations resulted. They, however, became less and less till 3.15, when she died. At the *post mortem* examination, the heart was found covered with fat; the right ventricle contained an ounce of fluid blood, the left was firmly contracted and empty; the muscular coat was one-twelfth of an inch thick. The base of the right lung contained a considerable quantity of fluid blood, and the base of the left a smaller quantity. There was cancerous deposit in both lungs.

Those of the above cases, which show, *prima facie*, their causes and modes of death, may be at once taken out of the list, viz.:

No. 2, the old man, who, after the anæsthetic effects of ether had passed away, had not the strength to rally, but passed through the stages of confusion, stupidity, unconsciousness, and coma successively within two days.

Nos. 3 and 15, the ether being in the one case mixed with, and in the other replaced by, bichloride of methylene.

No. 5, in which Robbins's ether was used; for Dr. Richardson says it is not pure ether, but a mixture of amyl hydride and anhydrous ether; it is useful in producing local anæsthesia by the spray-machine for which it is manufactured, being of a low boiling point and specific gravity; and it is directly dangerous when inhaled.

No. 11, in which the trachea was found filled with food.

Nos. 12 and 14, where previous pulmonary trouble was just aggravated by means of the ether.

Nine cases still remain, in which ether appeared to play no secondary part, nor even to be assisted by any untoward condition or circumstance; and the question immediately follows: What killed these patients? They who admit that, although ether is safer than chloroform, it is not absolutely safe, answer "asphyxia"; whilst all others, including those who assert the absolute safety of ether, give no answer at all.

It may be an advantage to draw up the essential particulars of these nine cases in a table, so that we may the more readily compare them altogether, and consider the following points.

- The important facts reported in these cases.
- The probable conclusions deduced from the facts.
- A theory explaining the facts and the deductions.
- The best method of the administration of ether.

Table of Nine Cases of Death under Ether.

No.	Kind of Ether.	Instrument used.	Quantity used.	First alarming Symptoms.	Time between commencement of alarm & death.
1	Pure; sp. gr. 700	Warmed sponge in felt cone	One ounce	Face dusky red; pulse stopped	Query? **
4	"	Spongio-piline cone	"	Opisthotonos, & pulse feeble	The operation performed in the interval
7	E.P.; sp. gr. 755	Lint cone covered with oil-silk	The inhalations during 5 minutes	Face dusky; respiration shallow; pulse good	Some length of time
8	"	"	"	Face blue; respiration ceased; (pulse good?)	Ditto ditto
9	"	"	"	Face livid; respiration ceased; pulse weak	The operation performed in the interval
10	"	Towel	1b. ss. on a towel; part lost in air	"	"
16	"	Modified Ver's	Clo- Inhalations during 1 minute	Face livid; respiration & pulse continued	Four minutes
17	Sp. gr. 720.2	Ormsby's inhaler	One ounce	Face cyanotic; pulseless; râles	From 2.45 P.M. to 4.15 P.M.
18	Sulphurised	Leather case with valves	Half an ounce, but only three inhalations	Face turgid; pulseless	From 3.0 P.M. to 3.15 P.M.

"Post Mortem" Appearances.

No.	The Lungs.	The Heart.	Other Organs.
1	Gorged with blood	"	"
4	Congested with bright red blood	Right side full of dark fluid blood; left side empty	All healthy
7	Trachea contained a clot of blood	Right auricle collapsed; ventricle empty; left nearly so	"
8	"	"	"
9	"	"	"
10	Pulmonary artery engorged	"	"
15	Emphysematous and congested	Flaccid; fatty walls; mitral valve contracted	"
17	Pale and oedematous	Right auricle contained a little blood	Healthy
18	Bases contained considerable quantity of blood	Right side contained one ounce of dark blood, left empty; walls a twelfth of an inch thick	Cancerous deposits

** In the spaces of those cases where the double asterisks are placed, the reports gave no details to put in. Nos. 8 and 9 being shortly reported from American journals, many of their details are wanting.

A. *The important facts.*—They are easily recognised in looking over the table of the nine cases.

1. Ether was inhaled in various yet limited quantities, from three inhalations of it up to as many as would consume half-a-pound on a towel; and then produced the symptoms ending in death. It was diluted with various quantities of atmospheric air, and given in various methods.

2. The face was reported to be "dusky," "blue," "dusky red," "livid," "cyanotic," or "turgid" in seven of the nine cases, and never said to be "white" or "pale"; in the other two, the colour is not reported at all.

3. In seven cases, the heart did not cease till some time had expired after the commencement of the alarming symptoms, and after the ether had been discontinued; the intervals varying from four minutes to three hours. In those of which the notes were comprehensive, we read that the pulse remained feeble, weak, or good for a longer or shorter length of time after the ether had been discontinued, or after the alarm had been taken; in the other two cases, no certainty on that point can be gathered.

4. The lungs were reported to have been gorged with blood in five cases and the pulmonary artery in the sixth. In another, the trachea contained a clot of blood; and, of the remaining three, two cases were not reported at all; and one case only (No. 17), in which the patient died three hours after the ether-inhalation was over, were the lungs altogether "pale," and even then they were "oedematous."

B. *Two Deductions* seem to follow from these facts.

1. The fatal effects of ether do not depend upon any directly poisonous property of its own.

2. These cases died by "asphyxia".

Is not the former deduction indicated by the facts that the quantities

of ether given in these cases were various and often small, and the proportions of its mixture with air as well as the methods of its administration also various? And is it not further borne out by the experience of so many cases in which ether has been given in large quantities with the smallest possible amount of atmospheric air, and still the patients have to all appearances been perfectly safe?

Some cases might be quoted, such as those which caused men like Dr. Joy Jeffreys to affirm the belief of American surgery that ether is absolutely safe; but one will suffice. Mr. Furneaux Jordan related a case in which the ether was pushed to an extreme degree, on account of the marked and uncontrollable tremor of the muscles rendering the operation doubly difficult. The anaesthetiser, Mr. Priestley Smith, when requested by Mr. Jordan to give the patient more ether, remarked "that the man was as much under the influence of ether as it was possible to effect".

The second conclusion, that asphyxia was the mode of death, is, to my mind, irresistible from the dusky face, the shallow respiration, the interval between the commencement of the alarming symptoms and death, the engorged lungs, and other signs reported in most of the cases.

C. A Theory explaining these facts and reconciling these conclusions.—The intense cold produced by the ether under certain circumstances causes the small blood-vessels of the lungs to contract, and so offer such degree of resistance to the right ventricle of the heart as to stop it, if it be weak or wearied, and embarrass it, if it be strong; and, by watching the symptoms from this point of view, we are likely to be able to cope with the dangers as they may arise, or even (may we hope?) to prevent their occurrence entirely.

Assuming that the deductions under the head B are logically based upon known facts, we are driven into a corner out of which only such a theory as this can help us.

The asphyxia by which these deaths occur cannot be said to be brought on by any interference with the nerves or nerve-centres directly concerned in respiratory movements, *i.e.*, by paralysis of respiratory muscles, like the asphyxia from carbonic dioxide poisoning; nor, on the other hand, by any mechanical interference with the air-passages, as the asphyxia from hanging or drowning; but must be from interference with the chemical process of the aëration of the blood in the air-cells and blood-vessels surrounding them. This interference is not due to the want of oxygen, because *none* of these cases show that oxygen was absent; but most of them show the reverse, pure atmospheric air having been breathed for some time before death. It must, then, be the result of the insufficiency of the circulatory action of the blood in the capillary vessels of the lungs to do their share in carrying on respiration. What obstructs this circulation? It cannot be that the blood is poisoned with ether; for, in one case (No. 18), three inhalations only had been taken, and, in another (No. 16), the ether had been administered for one minute only. It must be from some property of ether which comes into action in certain circumstances; and, when we call to mind its power of producing intense cold under some conditions, we venture to inquire into the likelihood of that property being the cause of asphyxia. Suppose it to be true. Ether, in its administration, becomes a vapour by absorbing a fixed amount of heat from surrounding media, generally the atmosphere, and, in that condition, is inhaled into the larger bronchial tubes and then becomes mixed with the residual air in the smaller tubes and alveolar spaces. From them it is absorbed into, and dissolved by, the blood, becoming a fluid again virtually in that act, and therefore giving off a certain amount of latent heat. This heat diffuses itself through the body as well as the ether, and probably much faster, the latter having to be pushed on to other parts by the continued addition of more ether behind. This process goes on as long as ether is added. When its administration is discontinued or interrupted for any reason, and pure air allowed to enter the lungs, the current of osmosis between the blood in the capillaries of the lungs and the contents of the air-cells is reversed. The ether, having now to change from the state of fluid to that of vapour again, reabsorbs the amount of heat it gave off on its entrance into the blood. If the air which has just entered the lungs be warm, the abstraction of heat for the re-evaporation of the ether will not be felt by the lungs, though it is sudden and local; but, if, on the other hand, that fresh air be cold, whether on account of its passing through or close to an ice-cold instrument, rendered so by the action of the ether, or from the room being cold, or from the patient having been put into a cold place, though well wrapped up, the amount of heat required suddenly by the ether on its returning to the atmosphere will be more; and the lung-tissue, not having stored up the heat, the ether brought to it will, upon this sudden demand, become so cold as to cause a violent contraction of its arterioles. Such an amount of obstruction, from this

contraction of a large number of vessels, without anastomoses or diverticula, resists the right side of the heart; that, unless the latter has an immense margin of strength, failure in its function is the result, and the patient dies in a space of time varying with the amount of resistance and the amount of strength the right ventricle possesses. If the death were rapid, there would be engorgement of the main branches of the pulmonary artery and the right side of the heart. But the heart may be able to overcome this obstruction; then the capillaries of the lungs become engorged, the chemical process in respiration becomes impeded, and the *vis à fronte* more or less lost. Here is another and, perhaps, greater resistance to the heart, and the latter, wearied out now, might fail. In this case, death would be more delayed than in the former; the pulse might be felt to become more and more feeble. Afterwards the lungs would be found engorged with blood, and the right side of the heart might be full of dark blood or the reverse.

But a strong heart might be supposed to overcome even this second resistance; then the engorged capillaries would throw out a quantity of serum into the air-cells and the surrounding tissues; that in the air-cells becoming frothy and being expectorated; that in the tissues, perhaps, after some time becoming reabsorbed, or possibly causing so much difficulty in the acts of respiration as to constitute the last straw and break the camel's back by offering such embarrassment to the exhausted heart that the patient at last succumbs.

D. The Best Method of the Administration of Ether.—My own experience consists principally in having administered anaesthetics for Mr. Pridgin Teale's cases in private, with very few exceptions, during the last year and a half. In those cases, except with very young children, ether has nearly always been administered. At first, we used the sponge, covered with mackintosh; then the American framework, with the bandage weaved in it; next, Clover's larger apparatus; lastly, Clover's smaller and more recent inhaler. I have also used Ormsby's inhaler a few times.

In my opinion, Clover's smaller inhaler is the best. It is made by Meyer and Meltzer, Great Portland Street. It is composed of an ether chamber and water chamber, together in a circular vessel, a bag that can be detached, and a face piece, which likewise can be detached, and which rotates, when fixed to the vessel, for the purpose of regulating the amount of ether-vapour. It has no valves, or sponge; and costs between £3 and £4.

It possesses the following advantages.

1. There is no struggling or resistance on the part of the patient, however terrified or prejudiced he may be; the ether being invariably breathed with comfort, and in many cases with even a sense of pleasure.
2. The amount of ether-vapour can be carefully regulated to a nicety without lifting the machine from the patient's face, and, consequently, it is easy to keep a patient on the very borderland of insensibility for any length of time.
3. The ether being economised, and not being dissipated into the surrounding atmosphere, there is not only a better chance of fresh air if needed for the patient, but there is more comfort to the operator and his assistants, and especially to the anaesthetiser, who, with other contrivances, often inhales a large share of the vapour himself, and in consequence suffers many a headache. There is also a considerable saving of ether; an ounce and a half usually being sufficient for half an hour, when formerly eight, nine, or more ounces were used.
4. There is none of that bronchial mucus which gave, with other instruments, so much trouble at the time of inhalation, and which was often followed by bronchitis, and in some instances by death.
5. When consciousness has so far returned that the patient can recognise, and even speak sensibly, the sensibility to pain is still so numb that an operation may be concluded, sutures put in, and dressings applied, without the slightest sign of pain from the patient.
6. The comfort to the patient, silencing his resistance and calming his mind, the ease with which the anaesthetiser can administer and regulate the ether without the distraction caused by the patient's struggles, or the etherised atmosphere, or the repeated application to an ether-bottle for fresh supplies, and the equable temperature at which the ether-vapour can be kept, combine together to ensure the greater safety to the patient.

The following are the details of the method of administering ether with the abovementioned machine which I have adopted, keeping in view and acting upon the theory spoken of under the division C of this paper; and Mr. Teale expresses himself well satisfied with the practical results that continue uninterrupted under his observation.

1. Never allow any solid food, milk, or spirits to enter the patient's stomach for six hours beforehand.
2. See that the room is well warmed.
3. Detach the bag and face-piece from the metal vessel of the

machine; warm the vessel by placing it in a basin of hot water an inch deep; pour an ounce and a half of methylated ether, specific gravity 714, into the ether-chamber; put the face-piece to the vessel, and rotate it so that the indicator points to "no ether". Let the patient breathe through the vessel without the bag into the air, so that he gets only a flavour of the ether; his nervousness and fear will by this means be soon allayed, and confidence gained. Avoid giving him the choking sensation until he becomes numb to the ether; by giving him the ether slowly at first, imperceptibly and gradually increasing it, the bag being placed to the vessel, and so stealing over his sensitiveness until he is quite "numb". Then proceed rapidly to full ether, without any atmospheric air; watch the respiration closely. If it be at all embarrassed, give one breath of fresh air, and resume the ether, at first weak, but increase it as before. He will soon be under its influence; then reduce the proportion of ether by the regulator, so as to keep him just beyond the boundary line of sensibility; give him one breath of fresh air occasionally. Continue to watch the respirations closely. After the operation, do not place the patient suddenly into a cold room or passage, even if he be warmly clothed.

CLINICAL MEMORANDA.

APPARENT GLYCOSURIA AS A RESULT OF THE ADMINISTRATION OF SALICYLIC ACID.

WHEN visiting a case of acute rheumatism in Guy's Hospital, which I was treating with salicylate of soda, I was told that that morning the urine (which was free from sugar on admission) gave a distinct reaction with copper. Next time I examined it myself, and found a more abundant precipitate. The specific gravity was somewhat high, but the quantity was not increased, and there were no other symptoms of diabetes. The reaction disappeared after a few days, when the drug was given less frequently; and, though a slight relapse led to its being again administered every two hours, the presence of sugar was not again noted.

A few days later, another patient taking salicylate of soda for rheumatism was found to have a trace of sugar in his urine. I then suspected its source, and the ward-clerk, Mr. Charles Wood, undertook to examine the urine of all the patients in the hospital who happened to be taking salicylic acid in the form of the soda or ammonia salt. In sixteen out of eighteen cases, the copper was reduced. I have myself tested the urine in other patients for whom I had prescribed salicin or salicylates for rheumatism, urticaria, or common colds, and have never failed to find more or less reaction with the copper-test. The specific gravity was usually not raised, and there was no polyuria or other symptom of diabetes. The reaction disappeared when the drug was no longer taken, and its effect was the same in healthy persons.

An alkaline salicylate is probably decomposed in the circulation into the corresponding carbonate and nascent salicylic acid, and this is partly or entirely excreted in the urine in the form of salicyluric acid. Salicin, it is well known, is excreted as salicyl hydride. Since excess of uric acid will itself reduce copper salts like grape-sugar, and it is possible that salicyluric acid is the reducing agent, salicin, beaten with dilute mineral acids, takes up water and forms saligenin and glycoside; and I find that, whereas salicylic acid and salicin have no reducing action on copper in an alkaline solution, they exert it when previously acidulated with acetic or mineral acids or when added to acid urine.

I hope to pursue the inquiry further, but thought it well, in this preliminary communication, to call attention to the fact, as one of clinical interest, that the ordinary test for sugar in the urine acts as I have described in persons taking salicylic acid, whether this be due to glycosuria or some other cause. I may add that in every case perchloride of iron produced its characteristic reaction in the urine.

P. H. PYE-SMITH, M.D.

NOTES ON A CASE OF SEVERE INFANTILE CONVULSIONS.

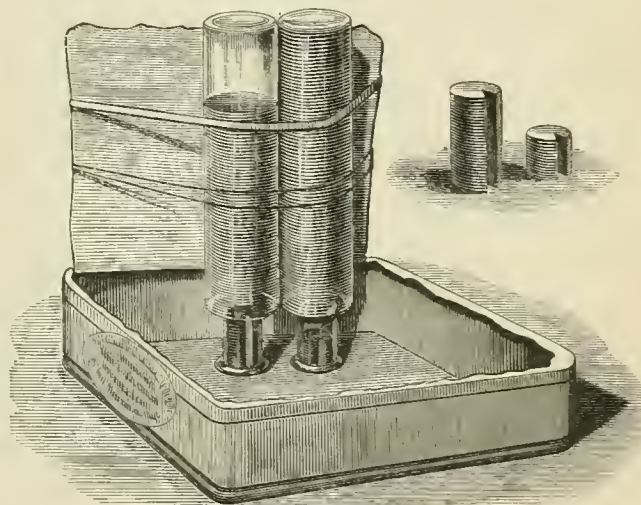
ON February 2nd, I was called in to see an infant twelve days old, and that weighed six pounds two days after birth. She was suddenly seized with violent contraction of nearly every muscle in her body, the head being violently jerked backwards and forwards; the face was alternately red and livid; respiration was very irregular and laborious; the features were fearfully distorted; and there was involuntary discharge of feces and urine. These symptoms had gone on more or less for three hours without a decided intermission. On endeavouring to

find a cause, I could not. The bowels had acted regularly up to the attack; the remains of the umbilical cord were normal; the appetite was not impaired; and the child had had nothing but her mother's milk since birth. The sister died from convulsions when about twelve months old. I ordered the usual remedies, such as cold to the head, the feet to be placed in hot mustard and water, etc.; but they were of no avail, the symptoms being as persistent as before. I gave the infant an inhalation of equal parts of chloroform and ether, producing complete insensibility, which I kept up for twenty-five minutes, the chaplain christening the child during the administration of the anæsthetic. The inhalation being discontinued, the convulsions were replaced by apparently a sound natural sleep, lasting upwards of three hours and a half, after which some slight muscular twitchings were observed. I then administered two grains of chloral-hydrate, which had the desired soporific effect. The infant awoke up bright and cheerful, without a sign or symptom of muscular twitching, and has remained in perfect health up to the present time.

JOHN R. PARKINSON, M.R.C.S.,
Lancashire County Asylum, Whittingham.

THE DETECTION OF SUGAR IN URINE.

THE employment of the fermentation-test for the detection of sugar in the urine is, I am afraid, not so frequently used as it should be. This arises from some little difficulty in the manipulation. To obviate this, I have devised a simple and inexpensive apparatus, which is very easy to use, and gives trustworthy results. It consists of a couple of ounce-and-a-half vials, with their corks, and an empty used sardine tin. The lid of the tin is bent at right angles with its cavity, and affords a support to the two vials, an elastic band or two being used to retain



them in their proper vertical position, while the cavity of the tin receives a portion of the urine under examination sufficient to cover the inverted ends of the bottles, thus forming an extemporaneous pneumatic trough, allowing the whole concern to be put in any situation where the required temperature can be maintained. The vials are two of the ordinary "long series" ounce-and-a-half size. The corks are of unequal length, and each has a triangular notch, about one-twelfth of an inch deep, cut through the entire length of one of its sides. This constitutes the whole of the mechanism. In using, the bottles are to be filled to the very brim with the suspected urine. To the vial which takes the longer cork, a little yeast is to be added; the cork is then forced in level with the neck of the bottle. The notch in the cork allows the superfluous urine to escape. The bottle can then be inverted without a particle of air entering, and placed mouth downwards in the stratum of urine contained in the hollow of the tin. The other bottle is to be treated in the same way; but no yeast is to be put in it, and it is to be placed side by side with the other. The bottle containing the yeast is recognised by its longer cork; and if sugar be present, at a sufficient temperature fermentation soon commences. Gas is evolved, and is retained in the upper part of the bottle, while an equal bulk of urine is expelled through the slit in the cork. The bottle with the shorter cork having no ferment added to its contents, remains full and

unaffected, affording a striking means of comparison. By always using the longer cork for the bottle to which the yeast is added, no mistake can occur. The whole affair, being bound together by the elastic bands, can be safely carried about and exposed to the requisite temperature. The thing is thus done as easily as the copper or other tests. A little modification would afford a quantitative result.

THOMAS BIRT, M.D., Leamington.

THERAPEUTIC MEMORANDA.

IODOFORM AS A LOCAL APPLICATION IN VENEREAL SORES.

THE therapeutic use of iodoform having been brought to the notice of the readers of the BRITISH MEDICAL JOURNAL of January 26th, by Mr. Berkeley Hill, and its value in venereal sores therein demonstrated, I should like to state that, in my limited experience at the Liverpool Seamen's Dispensary, I have seen very beneficial results follow its application to indolent non-specific sores. In the case of an obstinate ulcer of the frænum, which defied treatment for weeks, I applied the ethereal solution of iodoform. In three or four days, the change for the better was marked. The sore healed in less than a fortnight. In another case of extensive indolent ulceration of the body of the penis, occupying nearly its circumference, and upwards of an inch in width, I applied a similar solution. The result could not have been more satisfactory. The sore healed in about fourteen days. I have used it on two or three occasions in open buboes, where sinuses had formed, with the same satisfactory results.

Outside my own practice, I have also seen its value fully proved; and Mr. McCheane, Senior Surgeon to the Liverpool Lock Hospital, who uses it extensively, has told me that, in his hands, it has proved invaluable. Its beneficial action appears to consist in its antiseptic and absorbent properties, and in its also acting as a stimulant. The smarting which accompanies the application of the ethereal solution seems variable; being in some cases sharp enough, to judge from exclamations on the part of the patient; in others, inappreciable. The odour certainly is disagreeable, which is unfortunate, as possibly it may deter sensitive patients from submitting to its use.

I cannot conclude these few remarks without expressing the satisfaction afforded me in reading the interesting article by Mr. Wyndham Cottle, on the same subject, in the number of the BRITISH MEDICAL JOURNAL for February 9th.

ARMAND BERNARD, B.A., M.B.,

Surgeon to the Liverpool Seamen's Dispensary.

ON THE LOCAL USE OF IODOFORM IN EAR-DISEASES.

THE following are the conclusions to which I have come, after using this agent in the treatment of ear-diseases during the last two years.

Iodoform is of service alone in cases of ear-disease in which there is a lesion of tissue (ulceration), and notably in those of caries of the mastoid, complicated with polypous granulations. After these are removed, the local application of iodoform, as a fine dry powder, generally acts capitably and, I may add, successfully. I intend, however, to give it a trial as an internal remedy, not with much hope of success resulting, I confess, in those cases of deafness following eye-disease, having keratitis and scooped (Hutchinson's) teeth, and other outward signs of hereditary syphilis.

JAMES PATTERSON CASSELLS, M.D.,

Aural Surgeon to the Glasgow Royal Infirmary.

OPIUM AND ATROPINE.

THE record of Dr. Fothergill's case in last week's JOURNAL suggests the publication of a case which occurred under my observation recently. I have always desired the house-physician acting under me to make use of atropine in severe opium-poisoning; and Mr. Spofforth, with other residents, carried out the treatment judiciously and successfully, as will be seen. [The case is described at page 297.]

There is not quite the same point as in Dr. Fothergill's case, viz., the use of a lethal dose of atropia without sign of lethal action, but still a fairly large dose (about one-seventh of a grain) was given without other marked effect than dilating the pupils, unless it were "dancing a jig". We could have wished for a note as to temperature and change in respiration, but, in the urgency of the case, these were omitted.

A propos, I am now attending a nervous patient, who is extremely

susceptible to the action of atropia, and who passed into a state of uncontrollable excitement after the application of belladonna-extract to about six inches of his skin. His wild excitement and restlessness and pain in the head were amended in a few seconds by one-eighth of a grain of morphia injected hypodermically, and the widely dilated pupils soon passed into the opposite condition.

The following also is instructive. To obviate the depressing effects produced in this patient by even small doses of morphia, I adopted the now usual combination with atropia, giving one-fifth of a grain of the former with one-hundredth of a grain of the latter. The solutions were in separate bottles, and I took up in the needle first the morphia and then the atropia solution, so that the latter was nearer to the point of the needle. Allowing a few seconds for their mixture, I injected into the arm as usual. The patient was calmed from a state of excitement and gastric pain, and went to sleep. Fifteen minutes afterwards, he woke with throbbing in the head, jumped from bed, and passed into the state of excitement which I had before seen in him from the belladonna extract. He said he felt as if dying; but I noticed no great change in respiration, the pulse was quickened, and the pupils were widely dilated. I gave him five drops of nopenthe, and in about half-an-hour the excitement subsided; and when I saw him next, two or three hours afterwards, the pupils were contracted, and he remained pleasantly under the influence of morphia during the next day, sleeping it off quietly the next night.

This first action of the first alkaloid injected is curious. I presume that atropia circulates somewhat more quickly than the other; but it is worth while to mix the solution well before use.

EDWARD MACKEY, M.D., Brighton.

TREATMENT OF BURNS AND SCALDS BY CARBONATE OF SODA.

I HAVE used bicarbonate of soda for some years past; at first in minor burns and scalds of a domestic kind, and afterwards in pit, foundry, and gas explosion burns. I use only the washing soda of commerce. It is kept in the surgery ready. If called to an accident where two or more are injured, I put a pound in a wash-hand basin and fill with water; thin soft cloths in small pieces are dipped in the solution and laid over the parts, and covered with dry flannel. A dose of solution of morphia is given if the injury be severe. The cloths may be rewetted two or three times when dry. The pain is intense for from a few minutes to half an hour, according to the extent and nature of the injury. After that, there is no pain; and, should the tissues have been much injured, the sores remaining readily heal under bread and milk poultices, or a mild ointment or lotion. Some curious episodes have arisen from its use. After undergoing all the terror and pain of a severe burn, the sufferer perhaps next day has nothing to show, and has been looked on as an impostor making much ado about nothing. In December 1876, an ironmoulder tripped and fell while carrying a pot of metal. His right arm was immersed in the molten mass before he could get to his feet, and the arm was much burnt and charred. The soda solution was applied early, and, if I remember right, he was at work in a fortnight. In September last, a number of men of our fire brigade were burnt, some of them severely, by an explosion of gas at a fire. My assistant and myself were early at the place, and covered them all with the soda solution. One, a soldier who was assisting, was sent to the Military Hospital; and another, who felt and appeared to be much injured, insisted on being sent to the Western Hospital. Only one of those under my care was confined to the house for a few days, and all were able for their duties in ten or twelve days.

WILLIAM McDONALD, L.R.C.P., L.R.C.S.E.

Medical Officer to the Glasgow Plate-Glass Company, etc.

PATHOLOGICAL MEMORANDA.

NOTE ON THE HARDENING AND PRESERVATION OF PATHOLOGICAL SPECIMENS.

AFTER many experiments with different fluids, I have as yet found no better fluid for the purpose of hardening and preserving museum specimens than a strong alcoholic solution of carbolie acid and creasote.

The carbolie acid should be dissolved in a little spirit, and the creasote then added: a clear solution results, which is not altered by the subsequent addition of the methylated spirit; and the following proportions are recommended for the purpose: Creasote, 1 part; carbolie acid, 1 part; methylated spirit, 38 parts. The hardening of lung-tissue, with which I am chiefly concerned, is not easily effected by

alcohol alone, and mucous tissue and fluid loses a large quantity of water before hardening; but, with the above fluid, the larynx is very rapidly hardened, and tubercle, which completely alters its macroscopical appearance in alcohol, is better shown after immersion in this fluid than in any other that I have yet tried: the colouring matter of the blood is but little altered by it, and may be thus preserved for some time.

For putting up specimens, glasses, with a glass cover ground at the edges to fit close, are well suited. These are often glued together with shoemakers' glue; but, as there is much risk from the heating of this substance, and as the glue is soluble in spirit, I have altogether discarded this method and use diamond cement. This is solution of gelatin in acetic acid, which is readily softened by the application of hot water, is easily applied by a brush, and is quite insoluble in spirit.

REGINALD E. THOMPSON, M.D.

OBSTETRIC MEMORANDA.

TURPENTINE IN POST PARTUM HÆMORRHAGE.

I HAVE long been in the habit of giving turpentine in half-ounce doses in cases of *post partum* hæmorrhage, and I can fully corroborate the favourable testimony of Mr. Pollard of Torquay in the JOURNAL of February 23rd. Turpentine, however, has this disadvantage, that it is very likely to be rejected by vomiting; and it cannot be used hypodermically like ergotine. Mr. Pollard states that he does not remember to have seen large doses of turpentine ever advocated. If he will refer to my *Obstetric Aphorisms*, he will find that it is recommended even in the first edition of that work, which appeared in 1856.

JOSEPH GRIFFITHS SWAYNE, M.D., Clifton.

MR. JAMES POLLARD will find the value of turpentine in menorrhagia admitted at page 238 of my *Handbook of Uterine Therapeutics*; and at page 409 he will see that ten years ago Mr. Bradley of Martley recommended half-an-ounce of turpentine in milk to cure *post partum* flooding. It is best to prescribe "fir-oil" instead of the ordinary turpentine.

EDWARD J. TILT, Seymour Street.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

EVELINA HOSPITAL FOR SICK CHILDREN.

THREE CASES OF CEREBRAL DISEASE.

(Under the care of Dr. E. BUCHANAN BAXTER.)

CASE I. *Cerebral Fever ending in Death: Optic Neuritis an early Symptom: Meningeal Tuberculosis without Meningitis.* (From notes by Mr. HAYWARD.) Jane S., aged 9, entered the hospital on October 19th, 1877. Three months before her admission, she used to suffer from pain in the back and occasional headache. She was sent into the country for a few weeks, and returned in good health. On October 12th, she complained of severe pain in the lower part of the back and in the shoulders on getting out of bed; soon afterwards, her head began to ache and she vomited. She had been sick once or twice a day ever since. The vomiting took place quite suddenly about thirty minutes after a meal; the food was thrown up without retching or straining. She had not taken to her bed, though during the last two days she had been very drowsy. Her sleep was disturbed; she dozed a little and then woke up with a start, complaining of her back or her head. The bowels were confined. The appetite was pretty good. She had had measles, whooping-cough, and small-pox.

On admission, she was well-nourished, of fair complexion, with flushed cheeks. She lay on her back, with her legs drawn up. Her chief complaint was of pain in the back, and occasionally in the head also. She objected to put her legs down in the bed, saying that this hurt her back. Though her manner was rather listless, she answered questions readily and to the point. Respirations were tranquil, regular, 18; pulse 56, feeble, slightly irregular in rhythm. Temperature normal. The tongue was moist, thinly furred. The heart, lungs, and urine were normal. Cerebral macule were well marked on the somewhat flattened abdomen and on the forehead. There was a slight inward squint of the

left eye; but this was probably of old standing. The pupils were equal, sensitive to light; vision was apparently good. On examining her eyes with the ophthalmoscope, both optic discs were seen to be of a dull buff colour, woolly, with blurred edges; the veins were tortuous and distended; the arteries masked at intervals. There was no retinal hæmorrhage; no tubercles in the choroid. During the next three days, she was alternately restless and drowsy, but did not vomit. On the 23rd, she was delirious and almost maniacal. On the 24th, she was comatose, with equally dilated pupils, and began to pass her evacuations under her. On the 25th, her temperature, which had not previously risen above 100 deg. Fahr., shot up suddenly to 103.2 deg.; her abdomen fell in; her eyeballs were noticed to be oscillating continually and independently of each other. On the 26th, she was still insensible, breathing 46 per minute, with a fluttering pulse of 208. She died the same evening without ever having manifested paralysis, rigidity, or convulsion.

Treatment.—An attempt was made to bring her quickly under the influence of mercury by rubbing in grey ointment. This was begun on the 22nd; it exerted no appreciable influence on the course of the symptoms; neither was it followed by its usual physiological effects.

Post Mortem Examination.—A few hemp-seed-like tubercles were found in the pia mater, lining both sides of the longitudinal fissure, on the upper surface of the cerebellum, and on the tip of the right middle cerebral lobe. There may have been a dozen and a half of these bodies altogether. The pia mater in their neighbourhood showed no trace of inflammation. None were found in the Sylvian fissure or elsewhere; there was a complete absence of lymph or other inflammatory products at the base of the brain. There was no excess of fluid in the ventricles; the brain-tissue looked perfectly healthy to the naked eye, and was nowhere softened. The lungs were much congested and almost carnified at their base, but they contained no tubercle; neither was any found on the pleura or peritoneum. No cheesy mass was detected in any part of the body; the only trace of old disease being a partial adhesion of the right pleura. When the tubercles were subjected to microscopic examination, they were found to be cheesy and granular throughout, retaining no sign of their original corpuscular structure.

REMARKS.—The value of the routine use of the ophthalmoscope, much insisted on by Dr. Hughlings Jackson, is well illustrated by this case. At a stage of the malady, when objective symptoms were few and insignificant, the existence of optic neuritis at once disclosed the true nature of a case whose exceeding gravity might otherwise have escaped recognition for days. Yet there was nothing to call attention to intraocular mischief. Another point of interest is the striking disparity between the violence of the disease during life, running a precipitate course to its fatal issue, and the relatively trifling changes found in the brain, or rather upon it, after death. All the structural lesions commonly met with in tubercular meningitis might reasonably have been looked for; yet they were all conspicuous by their absence. Indeed, it might fairly be argued that the obsolete tubercles in the pia mater had no very immediate connection with the disturbances preceding the patient's death. It is far from easy to construct any rational hypothesis which will account for a few minute foreign bodies on the surface of the brain causing such profound disorder of essential functions. It is easier to take refuge in the belief that the visible minimum of structural damage represents a maximum invisible to ordinary inspection. This belief, however, comes more readily to those who read the account of a *post mortem* examination than to those who make it.

CASE II. *Persistent Retraction of Head: Screaming and Restlessness: Occasional Vomiting: Absence of Optic Neuritis: Simple Internal Hydrocephalus.* (From notes by Mr. BOTT.) Thomas W., aged 2, supposed to be in good health, had a fit of some sort, lasting about an hour, on December 10th, 1877. Since then, he had been drowsy, and unable to stand without support (he used previously to run about without help). His head had been constantly retracted, and he screamed when he was moved. Before the attack, he was able to speak a few words; he could not now be induced to say anything. He had never had any illness except thrush, which he had severely. He cut his teeth and began to walk early. His mother had had four other children, all alive and well. The present boy was one of twins; the other, a girl, was in excellent health. There was no history of injury to the head.

On admission (December 20th), he was a well-nourished rosy child, lying on his back with his head drawn back as far as it would go. The muscles at the back of the neck were rigidly contracted; any attempt to bend the head forward into a line with the rest of the body was strenuously resisted by the patient, who screamed lustily when he was touched. His screams were more like those of a bad-tempered or passionate child than of one in pain. The persistent retraction of the head, together with restlessness and unwillingness to be touched, was really all that could be made out. The temperature was below the normal;

breathing quiet; pulse quick, but regular. There was no apparent weakness or rigidity of the limbs; no vomiting; no squint. The pupils were equal. There was no vomiting or constipation. The belly was neither tumid nor drawn in. There was no trace of old rickets or of syphilis.

Up to December 29th, there was no change in the symptoms. His restlessness at night was so great that small doses of chloral-hydrate had to be given to procure sleep, which they effectually did. From this time forward, he began to vomit occasionally, and his eyeballs were frequently noticed to converge. They no longer followed a bright object moved before them. Still, he was not blind; for, if the finger were suddenly brought near the eye, he would close it. On December 31st, his pulse was noticed, for the first time, to be somewhat irregular in rhythm. On January 11th, he screamed frequently, even when he was not disturbed; when any attempt was made to raise him up, he arched his back and dug his head and heels into the bed, screaming violently. His nutrition had not hitherto suffered; he was neither wasted nor anæmic. January 28th. For the past week, he had vomited nearly everything he had taken; he now looked, for the first time, pale and ill. He slept more than he did by day; hardly at all by night, unless chloral had been given. The pupils were dilated, equal. He now moved his head from side to side occasionally, though it continued retracted as far as ever. On January 30th, he died quite suddenly and almost unexpectedly; he had ceased to be sick for a couple of days before his death, which was not preceded by any convulsion. At no time during his sojourn in the ward did the rigid spasm of the muscles at the back of the neck abate. His eyes were repeatedly examined with the ophthalmoscope, and the discs were always found normal. He took three-grain doses of potassic iodide thrice a day till January 25th; they did not produce any appreciable effect on his symptoms.

Post Mortem Examination.—On removing the skull-cap, the convolutions were seen to be flattened, the sulci effaced; the veins of the pia mater over the vertex were turgid with black blood. When the anterior lobes of the brain were drawn back out of their bed, the third ventricle was seen forming a cyst-like expansion, over which the optic nerves were stretched. When the infundibulum was torn across, several ounces of clear liquid escaped from the ventricles. The anterior fontanelle was slightly patent; the sutures were solidly united; the vault of the cranium was thinned in patches; the orbital plates of the frontal bone were not depressed. There seemed to be an unusual amount of connective tissue over the cerebro-spinal foramen; but it was not possible to determine, with any certainty, that it had been impervious. The ventricles of the brain had all been greatly stretched by the accumulated fluid in their interior; the iter a tertio ad quartum ventriculum and the foramen of Monro were much dilated. There was no tumour, no trace of tubercle, no sign of inflammation or softening, in any part of the brain or its membranes. The lungs were pale, emphysematous at their edges, otherwise normal. The heart's cavities were distended with fluid blood, their muscular walls relaxed. Nothing abnormal was noticed in the abdominal viscera.

REMARKS.—The nature of the mischief in this case was not recognised during life. Putting the chronic hydrocephalus of infancy aside, intraventricular effusions in children are usually secondary to tumours in the hinder portion of the brain. These are supposed to cause passive dropsy by pressing on the veins of Galen—a hypothesis the truth of which, in the majority of cases, it is difficult either to confirm or to disprove. In the present instance, there was no tumour; and the sole cause to which the dropsy could be referred was a possible occlusion of the cerebro-spinal opening. Intraventricular hydrocephalus, setting in after consolidation of the sutures, is extremely difficult of recognition. The head may be peculiar in size or shape. Careful examination may sometimes disclose slight mobility of the parietal bones upon each other along the line of the sagittal suture, and the anterior fontanelle may remain slightly open long after it ought to have closed up. The absence of rickets must, of course, be established. Rickety heads are often erroneously taken to be hydrocephalic. In a rickety child, there is no certainty of intraventricular effusion unless the orbital plates of the frontal are visibly depressed; but this sign is never present in the cases now referred to. Apathy, alternating with restlessness when roused; extreme dislike to change of posture—from the horizontal to the vertical and *vice versa*—a change which seems to cause disagreeable sensations, occasionally amounting to severe pain, probably by suddenly altering the blood-pressure within the cranium—the alteration not being susceptible of compensation owing to the damming-up of the cerebro-spinal fluid; rigidity, permanent or paroxysmal, of the muscles at the back of the neck; these are among the best corroborative symptoms, though they are not individually distinctive. Widely dilated pupils are sometimes mentioned in this connection, but they are seldom observed till a very late period of the disease.

CASE III. Solitary Tubercles in the Brain: Intraventricular Hydrocephalus: Death from Basilar Meningitis. (From notes by Mr. S. ANDREWS.) William M., aged 2½, was in his usual health on April 8th, 1877. On the evening of the 9th, his mother noticed that his mouth was drawn, his left eyelid drooped, and that he took his food with his left hand instead of his right. He had been running about as usual that afternoon, had met with no accident, and had made no complaint. In a few days' time, he began to limp, and was found unable to raise his right hand without the aid of its fellow. He became rather fretful and slept less tranquilly than usual. There was nothing in the way of a convulsive attack, vomiting, or other general disturbance. He was the sixth child in a large family, the history of whose members threw no light upon the case.

On admission (April 17th), he was a well-nourished healthy-looking boy, displaying an unusual degree of intellectual quickness. All the branches of the left third nerve were completely paralysed, with the exception of those supplying the sphincter fibres of the iris through the lenticular ganglion. When the fallen lid was raised, the eyeball was seen to roll outwards; but the pupil was of the same size as its fellow, and acted with equal readiness under the influence of light. The right arm and leg were decidedly weak. He could support his weight on the leg when he was set up; he could grasp any object put into his hand; but he would not stand up without help, and never used the right hand of his own accord, generally keeping it hidden up his sleeve. The right arm and leg were always colder than the left. When he smiled, the mouth was drawn slightly over to the right side; there was no other evidence of facial palsy, no rigidity of any of the muscles. He ate and slept well; was full of fun and almost morbidly shrewd. Temperature normal; pulse regular.

On April 23rd, iodide of potassium, in three-grains, was ordered three times a day. He continued to take it till May 17th.

On June 12th, it was noted that he had gained some power over the left eyelid and the right hand. The muscles of the arm were slightly rigid. The optic discs were examined and found normal.

In the latter part of June, he had a mild attack of measles, unattended by any complications. This illness had no appreciable effect on the paralysis.

July 13th. Since the measles, he had lain in an apathetic condition, which contrasted strikingly with the restless buoyancy he showed before. His evacuations passed under him. No signs of acute cerebral disturbance were present.

July 16th. He was feverish; the temperature fluctuated between 99 deg. and 101 deg.; pulse 120; breathing 48. He had no appetite. He took hardly any notice when spoken to; when raised up in bed, he cried, as if in pain. An attempt to lift him up this morning brought on a slight epileptiform paroxysm; the pupils were dilated, the eyes fixed; there was slight twitching of the right arm and leg, lasting a few seconds only, and followed by momentary rigidity. A minute later, the muscles were again relaxed; the cerebral macula was faintly brought out on the forehead and abdomen. The anterior fontanelle admitted the ball of the middle finger; the commencement of the sutures might be traced from it. The muscles at the back of the neck were rather stiff; any attempt to move the cervical spine was resisted as if it caused pain. When not meddled with, he lay perfectly quiet.

July 20th. He was still drowsy, taking no notice unless roused. When disturbed, he cried fretfully, and the right leg became rigid. The pulse was irregular in rhythm for the first time. The breathing was regular. There had not been any vomiting.

July 28th. The temperature, which had been fluctuating between 100 deg. and 102 deg. for several days, rose to 103.2 deg.; pulse 128; breathing 28. The eyes were examined by Dr. Goodhart; both discs were puffy, with blurred edges.

July 31st. He died comatose, without convulsion. The temperature rose from 103 deg. to 106 deg. before death.

Post Mortem Examination.—The body was thin, not emaciated; plenty of subcutaneous fat. Rigor mortis was universal. The right lung was adherent; the adhesions were old and tough. The lower lobes were congested. The bronchial glands were enlarged and cheesy. The heart and abdominal viscera were normal. The anterior fontanelle was open; the parietal bones were not solidly united, but the sagittal suture did not gape. The skull was rather large. The cranial vault was much thinned and translucent in patches. The orbital plates of the frontal bone were not depressed. The convolutions were flattened, and the sulci effaced. The pia mater over the convexity was neither congested nor inflamed. Many ounces of clear yellowish liquid escaped from the ventricles as the brain was being removed. There was basilar meningitis, with considerable exudation about the optic commissure. No tubercular granulations were detected either with the naked eye or by means of the microscope (the vessels in the Sylvian fissures were

specially examined). The surface of the pons Varolii and medulla oblongata were smeared with yellowish lymph. The left half of the pons bulged, as if stretched over a mass in its interior. From its anterior edge, a hard nodulated mass, as big as a large walnut, was seen to project. Its surface was coated with inflammatory exudation, on removing which the left motor oculi nerve was seen tightly stretched over the tumour. The left crus cerebri was expanded by pressure to twice its normal width; moreover, its under surface was soft and pulpy. A small patch on the under surface of the right crus, where it touched the tumour, was likewise softened. On washing away the softened tissue, there was seen to be a very extensive, though superficial, loss of substance in the left, a smaller one in the right, crus. The projecting mass was continuous with that embedded in the left half of the pons, whose tissue did not appear to be softened, though it was much stretched. Two other lumps, exactly like that just described, were found: one, as large as a rifle-bullet, in the left hippocampus minor; one, somewhat larger, in the left cerebellar hemisphere, from whose upper surface it projected to a height of about a quarter of an inch. These lumps were hard, somewhat elastic, yellow, with a small central nucleus of white friable material. They shelled out easily, the brain-tissue in immediate contact with them being softened. Microscopically, they presented the usual characters of "scrofulous lumps" or "solitary tubercles". The ventricles were all of them very much stretched, and the corpora quadrigemina somewhat dislocated by the pressure of the tumour in the pons. The softening usually noticed in cases of tubercular meningitis was entirely absent. The optic papillæ were obviously swollen, and their edges very indistinct.

REMARKS.—The following appears to have been the sequence of the morbid changes in this case. First, a pulmonary affection resulting in adhesive pleurisy and enlargement, with subsequent caseation, of the bronchial glands. Secondly, a gradual development of scrofulous lumps in the brain, one of which, by encroaching on important structures, brought on objective symptoms; while the other two (that in the cerebellum and that in the hippocampus minor, naming them in the order of their size and probable age) did not betray their presence during life. The hydrocephalus must have come on gradually, *pari passu* with the tumour in the pons. Thirdly, an acute basilar meningitis, probably in causal relationship with the tumours. Meningeal tuberculosis is not unfrequently associated with the presence of such bodies in the brain, and the distribution of the tubercles often compels us to view them as products of a local infective process of some sort, setting out from the original growth. In the present case, however, no distinct tubercles were found; and the inflammation, roughly symmetrical, could not be positively referred to the basal tumour as its source. Moreover, there was no sign, either of tuberculosis or of meningitis, about the remaining tumours. The sudden onset of the paralysis, and the slight, though decided, improvement which took place, are worthy of note. Sudden palsy in a child is due, as often as not, to a cause which has been long in operation. Cerebral hemorrhage, the typical lesion in which the onset of symptoms is contemporaneous with that of their immediate cause, is rare in childhood. So, too, apparent remission, whether in degree of palsy or in other grave symptoms, is often obscured in the cerebral disorders of children. The optic neuritis in this case was clearly consequent on the meningitis, not on the tumours or the intraventricular effusion. It is interesting, in reference to the commonly received view of the origin of this form of neuritis—that it is due to increase of intracranial pressure—to note that it was absent throughout in the case of simple intraventricular effusion (II), present in Case III only in its inflammatory stage, and present in Case I, where no exaggerated degree of tension can be supposed to have prevailed within the skull. The great rise of temperature just before death is an usual thing. When a child dies of brain-disease, its temperature is either abnormally high or abnormally low. Why it should be high in one case, low in another, it is impossible to say. The heat-regulating mechanism is always out of gear in such cases; what the result of its derangement will be in any given instance, we are not at present able to foresee.

QUEEN'S HOSPITAL, BIRMINGHAM.

CASE OF POISONING BY OPIUM TREATED PARTLY BY ATROPINE.

(Reported by Mr. SPOFFORTH, House-Physician.)

E. P., AGED 35, was admitted three-quarters of an hour after having taken one ounce of the pharmacopœial tincture of opium, shortly after his supper.

When I first saw the patient, he appeared to be in a sound sleep, from which he could be roused with difficulty, though he quickly relapsed. His breathing was slow, his pulse rapid, weak, and feeble; the pupils were contracted to a pin's point, and insensible to the stimu-

lus of light. The skin was bathed in perspiration. His countenance was slightly dusky. There was no vomiting.

The stomach-pump was used at 12.45 A.M., after which he was kept awake by being walked about between two assistants until 8 A.M., strong coffee being freely given.

At 1.12 A.M., one-hundredth of a grain of atropine was injected subcutaneously.

At 1.26 A.M., the pupils were slightly dilated.

At 2 A.M., one-tenth of a grain of atropine was injected.

At 3 A.M., the patient was more sensible. He had a tendency to go to sleep. He danced a jig round the dressing-room.

At 5 A.M., soda-water and strong beef-tea were given. During his sojourn, he had constant retchings and vomitings. There was arching backwards of the body with rigidity of the muscles of the back.

At 8 A.M., he was ordered to bed. He had passed urine. He was still a little drowsy. After he had been in bed a few hours, he awoke, with slight headache; otherwise he did not complain. He was ordered to have a calomel and jalap powder immediately.

At 2 P.M. he got up, well.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 26TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

ON A CASE OF AMNESIA, WITH POST MORTEM EXAMINATION.

BY WILLIAM HENRY BROADBENT, M.D.

THE communication began by recalling some of the hypothetical conclusions of a previous communication, on the "Mechanism of Speech and Thought", in vol. IV of the *Medico-Chirurgical Transactions*. Dr. Bastian's hypothesis of a special "perceptive centre" in relation with each sense was adopted and extended. It was considered that these "perceptive centres" would be situated in convolutions which received radiating fibres; and Ferrier's researches had since located the centres for vision, hearing, smell, taste, and touch in some of the convolutions into which these fibres had been traced, more particularly fibres from the extraventricular portion of the thalamus. It was further considered probable that the formation of a complete idea of external objects would be represented structurally by the convergence of arcuate commissural fibres from each perceptive centre to some part of the cortex not in direct relation with the crus or basal ganglia. A part of this intellectual process would be the association with the idea of a name. On this hypothesis, it would be possible for a breach to be made in the channel of communication between one of the perceptive centres and the "idea-centre" or "naming centre"; and a case was related in which the effects producible hypothetically by a lesion between the visual perceptive centre and the naming centre had actually been observed. A patient, otherwise quite intelligent, could not name the simplest object at sight, or read a word of his own writing. A *post mortem* examination was made. It was pointed out that a lesion cutting off the "naming centre" from the "auditory perceptive centre", or involving the former centre itself, would produce far more complicated symptoms, since the subject would, *ex hypothesi*, not only fail to understand spoken words, but he would not know what he himself was saying. Cases were briefly given exemplifying this condition, but no examination had been obtained after death. In the case which formed the subject of the communication, which was believed to afford another illustration, the brain was examined after death. An omnibus-driver, of intemperate habits, had a fit, of which no accurate account could be obtained, about October 1st, 1877. He had from that time been in the condition in which he was found on admission into St. Mary's Hospital on the 16th. He walked into the hospital, and no paralysis could be detected except very slight paresis of the right side of the face. Sensibility, however, was defective over the entire right half of the body, limbs, and face. The striking feature of the case was that the speech consisted almost exclusively of an inarticulate jargon, in which, however, from time to time, a distinct word or phrase would be heard, such as "if you please", "thank you". It was difficult to make out how far he understood what was said to him, as his replies, though mere jabber, were often appropriate so far as length was concerned, natural in tone and accent, and accompanied by natural gestures and facial expression. He would also address long speeches to those around him, evidently making some urgent request, and he frequently ended by crying. It was obvious that he thought he was giving expression to ideas present in his own mind, but he did not recognise the fact that his language was inarticulate. It was by telling him to do something that his want of compre-

hension of spoken words was made apparent. His invariable response to the command to give his hand was to put out the tongue, and in one or two doubtful instances only was his action appropriate, and then he was probably directed by signs. He did not understand writing. The patient died suddenly on November 6th; and, on *post mortem* examination, softening was found involving a considerable part of the posterior half of the convex surface of the left hemisphere. The greatest depth (three-fourths of an inch) and breadth of the morbid change were seen in a transverse vertical section made at the end of the fissure of Sylvius. Here, the softening reached from near the superior longitudinal margin to within an inch of the inferior and internal edge of the hemisphere. The convulsions affected were proceeding from before backwards, the supramarginal lobule and corresponding part of the inframarginal or first temporo-sphenoidal gyrus; more deeply and in a more advanced degree the postero-parietal lobule, the angular gyrus, and the first and second temporo-sphenoidal convolutions in the same plane; less extensively the middle connected gyrus and the part of the occipital lobe adjacent. The softening involved the temporo-sphenoidal lobe more completely than the parietal lobe. The arteries of the brain were fairly healthy. The membranes over the vertex were opaque, and raised by fluid from the convulsions. No other morbid change was observed. It was considered that the loss of comprehension of words, whether spoken by others or by himself, and the confusion of mind consequent upon his inability to understand or to make himself understood, would account for the condition of the patient; and the interpretation was that this was due to destruction of the channel from the auditory perceptive centre to the higher centre, in which the name is associated with the idea which it symbolises, or to destruction of this name-centre itself. Whether the interpretation offered was exact or not, the case was interesting as an example of the association of a certain loss of intellectual faculties with a lesion of definite extent and seat. It was worthy of attention that the left hemisphere was the one affected; and it would appear from this and similar cases that the exclusive employment of this hemisphere as the way out for language, involved its use as the way in. A comparison of the effects of identical parts of the two hemispheres would be fruitful of results.

In reply to a question from the PRESIDENT, Dr. BROADBENT said that the patient, when desired to write, took the pen in his hand, but held it in an aimless manner.—Dr. R. BARNES asked, with reference to the theory that the speech-centre was developed in connection with right-handedness, what was the condition in ambidextrous persons.—Dr. BROADBENT said that he could not answer the question.

A CASE OF ANKYLOSIS OF BOTH KNEE-JOINTS, WITH SHORTENING TO THE EXTENT OF TWO INCHES OF THE FEMORA, FROM OBLIQUE AND COMMUNICATED FRACTURES.

BY L. E. BRODHURST, F.R.C.S.

The communication described a case in which there was fracture of both thigh-bones, together with injury to both knee-joints. Shortening, to the extent of two inches, took place in each thigh-bone, and ankylosis followed the injuries to the knee-joints. The mode of restoring motion was related, and it was stated that motion was ultimately as perfect as before the accident; and it was further stated that, notwithstanding the shortening of the femora, the patient was not less active, whether on foot or on horseback, than before his accident.

A brief discussion followed, in which Mr. MORRANT BAKER, Mr. HULKE, and the author of the paper took part.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 22ND, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Apparatus for the Treatment of Transverse Fracture of the Patella.—The PRESIDENT brought before the Society a patient fitted with this apparatus, which he had employed for some time past at St. Bartholomew's Hospital. It consisted essentially of a sheet of plaster fitting to the thigh and extending to the upper margin of the patella, with loops on each side of that bone, and of a canvas slipper, between which, acting from the sole of the foot, and the loops in the plaster, such extension was made by means of pulleys as sufficed to draw the upper fragment down to the lower portion of the broken bone. It was easy to regulate the tension; and, when it was thought well for the patient to get up, the apparatus was left on, as it acted just as well when the man was walking about as it did whilst he was recumbent in bed. Practically, the appliance had been found to insure very good results.

Laryngo-Tracheotomy for Large Multiple Papillomatous Growth in the Larynx: Removal of the Vocal Cords: Preservation of Voice: Co-existence of Thoracic Aneurism.—Dr. BURNEY YEO introduced the

subject of this communication, who was a labouring man aged 49, and who first came under his observation as an out-patient at the Brompton Hospital on the 13th of last October, complaining of severe and almost constant pain at the upper part of the left side of his chest. He was very hoarse, and had been so for eight or nine years. He suffered much from dyspnoea, and could not lie down in bed. Examination of the chest discovered a distinct pulsation at the sternal end of the second left intercostal space, with a corresponding area of dulness and strongly accentuated second cardiac sound. There was a prolonged, noisy, harsh, and sometimes whistling inspiration heard all over the chest, without any moist râles. Laryngoscopic examination disclosed the existence in the larynx of a large vascular warty growth, apparently pedunculated, and attached to the anterior commissure above the vocal cords. It almost completely filled the upper part of the laryngeal cavity, concealing the glottis and the vocal cords entirely, except during breathing, when a triangular interval could be seen between the growth and the left vocal cord, through which air passed into the air-passages. On the 16th, he was admitted into King's College Hospital, where, amongst other points in his history, he mentioned that, in June last, while helping to pick up an iron rail, he heard something crack, and was suddenly seized with severe pain in the superior cardiac region, from which he had ever since suffered. He was kept at rest in bed for a month, without any amelioration in his condition; indeed, the pain in the chest and the difficulty of breathing were so distressing, that the patient begged for some operative interference. After consultation with Mr. Lister, the operation to be immediately described was performed on November 23rd.

Mr. LISTER described the operation which he had performed. Crico-tomy having shown that both vocal cords were implicated in the disease, he at once divided the thyroid cartilage, after introducing into the trachea one end of a bent leaden tube packed with thin sheet India-rubber, so as to plug the canal completely and prevent danger from blood entering the air-passages, chloroform being given at the other end of the tube. Both vocal cords were removed entire, together with neighbouring portions of mucous membrane, including the false vocal cords. The sides of the thyroid cartilage were drilled and tied together with silver wire, and the edges of the skin over the thyroid cartilage were kept in a state of relaxation by means of the button-stitch. The great peculiarity of the case consisted in the fact that the patient retained the power not only of coughing, but of speech of considerable power. In order to explain this, Mr. Lister referred to observations which he had made in 1861 upon the movements of the larynx, and published shortly in the article "Anæsthetics" in Holmes's *System of Surgery*. He had then ascertained by laryngoscopic examination in his own person, after an experiment on one of the lower animals, that the pulpy folds of mucous membrane which surmount the summits of the arytenoid cartilages can be carried forward to the base of the epiglottis by an antero-posterior movement of the cartilages not generally known to occur, so as to act as a secure valve to the opening of the respiratory passage. It is the vibrations of these posterior parts of the aryteno-epiglottidean folds which constitute the mechanism of laryngeal stertor; and it is by their means that the exit of air is prevented during the accumulating pressure in an expiratory act which ends in coughing. Mr. Lister believed that it was still not generally known that the strain of the act of coughing is not borne by the delicate apparatus of the *rima glottidis*, but by these folds of mucous membrane which cannot suffer from such treatment. Knowing this fact, he had anticipated that the patient would be able to cough like other people; but he had not expected him to retain the power of speaking above a whisper. Yet, he might have been prepared for the possibility of such an occurrence, seeing that laryngeal stertor can be produced at will, and by a mechanism which is independent of the vocal cords, and was left intact by the operation. Mr. Lister then himself uttered a sentence in a voice produced by the vibrations of the aryteno-epiglottidean folds; and he stated that, since his attention had been directed to the subject, he had noticed that this kind of voice is occasionally resorted to in ordinary parlance under the influence of mental emotion. When the patient was introduced, the linear cicatrix over the box of the larynx having been exhibited, he showed that he could cough naturally, and also spoke some sentences in a deep gruff monotone, plainly audible to all present.

Dr. BURNEY YEO added, in completion of the history of the case, that inspection with the laryngoscope now showed an entire absence of the normal intralaryngeal structures. In attempts at speech, the aryteno-epiglottic folds were drawn towards the median line, and served as vibrating media. The man had been admitted into the hospital a few weeks ago on account of the same neuralgic pains caused by his aortic aneurism, the physical signs of which had become more evident. He had been treated by rest in bed,

hypodermic injections of morphia to procure rest at night, and iodide of potassium in doses of thirty grains three times a-day. He had much improved under this treatment; he was now able to lie down comfortably in bed on either side. He had no dyspnoea and no cough. The expansile impulse and the area of dullness were less. Dr. Yeo thought the case of great interest not only on account of the curious physiological fact it had revealed with respect to the production of voice, but also from the remarkable coincidence of the existence of these large intralaryngeal growths together with thoracic aneurism. In prelaryngoscopic times, it would have been difficult to avoid the error of regarding the hoarseness and the obstruction to respiration observed in this case as consequences of aneurismal pressure. It was another instance, and a very remarkable one, of the clinical value of the laryngoscope.

The PRESIDENT considered the case now brought under the notice of the Society one inviting consideration and discussion, not merely from its clinical interest, but also from the physiological question which it raised. It seemed to offer another factor in that series of observations which, beginning with the facts noticed after removal of the tongue, had drawn attention to the manner in which the power of speech was preserved after great interference with the organs usually regarded as being concerned in its production. It had been taught that removal of the entire tongue rendered a man mute, but we now knew that the organ might be taken away and the power of speech retained; and now Dr. Foulis's case and the one at present before the Society pointed to further interference with the organ producing the voice, allowing the retention of modified speech or the production of speech by artificial aids. The question of the compensatory action of the aryteno-epiglottidean folds after the removal of the vocal cords was one which would, no doubt, attract further observation, for it was a point of practical importance.—Mr. MAUNDER said the case under consideration was of interest from physiological, clinical, and operative points of view. Doubtless, it was shown thus early after operation, lest the man should die of his aneurism; but he trusted Dr. Yeo would cure this, and would give the Society an opportunity of knowing whether or not the growths recurred. This was important in connection with a case, shown elsewhere by Dr. Foulis, where the papillomata had returned twice, and then excision of the larynx was resorted to. It is very desirable to know ultimate results, in order to settle the question of choice of operation.—Mr. HOLMES said that the case would have been more complete had any anatomical proof been given of the entire removal of the vocal cords, especially as, in the ordinary operation of thyrotomy for the removal of warty tumours from the larynx, no necessity was generally found for doing more than removing at most their surface. He also said that, in reference to the supposed power of the aryteno-epiglottidean folds to produce vocal sounds by their vibration, it would be interesting to know whether any laryngoscopist had ever observed such vibrations during the production of the hoarse voice which Mr. Lister imitated, or during any other kind of phonation. Mr. Lister's own experiments, of course, referred to a peculiar and forced position of the tongue and to the production of a mere inarticulate sound.—Mr. LENOX BROWNE said that, having had an opportunity of examining the patient, he could bear testimony to the fact that every portion of the vocal cords, true and false, had been removed. It appeared to him that in the act of phonation in this case there was general lateral compression of the larynx; there was certainly also a disposition for the epiglottis to hang lower than before the operation, so as to come into greater proximity to the arytenoid cartilages. The case was exceedingly interesting and important, because the operation had been performed not only on account of impairment of voice, but for relief of a vital symptom; and although there were dangers in the operation, they were, in point of fact, not so many nor so great as were frequently witnessed in attempts to remove growths *per vias naturales*. In this latter operation, he had personally witnessed the following consequences: spasm of the larynx, resulting from the introduction of instruments, in two instances, requiring immediate tracheotomy; removal of normal tissue, leading to ulceration; injury to laryngeal cartilages, especially the arytenoid, resulting in paralysis, caries, and death of the patient. There was further a much greater tendency to recurrence than was generally supposed, and the recovery of the voice was by no means so complete as was generally thought to be the case by those who had not an opportunity of personally witnessing the results. Mr. Browne considered that removal of the tracheal tube so very shortly after the operation, in the present instance, had contributed greatly to the patient's rapid recovery, while the very complete enucleation of the contents of the larynx would lead one to predict with almost certainty that there would be no recurrence; and he believed that were these two points, justly insisted on as important by Mr. Lister, rigidly adhered to in similar cases, there would not be necessity for the

much more dangerous operation of extirpation of the larynx.—Dr. F. SEMON was anxious to know why, before performing thyrotomy, no attempt was made to remove the growth by endolaryngeal operation, it being situated *above* the vocal cords. It had been said that it was too large and too hard to be removed by such an operation; but this reason did not at all seem sufficient to his mind to justify thyrotomy, it being clear that a growth was the easier to remove *per vias naturales* the larger it was. On the other hand, Professor Sörck of Vienna had proved, by removing enchondromata in several instances with his guillotine, that even the highest degree of hardness did not offer a serious obstacle for the endolaryngeal removal of laryngeal growths. If tracheotomy only had been performed, with subsequent endolaryngeal removal of the papilloma, he would not have raised any objection; but he did strongly object to thyrotomy, in consequence of his own experience, as well as from the perusal of a quite lately published book of Professor Paul Bruns of Tübingen—*Laryngotomy for the Removal of Intralaryngeal Growths*—towards which he wished to draw the attention of the Society. In this work, the author, who is Professor of Surgery in the University of Tübingen, compared the value of the intra- and extra-laryngeal methods very impartially, based upon the statistics of *all* the cases on record until the end of 1877. He came, after careful consideration, to the result that the intralaryngeal method was in most cases by far to be preferred. His results were very striking, and showed clearly the great danger of thyrotomy for the restoration of the voice, as well as for the possibility of recurrence. Out of thirty-nine selected cases of thyrotomy for the removal of growths (the result of all cases on record being still much more unfavourable), only eighteen ended in complete or nearly complete restoration of the voice; while in twenty-one—*i. e.*, in more than 50 per cent.—the voice was finally either completely lost or very much altered. At the same time, there was exactly the same unfavourable percentage of recurrence of the disease. In thirty-nine cases in which papillomata were removed by thyrotomy, the growth returned in twenty-one cases. This was not at all astonishing, if one remembered that thyrotomy was a very tedious operation, which took from one to two hours; that almost during the whole time the narrow space in which one had to operate was filled with blood; and that, if there were multiple papillomata in the larynx, a single small one might easily escape the attention of the surgeon; or that the mucous membrane from which they grew might not be deeply enough destroyed. In such cases, experience showed that, after the operation, the papillomata grew very rapidly again. Hence the comparatively numerous reports of repeated thyrotomies on the same patients. On the other hand, the endolaryngeal method could already now show more than one thousand successful removals of growths. Even if the operation did not succeed, there was at least not a new factor added by the operation itself, so dangerous for the voice as thyrotomy had proved to be. Further, Bruns' statistical tables showed that, in ninety cases of removal of papillomata (most of which were multiple) by endolaryngeal operations, there were only thirty recurrences; *i. e.*, 66½ per cent. successes, against the 53 per cent. failures of thyrotomy. These numbers spoke for themselves. With regard to Mr. Lister's physiological remarks, Dr. Semon did not doubt in the least their accuracy; but, as he had made his observations in two instances only, so small a number did not seem sufficient to base upon it any general conclusions. It was a well-known fact amongst laryngoscopists, that some parts of the larynx could take vicariously the functions of others; *e. g.*, the epiglottis being destroyed by syphilis or any other disease, the ary-epiglottic folds or the false vocal cords could protect the larynx against the entrance of food and fluids; or, the vocal cords being ulcerated and almost destroyed, the false vocal cords could act for them during phonation. Also, it was sometimes to be observed that the upper part of the larynx in some patients was so irritable, and at the same time so flexible, that it could be closed completely above the false vocal cords (in which fact the instances related by Professor Lister found their physiological explanations). Dr. Semon thought these cases were only exceptions, and not reliable at all to found upon them any principle of acting; and he did not think the single result obtained by Mr. Lister in this case, however excellent, would induce him to perform thyrotomy as long as the much less dangerous endolaryngeal method was at his disposal.—Mr. ERNEST HART remarked that several of the speakers had referred to the aneurism with the intimation that it would be likely to prove fatal; but he was sure they would be pleased to say, *Abstine!* By way of practical postscript to that effect, he would like to say that, in all probability, aneurisms ought now to be considered as curable rather than incurable diseases, and that whether they were medical or surgical aneurisms. He had lately seen in the museum of Dr. Steevens's Hospital in Dublin a preparation of a cured consolidated aneurism of the first portion of the arch of the aorta, of which the clinical history very

much resembled that of the present case so far as the aneurism was concerned. The patient had subsequently committed suicide for reasons connected with his pecuniary affairs. The patient had been treated by Mr. Tufnell on his well known method, and there seemed to be no reason why this patient should not be treated by the same method of restricted diet and rest with the prospect of an equally successful result.—Mr. LISTER, in replying, said that, with reference to Mr. Holmes's remarks, he must beg Mr. Holmes to take his word for the fact that both vocal cords were removed in their entire length and thickness, including the anterior processes of the arytenoid cartilages into which they are inserted; or, if that were not sufficient, he would appeal to Dr. Yeo, who was present at the operation. Mr. Wood also kindly assisted at the operation, and, if he had been at the meeting, he would have confirmed the accuracy of the statement.—Dr. BURNEY YEO, in replying, said there could be no doubt whatever that the whole of the strictly intralaryngeal structures had been removed by the operation. He had had opportunities of demonstrating this fact laryngoscopically to several gentlemen present. The patient had not made so good an appearance that evening as he had done on other occasions, being probably a little disturbed by coming before so large an assembly; but his voice had been tested in every way, and he was able to pronounce all the vowel sounds and to read distinctly anything that was put before him. With regard to his aneurism, it was possible that a cure might be effected; but, of course, that was always a matter of great doubt; at any rate, he was in a much better condition than formerly. Moreover, he was certainly *alive*, as the members present could testify, although he had heard it authoritatively stated that this patient was dead.—Mr. HOLMES, in answer to an observation from Mr. Lister, implying that he had questioned the justifiability of the operation, begged to explain that he had said nothing that would bear such an explanation. All that he had said was that, in a case so novel, and on which new physiological views were based, it would have been better if distinct anatomical proof had been adduced of the total removal of the vocal cords. Again, in answer to Dr. Yeo, who represented him as not believing that the cords had been removed, Mr. Holmes begged that he might not be misrepresented. All he had said was that distinct anatomical details would have made the case more complete.

Sequel of a Case of Subperiosteal Excision of the Os Calcis.—Mr. HOLMES brought forward the sequel to this case, which is to be found recorded in the Society's *Transactions*, vol. viii, p. 77. The operation was performed on January 31st, 1874. The boy recovered, but with much inflammation, and loss of motion of the ankle. He died of phthisis last autumn, having had a fairly useful foot, though by no means so good an one as was usually obtained by the ordinary excision. The specimen showed that the posterior tarsal bones, astragalus, cuboid, and scaphoid, were ankylosed together by bony ankylosis, and the astragalus to the bones of the leg. There was a very small shell of bone reproduced to represent the os calcis; and to this the tendo Achillis and the muscles of the calcaneum were attached. But this was of no practical utility, nor was the heel more filled out than it usually is after the common operation. On the whole, the anatomical examination of the foot proved beyond doubt that, in this case at any rate, the subperiosteal had given a less satisfactory result than is usually obtained by less tedious dissection.

Mr. MAC CORMAC asked Mr. Holmes whether the suppuration in his case had been long-continued after the operation: for the retention of the bone-making properties of the periosteum depended very largely on the absence of any protracted suppuration, by which these properties were, in fact, destroyed.—Mr. FURNEAUX JORDAN said that he had lately performed the modification of Syme's operation as proposed by Mr. Bell, viz., dissecting off the periosteum from the os calcis and applying it to the sawn end of the tibia. The result was the formation of a convex plate of new bone, which gave a rounded form to the stump and made it more like a new heel. He asked whether this new bone would be liable to take on caries, just as frequently happened in partial operations on the foot for disease to the tarsal bones which had been left behind.—Mr. MAUNDER said he thought the reproduction of bone in subperiosteal excisions depended upon the amount of force requisite for its removal. Rough usage with the raspatory, often unavoidable, gave rise to acute inflammation and destruction of the membrane, whereas in some instances the periosteum peeled off so readily that it would be difficult to take it away with the condemned bone. He deemed it desirable, in some instances, to save even the shell of the os calcis, lest the natural elasticity of the foot should be damaged by a section of plantar ligaments, and so the astragalus, being unduly compressed, might also become carious.—Mr. HOLMES, in answer to Mr. Mac Cormac, who had inquired about the length of the period of suppuration, stated that the suppuration

was extensive and protracted, and very probably testified to a severe inflammation in which the periosteum was more or less destroyed. This was one of the risks attending the protracted violence necessary to separate it from the bone.

Excision of the Lower End of the Rectum.—Mr. HOLMES related this case. The operation had been performed upon a woman for disease, apparently of an adenomatous character. The lower end of the bowel was occupied by a series of tumours which occupied and almost filled it, producing almost total stoppage—a case which would certainly justify colotomy in the opinion of most surgeons. About two inches of the whole circumference of the bowel, together with a great quantity of the surrounding tissues, were removed; and, as one of the tumours trenched on the vagina, an opening was necessarily made into the latter cavity. The case did very well; the patient regained her health rapidly, which had been much impaired, but did not recover any sphincter power. The object of the communication was to show that the operation was superior to colotomy in cases of limited disease of the lower end of the bowel, and to urge the surgical members to give it a trial in appropriate cases. Its main advantages were: 1. That it removed the disease which was left to make progress when colotomy was performed; 2. That in some cases (probably those in which the parts around the anus were not very freely removed) some amount of sphincter power was retained, and the patient had sometimes entire control over the motions; and 3. That the artificial anus, even when no more control existed than after colotomy, was in a more convenient position.

Mr. HULKE mentioned that his former colleague, the late Mr. Charles Moore, had, in the Middlesex Hospital, excised the lower end of the rectum in three cases. There was very copious bleeding, checked with difficulty, and the patients soon succumbed. These cases were not well suited for this operation, inasmuch as the tissues outside the gut were much infiltrated. Where this had not happened and the disease was limited, as in Mr. Holmes's case, he quite concurred with him in the advantage of excision. From his own experience of colotomy, done often at a relatively early phase of the cancer, before obstruction, and for the relief of the suffering caused by the contact of the feces with ulcerated surface, Mr. Hulke was disposed to place the duration of life after colotomy as much longer than the time mentioned by Mr. Holmes. With regard to the relative facility of excision and colotomy to which reference had been made, Mr. Hulke thought that, whilst colotomy where the gut was distended must be looked upon as an easy matter, this was not so when the gut was empty, where often much difficulty was experienced.—Mr. THOMAS SMITH remarked that, whatever might be the respective merits of the two operations, colotomy and removal of the rectum, they could not fairly be compared the one with the other. In the event of a patient needing colotomy for cancer of the rectum, the disease would be so advanced that no question of removal of the rectum could be entertained; whereas, if the disease were in an early stage and so limited as to be within reach of removal by operation, the necessity for colotomy would not have yet arisen.—Mr. HENRY MORRIS did not consider that the operations of colotomy and excision of the lower part of the rectum were not comparable, as they were respectively required in different conditions. With respect to the comparative difficulty of the operations, it was true that colotomy was exceedingly easy when performed under favourable circumstances and when the colon was distended, but so was the excision of the rectum. Mr. Morris had never had an opportunity of performing the latter operation himself on the living, but had practised it on the dead subject, and had come to the conclusion that the only trouble likely to arise during the operation was hæmorrhage. He inquired of Mr. Holmes whether he found that hæmorrhage occurred more freely during the detachment of the bowel from the ischio-rectal fossa, or from the division of the gut itself by a transverse section. Referring to the risk of injuring the peritoneum during the operation, he quoted certain experiments by Dr. J. B. Roberts of Philadelphia to show that, when the anus and bowel were undisturbed, the average distance of the peritoneum from the anus was from one inch and a quarter to two inches; but that, when the bowel and anus were detached from their surroundings and straightened out, the average distance was from three inches and a half to four inches and a quarter. This showed the great importance, in order to avoid wounding the peritoneum, of detaching the tube freely from its ischio-rectal surroundings, and of making traction upon the anus before severing the diseased portion of the rectum from the rest of the bowel. He next inquired if any union took place between the lower end off the gut and the edges of the wound, or if the parts healed entirely by granulations; and also if, after healing, there was any tendency to stricture of the artificial anus. Finally, he asked for details respecting the exact mode of operating in this particular case. Three methods had been adopted by different operators; viz., the oval in-

cision, whereby the anus was encircled and the bowel with the anus was loosened from its attachments; 2. Lateral flaps made by one straight incision from the central point of the perinaeum to the coccyx; 3. A posterior flap made by a transverse incision in front of the anus. In both the latter operations, the external sphincter was saved with the skin of the anus; but these methods were, of course, only feasible when the anus was not involved to any extent in the disease; was this the case in Mr. Holmes's patient?—Mr. F. JORDAN said that, a few years ago, he had excised the rectum of a middle-aged woman for epithelial cancer. He removed it by a circular incision around the rectum, and cleared out the ischio-rectal fossa. About two inches of bowel were taken away, and the hæmorrhage, which was less than he expected, was controlled by sponges and pressure. The rectum acted as before the operation, although no sphincter had been left. No sutures were employed, on account of the high position of the bowel. The woman made an excellent recovery, and he believed she lived eighteen or twenty months afterwards. In a case of cancer of the vulva, he had removed the whole vulva, the vaginal orifice, and two-thirds of the rectum. That was two years ago, and the patient remained well.—Mr. HOLMES agreed with Mr. T. Smith that, if the operation became a recognised one, it might hereafter become possible to assign a different province to it and to colotomy. But at present the operation of excision of the rectum was hardly practised at all in the London hospitals; at least he had never seen it done or heard of it; for the operations referred to by Mr. Hulke, as performed by the late Mr. Moore, had not, as far as he knew, been published (Mr. Hulke assented). With regard to the number of persons surviving a year after colotomy, he was quoting from memory out of Mr. Cripps's essay. He had no information on the point himself, but could easily believe it. In answer to Mr. H. Morris, he said that the bleeding in dividing the wall of the bowel itself was quite insignificant. The only free hæmorrhage was in the ischio-rectal fossa. In answer to Mr. Morris, he said that he was acquainted with the observations of the American surgeon referred to. They were, perhaps, as trustworthy as any other observations made after the admission of the air into the peritoneal cavity; but it was quite evident that the latter fact deteriorated seriously from their practical value.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 18TH, 1878.

On the Treatment of Broken Nose by Forcible Straightening, and the Subsequent Use of Retentive Apparatus.—Mr. WILLIAM ADAMS exhibited to the Society some improved instruments for the treatment of broken nose, a subject which he had first brought before the Society in March 1875 (BRITISH MEDICAL JOURNAL, October 2nd, 1875). He divided the cases of broken nose into two classes. 1. Those in which the cartilaginous septum was depressed and bent laterally, so as to plug one nostril, obstruct the breathing, alter the voice, and produce ozena by the decomposition of retained mucous secretion; 2. Those in which the nasal bones were fractured in addition to the lateral bending and partial displacement of the cartilaginous septum. The operation which Mr. Adams had proposed was to straighten the bent cartilaginous septum by large flat-bladed forceps, and, when possible, to raise the lower margin of the fractured nasal bones; afterwards retaining the septum in a straight line with the vomer and perpendicular plate of the ethmoid bone by an ivory clamp, and also retaining the nose in an improved position by a nose-truss worn externally. The large flat-bladed forceps originally used by Mr. Adams in 1861, when he first successfully performed the operation, had not been improved upon; but the retentive apparatus for the septum, and the nose-truss applied externally, had been materially modified and improved, and various modifications were exhibited to the Society. The steel screw-compressor and the large ivory plugs were now replaced by the ivory clamp with rack-and-pinion movement, first made by Mr. Ernst; and the retentive nose-truss, consisting of a broad metal forehead-band, with two double-action rack-and-pinion movement levers, with adjusting plates, had been greatly improved by Mr. Huxley. The necessity of retentive apparatus in cases of broken nose had been questioned by some surgeons from the absence of the causes of displacement by muscular action met with in the extremities and other parts of the body; but, if it could be dispensed with in some cases of recent injury, Mr. Adams considered that it never could be dispensed with in cases of some months, and frequently of several years after the injury, and these were the cases which had generally fallen under Mr. Adams's observation. He especially drew attention to three cases now under his care, all occurring in young ladies between thirteen and sixteen years of age, who had met with accidents eight or ten years previously by falling downstairs, or similar

injuries. Increasing deformity of the nose was observed at this period of development; and, upon examination, one nostril was found to be completely plugged by lateral bending of the cartilaginous septum; the breathing and the voice were both interfered with, and ozena generally existed. In these cases, the nose was completely and permanently straightened by the plan of forcibly straightening the septum, and afterwards continuing the use of the retentive apparatus, the ivory clamp being used continuously for three or four days and nights, and afterwards at night only; whilst the nose-truss was worn during the day for several months.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX CONJOINT DISTRICT MEETING.

NOVEMBER 30TH, 1877.

F. A. HUMPHRY, Esq., in the Chair.

Lardaceous Disease.—Dr. WITHERS MOORE made some remarks on lardaceous disease, suggested by a case which occurred in his practice at the Sussex County Hospital. After a brief sketch of our present knowledge as to the nature, cause, and course of the disease, in which Kyber's statement as to the liability of the aorta and its primary branches to be infiltrated with the deposit was duly noted, Dr. Moore read the case, which was that of a boy aged 9, who had been ailing more or less for four years. The great size of the liver and spleen, together with the condition of the urine, both analytically and microscopically, left no doubt as to the nature of the case; but it was complicated with great contraction of the left chest, and in the same region dulness on pressure, with almost complete absence of breath and voice sounds save at the apex, and lateral curvature of the spine to the right. The pathology of the case was not easy to determine; for, while there were certain facts in its history which favoured the presumption of inherited syphilis being the forerunner of the disease, the massive white teeth, typically clubbed fingers, and general tubercular aspect, seemed to negative it. In the absence of any present or past purulent discharge, chronic fibroid phthisis suggested a possible parent; but the very great contraction of the left chest, together with the results of its physical examination, and, in addition, the spinal curvature, determined Dr. Moore to treat the case as one of lardaceous disease following upon an unresolved empyema; and this diagnosis was fully borne out by the *post mortem* examination, the left pleura containing much pus, and the corresponding lung being reduced almost to a fibroid mass.—A short discussion followed, in which the CHAIRMAN, Dr. MOON, Dr. HOLLIS, and Mr. BRANWELL took part.

Lead-Poisoning.—Dr. FUSSELL read notes of a severe case of lead-poisoning. It occurred in a stalwart gamekeeper, aged 53, living in a remote part of the county, who had been confined to his house for some months, and to his bed for many weeks, with urgent symptoms of disease, supposed to be caused by cancer of the bowel. He was admitted into the Sussex County Hospital in October 1876. He was a very temperate man, and before this illness had never suffered from any serious complaint. His aspect was sallow and dejected, lowness of spirits being very marked. The tongue was clean, pulse regular, and temperature normal. He felt excessively weak, had lost flesh rapidly, and complained of pains in all his limbs. The feet and legs were cedematous. For a long period, he had been suffering from what he described as a constant uneasiness in his bowels, which were usually more costive than relaxed; he had never had colic. On several occasions, he had passed small quantities of blood, but had never suffered from piles. One day, when he was shooting with his master, he was seized with sudden and severe pain for a few moments in the abdomen, was forced to evacuate his bowels, and at the same time passed much blood, nearly a teacupful he thought. He could not attribute this seizure to anything he had eaten. A most careful manipulation of the abdomen failed to give any signs of malignant or other disease, and an examination *per rectum* also gave negative evidence. The thoracic organs appeared to be healthy. The motions seemed natural, and the urine contained no albumen or sugar, and was of normal specific gravity. There was no paralysis of any muscle, and no tremors. Thus no disease was at first detected, so that Dr. Fussell would give no opinion upon the case; yet, the man was slowly dying. At a subsequent examination, a faint blue line was found on the gums, but so faint that, had it not been for the marked symptoms, no notice might have been taken of it. A bottle of his drinking-water was then procured, which gave traces of lead, and lead was found in his urine. On visiting his cottage, the wife was found to have been for some time subject to what she termed bilious indigestion, constipation, and uneasiness in the bowels, but there were no traces of lead on her gums. The daughters, aged 12 and 14, had not suffered in any way, and their gums were quite

free from deposit. The man was treated with large doses of iodide of potassium, aperients, warm-baths, and friction to the skin. He left the hospital in two months, much relieved; and Dr. Fussell met him about four months ago with his dog and gun, apparently well, but still feeling weak. There was a long leaden pipe into the well. The water sent to the hospital was taken from the well about the middle of November, soon after the man's admission, before the springs had risen to any great extent. A sample of water from the same well was taken in the month of February following, and sent to a London analyst, who could find no lead in it. This might have been owing to the state of the springs, or to the fact that the sample was taken after there had been much purifying. The case was remarkable in many ways. Had the man died at home, it might have been tabulated by the Registrar-General as "cancer of the bowel". It was truly difficult of diagnosis. There really no marked symptom of lead-poisoning, save the faint line on the gums. The wife, who had been suffering from the same symptoms to a slight degree, had no such mark. The man had been drinking the poisoned water for a considerable period, therefore was very slowly affected by it, and did not exhibit any of the more pointed symptoms of lead-poisoning. Dr. Fussell then referred to several cases of lead-poisoning in which the cause was difficult of detection; notably, the cases reported by Dr. Alford of poisoning by the under surface of a millstone being honeycombed with lead; a case of the man poisoned by being the first customer in the morning at a public house; also a case recorded by Sir Thomas Watson, who was called to the Isle of Wight to see a lady who had been attacked with convulsions, became comatose, but ultimately recovered.—Dr. HALL and Mr. WM. WALLIS related cases bearing upon the paper.—Dr. FULLER made remarks touching upon the various modes of contamination of water by lead.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, DECEMBER 5TH, 1877.

FRANCIS OGSTON, M.D., President, in the Chair.

Obstruction of the Bowels.—Dr. URQUHART read a paper on this subject. After noticing the general symptoms, causes, diagnosis, prognosis, and treatment of the disease, the author gave details regarding several cases. One of these cases was caused by feces impacted in the rectum, one by cancer of the lower end of the rectum, one by cancer of the cæcum, one by an impacted gall-stone, which had ulcerated through the gall-bladder into the small intestine, and the cause of one was unknown. All the cases were fatal, except the first and last. In the last case, the obstruction continued for seventeen days, during which time the vomiting continued for the most part stercoraceous, and there was no evacuation from the bowel of any kind. The patient was a healthy young man aged 21. The cause could not be made out with any certainty, as there was no local swelling or other indication of the locality or nature of the obstruction. He recovered under the administration of hypodermic injections of morphia, in doses beginning with one quarter of a grain of the acetate, increasing to one grain three times a day. In the case of obstruction from gall-stone, the patient was a man about sixty-eight years of age, tall and thin. He had had shivering, fever, and intense pain and tenderness in the region of the gall-bladder, about two months before his death. When seen, he was sinking, and, on *post mortem* examination, the gall-stone (which was produced and was about the size of a large walnut) was found impacted in the small intestine, completely closing the gut.

Tetanus.—Dr. IRVINE of Tarves read a paper on tetanus, with special reference to two cases he had seen and treated. He began by stating that lock-jaw had been divided into idiopathic and traumatic, the latter being allowed by all to be the most frequent. He had not seen any idiopathic cases. He believed traumatic tetanus was far more frequent in males than in females, and this for the obvious reason that the former were more exposed to injuries likely to be followed by lock-jaw than the latter. Injuries of the extremities and of tendons, and punctured and lacerated wounds, were more apt to be followed by the malady than wounds in other parts and of a different character, such as incised wounds. Very slight injuries, and such as were without breach of surface even, were said to have been followed by lock-jaw; but the author doubted whether tetanus ever occurred without there being some breach of surface. He stated that the balance of opinion among veterinary surgeons, who had more opportunities than medical men of witnessing and treating lock-jaw, inclined to the side that lock-jaw was seldom seen as an idiopathic complaint. Idiopathic tetanus had been attributed to cold; but while cold might fan the flame, as where in the case of the horse the stable was cold and the roof letting in the wind and rain, was it not possible to find a newly healed or scarcely healed

raw behind the shoulders, or a recently closed cicatrix, the mark of a former fall, on one or both of the horse's knees? He had seen a horse fall and slightly graze the knees, which healed shortly; but, in six weeks after the fall, lock-jaw supervened with the usual result. He was inclined, from what he had seen, to doubt the existence of idiopathic tetanus; and to believe that, where an injury had not been discovered, it was owing either to its being so slight as to have escaped observation, or to its not being looked for with sufficient attention. Dr. Irvine then made some remarks regarding the curability of tetanus. He said that, fifty years ago, the disease was considered almost incurable, and that, when he was walking the wards of the Aberdeen Infirmary, the case-books contained but one instance of recovery from lock-jaw. More cases of recovery had of late been recorded, and no doubt, in time to come, still more cures would be effected. One observation he would make on this subject was that the danger was always greater the sooner the untoward symptoms set in. The author then reported two cases. The first was that of a young farmer, who accidentally shot himself in the thigh, inner condyle of the knee, and inside and back of the leg. Seventeen days after the accident, lock-jaw appeared, and was treated without effect by chloroform, the failure being perhaps from not continuing the agent long enough, or using it with sufficient vigour. Tincture of cannabis Indica was then had recourse to, and was administered in doses of a teaspoonful at a time, repeated whenever the effect was wearing off. The patient was kept napping for days and nights together. No other treatment was given, but an occasional dose of calomel, with beef tea and stimulants, when these could be swallowed, and the patient recovered perfectly. The second case was that of a woman about 43, fair, nervous, hysterical, the mother of three children. She had long been subject to attacks of uterine hæmorrhage and leucorrhœa, and was on the whole weak and broken down. She had left home for the sea-side for a few weeks, and on the night of her return trismus came on. On inquiry, it was discovered that when from home excessive hæmorrhage had occurred, which had been checked by plugging the vagina with cotton-wool; and, as some uneasiness in the passage and some difficulty in urinating existed, she was examined, as it was thought there might be an abrasion of the mucous membrane sufficient to account for the attack; but nothing was found in the passage. Repeated hypodermic injections of morphia were used, warm cataplasms and soothing liniment were applied to the fauces, and clysters of strong beef-tea and brandy were administered by the bowels. Chloral-hydrate, in drachm and drachm-and-a-half doses, was injected by the bowels, and seemed to afford relief. After two days, cannabis Indica was tried, but could not be taken in quantity sufficient to be of service. Chloral injections were resumed, and seemed to give relief for about an hour after administration. These injections were continued in quantities of eighty grains at a time. Ten days from the coming on of the trismus, the power of swallowing seemed to be improving, and there appeared a prospect of a successful issue to the case, the chloral being still used twice daily; but, on the afternoon of the fifteenth day, during an attempt to swallow a few drops of water, she exclaimed, "I am choked", fell back on the pillow, and immediately expired, death being no doubt occasioned by spasm of the muscles about the glottis and closure of the rima itself. The author, in his closing remarks, regretted that, when he had found the cannabis could not be given by the mouth in the second case, he had not tried the administration of that medicine, either alone or with chloral-hydrate, by the rectum.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

JANUARY 25TH, 1878.

JAMES THOMPSON, M.B., in the Chair.

Diffused Traumatic Aneurism.—Mr. MESSITER of Dudley showed a patient who, in consequence of a punctured wound of the femoral artery, had had a diffused traumatic aneurism. Mr. Houghton of Dudley, three weeks after the accident, cut down upon the artery and tied it above and below the wound. The patient made a good recovery. The anterior tibial on the dorsum of the foot was the only artery to be felt below the ligature after the operation.

Thoracic Aneurism.—Mr. A. H. EVANS of Sutton-Coldfield showed a specimen of aneurism of the descending part of the arch of the aorta. The sac half filled the left chest. The heart and its valves showed no signs of disease. The aorta was dilated and calcareous. The mouth of the aneurism was two inches wide. The man from whom the specimen was taken was a brickmaker aged 32, of abstemious habits, and had not had rheumatism or syphilis. The symptoms extended over a period of two years. He first complained of pain in the back and right

iliac region. Two months later, cough and pain in the chest came on; and a diastolic murmur was heard over the sternum. No dulness or pulsation could be detected over the seat of the murmur, nor was there any difference in the size of the pupils or radial pulses; he lost flesh, and bent forward in walking. Three months before his death, as he was getting out of bed to go to work, he felt as though his spine had broken. Examined at that time, there was dulness, with diminished breath-sounds over the back of the left lung, and stridulous breathing over the bronchus of that lung. To avoid pain, he lay on his back from that time until his death, which was caused by hæmoptysis from the rupture of the aneurism into the left bronchus.

Cystic Calculus.—Mr. ORWIN of Dudley showed a calculus, having a piece of slate-pencil for its nucleus. It had been extracted from the bladder of a female by lithotripsy.

Cancer of Lung.—Dr. EDINGTON showed a specimen of the lung.

Sarcoma of the Tibia.—Mr. LOWE, in the absence of Mr. GOODALL, showed a specimen of sarcoma of the tibia, removed by amputation of the thigh. The patient, who was twenty-five years of age, discovered the tumour in July last. In September, as he was making a severe muscular effort, he felt the bone snap at the seat of the tumour. This fracture never united, but the tumour at once commenced to grow very rapidly, and became pulsatile; it was throughout painless. Examined after removal, the tumour was found to involve the whole of the tibia transversely, producing a globular expansion of the bone. Structurally, it was a round-celled sarcoma.

Cancer of Liver.—Mr. LOWE showed a liver, which was infiltrated throughout with cancerous nodules, and weighed eleven pounds. The liver-affection was secondary to cancer of the stomach. The specimen was taken from a woman aged 35.

Graves's Disease, with Unilateral Exophthalmos.—Mr. EALES showed a case of Graves's disease, with unilateral exophthalmos of the right side. The patient, a servant aged 22, had suffered from exophthalmos for eight years, associated with enlargement of the thyroid gland, which was most marked on the right side; there was anæmia; the pulse was irregular and intermittent; a systolic hæmic murmur was heard over the base of the heart and over the large vessels of the neck; and there was reduplication of the first sound of the heart. Menstruation was scanty and irregular. The pupils were of the same size. The right side of the face seemed more developed than the left. The retinal vessels in both eyes were full and tortuous, especially the veins. There was no difference in the two eyes in this respect. The right eye protruded about half-an-inch, but there was no displacement to either side or interference with the action of the recti muscles. Hypermetropia was present in both eyes, but to a greater extent in the right than in the left.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 26TH, 1878.

JOLLIFFE TUFNELL, F.R.C.S.I., in the Chair.

Atheroma of Aorta: Mechanical Hyperæmia of Organs.—Dr. J. W. MOORE exhibited the thoracic and some of the abdominal viscera of a man aged 73, long the subject of gouty eczema of both legs. Extensive endoarteritis deformans chronica of the aorta and its main branches led to the following sequence of pathological events: dilatation of the ascending aorta, hypertrophy, and subsequent dilatation of the left ventricle of the heart; dilatation of the mitral orifice and of the left auricle; passive hyperæmia of the lungs; remarkable dilatation of the pulmonary artery, right chambers of the heart, and tricuspid opening. The liver was in a condition of red atrophy (nutmeg liver); and the kidneys were the seat of a chronic passive congestion, with interstitial nephritis. There was some anasarca and ascites.

The Cure of Thoracic Aneurism.—Dr. HEAD exhibited a cured aneurism of the arteria innominata from the body of a gentleman aged 56, who unhappily committed suicide while labouring under mental depression. The deceased became subject to neuralgia in the right shoulder and up the back of the neck. Last July, a dusky spot and an area of indistinct pulsation underneath the cartilage of the right second rib, with a slight difference in the right radial pulse, and enfeebled respiration in the right lung, led to the diagnosis of aneurism of the innominate artery. Mr. Tufnell, who visited him in consultation, agreed in this diagnosis; and, as the aneurism sprang from the anterior aspect of the vessel, the patient was treated by rest in the horizontal posture and by limited diet from the end of July to the beginning of October. At this latter date, the heart was displaced downwards, and appeared somewhat enlarged. The strong impulse of a solid body was felt to the right of the sternum near the first and second ribs. The impulse was slightly presystolic. In the middle of January, the patient threw him-

self into the river Liffey, and, although rescued, died of the shock in a couple of hours. A solid tumour, adherent to the undersurface of the sternum, was found in the anterior mediastinum. There was no solution of continuity or extravasation of blood. The heart was covered with fat. Its left ventricle was dilated, but the valves were healthy. The aorta presented an extreme example of atheroma. It was dilated into pouches, forming true aneurisms in several places. The arteria innominata formed one large aneurism, which had been perfectly cured by the deposition of successive fine laminæ of fibrin in its sac.—Dr. LYONS asked whether the suicidal act had been induced by pain, or depended on any hereditary tendency.—The CHAIRMAN said monetary anxiety led to the suicide. He then detailed his method of treatment of aneurism by rest and diet, for the success of which three conditions were essential, viz.: 1. The aneurism must spring from the front of the vessel; 2. The sac, no matter how formed, must be perfect; 3. There must be a fibrinating power in the blood.

Vast Abdominal Aneurism.—Dr. HAYDEN exhibited an enormous aneurism of the abdominal aorta in a thin spare man aged 42, of very intemperate habits. The first symptom was shooting pains in the back radiating through the abdomen. Afterwards, a swelling came in the left loin; and lastly, a large tumour appeared in the epigastrium. At first, no murmur was heard, but subsequently a blowing systolic bruit became audible. Change of position did not affect the pulsation. Diet, with rest in bed and twenty-grain doses of iodide of potassium thrice daily brought about an apparent improvement, signalled by the firm feel of a large portion of the tumour. But in a few days death occurred most suddenly. A rent had taken place in the posterior wall of the aneurism, and an enormous extravasation of blood had infiltrated the iliacus and psoas muscles, forming a large false aneurism, in which the blood deposited quantities of firm fibrin. Thus was explained the apparent consolidation in the sac. A second hæmorrhage, into the pleura, was found as the cause of the sudden death. The sac was eleven inches in its antero-posterior diameter. The tumour moved with respiration, owing to its firm and extensive attachment to the diaphragm. There was no hypertrophy of the left ventricle; but the whole aorta was highly atheromatous. The aneurism sprang from the left and anterior aspect of the aorta at the origin of the celiac axis, the superior mesenteric artery arising from its inferior surface. There was partial erosion of the last two dorsal and first lumbar vertebrae on the left side.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, JANUARY 2ND, 1878.

SAMUEL GORDON, M.D., President, in the Chair.

Facial Paralysis.—Dr. WALTER G. SMITH read a paper on the action of induced currents and interrupted voltaic currents in facial paralysis. The remarkable and extremely characteristic clinical features of Bell's paralysis had been so often and so well described that, in a series of seven illustrative cases, the author restricted himself to a brief summary of those points alone which bore on prognosis and treatment. The series of cases detailed went to show that the prognosis in facial paralysis varied within wide limits, both as regarded duration and completeness of recovery, and that, without the aid of electrical investigation, no accurate forecast could be made. Why some cases were transient and others persistent, depended partly on the nature, position, and intensity of the lesion, and partly on the relative extent of degenerative changes in the muscle and nerve. The more the structural changes were confined to the muscle, the more rapid was recovery. Any attempt to localise the exact seat of paralyzing lesion rested on a precise knowledge of the anatomical course of the portio dura, and of the physiological functions of the nerves connected with it. When the relative action of direct galvanic currents and of induction currents upon a sufficient number of recent cases of Bell's paralysis was studied, the great majority distributed themselves among two classes. 1. Cases in which muscular irritability was slightly or not at all impaired towards voltaic or induced currents. These cases recovered speedily, and a favourable prognosis might confidently be made, because the absence of electrical disturbance argued the absence of important structural changes in the tissues. 2. Cases—perhaps the more numerous—in which muscular irritability towards faradic currents was usually markedly impaired, perhaps even appeared totally lost, but in which the galvanic irritability was not only preserved, but actually heightened, for a time. In the nerve, the excitability to either faradic or galvanic currents usually disappeared, and it was a curious and instructive experiment to test with suitable electrodes the relative irritability of the portio dura behind the angle of the jaw and of the muscles on the side

of the face. Whenever this curious phenomenon was well marked, it was an almost certain prognostic of a tedious course of many weeks or months. No explanation of this remarkable fact—viz., the muscle failing to respond to the stimulus of a faradic current, while it readily reacted to an interrupted galvanic current—was forthcoming until 1864, when Neumann proved that, if a galvanic current, which, when slowly interrupted, excited muscular contraction, were very rapidly interrupted by some mechanical arrangement, so as to approximate induction-currents in rapidity, it entirely failed to elicit muscular contraction. He stated also that single shocks of an inductorium failed to cause contraction. The conclusion thence arrived at was, that induced and galvanic currents exercise different actions upon paralysed muscles, because the muscles in certain diseased states have lost their excitability for even intense currents of momentary duration, while they have preserved it for currents whose duration is longer. Neumann's explanation, however, left untouched the paradox of paralysed muscles responding to a galvanic stimulus too feeble to affect the homologous healthy muscles. Neither did Erb, in his recent monograph (*Ziemssen's Cyclopf. Pract. Med.*, vol. xi) attempt to explain this. It was not difficult, however, to conceive how pathological alterations in muscular tissue might render the particles of muscles, to speak hypothetically, less mobile than usual to a rapidly intermitting current, i.e., to a series of quickly recurring excitations; or, in other words, the degenerated muscles—their normal properties being qualitatively and quantitatively changed—were exhausted by a rapid succession of stimuli, and accordingly lose their capacity to respond. Possibly, in some cases, the muscle was thrown into a state of feeble tetanus which was mistaken for immobility. In attempting to account for the curious difference in action between a slowly and a rapidly interrupted electric current, stress should be laid not only on the total duration of the current, but also on the interval between the successive shocks. If variations in rapidity of the oscillations of the current be a principal determining factor of the difference in pathological action of induced and voltaic currents, we ought to be able to demonstrate in a series of cases,—1. That rapidly intermitting induction currents are without effect; this is universally admitted: 2. That rapidly intermitting voltaic currents are without effect; this has been repeatedly verified, and careful observation will, the author believed, show that the first shock produces an initial contraction: 3. That slowly intermitting voltaic currents produce muscular contraction; this is confirmed by all observers: 4. That slowly intermitting induction currents may produce muscular contraction. The key to the solution of the problem of increased readiness of response of paralysed muscles towards a slowly interrupted voltaic current appeared to be that offered by Legros and Onimus—namely, that in certain stages of structural and chemical alteration striped muscular tissue comes to resemble in properties the more simply constituted smooth muscular fibre, and, therefore, is more susceptible than healthy striated muscle to the voltaic stimulus, for smooth muscular fibre is more readily excited by voltaic than by induced currents. Finally, Dr. Smith thought there was ground for holding that facial paralysis might arise in a threefold way; 1. From affections implicating the nucleus of the facial nerve, e.g., in acute ascending paralysis, tabes dorsalis, and bulbar paralysis; 2. From lesions of the trunk of the portio dura nerve, through cold, injuries, etc.; 3. From lesion of the peripheral nerve-terminations through the action of cold.—The PRESIDENT alluded to cases of transient facial paralysis confined to the portio dura district and due to deficient circulation. He also spoke of cases of paralysis of peripheral origin which eventuated in central brain-disease.—Dr. H. KENNEDY mentioned a case of facial palsy, in which mercury pushed to salivation had proved successful. He had observed transient paralysis in syncopal heart-disease. He quoted Dr. Graves to show that the application of cold to the feet and legs was capable of producing facial paralysis.—Dr. AQUILLA SMITH referred to the absolute failure of the mercurial treatment in a series of cases which afterwards did well under electricity.—Mr. H. G. CROLY had seen one of the cases reported by Dr. W. G. Smith. It occurred in a child who had overexerted herself. Numerous remedies were tried unsuccessfully. Very early in the case, he felt a small gland near the stylo-mastoid foramen. It was, perhaps, the cause of paralysis by pressing on the nerve; or it might have been itself due to a blister which was used. The patient progressed favourably under the electrical treatment. He detailed two cases of surgical facial palsy following the removal of parotid tumours, and alluded to the hypodermic injection of minute doses of strychnia.—Dr. FINNY asked what interval should elapse before electricity should be used. He also described an interesting case.—Dr. SMITH, in reply, said he had tried strychnia in several cases of facial paralysis, and had convinced himself that in no case was any improvement due to the use of it. He believed that the sooner electrical treatment was begun and carefully carried out, the better would it be for the patient. Prognosis could not be derived from a single ex-

amination, but must be the result of several examinations made within short intervals of each other.

A Fatal Case of Typhus, with Hyperpyrexia.—Dr. J. W. MOORE detailed a case of typhus fever in a woman aged 38, who succumbed on the nineteenth day. The fever was of the ataxic or nervous variety, attended with severe headache, delirium, sleeplessness, subsultus, extreme cardiac weakening, and hyperpyrexia in the death-agony. On three occasions, partial attempts at crisis, chiefly by profuse diaphoresis, occurred. On the morning of the nineteenth day, the axillary temperature was 106.4 deg. Fahr. At 6.45 P.M., she was bathed in a cold perspiration, the extremities were cold, her eyes fixed, with coma vigil. There was considerable albuminuria. Bronchial rales were heard universally over the chest. The axillary temperature (taken twice with two reliable thermometers) was 108.6 deg. She was manifestly dying. At 7.30 P.M., the last observation on the temperature was made. It was found to be 109.1 deg. Three hours later, she was dead. Unfortunately, no observation was made after death. This was partly owing to the late hour at which she died. In commenting on the case, the author discussed some of the modern theories of hyperpyrexia, quoting Dr. C. Handfield Jones on the neuro-pathological view of fever, and Dr. Burdon-Sanderson on the Process of Fever.—The PRESIDENT said the case reported by Dr. Moore was especially remarkable on account of the three efforts at crisis which had occurred in the course of it.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 18TH, 1878.

PHILIP C. SMYLY, M.D., in the Chair.

The Late Dr. Stokes.—Mr. HAMILTON moved that a resolution, expressing sympathy with the family of the late Dr. Stokes in their bereavement, be passed by the Society and forwarded to the relatives of the late esteemed gentleman. He spoke in high terms of Dr. Stokes's worth, and said that not only would his loss be felt in this country, but throughout Europe.—Mr. MACNAMARA seconded the resolution. He said that he had known the late Dr. Stokes for many years, having been first his pupil, and afterwards having enjoyed the privilege of being his colleague in the Meath Hospital; and never did he meet with anything but kindness and consideration at his hands.—After some further remarks by Mr. SMYLY and Dr. BENSON, the resolution was put and carried.

Exostosis of the Lower Jaw.—Dr. BARTON exhibited a specimen which he had removed from the face of a young woman aged 17. This growth had existed for four years. There was no history of an accident. The case was successful.

Displacement of the Ulna Backwards, with T-shaped Fracture of the Humerus extending into the Elbow-joint.—Mr. TYRRELL exhibited a specimen of these injuries, in the case of a girl whose elbow-joint he excised a short time before.

Ovarian Cyst.—Dr. ATTHILL exhibited an ovarian cyst which he had lately removed. It was very large, and had existed several years. The woman from whom the tumour was removed had been tapped several times, but with little or no advantage. The case proved fatal.

Supposed Fracture of Great Trochanter.—Mr. TYRRELL exhibited a large pencil which he had removed from the thigh of a man, who had been sent to him for a supposed fracture of the great trochanter. The movable nature of the pencil had caused the error of diagnosis.

Deformities of the Bladder.—A postponed discussion on Mr. WHEELER's paper, read at the last meeting, took place. The paper was on the subject of deformities of the bladder, operations for their relief, and certain experiments which he had performed to show the absorptive power of the vesical mucus. Liquor potassæ, morphia, iodine, and prussiate of potash had been used by him with good results.—Mr. MACNAMARA considered it most difficult to make experiments on the bladder, as it was hard to get a patient to micturate at the right moment, and also to be able to discontinue doing so when told. He had been singularly fortunate himself in having had a patient under his care in the Meath Hospital, where the man could do what he was told to do. The case is given in Haughton's *Animal Mechanics*. Mr. Macnamara considered the case to have been most important, as he had been enabled to make experiments with much facility.—Dr. MAPOTHER considered the experiments made by Mr. Wheeler to be most valuable.—Mr. RICHARDSON agreed with the opinion of Sir Henry Thompson, that the mucous membrane of the bladder has no absorptive power. He considered that experiments made on healthy bladders and bladders exposed to the air (as Dr. Wheeler's patient was) were very different. Sir H. Thompson had never tried experiments, as Dr. Wheeler had done, on an extroverted bladder; but Mr. Richardson said that Sir H. Thompson believed that the action of drugs would

not be the same on it as on a healthy viscus. Mr. Richardson stated that he had injected twenty grains of extract of belladonna into the bladder without producing the slightest effect.—Dr. O'LEARY said that, in all the cases in which Sir Henry Thompson had experimented, the bladder had been in a state of inflammation, and, therefore, not in a fit state for experiments.—Mr. HAMILTON considered that the exposure of the mucous membrane to the air had altered its condition.—Mr. WHEELER, in reply, stated that the experiments were most difficult to perform on account of their great tediousness. He brought forward, in support of the theory that the mucous membrane of the bladder did absorb, the fact that it was histologically derived from the same source as that of the vagina, and the mucous membrane of the vagina certainly did absorb.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, JANUARY 16TH, 1878.

J. D. GILLESPIE, M.D., Retiring President, and afterwards W. R. SANDERS, M.D., President, in the Chair.

Tendon-Reflex.—Dr. GRAINGER STEWART introduced a series of cases as illustrations of the condition described by Professor Westphal of Berlin as "knee-phenomenon" and "foot-phenomenon", and by Professor Erb of Heidelberg as "tendon-reflex". These gentlemen had each independently discovered these phenomena, and they described them in the same number of the *Archiv für Psychiatrie und Nervenkrankheiten* three years ago. The condition may be demonstrated in connection with many muscles, but is most conveniently shown in connection with the quadriceps extensor femoris and ligamentum patellæ. By tapping firmly and suddenly on certain parts of that tendon, when the leg is in a semi-flexed position, reflex contraction of the quadriceps is produced, and the foot is jerked forward. The amount of irritability varies in different individuals, but is never absent in healthy people. In various diseases it becomes altered. Westphal, Erb, and Berger have shown that it is invariably and completely absent in the advanced stages of locomotor ataxia; and, quite recently, Westphal has announced that he has found its disappearance one of the earliest reliable symptoms of that disease. In chorea, the irritation has been seen to lead to extensive and irregular movements; and there are various other modifications in cerebral and spinal diseases. The first patient introduced was a boy, suffering from right-sided hemiplegia, with partial aphasia. In the left leg, the phenomena of ordinary natural reflex movement was exhibited on tapping the tendon. On the right leg, it was shown that the tapping was immediately followed by the usual jerk, but that the contraction inducing this jerk persisted, so that the leg was maintained for some seconds in a state of partial extension. This condition was associated with various other peculiarities in regard to the function of the muscles, which it was not desired at present to bring under the attention of the Society. The second case was that of a man suffering from well-marked locomotor ataxia, with extreme spinal myosis. In him there was absolutely no "tendon-reflex" to be elicited, while reflex action was readily produced by tickling the soles of the feet. The third case was another example of locomotor ataxia, associated with some degree of multiple sclerosis. In this case also the tendon-reflex was shown to be completely lost. The fourth case was that of a young man who exhibited certain of the symptoms of locomotor ataxia, viz., an ataxic, though not characteristic, gait with increase of unsteadiness on closing the eyes. In this patient there was an increase of the tendon-reflex; and Dr. Stewart pointed out that, according to Westphal's recent observations, this would tend to confirm the diagnosis which had been arrived at from a general consideration of the symptoms, that the case afforded an example of an anomalous spinal affection, different from the grey degeneration of the posterior columns. Reflex movement on tickling the soles was natural.

Amputation at the Hip-joint.—Mr. BELL showed the patient, whose leg he had amputated at the hip-joint for a large malignant tumour of the thigh. The tumour itself he had shown at a previous meeting. This case was as yet the only one where antiseptics had been successfully carried out in amputation at the hip in an adult. They could now see the line of union of the flaps, and the large part at the inner angle which had healed by first intention.—The PRESIDENT (Dr. GILLESPIE) remarked that he had never seen a patient suffer less from shock. He had watched him from the day of operation, and had always found him more like a patient with a finger amputated than one whose leg had been removed at the hip.

Reflex Paraplegia.—Mr. ANNANDALE showed a boy who had suffered from reflex paraplegia. He was admitted six weeks ago with the history that, shortly after beginning to walk, he had weakness in the legs, and a tendency to fall. When lying in bed he could not get up.

There was no disease of the spine or of the brain apparent, and the paraplegia was incomplete, as he could walk and stand to a certain extent, while sensation was unimpaired, and the sphincters unaffected. A few years ago, Mr. Annandale had a conversation with Dr. Sayre of New York, who sent him some pamphlets on this subject. The boy had congenital phimosis, and therefore, on the supposition that it was related to the paraplegia, he circumcised him on December 19th. The result was marked improvement, as he could now stand pretty steadily, kick out when he was lifted from the ground, and walk better. It was evident that the muscles were not right yet, and he was accordingly getting the galvanic current applied.

Injuries of the Arm.—Mr. ANNANDALE showed a lad who had suffered from a rare injury. While bird's nesting, he fell down a precipice, and got a fracture of his right arm, several cuts, and a compound separation of the lower epiphysis of the radius, the shaft being protruded for about one and a half inches, while the epiphysis remained attached to the wrist. In such cases amputation was generally performed. In this case, however, Mr. Annandale cut off the protruding parts of the shaft, after stripping off the periosteum, and also removed the epiphysis, inasmuch as it got its chief nourishment from the shaft. The result was a good one, and the patient had now an useful hand, although about three inches of bone had been removed. A similar case was recorded in *Druitt's Surgeon's Vade-Mecum*, where amputation was performed.

The PRESIDENT, after thanking the gentlemen who had shown the specimens, delivered his valedictory address.

The New President.—Dr. SANDERS, President-elect, then took the chair. It was not customary to deliver any speech, and he would accordingly only tender the members his sincerest thanks for the honour they had conferred on him in electing him the president. The honour was a valuable one, not only because the presidential chair had been filled by most excellent and eminent men, but also because there could be no higher position than to preside over a society whose objects were the diffusion of medical knowledge, the culture of medical science, and the improvement of medical teaching. He trusted that by the communications brought forward the members would keep up the interest of the Society, and make the ensuing session as profitable and instructive as past ones. So far as in him lay, he would endeavour to promote the objects, maintain the dignity, and forward the interests of the Society.

Scirrhus Tumour of Orbit.—Dr. ARGYLL ROBERTSON showed a tumour removed from a man beyond the middle period of life. It occupied the floor of the orbit, as far back as the optic foramen. The eye protruded forwards, upwards, and outwards. As it was growing rapidly, and other treatment had failed, he removed it, leaving the eye behind. It was difficult to separate it from the surrounding tissue, and, while doing so, he found a perforation of the inferior orbital plate into the antrum. It appeared, however, to be removed entirely and permanently. On examination, however, it proved to be scirrhus, as it was concave on section, very firm in texture, and with a fine serum, containing numerous typical cancer-cells, polygonal, and many nucleated. As scirrhus of the orbit was rare, he had shown it to the society. He only wished further to mention that it had been kept in chloral.

Tumours.—Mr. BELL showed specimens of (1) epithelial cancer of the nipple and scirrhus in the same mamma, and (2) sarcomatous tumour following an injury. As the hour was well advanced, he would say nothing more about the specimens than that the drainage had been conducted according to the method of Mr. McGill, of Leeds. This consisted in having a long drainage-tube, with the part within the dressing perforated with holes. The part outside was non-perforated, and dipped into a jar containing carbolic lotion. Although the cases were unfavourable, yet rapid union had taken place. The plan had been brought under his attention by Mr. Chiene.

Penetration of Orbit by a Knitting Needle.—Dr. KIRK DUNCAN demonstrated on a skull a curious injury which a little girl had received. By an accidental blow, a knitting needle had been driven through the orbit into the pharynx.

Salivary Calculus.—Dr. CHURCH showed a salivary calculus removed from a patient who had suffered from enlargement of the sub-maxillary and sublingual glands. On the third day, the calculus was discharged from the duct, opening on the right side of the *frænum lingue*.

Cases of Aneurism.—Dr. BYROM BRAMWELL read notes on some cases of aneurism. He had, within three years, treated six cases of aortic aneurism and one of the innominate artery; and he would also lay before the Society notes of three other cases. The treatment he had used was iodide of potassium, in large doses, according to the method advocated by Dr. G. W. Balfour of Edinburgh, and his results

had been satisfactory. Of his cases, the most interesting were the following. An unmarried pitman consulted him at the Newcastle Infirmary on January 16th, 1875. A year and a half before, he had noticed sudden forcible pulsation in his right breast. He had suffered great pain three months before admission. Nine years ago, he contracted syphilis. There was a pulsating tumour at the upper part of the right side of the chest, close to the sternum. He had also unilateral sweating, dysphagia, hoarse voice, and a systolic basic murmur, with an accentuated second sound. Under half-drachm doses of iodide of potassium and the administration of morphia, he ultimately had great amelioration of his symptoms. The dysphagia, cough, and pain disappeared, and the pulsation became less. The unilateral sweating, however, continued. The second case was that of a sailor, with abdominal aneurism. Eighteen years ago, he contracted syphilis. There were great emaciation, severe pain, and difficulty in walking, from the flexure of the leg on the abdomen. Under half drachm doses of the iodide he made extraordinary improvement, and went out at his own request in thirty-five days. Four months after, he died from rupture in the left pleural cavity. In a third case, albuminuria was an intercurrent symptom; and, on *post mortem* examination, a large cicatrix was found in one kidney.—Dr. GRAINGER STEWART, after complimenting the author of the paper, said, in regard to the unilateral sweating and dilatation of the pupils, that he seen cases of the latter. He asked if Dr. Bramwell could give any explanation of the inequality in the radial pulses, as he had sometimes been puzzled to account for it in some of his cases. In the case of abdominal aneurism, with complete obstruction of the aorta, the kidney-lesions was probably due to the obstruction of one of the renal arteries. He had a case where the patient became exhausted, with slight symptoms of gastro-intestinal irritation. The small intestine was found congested, and with extravasations of blood and occlusion of the superior mesenteric artery. The obstruction seemed to have caused this, and, on referring to the literature, he found that it sometimes occurred. One point of interest was in regard to rupture. In a case where this occurred, the patient had symptoms of retro-pharyngeal abscess. There was fluctuation on palpation, and the question of opening it was mooted. However, this was not done, as it was extravasated blood.—Dr. BLACK, as a military surgeon, had seen many cases of aneurism; its causes were many. Dr. Bramwell had stated that syphilis was often present. Dr. Welsh had shown that syphilis was present in 48 per cent. of a series of cases; and some had even rated the proportion at 60 per cent. How syphilis produced it was not demonstrated, although small deposits in the arterial walls had been described. Rheumatism was said to have an influence, but in 18 per cent. there was no diathesis. Alcohol he believed to be one great cause, especially constant drinking or "soaking". The nature of the dress and the work seemed to be predisposing causes.—The PRESIDENT (Dr. SANDERS) mentioned that he had been consulted by a surgeon as to the propriety of opening, with antiseptic precautions, a swelling on the chest-wall. The swelling, on examination, proved to be aneurismal.—Dr. BRAMWELL said that in some of his cases the pupils varied in size. In the case of unilateral sweating, the pupil was small when it occurred, and the temperature behind the ear was one degree lower than on the opposite side. He had only to add that he could not explain the retardation of the radial pulse, and that few of his cases had syphilis.

PATHOLOGICAL AND CLINICAL SOCIETY OF GLASGOW.

FEBRUARY 12TH, 1878.

JOSEPH COAT, M.D., President, in the Chair.

Ovarian Tumour.—Dr. WILLIAM MACEWEN showed a large multilocular ovarian tumour, which he had removed from a woman aged 27. The symptoms were of one year's duration. There were many adhesions to the liver, omentum, etc., but none in the pelvis, where, however, the tumour was jammed in by its own growth. The pedicle was small, and on the left side, although the patient insisted on the fact that the first appearance of the growth had been on the right side. The operation was performed under ether; and after it some vomiting took place. The pedicle was ligatured; and, in spite of the complication of bronchitis and of the peculiar development of slight paralysis of the left arm and leg after the operation, the patient was making a very fair recovery.

Genu Valgum.—Dr. MACEWEN also showed a patient with genu valgum, whom he had brought before the Society at a previous meeting. Both legs had now been operated on by removal of a wedge-shaped piece of the femur above the joint; and they were now practically quite straight. At the last operation, a sharp chisel was used, which pre-

vented the trouble sometimes experienced from the separation of small bits of cancellated bone.—Dr. JAMES DUNLOP spoke of the great success of the case, which he regarded as one of the many triumphs of antiseptic surgery. Here was a severe operation near the knee, performed with safety and hardly any discharge.

Paraffin Splints.—Dr. MACEWEN showed also some paraffin splints. He had been using this material for splints for two years, and had found it act well. It set very quickly, retained its form well, and shed all discharge cleanly away from its surface. Paraffin varied as to its melting point, 113½ deg. to 130 deg. Fahr. being the usual points of fusion. It could be melted, therefore, in a bowl which was surrounded by hot water. He preferred the paraffin which melted at 113½ deg. The splints were very light and cheap (9d. per splint being an average); and, when no longer required, the paraffin could be melted in hot water and used over again. The chemical reaction of paraffin was quite neutral. At first, he brushed the paraffin over the bandages, but more recently he adopted the plan of rolling the bandages in the melted paraffin, and, when required, these were remelted in hot water and applied, a little melted paraffin being painted over the successive layers if required for extra strength. The paraffin was well suited for the body bandages in Sayre's spinal splints.—Mr. CLARK said the great objection to the use of paraffin was the danger of the softening of the material when near a fire or any source of heat. In one case, where he had used a glue bandage, non-union of a fracture had resulted from the melting of the glue near the fire.—Dr. DOUGALL said the name paraffin was derived from its want of affinity, neither acids nor alkalis uniting with it.

Intrathoracic Aneurism.—Dr. JAMES DUNLOP showed a series of specimens illustrative of atheroma of the arch of the aorta, aneurism of the arch, and aneurism of the heart. All the specimens of aneurism of the heart which he had seen were on the right side. The whole of the specimens were from cases where sudden death under suspicious circumstances had led to medico-legal inquiry.—Dr. JOSEPH COATS said all the aneurisms of the heart which he had seen were on the left side.—Dr. DUNLOP showed for comparison a case of stab of the heart.—Dr. FOULIS alluded to a case which he had seen of rupture of the left ventricle without any aneurismal pouch; the muscular tissue of the heart was fatty.

Putrefaction and Antiputrescents.—Dr. DOUGALL showed specimens of fluids which he had kept for four years. They had been prepared, along with many others, to illustrate the phenomena of putrefaction and the action of various antiputrescents. 1. A specimen of beef-juice in a state of putrefaction; the bottle had been kept in the dark, and was glass-stoppered, and the fact that putrefaction still continued threw light on the state of sewer-fluids pent up in dark places. 2. A specimen of beef-juice, in which fermentation was induced by the addition of hydrochloric acid. If an albuminous fluid be divided into two parts, and one of these set aside, it putrefies; but if to the other part a vegetable or mineral acid be added, the putrefactive process is averted, and instead of it we have in a few days tufts of fungi, and after several months the reaction of albumen is quite lost in the fluid so treated. Contrasting this specimen with specimen No. 1, where putrefaction was still in progress after four years, Dr. Dougall said it showed that fermentation was a much quicker process than putrefaction. 3. A specimen of beef-juice, in which the putrefactive process had been arrested by the addition of hydrochloric acid. Two weeks after addition of the acid, the putrid odour had disappeared, and was replaced by a fragrant smell possibly akin to that of valerician acid. This odour had been retained by the specimen for four years. Dr. Dougall also showed various solutions to illustrate the theory of subsidence of germs or particles from the air; in one of these, boiled urine had been kept quite sweet and clear for four years by the simple precaution of plugging the neck of the flask with common cotton-wool, which acted as a filter to the particles in the air. This cotton-wool had been subjected to microscopical examination (with $\frac{1}{2}$ lens), but only amorphous particles were seen. Dr. Dougall avoided entering into the various theories on the subject, and contented himself with showing the specimens.—Mr. W. J. FLEMING said the lapse of time in these experiments was of importance; he was inclined to think putrefaction was a phase of fermentation, and to agree with Pasteur's conclusions. He alluded also to Mr. Godlee's experiments on vaccinia as bearing out these views.—Dr. DOUGALL thought the process of putrefaction was so different from fermentation as to deserve a separate name. When one fluid remained clear and odourless and acid, but with a little fungus here and there, while a second fluid became turbid and putrid, he thought the difference was as great as between typhus and typhoid fevers, and that separate names should be given. If observers chose to call all changes in fluids fermentation, he could only object that simplicity was being gained at the expense of clearness.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 2ND, 1878.

THE DENTAL PRACTITIONERS' BILL.

WE stated last week that the hasty intervention of the Chairman of the Parliamentary Bills Committee of our Association, aided by the goodwill of Dr. Cameron of Glasgow, who very kindly, at a few hours' notice, at the request of Mr. Ernest Hart, took up the defence of medical and public interests in opposing this Bill, was effectual in arresting the progress of the Bill at the moment when it was about to pass its second reading unopposed, and with the support of the Government, owing apparently to the political inexperience of its avowed opponents, and their unwise reliance upon the supposed influence of some effusions of the pen which they had reprinted and scattered broadcast. The result of that inefficient mode of proceeding was, that the promoters of the Bill, who had taken the trouble, by one kind of statement or another, to remove the opposition of independent members and to secure the support of Mr. Cross, who represented Lord Sandon, were on the point of carrying this Bill through by a *coup de main* and while their opponents were napping. This having been prevented, however, and it having become apparent to the promoters of the Bill that it is perfectly hopeless, now that the plain objections to their measure have been disclosed, and that the Parliamentary opposition is in the hands of those who know how to organise it, they have resolved to give way on the subject of the objections made in the interests of the medical profession, and to strike out from the third clause the words "surgeon or dental surgeon", and to provide that legally qualified medical practitioners shall altogether be exempted from the working of the Act. This is so far satisfactory, and it meets in great measure the objections urged by our Parliamentary Bills Committee, except that it will, we think, be necessary to schedule the *Register*, in order to make it quite clear that the word "dentist" or "dental practitioner" only shall head the *Register*, and to see that the title of dental surgeon or surgeon dentist, so expunged from the third clause, shall not reappear in that or in any other part of the Bill, or in consequence of the working of the Bill.

There is, however, another objection to making immediate progress with the Bill. This Bill proposes to impose a complicated, extensive, and difficult series of duties on the General Medical Council. They are to make the *Register* of dentists and to keep it; to make all decisions as to putting dentists on the *Register* and to striking them off; they are to regulate the curriculum and to supervise examinations—in fact, to do everything for dentists which they now do for medical practitioners; but with this great difference, that the Bill, in the first place, has never been before the General Medical Council at all, so that they have had no opportunity of saying whether they understand those duties and are willing to accept them: and further, that the Council consists of, and is likely to consist, exclusively of medical practitioners, and has not a dentist upon it. In what way they are to decide what is the proper curriculum for dentists, what are the proper examinations, and what schools should be recognised, is not apparent; nor are there any professional dental advisers of the General Medical Council. The questions likely to arise as to the conduct of dentists, who may come on the *Register* and need to be put off again, will probably very often be of a complicated and disagreeable character. Medicine is a profession. Dentistry is largely a business; and these gentlemen sell all of them

teeth and gold plates, and alloyed gold plates and vulcanised plates, and use all sorts of materials for stopping, of various values. They are also very largely in the habit, some of them at least, of suing and being sued in County Courts, and, judging from the reports which are from time to time sent to us, dentists are sometimes charged with unfair representations as to the value of the goods which they supply, and sometimes with fraudulent misrepresentations. To adjudicate upon charges likely to be brought under such circumstances involves some knowledge of trade matters, as well as of professional matters; and if the General Medical Council have to undertake the tutelage and charge of dentists at large (and we by no means say that in no conceivable circumstances ought they to do so), they should at least have an opportunity of considering very carefully what is the proper machinery for carrying out their responsibility, and whether they are at present in a position to accept the responsibility involved under the conditions offered.

It does, therefore, appear to us most unusual, and quite contrary to the ordinary course of public business, that such a Bill should be pressed forward in the House of Commons without the General Medical Council having considered it. It is inconceivable to us that the Government should support such a course; and we should very much like to know what course Dr. Acland, the President of the General Medical Council, has taken in a matter which so deeply affects the Council and the profession. Has he protested against this Bill being proceeded with until the General Medical Council have seen it? If he have so protested, how is it that the Government has disregarded his protest, and that Lord Sandon, or his representative Mr. Cross, supported the second reading? Has Dr. Acland submitted it to a meeting either of the Executive Committee or of the Branch Council? If our Parliamentary Bills Committee were assured that the General Medical Council had had the opportunity of considering, and had approved the general machinery of the Bill, they would, we think, be inclined to withdraw further opposition, when their claim on behalf of the profession—that the title of surgeon should not be wrested from the profession—has been fully satisfied; but, until that information has been obtained, it is, we imagine, very unlikely that they will relinquish their opposition to the Bill. It will in this instance be their business to advance the interests of the General Medical Council, which are those of the profession, even against the Executive Council, if need be. It is hardly possible, however, to suppose that the President of the General Medical Council has given his approval to a Bill involving such great responsibilities to the Council, before the Bill has been considered by the Council at large; but in any case it would, we feel sure, be satisfactory to the profession to hear from Dr. Acland officially what view he has taken, and what course he has adopted, as President of the General Medical Council, in a matter which largely concerns the interests both of the Council and of the profession.

THE LOCAL GOVERNMENT BOARD AND COMBINED
SANITARY DISTRICTS.

IT is not surprising, considering the atmosphere of doubt which hangs over this subject, that the President of the Local Government Board should have been again called upon to explain to Parliament the attitude of his department on the combination of sanitary districts for the appointment of medical officers of health. In reply to a question from Colonel Naghten, whether he had considered the desirability, with a view to the better carrying out of the Public Health Act, especially with regard to the suppression of nuisances, of making it compulsory to appoint the medical officers of health in all cases for unions or other large areas, instead of, as is now sometimes the case, for parishes only, Mr. Selater-Booth is reported to have stated that he did not intend to propose any change in the law on that subject, but that the Local Government Board had always encouraged the combination of local authorities in respect to the appointment of these

officers, and it would continue to do so. It is somewhat significant that Colonel Naghten, a Hampshire member, and a neighbour of the President, as well as a supporter of the Government, should have invited this expression of policy on the part of the Local Government Board; and it is the more so, considering the fact that, with the exception of a small combination in the Christchurch district, the small area system was from the first adopted in Hampshire, the attempts of the then inspector of the district to obtain the division of the rural portion of the county into two large areas having signally failed. It may therefore, we think, be fairly inferred that if public opinion in Hampshire, as represented by one of the members of the county town, has come round to the side of the large appointments, there cannot be much doubt as to which way the current of opinion in the country generally is setting.

Whilst, however, it is somewhat reassuring to those who, like ourselves, have felt not a little puzzled by the course which the Local Government Board has pursued in regard to some of these appointments, to be informed that the Board is as much in favour of combined appointments as it has always been, it would have been more satisfactory if the President had given some indication of the way in which he proposes to encourage these appointments in the future. Hitherto, the encouragement which they have received from the Board has been of such a vacillating and feeble character, that a very small amount of repulsive action on the part of one or two parsimonious members of a combination has in most cases been sufficient to break up the combined district. It is true that the proportion of cases in which this falling away has taken place is a minority when compared with the whole number, and that in very few has the combination altogether fallen to pieces; still, the list of collapses is a sufficiently important one, including as it does such districts as Oxfordshire, Northamptonshire, and Huntingdonshire, with a considerable sprinkling of smaller areas, such as Taunton, Goole, Lytham, and some others which might be mentioned, to justify the inquiry whether the encouragement which Mr. Selater-Booth asserts that his Board has been in the habit of giving to the formation of large districts has been extended to maintaining them when they were formed; and if so, what is his explanation of the disintegration which the Board has allowed to take place in these cases? Of the few cases in which the original combinations have been augmented, we only know of one, that of Southam, in the Mid-Warwickshire district, in which this has been due to the compulsory action of the Local Government Board. In most instances where a sanitary authority has withdrawn from an existing combination, the Board has either made no opposition at all or it has been of the most perfunctory description.

Now, we have no intention of impugning the conduct of the authorities who have withdrawn from these combinations, for we have no means of knowing whether they had any justification for doing so on grounds of reasonable dissatisfaction with the way in which the work of the district had been done. Nor are we aware whether in any case in which this disintegration has taken place the person whose interests have been most directly affected by it, viz., the medical officer of health, has distinctly challenged the Local Government Board to hold an inquiry into the grounds of the withdrawal. It may be that this has been done in one or more cases, but if so, the fact has not come under public notice, and we are, therefore, driven to the conclusion that there must have been, in some of these cases at least, elements of weakness, either in the original constitution of the district or in its subsequent management, which to some extent justified the act of disunion. Indeed, looking at the haphazard and disjointed way in which these large districts generally were first organised, and to the fact that the tenure of office which was guaranteed was only of a limited description, and, therefore, not calculated to tempt a large number of first-class men into the field of competition for them, we should not have

been surprised if the cases of dissociation had been more numerous than they have been; and we think that it says something in favour of the tact and efficiency with which the officers to combined districts have, on the whole, done their work, that the tenants of office in most of the larger districts have been re-elected on the same terms as those on which they were first appointed; and that in some cases the desire was expressed that the appointment should be made of a permanent nature. Up to the present time, however, the Local Government Board has not only not encouraged permanent appointments, but has absolutely refused to sanction them. The only intelligible explanation of a course which is so diametrically opposed both to the practice of the Board itself in regard to poor-law appointments, and to the experience and opinions of all competent authorities on this matter, is, we apprehend, to be found in the forecast which the Board has for some time had of the probable organisation of county boards, which has at length become a Government measure, and in the assumption that in view of such a contingency, and of the propriety of putting the appointment of officers of health for county areas under such boards, it would be inexpedient to create permanent vested interests which might to some extent conflict with such a policy. We shall soon learn, either from the Bill now being printed or from the modifications which it may receive as it passes through Parliament, whether this supposition is well founded or not. It will be a singular instance of short-sightedness if these boards, when they are constituted, are to be invested with the appointment of coroners, as the Bill, we believe, proposes, and the opportunity is neglected of placing the sanitary supervision of their districts also in their hands, and of thus bringing the sanitary and judicial systems of inquiry, as represented respectively by the medical officer of health and the coroner, into a relationship with one another, which would be eminently beneficial to the public interests. So far as the present position of medical officers of large areas is concerned, nothing could well be more unsatisfactory. They are deprived of that independence which a fixed tenure of office would give them; they are in no relationship either to the poor-law medical officers on the one hand or to the medical staff of the Local Government Board on the other; they have no control over the officials who work under them, nor are they themselves under such supervision as a properly organised system would provide. In such a state of things as this, of which the Local Government Board has full cognisance, it is scarcely credible that the President should limit his statement of the future policy of the Board in regard to these appointments to a meagre promise of encouragement, except upon the supposition that he has in his mind's eye a more excellent way of encouraging them than that which he has hitherto adopted.

LIFE-INSURANCE AND BURIAL CLUB MURDER.

IN a trial for murder which recently took place at the Chester Winter Assizes, the evidence brought to light the defects in our present method of detecting and tracing crime. A woman of the name of Heesom was tried and convicted of the murder of her infant child, Sarah, by the administration of arsenic. The deceased Sarah Heesom was born in October 1876, and was proved to have been a fine healthy child. In October last, about midday, the child was seized with violent vomiting and purging, and it died the same evening in a fit of convulsions. As the child was teething, a medical man who was called in certified that the cause of death was convulsions from teething, *i. e.*, natural causes.

This case of murder by poison would have been passed over but for the fact that the prisoner's mother, Mrs. Symes, who had come to live with her, was taken suddenly ill the day after her arrival with vomiting, purging, cramps, and other symptoms like those observed in the child, and she died in a few hours. The suddenness of death excited suspicion in this case; and, on a *post mortem* examination and analysis, it was found that the woman had died from the effects of arsenic, seven

grains of that poison being found in her body. The bodies of the child Sarah Heesom and of Lydia Johnson, another child of the prisoner's, who had died in March 1876, were exhumed and examined. Arsenic was found in them, and the convulsions from which Sarah Heesom was certified to have died were thus proved to have been caused by arsenic and not by teething. The arsenic found in the stomachs was not mixed with any colouring matter, and there was evidence that about the date of these acts of murder the prisoner had had white arsenic in her possession. The evidence further showed that the prisoner had insured the lives of her mother and the two children in some assurance society, and that she was paid upon the three deaths a sum of money amounting altogether to £21. There was also proof that the deceased persons were entered in two burial clubs.

These cases demonstrate that the present mode of registering the causes of death is very defective. There was surely enough in the case of the infant to excite strong suspicion of the cause. Fatal convulsions from teething are not preceded by well-marked symptoms of irritant poisoning such as were observed in this case. There is not a sudden access of vomiting, purging, and severe pain affecting the stomach and bowels, followed by death in a few hours; and it is not enough, on these occasions, to assign the cause of death to "convulsions" without tracing the convulsions to their probable source. In narcotic as well as in irritant poisoning among infants and children, convulsions are frequently observed. Under a proper system of registering the causes of death, this would have been a case reserved for inquiry. No certificate would have been given in the absence of a *post mortem* examination.

Another point for observation is—How did it happen that no inquest was held on the body of this child? There must have been a want of due diligence on the part of the coroner and his officer. Had it been the case of some aged person, dying suddenly of apoplexy, under no suspicious circumstances, there would probably have been the formality of an unnecessary inquest; but where two children die in a few hours, in the same house, under well-marked symptoms of irritant poisoning, the cases are allowed to pass without observation; and it is only the sudden death of the grandmother, a month later, which led to the discovery of these acts of murder. The coroner's inquest, as it is at present conducted, is insufficient to initiate proceedings in these cases of secret poisoning.

Another fact to be noticed is, that the provisions of the Act regulating the sale of arsenicals are easily evaded. As sold to the public, arsenic must be coloured either with indigo or with soot. In the body of the grandmother, there were found seven grains, in that of Lydia Johnson fifteen grains, and in the body of the infant one grain and a quarter. There was no colouring matter in any one of them, and it was obvious that the poison had been administered as white arsenic.

These cases clearly show the necessity for greater care on the part of medical men in certifying causes of death in children, and for greater watchfulness on the part of coroners where several deaths occur in the same family under similar symptoms.

SEVERAL surgeons of the Stafford House Committee received, from the Turkish authorities at Constantinople, military medals of merit.

ACCORDING to the *Pester Medicinische Presse*, Professor Hyrtl, who has for some years retired from public life and has been residing near Vienna, has lately completed a lexicon of terms used in medicine.

A propos of the discussion on the Lost School at Oxford, and the severance which has there been effected by the positive and negative action of Dr. Acland, Dr. Rolleston, and others, between the teaching of natural science, preliminary and collateral to medicine, and the study of medicine itself, we publish in another column a valuable and weighty letter from Mr. Savory. This letter is of great importance at this moment, not only from the authority and philosophic power of thought of the writer, but from the obvious and direct bearing upon the

assumptions which have been made by those who propose to support the supposition of the Oxford Medical School that London teaching is something for which academic teaching in Oxford should be sacrificed, and who are disposed to concur with Dr. Acland that London medical schools are of unsurpassable excellence; so that Oxford ought to retire from the competition without even an effort to show what philosophic and complete medical teaching should be.

We see with great regret the various letters which have appeared in the papers, intimating that placards have been posted at the hospitals calling upon medical students to assemble in gangs to give traitors a lesson in patriotism. We have already expressed the opinion, in which we believe the authorities will agree, that, while medical students have a right to take their place as citizens in the expression of political opinions, it is extremely undesirable that they should, in their quality of medical students, and in any way associated with hospitals and medical schools, in bodies, take part in political disturbances; and it is much to be desired that hospital authorities will be vigilant in preventing the posting of any such placards, and will, moreover, use their moral influence in preventing their students from taking part in riotous demonstrations of the kind on behalf of any party whatever.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual general meeting of this Society will be held this evening (Friday) at 8 P.M. The following gentlemen have been nominated as the officers and Council for the year 1878-1879. [An asterisk is prefixed to the names of those who have not held similar offices during the past year.] *President:* Charles West, M.D. *Vice-Presidents:* William Wood, M.D.; *Richard Quain, M.D., F.R.S.; John Cooper Forster, Esq.; John Wood, Esq., F.R.S. *Treasurers:* William Wegg, M.D.; John Birkett, Esq. *Secretaries:* *James Andrew, M.D.; *Timothy Holmes, Esq. *Librarians:* *George Johnson, M.D., F.R.S.; *William S. Savory, Esq., F.R.S. *Other Members of Council:* Robert Barnes, M.D.; William C. Begley, M.D.; *C. Handfield Jones, M.B., F.R.S.; *Octavius Sturges, M.D.; *E. Symes Thompson, M.D.; *W. Marrant Baker, Esq.; *Henry H. Hayward, Esq.; *M. Berkeley Hill, Esq.; *Arthur B. R. Myers, Esq.; *Robert J. Spitta, M.D.

THE MIDLAND MEDICAL INSTITUTE, BIRMINGHAM.

IT is some time now since much has been heard of the above proposed "Institute"; but we are glad to be informed by a Birmingham correspondent that it is now on so solid a foundation that it is nearly absolutely certain that an excellent building will be raised in a most convenient and central situation, viz., New Edmond Street; the portion of land proposed to be built upon being, it is stated, now fixed; and the plans for the building in a very forward state, ready to be submitted to the Building Committee and the members. The public, though at present few in number, who have already been asked for pecuniary assistance, have generously responded. We understand that the annual meeting is to be held about the second or third week in March, when a scheme or two for raising more money for the building will be proposed for adoption by the members, which, if carried (following the example of the Law Society in Birmingham), will, with some further assistance from the public, raise funds sufficient to give substantial existence to what, we believe, will be a most useful and creditable undertaking. Liverpool has failed for many years to obtain such an institute or library, and it is only lately that rich Manchester has succeeded in doing so in a satisfactory manner. We have reason, therefore, to congratulate ourselves that the Birmingham Medical Institute is in so hopeful a position.

DEATH FROM CHLOROFORM.

THE particulars of the death from chloroform which occurred at the Northern Hospital, Liverpool, recently were, we are informed, as follows. The patient, an apparently healthy man, sustained an injury to his right eyeball on January 26th, and was admitted under Dr. Campbell. Extirpation of the eyeball was determined upon, and chloroform

administered. Skinner's inhaler was used. The administration was commenced with rather less than a drachm of chloroform, the patient inhaling it quietly for three or four minutes; the stage of excitement was then entered, lasting two or three minutes, during which the patient struggled violently and talked incoherently. Then he became quiet, the conjunctivæ being insensible to touch. The pupil at this time was much contracted. Muscular relaxation was not complete, the jaws being firmly clenched; breathing was going on well; the pulse was good. At this point, the inhaler was removed, about three drachms of chloroform having been used, the time being from eight to ten minutes. The speculum was being introduced between the lids, when the breathing was noticed suddenly to stop, the lips were slightly livid, the pulse was going: the chest was immediately pressed upon. The pulse, which was again felt almost immediately, was stopped. Artificial respiration by Silvester's method, also by Sayre's method, was kept up for half-an-hour; and, although the patient breathed a few times spontaneously afterwards, neither the pulse nor heart-beat was again felt. Galvanism, inversion, dashing of iced water on the face and chest, and ice in the rectum, were tried, but were of no avail. At the *post mortem* examination, the body was found to be well nourished. There was a wound of the right eye, and two large blisters, one on the arm and the other on the shoulder, due to hypodermic injection of ammonia. The left pupil was not widely dilated. The pericardium contained two drachms of serum. The heart was flaccid; the left side contained two ounces of fluid blood; the right about the same quantity, also fluid. The tricuspid valve admitted four fingers; the other valves were normal. The orifices of the coronary arteries were dilated. There was commencing atheroma of the aorta behind the aortic valves. The heart was rather pale; and the microscope showed slight fatty degeneration. It weighed twelve ounces. There were slight pleuritic adhesions on the left side. No fluid was found in the pleuræ. There was considerable cedema and emphysema of both lungs; congestion was not marked. The liver was very much congested, but healthy. The kidneys together weighed twelve ounces. They were very much congested, almost like scarlatinal kidneys, slightly granular. The bladder was contracted, almost empty. There were no casts in the urine. There was a considerable increase of subarachnoid fluid; the membranes of the brain stripped off readily. On section of the brain, the veins were found markedly congested.

SANITATION IN THE ISLE OF WIGHT.

THERE is probably no part of the British Isles in which sanitary reputation is so essentially necessary to prosperity as in the Isle of Wight, and there is certainly no part of Great Britain which stands higher in popular estimation for natural hygienic advantages. It is not unnatural, therefore, that the mortality statistics of the island should call for critical examination, especially with a view to determine how far these natural advantages are being fostered and protected by intelligent sanitary organisation. The area of the Isle of Wight consists of 93,241 acres, including 123 of inland water. At the first national census in 1801, the enumerated population of the island was 22,097 persons; while at each subsequent decennial census the population showed a marked increase, and amounted in 1871 to 66,219 persons, or very nearly three times the population enumerated in 1801. Assuming that the rate of increase of population in the island since 1871 has increased at the same rate as that which prevailed between 1861 and 1871, the population in the middle of this year may be estimated at 75,312 persons. The annual death rate per 1,000 in the island was equal to 17 per 1,000 in each of the decades ending in 1850, 1860, and 1870, and therefore averaged 17 per 1,000 during the thirty years 1841-70. During the past seven years of the current decade, the annual death-rate has averaged 16.5 per 1,000, showing a slight decline from the average rate in the preceding thirty years; the lowest death-rate in the past seven years was 15.1 in 1873, and the highest 18.2 in 1875. For almost any other place than the Isle of Wight, these death-rates might be accepted as evidence of satisfactory sanitary condition; but, while

it is not easy to say how low the death-rate in the Isle of Wight might be brought under perfect sanitary organisation, there is no difficulty in pronouncing unhesitatingly that, having due regard to the natural advantages of the climate and situation, this death-rate, comparatively low as it is, is excessive. During the seven years 1871-7, no fewer than 924 deaths were referred to the seven principal zymotic diseases, including small-pox, measles, scarlet fever, diphtheria, whooping-cough, fever, and diarrhoea: these 924 deaths were equal to an average annual rate of 1.9 per 1,000 persons estimated to be living in the borough; and it is unsatisfactory to note that this zymotic fatality has somewhat increased in recent years. Infant mortality in the island, measured by the proportion of deaths under one year of age to births registered, averaged 103 per 1,000 in the past seven years, and ranged between 128 in 1875 and 77 in 1876; infant mortality in the island should not average more than 80 per 1,000. It follows, therefore, that better sanitary organisation ought to have saved during the past seven years, not only more than three hundred infants who died under one year of age, but also a large proportion of the 924 deaths referred to the seven principal zymotic diseases. It may be useful, therefore, to glance briefly at the sanitary organisation of the island. Under the provisions of the Public Health Act of 1872, the island contains eight urban and one rural sanitary districts; and, as the Poor-law guardians of the Isle of Wight have divided the health responsibilities of the rural sanitary district among their nine district medical officers, there are no fewer than seventeen medical officers of health in the island. These seventeen medical officers of health have, for the most part, purely nominal salaries, ranging upwards from £8 15s., paid to the Medical Officer for East Cowes; the largest salary is £80, paid to the Medical Officer of the Urban Sanitary District of Ryde. The Rural Sanitary Authority of the Isle of Wight pay to their nine district medical officers an aggregate salary of £290. Thus, while the Isle of Wight has a medical officer of health for each 4,000 of its inhabitants, all are engaged in private practice. The aggregate salaries of the seventeen medical officers of health amount, however, to nearly £600 *per annum*; so that, if the numerous small sanitary districts were combined under the provisions of the Public Health Act of 1875, it would be easy, with scarcely an increased expense, to secure the services of a specially qualified professor of public hygiene, who, debarred from private practice, would be able to devote his whole time to the task of improving the sanitary reputation of the Isle of Wight. Its insular position and the special advantages of climate, as well as the special constitution of its population, should, with more perfect sanitary organisation, soon render the present waste of life from zymotic diseases a thing of the past. Joint hospital accommodation for the isolation of cases of infectious diseases should be one of the first results of a combination of the numerous sanitary districts. Anyway, the present large proportion of zymotic fatality in the Isle of Wight should engage the serious attention of those most interested in the prosperity of the island as a favourite health-resort.

THE CONTAGIOUS DISEASES ACTS AND THE HEALTH OF THE ARMY.

THE Army Medical Department Report for the year 1876, recently published, contains figures which should not be lost sight of by those anxious to inform themselves as to the true effect of the Contagious Diseases Acts upon the prevalence of venereal disease in the army. It cannot be said that this last report contains figures that are in any way new in their bearing upon this subject; but the addition of each new year's figures widens the field of observation, and adds to the value of the comparison of the rates of admission to hospital for these diseases at stations under and not under the provisions of the Contagious Diseases Acts. The opponents of these Acts are so reckless in their denial of the existence of any evidence of beneficial sanitary effect produced by them, that it is necessary from time to time to call attention to such facts as those contained in the Army Medical Report before us. During 1876, at fourteen stations under the Acts, the average annual strength of the troops was 48,620, among whom admis-

sions for primary venereal sores averaged 33 per 1,000, while the admissions for gonorrhoea were 68 per 1,000. Thus, for both forms of disease, the admissions were equal to 50.5 per 1,000. On the other hand, at fourteen other stations not under the Acts, the average annual strength of the troops was 18,790, among whom the ratio of admissions equalled 82 per 1,000 for primary venereal sores and 89 for gonorrhoea. Thus, at the stations not under the Acts, the average rate of admission from both forms of disease was 85.5 per 1,000, against 50.5 at the stations under the Acts. At the fourteen stations under the Acts, the highest rates of admission for primary sores were 41 and 47 respectively at Windsor and Aldershot; whereas, at the fourteen stations not under the Acts, the rates of admission for these diseases ranged upwards to 113 in Manchester, 119 in Sheffield, and 146 in London. So, with regard to the rates from gonorrhoea, the highest rate among the fourteen stations under the Acts was 93 at Devonport and Plymouth; whereas, at the fourteen stations not under the Acts, the gonorrhoea-rate ranged upwards to 105 in Preston, 113 in Dublin, and 152 in Manchester. A comparative table gives the rates of admissions from primary sores at each of these twenty-eight stations in each of the ten years 1867-76. This table clearly shows that the rate of admission from this disease at the stations under the Acts was in many years less than half that which prevailed at the stations not under the Acts. As, however, the average rates in each year in the aggregates of the fourteen stations under the Acts, and of the fourteen stations not under the Acts, are not given in the table, it is not possible to compare the proportional decline in the rates of admission during these ten years in the two groups of stations. This is to be regretted, as the opponents of the Acts assert that the decline in the prevalence of venereal diseases has been as large where the Acts have never been in operation as at the stations under the Acts. This assertion is disproved by the facts in this Army Medical Report; but the tables are not framed in such a way as to show satisfactorily the actual rate of disease in each of the two groups. It is pointed out that, in the group of fourteen stations under the Acts, the average rate of admissions from primary sores during 1876 showed a decline of 2 per 1,000 from the rate in 1875; whereas, in the contrasted group of fourteen stations not under the Acts, the rate in 1876 exceeded the rate in the preceding year by 3 by 1,000. It will only be necessary to allude to one other fact brought out by these figures in this Army Medical Report, and affording evidence of the influence of the Contagious Diseases Acts upon the prevalence of venereal diseases in the army. We have already pointed out that, among an average annual strength of 48,620 troops at the fourteen stations under the Acts, the rate of admissions for primary sores was equal to 33 per 1,000 in 1876. It is also shown that the rate among 38,073 troops at all other stations averaged 63 per 1,000, and was as nearly as possible twice as high as at the protected stations. It is further shown that the rate of admissions from gonorrhoea in 1876 averaged 68 per 1,000 at the fourteen protected stations, whereas at all the other stations it averaged 89 per 1,000. As is well known, the effect of the Acts upon the admissions for primary sores is far more marked than upon the admissions for gonorrhoea, although the rates from both forms of disease were in 1876 markedly lower in the protected than in the unprotected stations, being equal to 101 and 143 per 1,000 respectively. If the opponents of the Acts are to maintain their persistent denial of the beneficial effect of the Acts upon the prevalence of venereal diseases, it is incumbent upon them to furnish a more reasonable explanation of the comparatively low rates from these diseases prevailing among the troops at the protected stations, than that supplied by the provisions of the Acts themselves.

THE METROPOLITAN AND NATIONAL NURSING ASSOCIATION.

At a meeting of this Association, held at Grosvenor House, under the presidency of the Duke of Westminster, the report showed that, in four districts of the metropolis, namely, in Bloomsbury, Holloway and Islington, Paddington and Marylebone, and East London, the

committee were working, and hoped ere long to be able to form a fifth district in Lambeth. They had not the means of extending their organisation beyond the limits of the metropolis, but the committee wished it to be known that they would always be ready to consider any well-digested scheme for the affiliation of the existing district nursing institutions in the country. No actual steps had been taken towards establishing a training school for nurses; but, in the meantime, nurses are trained for the association at St. Thomas's Hospital by the Nightingale Training Fund. In order to carry on the five homes of the association during the present year, a sum of £5,000 was required, whilst the present subscription list amounted to less than £2,000. A letter was read from Miss Florence Nightingale, supporting the objects of the association.

LEPROSY IN SPAIN.

THE Spanish Government has ordered statistics of leprosy to be collected. In a medical report presented to the Governor of Valencia, it is stated that that province contained forty-five lepers, but it was difficult to obtain detailed information, the disease being concealed or disguised under a variety of names.

ALLEGED MANSLAUGHTER.

ELLEN WALKER, a midwife, has been committed for trial by Mr. A. Bode of Aylesbury, on a charge of causing the death of Jane Tomes, twenty-seven years of age. It appeared that prisoner was engaged to attend the deceased in her confinement, and, according to the evidence of persons who were in the house at the time, she treated the woman badly. Dr. H. G. Lee and Mr. Ceely considered it a case in which a midwife should not have acted alone, and described the prisoner's conduct as most unjustifiable under any circumstances. In reply to the charge, prisoner said she did the best she could for the woman.

SMALL-POX AT HARWICH.

WE learn, in reference to the outbreak of small-pox at Harwich, that a fresh case was admitted to the temporary hospital on February 21st—an unvaccinated patient, thirty-nine years of age. As might have been foreseen, it has proved of the confluent type. This case came from Dovercourt. No other new case was brought under the care of our correspondent this last week. At present, there are only eight cases in hospital, seven of whom are nearly convalescent. There is, therefore, every reason to hope that the epidemic is at an end. Of course, there is still the possibility of isolated cases occurring; but, with the means at the disposal of the authorities, it is not likely that the disease will again spread.

MEDICAL DEFENCE.

A FEW weeks ago, we called attention to the fact that in Liverpool an advertising obscene quack was assisted by a duly registered practitioner, whose name was boldly displayed on a brass plate beneath that of the quack, with the title of "surgeon" below. We are now informed that his name has been removed since our notice was reproduced in the local papers. We now learn, much to our regret, that another name appears on the door of the quack, with the title of "surgeon" below. The Christian name is not given. The surname, though peculiar, is not uncommon, there being five practitioners bearing it in the London department of the *Medical Directory*, thirteen in the Provincial, and one in Ireland. Thus within the space of two months three different registered practitioners have been induced to act as partners or assistants to this person, aided by the apathy which has always protected his fraternity. The matter will again form the subject of a complaint to the Medical Council, and we trust with some effect. The words of the Act are: "If any registered medical practitioner.....shall, after due inquiry, be judged by the General Council to have been guilty of infamous conduct in any professional respect, the General Council may, if they think fit, direct the registrar to erase the name of such medical practitioner from the Register." That the conduct we have described is infamous in the intended sense

of the word cannot be disputed; and that a severe example should be made is equally plain. It is much to be regretted that there is no public prosecutor, and that the General Medical Council is unable to act in such matters until set in motion by private individuals. We have before expressed the opinion that it is very desirable that there should be a "Defence Committee" attached to the Council of each Branch of the British Medical Association, capable of taking the initiative in such breaches of the law and attacks upon professional honour and public safety. The East York and North Lincoln Branch passed resolutions inviting the Association at its Sheffield meeting to take measures for affording central support to such local Defence Committees. The Association, if we remember aright, remitted the question to the Committee of Council; and the result up to this time has been negative. We do not remember whether the Committee of Council has reported to the subsequent meetings of the Association on the subject; nor have we seen any statement or summary of argument in favour of or against some more organised effort within the Association to protect professional interests, in the manner which the Medical Defence Association has found to be practicable. Meantime, however, such examples as these at Liverpool, which are typical of what is constantly occurring all over the country, seem to show that, in the absence of a public prosecutor and the enforced quiescence of the General Medical Council, local Committees are much needed to put a stop to the open frauds of obscene quacks, and in some cases to the discreditable connivance of registered practitioners with their practices.

TREATMENT OF LUNATICS.

It is reassuring to know that the lunatic who shot at the Master of the Rolls did not put a bullet in his pistol. We have, however, often wondered since whether this is the same gentleman who applied, a week before, to Mr. Vaughan, at Bow Street, for advice and assistance, and who explained that "he had been the subject of a conspiracy for seven times seven years, and now he felt strange draughts of wind blow into his mouth and send him to sleep, and that that was a part of it". Whereupon, Mr. Vaughan said that "he should now and again take a walk into the country. It, no doubt, would do him good." The applicant quietly left the court, remarking "that his means were not always equal to his wishes". It may be suggested to magistrates that they are not altogether right in sending, as they constantly do, into the world at large, lunatic persons who come under their notice. No one who has looked down the list of criminal trials and inquests lately can have failed to have noticed the astonishingly large number of lunatics at large who have committed acts of violence in all parts of the kingdom, in many instances with murderous results. The Select Committee of the House of Commons, which has been sitting all last session, has, we believe, failed to discover any single instance in which a sane person has been unjustly incarcerated; every day, however, affords evidence that there are a large number of dangerous lunatics at large, who ought to be incarcerated in fairness to themselves and in justice to their friends or enemies.

DALLINGER ON EQUIVOCAL GENERATION.

THE Rev. W. H. Dallinger delivered a lecture at the London Institution on Monday evening on spontaneous generation. There were, he said, many admirers of the theory of evolution who held that, unless spontaneous generation were admitted, the theory was incomplete. Just as in water there is the potentiality of forming crystalline patterns in snow and ice, so they hold that in organic matter generally there is the potentiality of forming protoplasm. No living structure contains any known element that is not met with in the inorganic world, and the only chemical difference known is in the combinations of the elements. But the lecturer urged that evolution and spontaneous generation were two distinct questions, that need very accurate study apart. The developmental progression of all living forms from simple protoplasm is a very different question from whether living protoplasm can be spon-

aneously evolved from the inorganic world. For himself, if facts were brought forward to support spontaneous generation, he should be bound, were they valid facts, to accept the theory. He had, however, devoted much labour and the time of years, to the rigid investigation of some of the facts that bear upon the question, and these he would describe. It had seemed to him, in studying what had been written, that there were two lines of work that needed following out very closely. One was a series of thermal experiments, to determine with exactness what is the "death-point of an organism, or a germ". The other was to watch the life history of some forms of monads, and see if they did reproduce. It was this second line he had taken up. The most carefully conducted experiments of the first group had led to the conclusion that if all germs are excluded from septic liquids no life appears, while his experiments had conclusively shown that monads do reproduce from parental products, for the life-history of successive generations had been watched. The natural inference seemed to be that monads originate only from previously existing monads; and if this were true to them, it was not improbable that observations conducted with equal care will show the same with regard to bacteria.

CONTAGIOUS DISEASES IN THE NAVY.

SOME time since, a parliamentary return bearing the above title was moved for by Sir Harcourt Johnstone. It has since been printed by order of the House of Commons, and issued as a parliamentary paper. In noticing the statistics contained in this return in our issue of the 22nd of December last, we surmised that Sir Harcourt Johnstone "could never have anticipated that the return he moved for would afford evidence so crushing to the assertions of the advocates of repeal" of the Contagious Diseases Acts. It would appear, however, from a circular letter with which, together with our contemporaries, we have been favoured by Sir Harcourt Johnstone, that he fails to see the true bearing of the figures in his return, and that he especially objects to a paragraph in the last official Report on the Health of the Navy, in which reference is made to his return in the following words: "The advantages of the Contagious Diseases Acts are shown by a comparison of the five ports in which these are in force, as compared with other five where they do not prevail." It may be useful to point out one or two of the grounds on which we entirely dissent from the view Sir Harcourt Johnstone appears to have adopted of the bearing of the figures in his return. It is stated that, in the five protected ports, the rate of contagious diseases in the navy was 31.23 per 1,000 higher in the five years 1871-5 than in the five preceding years; that the severity of the disease has also increased, as evidenced by a higher rate of cases of secondary disease; that the most common form of disease has more than doubled; and that the only apparent advantage of the Acts is a decrease of 4.21 per 1,000 in the rate of cases of primary disease, which is, it is asserted, unimportant in character. With regard to the increase of the rate from all forms of disease, it is evident that this is almost entirely due to the marked increase in the cases of gonorrhœa, which is not confined, as might be inferred by Sir Harcourt Johnstone's statement, to the protected ports, but is almost as great in the ports which have never been under the Acts. It may be admitted that the Acts do not appear to exercise any beneficial effect upon the gonorrhœa-rate; but there is absolutely no evidence of what is asserted by the opponents of the Acts, that the increase in this rate is due to the operation of the Acts, as a similar increase is observed at the ports in which the Acts have never been in force. The real causes of this apparent increase of gonorrhœa are probably those assigned by the Director-General of the Medical Department; namely, that it is due "to the greater number of cases recorded, rather than to any real increase of disease". The small increase in the rate from secondary disease in the protected ports between 1866-70 and 1871-5 is referred to as a proof of the baneful influence of the Acts, while no mention is made of the fact that identically the same proportional increase in the rate from secondary disease between the same periods occurred at the ports which have never

been under the operation of the Acts. So much for the unwarrantable assertion that the Acts have caused an increase in the rates from gonorrhœa and secondary syphilis. On the other hand, with reference to the assertion that the figures in Sir Harcourt Johnstone's return afford conclusive evidence of the beneficial effects of the Acts upon the health of the navy, we cannot, it appears to us, do better than quote a few figures from our notice of the return in our issue of December 22nd. In the five ports brought under the Acts, the average ratio of cases of primary and secondary syphilis *declined* from 75.0 per 1,000 in 1860-3 to 43.6 in 1871-5; while in the five ports not brought under the Acts the average ratio of cases *increased* from 70.1 in 1860-3 to 96.4 in 1871-5. Thus the rate from these forms of disease *decreased 42 per cent.* in the ports under the Acts, while it *increased 37.6 per cent.* in the ports not under the Acts. Further, the return shows that in 1860-3, before the Acts were passed, the ratio of disease was somewhat lower in the five ports that have not been brought under the Acts than it was in the other five ports subsequently brought under the Acts. Twelve years later, however, in 1871-5, the ratio of primary and secondary syphilis did not exceed 43.6 per 1,000 in the five ports under the Acts; while it was 96.4, or more than thrice as high, in the five ports which remained, as they were in 1860-3, unprotected. In conclusion, it appears to us, as we expressed it in the article above quoted, that "the marked decline in the cases of syphilis (primary and secondary) at the protected ports, concurrently with as strongly marked an increase at the unprotected ports, is unaccountable, unless attributed to the beneficial effects of the Acts". Judged by their unsuccessful attempts to saddle the Acts with the large increase of the rate from gonorrhœa, and with the small increase in the rate from secondary syphilis (which is as marked at the unprotected as at the protected ports), it will severely test the ingenuity of the opponents of the Acts to explain away the figures supplied by Sir Harcourt Johnstone's return, which support the assertion that the Contagious Diseases Acts have proved beneficial to the health of the navy.

A SUCCESSFUL GASTROSTOMY.

DR. F. TRENDELENBURG reports in the *Wiener Med. Presse* another successful case of gastrostomy to be added to the hitherto unique case of Vernet. A boy aged seven years, the subject of impassable stricture of the œsophagus from swallowing caustic potash, had fallen into extreme marasmus. Gastrostomy was performed without bad effects, and two days afterwards nourishment could be introduced into the stomach through the small resulting gastric fistula. A small drainage-tube of the thickness of the little finger was introduced into the fistula, into which was passed a thicker glass tube having attached to it an elastic gum catheter reaching to the mouth. When the boy wants to eat, he chews his food and expels the masticated mass through the tube into the stomach. Four months after the operation, the boy's weight had increased by a fourth.

WATER-SUPPLY.

THE results of the investigations of Mr. Wigner on the supply of water to seaside resorts, published in the *Sanitary Record*, appear to be as follows. Amongst the best waters tested are those received from Exmouth, Kingswear, Ryde, Paignton, Weymouth, Plymouth, Portsmouth, and Ventnor; and these are followed very closely by Teignmouth, Lynton, St. Ives, Dartmouth, Penzance, Gosport, West Cowes, Devonport, East Cowes, and Ilfracombe. They may all be ranked as first-class waters; and it is satisfactory to know that about three hundred thousand residents, and probably nearly five hundred thousand visitors, or about eight hundred thousand persons in all, are supplied with water of excellent quality. Eleven other places—namely, Seaton, Sidmouth, Shanklin, Brixham, Clifton, Portishead, Westward Ho, Falmouth, Sandown, Torquay, and Weston-super-Mare—are supplied with water which must be considered as second class. The defects in these waters, however, are not very serious, and in almost every case are due either to imperfect storage or to imperfect

filtration. The only places where the water-supply may be characterised as third class are where there is no public supply, but the water is derived from pumps and wells, or direct from the river. Amongst these, we feel it a duty to mention Dawlish, Freshwater, Yarmouth (Isle of Wight), Kingskerswell, Seaton, and Paynton. The water at Aldeburgh, in Suffolk, is described as excessively saline and otherwise contaminated, as well as swarming with animalculæ. Rottingdean, that prettily situated village near Brighton, is credited with having the most impure water of the two hundred and thirty samples analysed by Mr. Wigner in the course of his investigations. The Isle of Man sends two first-rate samples from Douglas and Ramsay. This series of investigations is about to be published in a convenient form for reference.

PRESERVED VEGETABLES.

PROFESSOR ATTFIELD, in an exhaustive article recently published in pamphlet form, gives the results of analyses of samples of preserved carrots, potatoes, and mixed vegetables, taken from the residual stores of the *Alert* and *Discovery*, made at the request of the Chairman of the Admiralty Committee appointed to consider the causes of the outbreaks of scurvy in the recent Arctic expedition. These results are briefly as follows. 1. The preserved carrots were of good quality. 2. The preserved potatoes were of good quality. 3. The preserved cabbage was deficient in saline constituents. 4. The specimen of preserved mixed vegetables was probably somewhat deficient in saline substances. Whether or not these conclusions may be applied to similar preserved vegetables supplied to the public cannot be definitely decided until more analyses have been published. Dr. Attfield says, however, that it is evident that, in the most important matters of colour and general appearance, preserved vegetables can be sent to the table in a condition very closely resembling the fresh articles. Properly soaked, dried vegetables also reabsorb almost their normal proportions of water, and become normally tender and juicy. After directing the exclusion of the stalks and thick midribs in drying cabbage, to prevent loss of juice and retention of mere fibre, he says the taste and aroma remaining in the preserved article will probably satisfy the nose and palate of those who really desire such vegetable food and cannot obtain it in the fresh condition; and, on the whole, he is of opinion that preserved vegetable substances, roots, and fruits deserve the already large confidence placed in them by the public.

SCOTLAND.

THE Glasgow Town Council have placed the Parliamentary Road Hospital at the disposal of the directors of the Royal Infirmary, for the treatment of all the applicants for admission into the city hospitals, who could not be received for want of accommodation; and as a portion of the staff of the Royal Infirmary can undertake the superintendence of the work, it is hoped in this manner to relieve the pressure on the resources of the regular hospitals.

AT a recent meeting of the Edinburgh University Court, besides other business, Dr. A. Wood Smith was recognised as a Lecturer on the Practice of Physic in Glasgow, whose lectures should qualify for graduation in medicine in the University of Edinburgh. On consideration of a report by the Faculty of Medicine, and relative Senatus minute, the following were added to the list of examinations recognised as exempting *pro tanto* from the examinations preliminary to entrance on medical study: 1. The London University examination for degrees in science; 2. The Glasgow University examination for senior candidates for honorary certificates, under its local examination scheme; 3. The examination for commissions and appointments in the Civil Service in the United Kingdom; 4. The Otago University preliminary examination; 5. The examination for the certificate of maturity granted by the Russian authorities for admission to the universities.

In a case recently before the Sheriff Court, at Greenock, Dr. A. D. Stewart of Greenock sued the trustees of the Ancient Order of Foresters' Friendly Society for £25 13s., for professional services rendered to members of the society from December 1869 to June 1870. The pursuer was surgeon to the society from 1843 to 1869. On November 15th, 1869, it was resolved that he should cease to be surgeon; but, at a subsequent meeting of the District Arbitration Committee, he was by a majority declared "duly elected surgeon for the Court". The defenders appealed against this resolution; and at a subsequent meeting of the District Committee, on April 2nd, 1870, the appeal was sustained, and the pursuer was found not to have been duly elected surgeon to the society. The Sheriff decided in favour of the defenders, with expenses. It behoves surgeons to Friendly Societies to see that their appointments are secure before giving their time and services to what may prove a thankless body.

DEATH OF DR. ROBERT MUNGALL.

WITH regret we announce the death of Dr. Robert Mungall of Cowdenbeath. He had been doing his work as usual until Tuesday, when he was taken ill and died somewhat suddenly on Saturday last. Dr. Mungall was well known throughout the counties of Fife and Kinross, not only owing to his professional skill, but also to the prominent part he took in all public matters, and to his geniality and benevolence of character. In his own district, he was connected with every public board and trust, and his attention was largely devoted to the promotion of educational and sanitary reform.

ARBRATH WATER-SUPPLY.

IT is proposed to obtain a fresh supply of water for the town of Arbroath from the Crombie reservoir, about seven miles distant from the town, either by purchasing the works which belong to the Dundee Water Commissioners but are not now required for the supply of Dundee, or by paying for water at a fixed rate. This action is being taken in consequence of the urgent representations of the Board of Supervision as to the need of a further supply.

TESTIMONIAL TO DR. JOHN BROWN AND DR. A. PEDDIE, EDINBURGH.

ON the 19th ultimo, a deputation from the Foreign Mission Board of the United Presbyterian Church waited on Dr. Brown and Dr. Peddie, at their respective residences, and presented each of them with a piece of silver plate, the gift of a few friends, "in recognition", as stated in the inscription on each article, "of inestimable services gratuitously rendered, for more than a quarter of a century, in testing and conserving the health of their missionaries, and thus rendering his beneficent profession the handmaid of saving health among all nations". The testimonial consisted in each case of a solid silver centre-piece, of tripod shape, with top supported by three fluted Corinthian columns, and on the base a standing figure of Esculapius, specially modelled from a terra-cotta in the British Museum.

THE SEWAGE OF GLASGOW.

THE Glasgow Town Council and Board of Police have received a report from a deputation appointed by them to inquire into the methods of disposing of sewage adopted in various towns of England. After detailing the methods in use in the places visited, the deputation make the following recommendations, which have at all events the merit of being thorough and sweeping:

"1. That the system of having water-closets for public works, factories, jails, workhouses, infirmaries, and railway stations should be forbidden, so as to reduce the quantity of water-closet sewage now turned into the river. Water-closets in small houses should also be discouraged. 2. That the ordinary privies and ashpits be altered to the tub and pail system, to be cleansed daily, as it has been carried out in Manchester and other important English cities and towns, and that special accommodation be provided for children. 3. That all drains, soil and waste-pipes, and all apparatus connected with water-closets, sinks, and baths, and their connections, be executed under public super-

vision. 4. That a complete system of ventilation of the common sewers throughout their entire length be immediately adopted. 5. That a system of ventilation of the house-drains and soil-pipes, independent of that of the common-sewers, be immediately adopted and enforced throughout the city. 6. That the use, for dietetic purposes, of water from cisterns supplying water-closets should be absolutely forbidden. In the event of its being found necessary to purify the river, 7. That the whole drainage of the city be taken into main intercepting sewers, and conducted to a suitable point, and after being rendered clear by precipitation and filtration, passed into the Clyde. 8. That the sludge obtained in the precipitation process be got rid of in the cheapest possible manner. A part of it might be utilised in making up waste-land, and a certain quantity might be taken away by farmers, but the greater part would probably require to be disposed of in the same manner as the dredgings of the river."

The deputation add:

"It will thus be seen that we entirely discard the idea of utilisation of the sewage itself, or the precipitate obtained by the action of lime or other chemical agents. The sludge obtained by any of the patented processes is dried at such cost, and its value when dry is so trifling, that all hopes of disposing of it for manurial purposes—at a price that would be remunerative—are entirely illusory. In conclusion, we have to remark that, while we consider the purification of the Clyde an important and necessary work, we are of opinion that, for the health of the city, the recommendations we have made upon the other details of the sewage question are of much greater consequence, and we trust that these will be carried out without unnecessary delay."

DEATH OF MR. G. P. CHALMERS.

CONSIDERABLE and painful excitement has been caused in Edinburgh by the death by violence of Mr. G. Paul Chalmers, R.S.A., a well known and most rising artist. On the evening of Friday 15th instant, Mr. Chalmers was present at the annual dinner of the Royal Scottish Academy, and went afterwards to the Artists' Club, which he left soon after one o'clock A.M. Shortly after two, he was found lying in a pool of blood in an area in South Charlotte Street, with a badly fractured skull. Mr. Chalmers was taken by the police to the Infirmary, where he died a few days afterwards. He only regained consciousness for a short time, and is understood to have stated that he had been kicked. His watch, purse, and hat were missing. Everything appeared to point to a violent and brutal assault, but, strange to tell, the police took no steps to investigate the matter, and made no inquiries from the medical men in charge of the case, until four days had elapsed from the occurrence of the outrage. A *post mortem* examination was made by Dr. Littlejohn, Dr. J. Duncan, and Mr. Chiene, but the result has not been made public.

IRELAND.

A CASE of small-pox was admitted into the Limerick Union last week.

AN outbreak of typhus fever has taken place at Ballynagh, a village in the County Cavan; and during the past few days, sixteen cases of the disease have been admitted into the Workhouse Hospital.

THE Local Government Board have approved of an addition of £10 yearly to the salary of the medical officer of the Mullingar Dispensary District.

DR. DAVID HADDEN died at Skibbereen on the 17th ult., aged 60. The deceased was a graduate in medicine of the University of Glasgow, and held the post of medical officer to the Skibbereen Dispensary District.

AT a meeting held on the 14th ult., to elect a medical officer for Castleblaney Dispensary District, Dr. John P. Clarke was appointed. There were three candidates for the post, the emoluments of which are £125 *per annum*, exclusive of salary as sanitary officer and the registration and vaccination fees.

AT a recent meeting of the Galway Guardians, Dr. Brodie called the attention of the Board to an irregularity in connection with the Moycullen Dispensary, viz., that the medical officer was in the habit of dispensing medicines to persons coming to the dispensary, and afterwards providing themselves with tickets. It appears that the relieving officer was frequently absent, and that there was no other person to give tickets in the district. The matter will be reported to the Local Government Board, but it appears to us that the fault lies with the relieving officer and not with the medical officer.

SANITARY CONDITION OF CARNEY.

A COMMUNICATION from the Local Government Board was received at a recent meeting of the Sligo Board of Guardians, drawing their attention to the defective drainage of this village. The Board pointed out that the guardians were deputed by statute to keep their district in a proper sanitary condition, and that if the public health became affected from the fact that the sanitary authority had neglected to carry out the necessary works for the effectual drainage and water-supply of their district, serious responsibility would be incurred by such neglect.

PARSONSTOWN UNION.

AT a meeting of the Board of Guardians of this Union held last week, the recent visit of Major Trench, one of the commissioners appointed to inquire into the advisability of amalgamating workhouses, was brought before the guardians. That gentleman was struck with the inconveniently crowded state of the hospital, and found many old people in it who, although bedridden, were not actually under medical treatment, and who, he thought, could be placed in one of the unused rooms in the house. Also, instead of there being too much space for the present number of inmates, there was too little. Under these circumstances, he did not see that they could provide separate accommodation for harmless lunatics and idiots, but suggested that arrangements could eventually be made for their accommodation in Portumna Workhouse. Dr. Woods endorsed Major Trench's statement in reference to the overcrowded condition of the hospital, and had often tried to remedy it without effect. It was ultimately decided to make one of the unoccupied rooms a "bedridden ward", and a report on the subject will be made to the Board.

GALWAY WORKHOUSE.

DR. BRODIE, Local Government Inspector, in his late periodical report of this union, remarks that he inspected the house on the 9th ult., and discovered several irregularities in its internal management. In the dormitories occupied by the male infirm classes, Dr. Brodie found the floors soiled and discoloured from urinal discharges; and in one instance, two men occupied the same bed, although there was sufficient space for additional beds; and the master did not appear to visit the ward as often as he should do. The female infirm ward was clean and orderly, but one of its occupants was in a dying state, which requires explanation, as it is obvious that such a case should have been previously removed to hospital, where the patient could have been more carefully and properly cared for.

A NOVEL ACTION.

THE guardians of the Limerick Union were last week defendants in an action brought against them by a party of the name of Brennan, whose son had been under treatment in the fever hospital attached to the union, and whilst suffering from fever got out of bed, and falling into a yard was killed. The plaintiff alleged that it was the duty of the guardians who had charge of the hospital to provide sufficient attendants for looking after the patients admitted, and by neglecting their duty they were responsible for his death. Judge Fitzgerald, in pronouncing judgment, stated that the action was not maintainable, for otherwise an action would lie at the suit of every pauper for every real or fancied grievance; for example, for having been supplied with insufficient food, or even for defective sanitary regulations. The

ground of action was a peculiar one, and nothing similar has ever been instituted against the poor-law guardians in Ireland during the forty years the poor-laws have been in operation.

WATER-SUPPLY OF WATERFORD.

AN inquiry is proceeding at Waterford for the purpose of considering any objections that may be made to an additional loan of £15,000 to the Waterford Waterworks Committee from the Board of Works, for the completion of the proposed waterworks for this town. The sum of £50,000 has already been expended, and several ratepayers protest against any further outlay, as they consider that the funds already obtained have been mismanaged.

WEXFORD WORKHOUSE: TREATMENT OF A PAUPER LUNATIC.

ON the 23rd ult., at the weekly meeting of the guardians, attention was drawn to a report of the visitors, which stated that in one of the female cells they found a lunatic in a most filthy condition. It seems that the infirmarian nuns, who are the paid nurses, neglected their duty of looking after this pauper lunatic; and the matron, on being brought before the Board, acknowledged that she had not entered that particular cell for the past three weeks, being otherwise engaged, and having confidence in the nurses. After some discussion, the guardians ordered that for the future the matron should inspect all the departments of the hospital daily, and be cautious in not permitting the repetition of a similar occurrence.

EPIDEMIC OF SMALL-POX IN DUBLIN.

THE epidemic continues steadily to increase. On one day last week, there were seven cases of the disease admitted into Cork Street Fever Hospital; the total number of small-pox patients in the hospital amounting to forty-three. From the Registrar-General's returns, it appears that the death-rate in Dublin for the past week was 3.4.2, against 29.2, the average rate for the past ten weeks. The zymotic death-rate was 5.1, as compared with 3.9, the zymotic rate for twenty large English towns. During the ten months the epidemic may be said to have already lasted, there have been 108 cases under treatment in the Cork Street Hospital; 88 of these had been previously vaccinated and 20 unvaccinated. Out of the 88 vaccinated cases, only 5 were fatal; while 12 of the 20 unvaccinated ones terminated fatally.

SCIENTIFIC LECTURES.

THE fourth lecture of this year's course of scientific lectures in the King and Queen's College of Physicians was delivered on Monday last by Dr. Purser, being his second lecture on "Researches in the Anatomy and Physiology of the Spinal Cord". The principal facts which are known as to the functions of the different tracts of white fibres in the cord were stated. The difficulties and uncertainties which beset experimental investigation were pointed out. The results of the more important researches were detailed, particular notice being given to those recently carried on at Leipzig, and being better conceived and more perfectly executed than the experiments of earlier physiologists. The hyperaesthesia which follows certain limited lesions of the spinal cord was stated to be probably due to destruction of inhibitory fibres. The knowledge to be derived from the facts of human pathology was then considered. It was shown that as yet even the best defined diseases, such as posterior or lateral fasciculated sclerosis, were able to throw very little light on the functions of the different parts of the medullary cortex. In conclusion, an attempt was made, from a consideration of all circumstances, to trace the course of sensitive and motor impressions through the cord. It was shown that, while we possessed a fair amount of knowledge as to the paths of motor impulses, many facts existed which made sensitive conduction still quite inexplicable. The next lecture of the series will be delivered on Monday next by Dr. Grimshaw, on "The Present State of our Knowledge of the Intimate Pathology of Contagion, and its Relation to the Prevention and Treatment of Zymotic Diseases".

THE RELATION OF MEDICAL WOMEN TO THE BRITISH MEDICAL ASSOCIATION.

It is, we believe, proposed to call an early special general meeting of the members of the British Medical Association, to consider the propriety of taking measures to carry into legal effect the opinion of the members taken by vote, that women shall not be elected members of the Association; and also to consider what steps, if any, shall be taken in respect to the two medical women who had been elected members of the Association prior to that vote.

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

At a meeting of the Fellows held on February 22nd, the chief subject of discussion was the question of which notice had been given by Dr. Elam; viz., "What are the existing relations of the College to the question of the admission of women to the practice of medicine?" It was stated that the College had been informed by counsel that it could not, under its charter, grant its licence to women, or admit them to examination; but that an Act of Parliament had recently been passed (extending the powers, but not rendering compulsory the exercise of such powers) to the granting of any qualification for registration granted by the College to all persons without distinction of sex. It was then resolved:

"That the President summon a meeting as soon as may be convenient to consider whether, under any circumstances, the Royal College of Physicians of London is prepared to grant its licence to practise physic to women."

REPORT OF THE MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD.

THE report of the medical officer of the Local Government Board appears for the first time as a "supplement" to the annual report of the Board, and the volume just issued deals with certain special work done or commenced during 1876. During the first five months of the year, Mr. Simon directed the work of the medical department of the Board, and, during the remainder, it was under the guidance of his successor Dr. Seaton. The actual report by the medical officer is brief, and, after referring to the former reports which had been issued by Mr. Simon since 1859, and which have had so large an effect in shaping professional and public opinion in sanitary matters both in England and abroad, it proceeds to draw attention to the matters dealt with in the appendix which makes up the greater part of the Blue Book.

Amongst the first of the papers published are three special reports by Mr. Netten Radcliffe on Hospital Hygiene, the institutions dealt with being the Radcliffe Infirmary at Oxford, the Norfolk and Norwich Hospital, and the Royal Infirmary at Manchester. When the report on the Radcliffe Infirmary was issued, we discussed it at some length; and it will suffice on the present occasion to point out that Mr. Radcliffe's inspection of the institution was called for owing to the somewhat extensive diffusion of erysipelas within its walls, and that this diffusion appeared to be the result of causes so obvious, that they should never have been allowed to exist. Amongst these we would note that no sufficient isolation of erysipelas cases was attempted, and hence contagion was perpetuated and an infected condition of certain wards was maintained; that, owing to a previous freedom from highly infectious erysipelas in the hospital, such precautions in the matter of cleansing and disinfecting as should always be adopted by surgical staffs when dealing with this disease were allowed to fall into abeyance; that the nurses, both by means of their dresses, which were made of absorbent materials, and in other ways, became carriers of infection from one part of the building to another; and that the position of the laundry as regards the wards, and certain defects in the system of drainage, were calculated to favour the spread of traumatic infection. It is interesting to note that, very shortly after this report was issued, and when a large number of accidents were suddenly admitted into the Infirmary, the patients were remarkably exempt from erysipelas. This immunity, however, followed on the adoption of some of the principal remedial measures which had been urged by Mr. Radcliffe. Erysipelas cases had been isolated, and their linen was separately washed; overcrowding of surgical cases was studiously avoided; proper dresses for the nurses had been provided; sponges were all but

replaced by carbolised tow, which was destroyed after use; and other minor defects had been dealt with.

In the Norfolk and Norwich Hospital, there had been an increasing tendency to fatal pyæmia and of fatal erysipelas amongst surgical cases, and, under these circumstances, the advice of the medical department of the Local Government Board was asked. In this instance, the supervention of pyæmia in the wards appears to have followed on undue overcrowding of cases requiring operative interference: a condition calculated to give rise to an "unmanageable intensity of traumatic atmosphere"; and this state of affairs was associated with defective ward arrangements and management, with insufficient ward-ventilation and sanitary arrangements such as are calculated to render the air breathed by the patients impure, and with an absence of any proper medico-sanitary supervision.

In the case of the Royal Infirmary at Manchester, advice had been specially sought mainly with a view of determining whether the existing building could or could not be made suitable to the present requirements. In this instance, the general plan and construction of the hospital were found to be faulty; the drainage and numerous other sanitary arrangements were extremely defective; the building was overpacked, surgical overcrowding being very marked; and recurring outbreaks of traumatic erysipelas had taken place.

These reports, which we have only been able to glance at in a cursory manner, deserve the serious consideration of all who are concerned in hospital administration. In a large number of hospitals, no scientific records are kept which will enable a proper judgment to be formed as to the hygienic condition of the institutions; and one of the points specially urged by Mr. Radcliffe is that, in every hospital, some person should be appointed whose duty it should be to have a direct and special responsibility for its daily sanitary supervision. Ill-kept hospitals are certain, sooner or later, to favour the spread of such diseases as gangrene, phagedæna, pyæmia, and erysipelas; unless such ventilation be secured as shall leave no corner unsearched by its currents, wounds are liable to go on badly; and, where water-closets, baths, and the ward-offices open either directly into the wards or into the main body of the building, the purity of atmosphere necessary to keep traumatic infections in check cannot be expected. And yet such conditions as these, coupled with the absence of proper means for immediately isolating such affections, are, we fear, only too common in the present day, and they constitute a cause for anxiety as to the results of operations which no amount of surgical skill can overcome. Their remedy must to a great extent be in the hands of the medical staffs, with whom the responsibility of such results as we have enumerated must to a great extent lie.

Another contribution to the volume is a report, which is the result of a lengthened inquiry by Dr. Ballard as to Effluvium-Nuisances arising in connection with various manufacturing and other branches of industry. As yet only one division of this report has been completed; namely, that relating to the keeping and slaughtering of animals, and to those industries in which substances of animal origin are dealt with; but it is to be followed by other divisions in which nuisances arising from industries in which vegetable, mineral, and mixed substances are considered. The principal object of this inquiry has been to ascertain how far effluvium-nuisances arising from various manufactures are injurious to health, and to what extent they may be prevented. The result so far is highly satisfactory; for the tendency of the evidence obtained is to show nearly all, if not all, the trades now causing offence from the diffusion of effluvia may be so carried on as not to cause offence at all, or only offence of such a trifling nature as may well be tolerated by persons who live in communities. The extensive nature of Dr. Ballard's investigations may be guessed at when it is stated that, in dealing with the question of the manufacture of artificial manures alone, more than eighty places of business were inspected in various parts of the kingdom, and that as many as twenty-eight different industries are discussed in the present volume. These include a large number of the offensive trades now commonly carried on in towns, such as those of the fellmonger, the tanner, the candle-maker, the boiler of bones, and the size manufacturer. The exact nature of the various trades is fully described, and many of the unnecessary evils associated with them are discussed. The report, which is copiously illustrated, is calculated to be of great general utility, and in its results it may possibly vie with that issued a few years ago by the medical department on the means of preventing excrement nuisances in towns and villages.

The concluding report is a memorandum by Mr. Netten Radcliffe on the Progress of Levantine Plague from 1875 to 1877. The outbreak described appears to have commenced in 1873 amongst the Arabs inhabiting some of the marshes to the east of the Euphrates, and to have recurred in the spring of 1874, when it caused about four thousand deaths. It subsided during the summer months, but reappeared in the

winter of 1874-75, and became much more widely spread. On the setting in of the hot season in 1875, it seemingly ceased, only, however, to become again developed; and it is the course of the disease from November 1875 that is mainly dealt with in the present memorandum. The neighbourhoods of Bagdad and of Hillah seem principally to have suffered, the greatest activity of the disease being from the end of February until April, when it commenced to decline, the epidemic ceasing about July. The ravages of the disease were, however, great, and the minimum mortality during the outbreak of 1875-76 is estimated at twenty thousand. With the recurrence of colder weather in October the epidemic again appeared, it having now reached a higher point up the Euphrates Valley. The disease again lasted through the winter, and was still in existence throughout the early part of 1877.

Not till late in the course of this great epidemic were any measures adopted for staying the spread of the disease, and even then those which were attempted were of so vexatious a nature, that they were evaded on all hands.

ASSOCIATION INTELLIGENCE.

LANCASHIRE AND CHESHIRE BRANCH.

THE first intermediate meeting of this Branch will be held at the Town Hall, Oldham, on Tuesday, March 5th, at 3.30 P.M.

Dr. W. H. Broadbent (London) has kindly consented to read a paper on the Mechanism of Speech and Thought as illustrated by Pathology.

The following communications have also been promised.

Dr. G. J. Robertson will read the history of a case of Multiple Mammary Tumour.

Dr. Lloyd Roberts will exhibit some specimens of Distorted Pelves.

Dr. Humphries will read a paper on Scarlatinal Nephritis, and show specimens illustrating its pathology.

Dr. Dreschfeld and Dr. Ross will exhibit, by means of the Oxyhydrogen light, Microscopic Sections illustrative of Disease of the Spinal Cord.

Mr. Jones will show a specimen of Necrosis of the Femur following Acute Suppurative Periostitis.

Dr. Leech and Mr. Cullingworth will show cases of Pseudo-hyper-trophic Paralysis.

Members wishing to read papers or to exhibit specimens, are requested to communicate with the Honorary Secretary as soon as possible.

Dinner will be provided at the Angel Hotel at 6 o'clock. Charge, 5s., exclusive of wine. Members intending to dine are requested to send their names to Dr. G. Thomson, Oldham.

D. J. LEECH, M.D., *Honorary Secretary*.

96, Mosley Street, Manchester, February 13th, 1878.

NORTH WALES BRANCH.

THE intermediate meeting of this Branch will be held at the Owen Glyndwr Hotel, Corwen, Merionethshire, on Friday, March 8th, at 1 P.M.: R. ROBERTS, Esq., Portmadoc, President.

The Honorary Secretary will relate a case (with specimens) of Aneurism of the Ascending Aorta.

Members wishing to read papers or exhibit specimens are requested to communicate at once with the Honorary Secretary.

T. EYTON JONES, M.D., *Honorary Secretary*.

Wrexham, February 18th, 1878.

BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the session will be held at the Museum and Library, at the top of Park Street, Bristol, on Wednesday evening, March 13th, at half-past 7 o'clock; H. MARSHALL, M.D., President.

The following papers are expected.

1. J. G. Swayne, M.D.: Case of Puerperal Convulsions.

2. W. H. Spencer, M.D.: The Use of Salicylic Acid in Combination with Opium and Aconite.

3. R. S. Smith, M.D.: Cases illustrating the Treatment of Pleuritic Effusion.

4. A. E. A. Lawrence, M.D.: On certain Forms of Non-Puerperal Uterine Hemorrhage.

A train leaves Bath at 6.35 P.M., and returns from Bristol at 10.15 P.M., Great Western Railway.

E. C. BOARD, *Honorary Secretary*.

7, Caledonia Place, Clifton, March 1st, 1878.

THAMES VALLEY BRANCH.

THE next general meeting will be held on March 14th, at the Griffia Hotel, Kingston, at 5 o'clock.

Papers will be read by Dr. Price Jones and Mr. George Farr White, F.R.C.S.

There will be a dinner at the above hotel at 7 o'clock. Charge, 7s. 6d., exclusive of wine.

Those members who intend to be present are requested to write to the Honorary Secretary.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Kingston-on-Thames, February 28th, 1878.

YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Infirmary, Rotherham, on Wednesday, March 27th, at 3 P.M.

Members wishing to read papers or bring forward cases are requested at once to communicate with the Secretary.

After the meeting, the members will dine together at the Ship Hotel at 5 P.M. Tickets (exclusive of wine) 6s. 6d. each.

W. PROCTER, M.D., *Honorary Secretary*.

York, February 26th, 1878.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting will be held at the Crystal Palace Hotel, Upper Norwood, on Thursday, March 14th, at 4 P.M.: R. M. MILLER, M.D., in the Chair.

The following papers are promised.

1. Mr. Golding Bird: The Treatment of Scrofulous Glands by the Electrolytic Caustery.

2. Dr. Poole: On the Non-Alcoholic Treatment of *Post Partum* Hemorrhage.

3. Mr. Sidney Turner: A Case of Abdominal Tumour.

4. Mr. Sidney Turner: A Case of Opium Poisoning.

Dinner will be laid at 6 P.M. Charge, 6s. a head, exclusive of wine.

JOHN H. GALTON, M.D. Lond., *Honorary Secretary*.

Woodside, Anerley Road, S.E., February 26th, 1878.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.

THE next meeting of the above District will take place at the Surrey County Hospital, Guildford, on March 21st, at 3.45 P.M.

Members wishing to read papers are requested to communicate with the Secretary at once.

There will be a dinner at the White Lion Hotel, at 6 P.M. Charge, 7s., exclusive of wine.

A. ARTHUR NAPPER, *Honorary Secretary*.

Cranleigh, February 26th, 1878.

CORRESPONDENCE.

SUBCUTANEOUS INJECTION OF ATROPIA.

SIR,—In the interests of humanity, and in reference to "a case of opium-poisoning successfully treated by atropia" reported in the BRITISH MEDICAL JOURNAL of February 23rd, I write to say that *one grain of pure sulphate of atropia* injected under the skin will, whether opium has been previously taken or not, usually prove a fatal dose.—I beg leave to remain faithfully yours,

JOHN HARLEY.

Brook Street, Grosvenor Square, W., February 22nd, 1878.

THE MEDICAL BENEVOLENT FUND.

SIR,—I would venture to suggest that each honorary secretary should follow the example of the energetic secretary of the South-Eastern District, and, when sending the usual application for the annual subscription, should offer to take charge of a subscription for the Medical Benevolent Fund. It might be the means of gaining additional subscribers, and it would save a great deal of trouble, as one cheque covers all three subscriptions: that for the Association, that for the Branch, and that for the Benevolent Fund.—Yours, etc.,

FRANCIS H. PARSONS.

Mount Pleasant, Hastings, Feb. 20th, 1878.

THE PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

SIR,—Dr. Falconer's reply to my letter leaves matters in a position still more unsatisfactory than I had anticipated. His letter is still more unintelligible than the report of the Proceedings of Council, of which I complained as being more likely to misinform than inform members of the Association of what really occurred at the meeting of which they pretend to report the proceedings. Let me analyse his letter.

1. Dr. Falconer says: "I am responsible for the delay", etc. I congratulate Dr. Falconer upon the light-heartedness with which he passes over, without a word of explanation or regret, a considerable delay in the publication of proceedings so important to the Association at a critical moment. The formula "accidental circumstances" has, within my brief experience, unfortunately too often been applicable already to omission to perform duties connected with important business of the Association by the central executors of affairs. I will, however, pass by this incident. If Dr. Falconer feel no regret for the unfortunate circumstance that Dr. Wilson Fox's letter appeared in all the medical journals, including our own, before the publication of the Proceedings of the Committee of Council to which it relates, I am sure that the Association in general feels regret.

2. Dr. Falconer states that he is responsible for the imperfect and unintelligible form in which the so-called report has been published, and that in this report he has anxiously followed the practices of his predecessors. I am not old enough to know how far this aspersion upon his predecessors is accurate or not: of his immediate predecessors I believe only one, unhappily, is alive to defend himself against such a charge.

3. With singular inconsistency, however, after announcing his personal responsibility for omitting from the reports the most highly important facts in the Proceedings, Dr. Falconer refers me for any remedy to the next meeting of the Committee of Council; that is to say, he first attempts to shift on the Committee of Council a responsibility which he has just admitted to be purely his own; secondly, by this means he proposes to defer for two months at least the publication to the members of the Association of the vital facts of those proceedings which concern the largest interests of the Association in respect to 1. Membership; 2. Finance and the disposal in a peculiar (and I contend in a wasteful and injudicious) manner of large amounts of capital; 3. The privileges of members at the annual general meeting.

I wish, therefore, to point out to Dr. Falconer that his letter does not convey the information which the members of the Association have a right to expect. He has informed them that it lies in his hands to let them know what was the amendment proposed and seconded at the meeting of the Committee of Council, on the subject of the letter of Dr. Fox. What would Dr. Falconer himself think of a report of the proceedings of the House of Commons without a report of any of the amendments proposed? It lies with him also, as he has told us, to give to the members the full and real statement of facts as to what it is proposed in respect to taking the house, as to which the only information yet given is, that £320 *per annum* is to be paid for the rent, and that the premises are to be insured. Were not much more important financial resolutions passed at the same time and on the same subject, including the expenditure of £1,500 on leasehold premises, and the undertaking of a printing business, which information he has kept back from the Association by the method he had adopted in his "selection from the minutes"?

Were not also most important regulations passed at the same meeting affecting the privileges of members at the annual general meetings? Is it not fair to the members of the Association that these facts of the Proceedings should be published at once, in order to afford time to the members to undertake questions so dealt with, and, if they have any suggestions to make, to allow them to make such suggestions sufficiently early for consideration at the next meeting of the Committee of Council?

In respect to the Proceedings of the Habitual Drunkards Committee, will Dr. Falconer explain how the rule operates which, in this case, prohibits the publication of all except the amendment, while, in the case of Dr. Fox's letter, it expressly excluded the amendment?

I earnestly beg Dr. Falconer to weigh well the grave importance of not persisting in keeping members in ignorance of these important matters at this critical juncture. He admits that the responsibility of dealing with the minutes rests with him; is he sure that Sir Charles Hastings, Dr. Sibson, or Mr. Southam, whose *names* he invokes, would have insisted on a policy of secrecy on such an occasion? At any rate, I would ask him to remember that the responsibility is his to state

definitely to members whether he will respond to the appeal and publish forthwith an intelligible report of the Proceedings of the Committee of Council, including those parts to which I have referred.

I have the honour to remain, etc.,
W. C. GRIGG, M.D., Honorary Secretary to the
Metropolitan Counties Branch.

6, Curzon Street, Mayfair, February 25th, 1878.

THE LATE DR. D. DONOVAN.

SIR,—May I ask for your kind assistance in promoting the memorial to the Prime Minister on behalf of the family of the late Dr. Donovan? I need not enumerate the claims of Dr. Donovan on the country, as these are set forth in the accompanying memorial, clearly, but without exaggeration.—Faithfully yours,
A. HUDSON, M.D.

Loweville, Dublin, February 1878.

The following is the memorial referred to in Dr. Hudson's letter.

To the Right Honourable the Earl of Beaconsfield, First Lord of the Treasury.

THE petition of the undersigned humbly sheweth—

That Daniel Donovan, M.D., Edinburgh University, 1828, L.R.C.S.E., L.M.E. (Dub. and Edin.), late Medical Officer, Skibbereen Workhouse and Dispensary, died on the 30th September, 1877, aged 69, at Skibbereen, in the county of Cork, Ireland, leaving him surviving his widow, Henrietta Donovan, and, amongst other issue, four unmarried daughters, Helena, Frances, Mary, and Margaret, two of whom are in delicate health.

That, for eight years before his death, the said Daniel Donovan suffered from a lingering disease, by which he was entirely incapacitated from any professional work whatever, and confined to his room.

That, as a consequence of the said protracted illness, and of the failure of the Albert Life Insurance Company when he was broken down in health (in which Company his life was largely insured for his wife and daughters), Dr. Donovan was entirely unable to make any provision for his widow and unmarried daughters as aforesaid.

That, during the said illness, his principal means of support was a small pension from the Skibbereen Board of Guardians, voted to him on his retirement from the position of their medical officer, which pension ceased on his death.

That one of the sons of the said Dr. Daniel Donovan was Dr. Jeremiah Donovan, late of the Royal Navy, who, after active and zealous services in his capacity as naval surgeon on the West Coast of Africa, died soon after his return therefrom of the effects of a disease, the seeds of which were laid by his service in the unhealthy climate of the West Coast; and that, owing to his death, his mother and sisters were deprived of one who contributed to their support and welfare.

That, during his lifetime, the said Daniel Donovan was enabled, at a great crisis in the history of his country, to render extraordinary services to humanity; and that his original medical researches and observations have been recognised by the most competent authorities as among the most valuable contributions to medical science in his time.

That the town of Skibbereen and the district around it notoriously suffered more severely from the great famine of 1846-7 than any other part of Ireland.

That, at the time of the said terrible calamity, Dr. Donovan was the Poor-law Medical Officer for the town of Skibbereen.

That Dr. Donovan made the most superhuman exertions to grapple with the famine; that he spent day and night succouring the sick and feeding the hungry; that he was the centre and organiser of all efforts to relieve the famishing west of Ireland; that his letters to the *Times* and other English journals, by making known the extent of the famine, secured large pecuniary aid for the suffering poor; and that he thus rescued thousands from disease and death.

That, moreover, the said Dr. Donovan recorded his medical experiences of this period in the columns of the *Dublin Medical Press*; and that the papers thus contributed by him have ever since been regarded by medical writers as the great original authority on the symptoms of starvation as they occur in the human subject.

That Dr. Donovan's position, as the great original authority on this subject, is fully recognised by Dr. Taylor in his celebrated work on *Medical Jurisprudence*, by Dr. Casper, the principal German writer on the subject, and by all recent writers on forensic medicine, both English and foreign.

That, during the recent great famine in Madras, the observations of Dr. Donovan were most valuable to the medical men employed in succouring the starving people, as enabling them to diagnose between the symptoms of starvation and disease, first clearly distinguished by Dr. Donovan.

That no reward whatever was conferred, nor did profit of any kind accrue to the said Dr. Donovan, from the said researches; and that his position as a medical man in a small country town, with a family of eleven children, prevented him from making due provision for his family, save by the insurance lost as aforesaid.

That, having regard to the said services, your petitioners humbly pray your lordship to advise Her Majesty, in consideration of the great services to humanity and science by the said Dr. Donovan, to grant his widow and unmarried daughters aforesaid a pension from the Civil List; and your petitioners will, as in duty bound, ever pray.

THE TEACHING OF NATURAL SCIENCE IN MEDICAL SCHOOLS.

SIR,—Some nine years ago, the General Medical Council addressed to the various teachers in our schools of medicine a circular letter containing a number of questions on the subject of professional education, on which they invited an expression of opinion. In my reply, I ventured to say:—"I have, with others, often thought that the teaching of these subjects (anatomy and physiology), instead of being distributed amongst our several hospitals, might be much more beneficially carried on at some one or two central colleges. I believe that such a plan would afford advantages, resulting from a concentration of force, which would far outweigh any objections to it."

Even then this idea was far from being a new one, and ever since continued observation and reflection have so strengthened the conviction that some such scheme as this ought to be carried out, that at length I am induced to trouble you with this letter.

I think all must admit that the usual mode of teaching anatomy, physiology, chemistry, and botany in our medical schools, is very far from being satisfactory. With the exception of two or three of our largest schools, the classes are too small to afford the least encouragement to any teacher; nor could competent men be induced to lecture on these subjects, were it not that such appointments are considered to be almost necessary stepping-stones to something better in the future. The consequence is, that the lectures aforesaid are made only a means to an end, and such appointments are thankfully resigned upon the earliest opportunity. To fill such an office in this way for a time may, no doubt, be of advantage to the teacher, and go far to advance the more scientific part of his education; but what can be said of it for the student?

If, instead of having the classes on these subjects split up among a number of small schools, the natural sciences were all taught at one place, it is not difficult to foresee that the gain to our students would be immense.

The classes would be so large that the services of the best men could be secured for teaching, and the appointments would be so valuable, that they would be earnestly sought for their own sake. Furthermore, if it were deemed advisable, some or all of the subjects might be so divided that each part could be taught by the man who, of all others, best understood it.

In this way, the hospitals would be relieved of a burden which each year presses more and more upon all; upon some so heavily that the work can hardly be carried through. But, if our medical schools were relieved of having to teach natural science, all their energy might be concentrated upon their own more immediate business of instruction in medicine and surgery.

Beyond these advantages, there would be a great gain in the order of teaching. A student now comes to a hospital fresh from school, and forthwith finds himself face to face with a host of subjects, all of which, some even by name, are painfully strange to him, and each one apparently so complex and difficult that, without any previous introduction, he cannot tell how or where to begin, and, in a conscientious endeavour to do justice to all, he attempts to grapple with subjects which as yet are quite out of his reach, and ought to be left alone until, by the previous study of others, he has been educated up to them. Some previous knowledge at least of anatomy, physiology, and chemistry is necessary to the intelligent study of medicine and surgery.

Of late years, it is true this radical evil has been partially met by a division of the examination at the College of Surgeons into a primary one in anatomy and physiology and a pass one in surgery; so that, as far as the examination is concerned, students may not have the burden of all these subjects upon their minds at once. But, after all, what does this imply? If students, as is usual, work only for their examinations, the study of medicine and surgery at the hospitals becomes limited to a period of less than two years, which is ridiculous. And if, according to the presumption, students are expected to "go

round the wards" during the whole term of their attendance at the hospital, "clinical work" becomes nothing better than a farce. What is a man to learn by thus sauntering through the wards without any previous instruction in medicine and surgery?

Now, if from school he could pass first of all to an institution to study anatomy, physiology, and chemistry, just as other men go to college, he would not only receive the best possible training for his future career, but he would, in course of time, come to the hospital so educated as to be able to enter upon the study of medicine and surgery under fair conditions. He would be able to make the best use of his time, or at least to avoid wasting much of it.

Of course, I would not have the time to be spent in the study of the natural sciences at a central college subtracted from the period of work at a hospital. I wish to avoid all detail now, and to speak only of the plan in general; but at least three years should be spent at a hospital in the study of medicine and surgery after two years' previous work in anatomy, physiology, and chemistry. This would make a total of five years for professional education. Such a time may be, and I for one think it is, too short, but assuredly it is not an hour too long.

I will not lengthen this letter by dwelling upon other advantages which would wait upon this scheme; such, for example, as the way in which it would strengthen the bond between the study of the natural sciences and the practice of medicine and surgery, an union which I am ashamed to say is too often shaken by those who should be amongst the foremost in cementing it more closely. For I would rather let the case rest upon the three points I have endeavoured to indicate.

But I am not sanguine that this plan will in any fashion be carried out, at least for a long time. I know that its advantages are realised by some whose authority on questions of education stands highest; but then I suppose there would be too much difficulty in matters of detail. The scheme, to be in any way efficiently carried out, would involve some individual sacrifice on the part of many, and of these some, by mere passive resistance, could place such obstacles in the way of any change of this kind, that the plan would have no chance of surviving the stage of discussion.

But, whatever the fate in future of any such arrangement may be, I at least am glad of the relief which comes of writing this letter.—I am, sir, your humble servant,

WILLIAM S. SAVORY.

London, February 26th, 1878.

HOSPITAL FINANCE.

SIR,—I agree with you in thinking that the time is rapidly approaching when some very active reforms will have to be introduced into the management of the large metropolitan hospitals. It is not my purpose to-day to dwell upon the close relations which exist between irresponsible relief and increasing deficiency of funds; for you have already, and with justice, dealt at length with that branch of the subject which relates to the unlimited and ever increasing medical relief afforded almost without restriction to all applicants. Such a condition of affairs must, in a time of depression like the present, undoubtedly increase the deficiency in the accounts of which so many hospital managers at present complain. But, apart from this, I am convinced that the system of management, or rather want of method, which regulates the financial departments of most of the metropolitan hospitals, is based upon unsound principles. So far as any general rule can be said to exist, such rule lays down that it is useless to attempt to obtain annual subscriptions, and so it is best to be thankful for what donations can be obtained by appeals, festivals, and so forth, each year and year by year; and, when these do not suffice, with the interest on invested property, to meet all the expenditure, a sale of stock supplies the deficit. In the provinces, such a system finds no favour; but there, as a rule, annual subscriptions form the financial backbone of each of the medical charities. If this be doubted, I would merely point to the fact that the comparatively recent cottage hospital has proved this beyond dispute; for eighty cottage hospitals, having an aggregate income of £30,000, derive 48 per cent. of it, or £14,500, from annual subscriptions alone. Yet it has been proved by experience that it is not more difficult to obtain annual subscriptions for a London charity than for a country one, providing the same kind of method be employed with steady pertinacity. The economy of procuring annual subscriptions must be manifest to everyone. It does not cost more than 5 per cent. to collect an annual subscription when once it is procured, whereas a donation, each time it is paid, costs a variable sum of from 15 to 25 per cent. at the better managed and larger institutions, and who shall say how much at some others which shall be nameless? What is the reason, then, that an institution with an expenditure of £30,000 a year derives but £2,000 from annual subscriptions, and has to sell out

£38,000 of stock in two years to meet its current expenses? Simply that the question of financing our large hospitals has never yet received the attention which it deserves. Much surprise has been expressed that the London Hospital has been compelled to sell £21,000 of stock in one year. It seems to me that this surprise will be materially modified, when I state that it is a rule at most hospitals to make up the deficiency on general account by a sale of stock year by year. If a good year come, well and good; then some funds are invested; if not, then capital account suffers. To show more clearly how this system works, I will quote two examples.

A has an expenditure of £23,000 a year; B has an expenditure of about £12,000. In one hundred years, A has received for investment the enormous sum of £345,000, of which it has spent £241,700, or an average of nearly £2,500 a year. In the first four decades, the amount derived from annual subscriptions was £2,200 on an average. In the next six decades, the annual subscriptions gradually increased to £6,100; but the expenditure had risen from £5,700 to £18,200; so that the annual subscriptions showed no proportionate increase, although at the outset they were nearly equal to the expenditure, being £2,243 and £2,290 respectively. Recently, a stir was made, and the annual subscriptions reached £8,700; but they have since been allowed to fall to £8,200, which I regret to say is the largest sum derived from this source by any London hospital.

In the case of B, the information is not forthcoming for so long a period; but, in ten years, £20,212 of capital was sold out—an average of £2,021 a year—to meet current expenses. The managers' attention was called to the system a few years ago, and they resolved to put a stop to it and try the plan of annual subscriptions. Steps were taken to raise the subscription-list to something like an adequate sum, and their experience proves that this can be done with success; for in three years they have procured £1,700 in new annual subscriptions: a sum more than double the average subscription list of the previous fifty years; they have also paid off an old debt of considerable extent, and their expenditure for management has been but 9 per cent. Not a single penny of invested capital has been spent since the new plan has been at work (three years), although the work of the institution has much increased. If only the managers of the metropolitan hospitals would try this system, and by publishing each year, in a tabular form, the returns they make to the Council of the Hospital Sunday Fund, would afford each other and the public generally the means of watching the progress these institutions are making, much would be done.

But, in my opinion, what we really want is an annual conference and a working committee of representative managers of our medical charities. There are social congresses, conferences of librarians, head masters of public schools, Poor-law officials; why not of hospital managers? The hospital managers spent, in 1877, no less than £545,000 of public money, and surely a little joint action on their part would tend to promote the public good. I shall be glad to hear that some steps are being taken to form such an association as I propose.—I am, etc.,

HENRY C. BURDETT.

Greenwich, S.E., February 1878.

MATERIA MEDICA EXAMINATIONS.

SIR,—Students can hardly have failed to note with satisfaction the resolution passed by the General Medical Council last summer, with reference to the definition and limitation of the areas of examination in certain of the most oppressive subjects. In other words, they are no longer to overload their memories with every fact and detail contained within the wide-reaching limits of chemistry and materia medica; but certain regions are to be mapped out, within which their knowledge is expected to be precise and accurate. Such at least is the theory of the matter, and for its practical solution we must await the decision of the examining boards; but I may venture to suggest that the summer session will soon be here, and that teachers of materia medica may not unreasonably look for some lines to guide them in their forthcoming lectures. Are they, as formerly, to wade through the dreary pages of the *Pharmacopæia*, describing processes and reactions which are as dull as they are profitless? or may they in future confine their attention to points of real importance, and leave out of all consideration much of that wearisome detail which wastes many a precious hour? It is, of course, impossible that this selective power should be wielded according to individual caprice; but I would venture to suggest that some comprehensive scheme might be drawn up, to be submitted to the great medical corporations and modified or adopted by them. Professor Harvey and Dr. Lauder Brunton have already done good service in this direction; and the further development of the subject might be taken up by the

materia medica lecturers in conclave, or by the Medical Teachers' Association, if that body still exist.

Will you allow me, with such brevity as the importance of your space demands, to make one or two suggestions? In the first place, it must be understood that the student should possess a good working knowledge of the physiological actions and therapeutical applications of the drugs included within the horizon of examination, but that the pruning-knife must be freely used, and many substances struck out of the list on which he is now expected to bestow some portion of his sorely taxed memory; and on this point Professor Harvey's tables may be well taken as a basis of arrangement.

Secondly, much abridgment must be made in the present wide field of pharmacy.

Were I enabled to follow out my own views, I should banish all such detail from our lecture-rooms and examination-tables; but we are as yet hardly ripe for this, and can only expect to obtain some relaxation of the present rigid limits. Therefore, I would suggest that, of the larger groups of inorganic substances, the precise mode of manufacture of the compound from which the others are prepared, with, perhaps, one prominent member of the family, should alone be learned. Thus the potash salts are derived from the carbonate, and this may be retained as an examination subject, whilst the iodide may also be included, on account of its importance. But, of all the other varied preparations, the general actions and dose of the bicarbonate, acetate, acid tartrate, nitrate, and bromide should be the full extent of the knowledge to be expected.

Of the iron salts, the formation of the sulphate and perchloride, as illustrating a broad chemical distinction, should be learned, and the doses of the other preparations given in large capitals by Harvey and Brunton must also be known; whilst mercury may fairly be restricted to the chloride and perchloride, in addition to the various pills, ointments, powders, and plasters derived from the crude drug itself.

Your space does not enable me to go further into detail; but the same principle may be applied to all the inorganic substances, and a variety of excisions may also be made among the organic articles of the *Pharmacopæia*.

Thirdly, I would suggest that the student should no longer be expected to know anything about the adulteration of drugs. This is seldom of clinical interest, and, as it concerns almost entirely our wholesale druggists, medical men may well be excused if they wish to protect their brains from the intrusion of useless lumber.

Fourthly, botanical characters should be remembered only in connection with the more common poisonous plants, as belladonna, conium, etc., where such knowledge may often be of real medico-legal importance.

Fifthly, let the student, as a mere matter of observant training, make himself thoroughly acquainted with the physical characters of the various drugs, without being expected to furnish in writing any of the elaborate descriptive detail laid down in the *Pharmacopæia*. Although useless in itself, I have found, as a rule, that my students do not chafe against this as against the equally useless intricacies of pharmacy, but speedily acquire a rapid power of recognition of a very satisfactory nature; and I would ascribe this toleration to the fact that specimens of the leading drugs are freely displayed in drawers, where members of the class can at all times inspect and handle them for themselves.

Sixthly, and to conclude, concerning the alkaloids; this has always been rather a stumbling-block in the student's way, as the six in which he is most usually examined, are prepared by methods so far varying from one another as to be brought with difficulty, if at all, under any systematic classification. I would, therefore, suggest that morphia, as a representative of the others, should be studied thoroughly, and that some idea might be obtained as to how the others differ in preparation. Thus, dividing the process into three stages, we have: 1. Extraction by spirit, by percolation and exhaustion in aconitia, strychnia, and atropia; exhaustion and evaporation with water in morphia and veratria; by hydrochloric acid in quinia; 2. Purification by successive solutions in water or spirit and evaporation; colouring matter removed by precipitation on animal charcoal; grosser impurities, such as the meconic and lactic acids in opium, by combination with chloride of calcium, resin, and igasuric acid separated from strychnia by acetate of lead, brucia removed by washing with spirit and water; from atropia, colouring matter and organic acid are removed by lime; 3. Precipitation and separation by ammonia in morphia, aconitia, strychnia, and veratria; by solution of soda in quinia; by carbonate of potash and chloroform in atropia.

I should have liked to go much more closely into detail in the consideration of this important subject, but wish rather to ensure its free ventilation and discussion than to obtrude my own views. So long as the teaching of materia medica is compelled to continue on its present

footing, so long do we perpetuate the vices of grinding in their worst form; and by these I do not mean the orderly and systematic digestion of crude masses of reading, which is often beneficially provided by professional coaches, but the wholesale cramming into the memory by the student himself of facts and details from one or other of the abbreviated manuals. No amount of lecturing power can galvanise any interest into pharmaceutical detail, and the student most naturally postpone all attempt at acquiring any familiarity with so distasteful a subject until the coming event of the examination begins to cast its grim shadow before; and no sooner does he become a qualified man than he restores the elasticity of his brain by casting much of its tightly packed cargo overboard. Far be it from me, sir, to advocate any reduction of the due amount of knowledge possessed by medical men; but there comes a point when mental training, as conducted by practically useless things, must cease, and all the time at command be devoted to the mastering of the actual facts and details of future professional life. The philosophical consideration of these affords intellectual problems of the highest variety and importance, and we must take care that we do not place needless obstacles in their way.—I am, sir, your obedient servant,

ROBERT FARQUHARSON.

Brook Street, February 1878.

PHYSICIANS, PRACTITIONERS, AND FEES.

SIR,—Your correspondents on the subject of fees seem to think that pure physicians admit of being divided into popular leaders, who make their income mainly by consulting with the family doctors of the wealthy, and needy failures, who have degenerated into general practitioners. No account has been taken of a class, not small in numbers, to which I belong, and which necessarily disturbs the proper constitutions which your correspondents draw up for the profession. Though my position in the profession is very good, yet circumstances have prevented my getting a footing in the good graces of the upper classes, and I have few patients indeed of social rank equal to my own. The names in my case-book are those of farmers, tradesmen, artists, literary hacks, the inferior clergy, clerks, publicans, artisans, and even domestic servants. If they confess to having a family doctor, I always write him a note of my diagnosis and proposed line of treatment. But I have reason to believe the majority come to me for the very purpose of avoiding the employment of a family doctor, and, on economical grounds, are willing to pay two guineas the first visit and a guinea for subsequent visits, and to carry out any variations required in the treatment for themselves when put into possession of its *rationale*. The only persons who demur to a full physician's fee are the vulgar rich, who have apparently come to an unfashionable physician in the hope of getting advice cheap. For us to give up this line of practice and refuse to see patients without a family attendant, is simply to shelve ourselves altogether and starve; for it is evident there is not enough strict old-fashioned consulting practice to feed one-twentieth of that formidable list which I have just received from the Royal College in Pall Mall. Moreover, the effort of the Charity Organisation Society to purge the out-patient department at hospitals augments considerably our *clientèle*, and the establishment of private pay hospitals will enable us to add acute cases to our list. But I cannot conceal from myself that we are diminishing the aggregate income derived by the profession from the public, nor do I see how that result can be avoided.—I am, sir, yours faithfully,

February 22nd, 1878.

F.R.C.P.

SIR,—As it is probable that the favourable notice of my paper (January 19th, 1878) in your leading article (February 9th) on "Physicians, Practitioners, and Fees" will call forth some further remarks, allow me to anticipate certain adverse criticisms, which would otherwise assuredly be given. I will direct attention to two particulars only which are most liable to be misunderstood, and which, when misunderstood, are valid grounds of objection.

First, the plan proposed is not that which "obtains in many parts of the Continent". It is like it, but there is a very important, an essential, difference between them. The Continental plan, sometimes called "the Chinese plan", is simply "payment *per annum* for medical attendance", instead of "payment *per visit*". Mine is "payment *per annum*", it is true, but the annual sum covers only *ordinary* service.

(A simple and easily applicable rule is given for defining what service is "ordinary" and what is not). Secondly, the Continental plan says nothing about "fees"; my plan makes express provision for them under the head of *extraordinary* service (which also is defined in a simple common-sense way). In other words, the Continental plan is primarily commercial; it is a bargain, a contract "to include everything". Mine is primarily professional; the commercial view is not ignored, but it is kept in its proper place, strictly subordinate to the professional. If my plan were nothing more than the "Chinese" system, it would not be worth the paper on which it is written; but, as a proposal in strict accord with the most advanced views of medical science, calculated both to further medical science and to make it popular, I submit it with confidence to the members of the British Medical Association, and through them to the public.

The other point liable to misapprehension is that, in applying the principle of co-operation to my plan, it seems to be "open to the objection that medical men would be called upon to do for the public what the public ought to do for themselves". If this be so, I would be the first to denounce it. I would not ask "the profession to part with a third of its fees", nor a hundredth part of its fees, "for charitable purposes". I hate expediency in every form, and none the less when it puts on the garb of charity. I will neither prostitute virtue nor cheat the profession. I ask for a third, not of the doctor's fees, but of a sum contributed for a certain definite purpose, and I ask for it simply on the supposition that this is the just proportion. The work to be done can only be done by making an united effort. As much as possible of the individuality (both of the doctor and of the patient) shall be preserved—the more the better; but there will be a residuary service (assumed to be one-third), which must be done collectively. The money, therefore, must be apportioned accordingly. That is all.

There will, however, be room for the exercise of charity, and that of the most refined kind—the kind that does not let the right hand know what the left hand doeth; and there will be opportunity for the performance of public professional service of a very high order. These are points in the scheme worth noting, and they do not stand alone. Indeed, I have from time to time observed how readily this simple plan adapts itself to the various requirements of the present day, and is ready, as in the present instance, to put an end to what you characterise as "an unseemly and paltry squabble" about fees; or as I should be disposed rather to classify it with those confessedly difficult and perplexing problems of advice gratis, hospital abuses, counter-practice, quackery, and various other professional "grievances", for which the same plan would serve, and for which no other remedy worth the name has been as yet discovered.

These incidental confirmations of the soundness of my plan have inspired me with confidence that otherwise I should not have presumed to express.—I am, yours faithfully,

WILLIAM OGLE.

Derby, February 11th, 1878.

SIR,—The plan of Dr. Ogle of Derby, mentioned in the leading article in the BRITISH MEDICAL JOURNAL of February 2nd, of substituting annual subscriptions for separate fees, reduced to practice, means a medical club for the middle and upper classes, and would sacrifice the independence, and consequently the dignity, of the profession to the disadvantage of both parties to it. I would not again work under such a plan, for any class of the community, for ten times my present small income, obtained by charging separate fees according to the ordinary graduated tariffs of this and other districts. Patients would still be discontented; but the "haggling" would be transferred from the amount of their bills to the amount of attention they would consider they required or were entitled to. For my own part, patients never "haggle" with or cheat me a second time. I am strongly in favour of medical clubs on an equitable basis; but the present system, whereby the work required for a very small given sum is an unknown quantity, is a commercial (I use the word in its strictly economical sense) anomaly, and cannot be too strongly condemned. I have studied this subject of club medical aid *versus* separate fees attentively, and am inclined to say more, but trust that those who are enamoured with the beautiful simplicity and good intention of Dr. Ogle's plan, will seriously consider its grave defects. We should be in danger of losing the moral control of our patients and our own self-respect; we should, in fact, be in the position of paid servants, without any redeeming or counterbalancing *prestige*: to say nothing of the extra work and worry, for probably less than the present insufficient remuneration.

A short time since, we were told that the profession had given its cordial sanction to self-supporting hospitals for the middle classes. Unimportant as my influence may be, as an unit of that profession, I protest against any such *unnecessary* interference with my bread winning occupation. I regret troubling you; but plans like these, seriously

affecting the vital interests of the profession—and, therefore, of the public—require free discussion.—Yours faithfully, W. J. MARSH.
Shrewsbury, February 9th, 1878.

SIR,—For years past, it has been a matter of surprise to me that our profession could rest content with the anomalous condition of its different grades, and that the "one portal" question could be discussed, and almost settled, without a thought being directed to the legal or ethical status of the members after their admission into the profession. Accordingly, I hailed your "leader" and the correspondence following it as the key-note of a much needed reform.

It has always appeared to me that there ought to be a very broad line of distinction between consultants and ordinary practitioners; not only in the matter of remuneration, but in the lines of practice open to them respectively. It matters not to what branch of practice a man devotes himself, he cannot or ought not to be at once a consultant and an ordinary practitioner. It is essential to have two classes, as distinct as barrister and attorney; but it is equally essential that there should be no possibility of competition between them. At present, there is no distinction, but universal competition. The same man is consultant in one house and general practitioner in another; his fees are sometimes honoraria, sometimes matters of account; and the fees of the general practitioner are often as large as those of the consultant for ordinary attendance. How is this to be obviated?

I venture to suggest that the Medical Council should take steps to separate the two classes, somewhat in this manner. The consultant should hold a special diploma; undergo a special course of study; and give evidence, in public gratuitous practice (hospitals), of his qualification for the position to which he aspires. A central authority should then have power to license or "call" him to practise as consultant in the special branch to which he has devoted himself. His practice should consist in giving counsel and advice, in consultation with general practitioners; and he should be precluded from holding communication with any patient, except through general practitioners. His fees should be honoraria, and not recoverable at law.

On the other hand, the general practitioner (so called until a better name is coined), holding certain diplomas, should be allowed to engage in one or all the branches of practice, and should be the ordinary medical and surgical adviser in all cases. He should be obliged to take out an annual licence to practise, which should give him a legal status to recover debts for professional service, in accordance with an established scale of charges. Such a scale would not prevent his charging more or less, according to circumstances; but would fix the amount recoverable at law, and so form a data for ordinary charges.

Such a division would correspond somewhat with barrister and attorney-at-law, and would be returning very much to the position of the profession in the last generation, when the apothecary was the ordinary attendant, and the physician or surgeon was called in to advise in difficult cases. It might possibly, at first sight, wound the susceptibilities of the more aspiring; but this is a matter of small moment compared with the advantage to the profession at large. There would be no longer any jealousy between the consultant and general practitioner. The former could not, if he would, be a competitor with the latter; and consultations would be more frequent, more cordial, and better paid than they are at present. There would be some reason then (and an explanation to the public) for men spending so much of their time in hospital and other gratuitous work, when it became necessary for them to prove their competence to fill the lucrative position of consultants. Professors or teachers would be drawn exclusively from their ranks, and many appointments would be open only to them; while the general practitioners would have all the family practice, with a legal basis for their charges.

I refrain from entering into details out of respect for the space in your columns, and am, sir, yours,

EDWARD CROSSMAN.

Hambrook, near Bristol, February 4th, 1878.

CATGUT-DRAINAGE.

SIR,—Mr. Bradley, in his paper on Antiseptic Surgery (February 23rd, 1878), speaking of drainage, says, "Chiene's catgut method of drainage, which acts by capillary attraction, is perhaps the most inefficient of all". Mr. Bradley does not give his grounds for this assertion. I ask him to do so in your JOURNAL.—Yours, etc.,
Edinburgh, February 25th, 1878.

JOHN CHIENE.

DONATIONS, ETC.—E. A. S. has given £100 "In Memoriam" to found a bed in the Cripples' Home, Bray. The late Edmund Burke of Cork has bequeathed £50 to the North Infirmary, Cork, and a similar amount to the Mercy Hospital in the same town.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

A CONSTITUTIONAL QUESTION.

THE correspondence which has taken place between Mr. Buck of Newport, Essex, the Board of Guardians, and the Local Government Board, raises points of such importance to all Poor-law medical officers whose stipends are arranged in accordance with the Consolidated Orders, that we shall briefly comment on it. It would appear that, in April 1877, Mr. Buck was ordered by the relieving officer to visit two of the children of a labouring man named Wright, who were affected with bronchitis. Their names were duly entered in the medical relief-book, and they were attended until well, no objection being raised at that time to the propriety of such attendance. That the relieving officer was justified in giving such an order, is evident from the fact that Wright has seven children, the eldest aged only fourteen; this one, a girl, earns one shilling a week and her board; a younger one earns three shillings a week; the united earnings of the family—out of which rent, clothing, and food have to be found—amounting only to seventeen shillings a week.

In December last, Mr. Buck was called to attend one of the same children, whose leg was fractured. On the father applying to the relieving officer for an order, it was refused; that official, however, permitted him to apply to the Board of Guardians, but with no better success. Thereupon Mr. Buck wrote to the Board, requesting to know the reason why they refused to grant an order in December when one was sanctioned in April. After three several applications, he received, on the 16th ultimo, a letter through their clerk, simply acknowledging the receipt of his three letters. Not daunted by this, Mr. Buck again wrote, and demanded an explanation of their action in granting an order for medical attendance in April and refusing it in December, the circumstances of the party remaining the same. In their reply, the Guardians state "that they consider the case in no way altered, and adhere to their former opinion (when expressed does not appear), that is, that Wright's case was not one that called for assistance from them".

Whilst this correspondence was going on, Mr. Buck wrote to the Local Government Board, giving the facts of the case, and inquiring whether, having ordered his attendance on the family in April, the guardians could refuse an order in December. He received for answer that the guardians were the sole judges when an order for relief, medical or otherwise, should be granted; that if an order for medical relief were granted, such order only remained in force so long as the illness continued; and, therefore, an order for relief given in April would not apply to a fracture of a leg of one of the children in the following December; but expressing no opinion on the fairness of the guardians towards him.

Now, we can have no hesitation in expressing our decided opinion that Mr. Buck has been most meanly used by this Board of Guardians; for it will be noticed that, when medical relief pure and simple is ordered for Wright's children, no objection is raised; directly, however, that an accident occurs, the treatment of which involves a fee of £3, then the order is refused. Our readers will also not fail to observe that the Local Government Board do not give any opinion on the merits of the case, beyond stating that the guardians are the sole judges when relief should be afforded. Seeing, however, that Mr. Buck holds office under the provisions of the Consolidated Orders, we are of opinion that successful action could be taken in the County Court for recovery of the fee; at any rate it would be worth the trial, as it would determine the legality or otherwise of a board of guardians directing their medical officer to attend a case of ordinary illness, and refusing the same when such attendance carried with it a fee.

We would also advise Mr. Buck to get a question asked in the House of Commons on the subject, upon the framing of which question we should be very pleased to advise him, if he should make application to us.

POOR-LAW MEDICAL APPOINTMENTS.

MACLAUGHLIN, F. P., M.B., appointed Medical Officer of the Strangford Dispensary District of the Downpatrick Union, *vice* W. Chartres, L.K.Q.C.P.I., resigned.
THOMSON, J. A. Mulville, L.K.Q.C.P.I., appointed Medical Officer to the Workhouse and Public Vaccinator, Newport (Salop) Union.

PUBLIC HEALTH MEDICAL APPOINTMENTS.

HARVEY, H., M.B., appointed Medical Officer of Health for the Township of Wavertree (Liverpool), *vice* James Legros, M.R.C.S., deceased.
PRICE, J. Le, M.R.C.S.E., reappointed Medical Officer of Health for the Standish District.

TREATMENT OF THE POOR AT GLOSSOP.

SIR,—In reference to your article in the JOURNAL of last week respecting the above, allow me to say that the out-door medical relief cases of the adjacent villages to Colchester are equally heathenly treated; and I have no hesitation in saying that, were it not for the kindness of the medical officer of health, who, I am informed, now relieves some of the distress by visiting, giving medicine, etc., as well as kind words (which are quite foreign to that district), the poorer classes would suffer far more than any one could imagine in this enlightened quarter of the globe, where it is supposed that the clergy, medical officers, and other high public servants are only too happy to minister to the wants and necessities of their fellow creatures.—I remain, yours, etc.,

MARTIN LUTHER.

MILITARY AND NAVAL MEDICAL SERVICES.

INDIAN MEDICAL SERVICE.—The following is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination held at Burlington House, on the 11th February, when thirty candidates competed for twenty-five appointments, and all were reported qualified. [One appointment was subsequently added.]

Marks.		Marks.	
1. Mullen, J. E.	2716	14. Bigger, S. F.	1800
2. Cretin, J.	2383	15. Nixon, G. M.	1783
3. Duncan, A.	2123	16. Worgan, T. E.	1775
4. Hemsted, A.	2011	17. Moran, J. J.	1727
5. Bale, J. S.	2008	18. Warliker, D. P.	1726
6. Cones, G. A.	2005	19. Smith, F. C.	1695
7. Nicholson, G. F.	1990	20. Earle, J. H.	1615
8. Pope, T. H.	1981	21. Damania, P. J.	1610
9. Pemberton, R.	1955	22. Bull, G. H.	1580
10. Robertson, G. S.	1900	23. Quayle, W. A.	1565
11. Gomes, D. A.	1869	24. Carruthers, C. N.	1540
12. Monk, C.	1843	25. Armstrong, H.	1525
13. Walsh, J. E.	1833	26. MacCartie, F. F.	1525

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates on February 22nd, 1878.

Battye, John Howard, 123, St. George's Road, S.W.
Bennett, William Charles Storer, 17, George Street, Hanover Square, W.
Blaxland, Herbert, University Hospital, W.C.
Chawner, Alfred, 73, Addison Road, Kensington, W.
Coates, Harcourt, 8, Granby Street, N.W.
Griffith, Charles William, Station Hospital, Dover
Harris, George Francis Angelo, 55, Sutherland Gardens, W.
Pearse, Thomas Frederick, 62, Haverstock Hill, N.W.
Pointon, James, Birkenhead
Ritchie, Arthur Fisher, 13, Charlotte Street, W.C.
Sykes, John Frederick Joseph, 20, Fitzroy Square, W.
Turner, George Robertson, 9, Sussex Gardens, W.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 14th, 1878.

Evans, Robert Davies, Criccieth, North Wales
Reddy, Herbert Lionel, Montreal

The following gentlemen also on the same day passed their primary professional examination.

Bishop, James Thomas, Guy's Hospital
Jago, Edwin Osborne, Guy's Hospital
Morgan, William Pierce, Guy's Hospital
Nourse, William John C., St. Mary's Hospital

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, February 12th, 13th, and 14th, 1878, the following candidates were successful.—For the Licences to practise Medicine and Midwifery.

Allen, Edmund Henry
Collins, Patrick John
Curran, Thomas John
Emerson, John Joseph
Hamilton, John Robert
Leary, Edward George
Mackay, William Brittain
Wride, Francis George

For the Licence to practise Medicine.

Flannery, James Gordon

Hassard, Richard John

For the Licence to practise Midwifery.

Love, Robert Lidsay

MEDICAL VACANCIES.

THE following vacancies are announced:—

BALROTHERY UNION—Medical Officer of Lusk Dispensary District. Salary, £125 a year as Medical Officer, and £20 16s. 8d. as Sanitary Officer, with the usual Registration and Vaccination Fees. Election will take place on the 2nd instant.
BROMYARD UNION, Parish of Cradley—Medical Officer and Public Vaccinator. Salary, £50 per annum, and fees. Applications to be made on or before the 9th instant.
GENERAL INFIRMARY, Hertford—Medical Resident and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before the 6th instant.
GORT UNION—Medical Officer of Ardahan Dispensary District. Salary, £140 a year as Medical Officer, and £10 as Sanitary Officer, with Registration and Vaccination Fees. Election on the 14th instant.
KENSINGTON DISPENSARY—Resident Medical Officer. Salary, £125 per annum, with furnished apartments, coals, gas, and attendance. Applications to be made on or before the 4th instant.
KILLALA UNION—Medical Officer of Killala Dispensary District. Salary, £60 yearly, and £20 as Sanitary Officer. Applications to the 2nd instant.
NARBERTH UNION—Medical Officer for No. 4 District. Salary, £55 per annum, and fees, with £10 as Medical Officer of Health.
PUBLIC DISPENSARY, Stanhope Street, Clare Market—Resident Medical Officer. Salary, £105 per annum, with furnished apartments, coals, and gas. Applications to be made on or before the 4th instant.
SLIGO UNION—Medical Officer for Carney Dispensary District No. 2. Salary, £120 per annum as Medical Officer, and £20 per annum as Sanitary Officer, with the usual Registration and Vaccination Fees. Applications to the morning of the 13th instant.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

FORT—MELLOR.—On February 20th, at the Parish Church, Oldham, Thomas L.R.C.P., M.R.C.S.L., L.M., to Annie, youngest daughter of the late J. Haque Mellor, Esq., of Falcon House, Oldham.

DEATH.

TREDENNICK, William Magee, M.D., youngest son of the Rev. G. N. Tredennick, formerly Vicar of Kilbarrow, co. Donegal, at Shanganagh Terrace, Ballybrack, co. Dublin, aged 32, on February 26th.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The fifth meeting of the twenty-second session was held at the Royal Kent Dispensary, Greenwich Road, on Friday, February 1st; W. Johnson Smith, F.R.C.S., President, in the chair. Dr. B. Peacock read a paper on some cases of Pleural Effusion. The next meeting will be on Friday, March 1st, at 8 P.M., when Dr. A. L. Galabin of Guy's Hospital will read a paper on Operative Measures in Congenital Atresia Vaginae.

PRESENTATION TO DR. J. ORSBORN.—On Thursday, February 14th, a service of plate was presented to Dr. Orsborn of Bitterne, at the South-Western Hotel, Southampton, as a mark of esteem from a numerous body of friends on his relinquishing practice. The presentation comprised a salver, a suite of "apostles" spoons and salts, a service of small plate in chest, and a fish and dessert service; the whole being of solid silver and chastely engraved, and bearing also the crest of the recipient. The total subscriptions from about one hundred and twenty subscribers, many of whom were patients in humble circumstances, amounted to a trifle over £260. The salver bears the following inscription: "Presented, with a service of plate, to John Orsborn, Esq., M.D., by his friends and neighbours, on his retiring from practice. A.D. 1878." Along with the plate, the following address was presented. "To John Orsborn, Esq., M.D., M.R.C.S., etc. We whose names are inscribed hereon, having heard of your contemplated retirement from the active and arduous duties of your professional practice, from which, combined with your skilful knowledge and uniform kindness, many of us have experienced and derived the comfort and alleviation so needful to us in the hour of sickness and affliction, beg to tender you our sincere and heartfelt wishes for your future health, happiness, and prosperity; and to assure you that, although you are about to remove from the sphere in which you have devoted so many years of your well-spent and useful life, whereby we shall necessarily be deprived not only of your professional services and assistance, but of the social intercourse which it has been our privilege and pleasure so long to enjoy, you will carry with you the regard and approbation of your numerous patients and friends, to which you are so justly and honourably entitled. With this memento, and in appreciation of your distinguished qualities and the talent you have so conspicuously displayed during your successful career, we also desire your acceptance of the accompanying testimonial—a tribute intrinsically of small value, but a token expressive of our sincerity, respect, and esteem."

OPERATION DAYS AT THE HOSPITALS.

- MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.
- TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
- THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.
- FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.—Medical Society of London. Annual Meeting. At 7.30 P.M., Election of Officers and Council; Ballot closes at 8.30 P.M. Dr. Howard, U.S.A., will give a demonstration of the "Direct Method of Artificial Respiration"; Mr. R. Brudenell Carter, "On Artificial Light in relation to the comfort and well-being of the Eyes".
- TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. Goodhart: Dilatation of the Heart and Aorta from old Spinal Disease. Mr. G. C. Coles: 1. Lymph Scrotum; 2. Worms in the Heart and Oesophagus of a Dog. Mr. B. Squire: 1. Drawing of a rare form of Psoriasis; 2. Drawing of a case of Nævus complicated with Molluscum. Mr. Sangster: Case of Hypertrophic Lupus. Dr. Ord: 1. Renal Calculus containing Indigo; 2. Renal Calculus of mixed Carbonate and Phosphate (from the same subject); 3. Two specimens shewing the Spontaneous Disintegration of Calculi. Mr. Spencer Watson: 1. Polypus from the Antrum and Orbit; 2. Colloid Cancer of the Breast. Mr. Nunn: Sections of Tumour from the Pectoral Region of a Man, aged 81.
- WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens and Instruments: Dr. Hayes, Tube for Intra-uterine Injection of Solution of Perchloride of Iron; Dr. Galabin, Metrotome; Dr. John Williams, Uterus with portion of Placenta, three weeks after labour. Papers: Dr. Matthews Duncan, "On Traction by the Lower Jaw in Head-lid Cases"; Dr. George Roper, "Case of Protracted Labour in which the Forceps was typically indicated"; Royal Microscopical Society, 8 P.M. Mr. Adolf Schulze, "On an easy and simple method of resolving the finest lined Diatomaceous Tests"; Mr. Chas. Stewart, "On a supposed new Coral".
- THURSDAY.—Harveian Society of London, 8 P.M. Casual Communications. Dr. T. S. Dowse, "On the Treatment of Syphilitic Disease of the Nervous System"; Linnean Society (Burlington House), 8 P.M. Dr. Patrick Manson, "On the Development of *Filaria sanguinis hominis* and on the Mosquito considered as an intermediate host"; Dr. T. Spencer Cobbold, F.R.S., "The Life-History of *Filaria Bancrofti*, as explained by the discoveries of Wucherer, Lewis, Bancroft, Manson, and others".
- FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Hulke, "Large Aneurysm of Left Subclavian and Axillary Artery treated by rest and a very restricted diet" (living specimen); Dr. Broadbent, 1. "Sudden Death from Effusion into the Pleural Cavity, without Paracentesis"; 2. "Unusually rapid Effusion of Bloody Fluid into the Pleural Cavity, at the age of 76: Paracentesis: Recovery"; Dr. Frederick Taylor, "Unilateral Atrophy, with Muscular Spasm [Athetosis? (living specimen)]".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

THE following communications have been handed to the General Manager:—Mr. J. C. Garman, Wednesday; Mr. B. Brown, Manchester; Dr. Hayden, Dublin.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the JOURNAL Office or any stated address other than a Post Office.

DR. BURDON SANDERSON'S EXPERIMENTS.

SIR,—Perhaps Dr. Sanderson will kindly add to the obligations he has conferred on the profession by supplementing his account of the paraffin experiment (see BRITISH MEDICAL JOURNAL, January 26th, 1878, page 119) on the following point. I shall be glad to know (I am sure with many others) what were the morphological characters of the objects described by Tiegel and Billroth in 1874, and by the learned lecturer this year. If the bacteria were in the form of rods or "colonies" of spheroids, we may, I presume, consider the question of their existence in these conditions as established; but if the appearances so described were isolated moving spheroids, there will still be found sceptics who doubt the possibility of distinguishing by microscopical characters minute fatty and other granules from spherical bacteria. Most of us have no means of referring to Tiegel and Billroth's original publications, and we shall in any case be glad to know in what forms Dr. Sanderson found the bacteria in his experiment.—I am, yours faithfully, M.D.

THE TELEPHONE IN FEVER-HOSPITALS.

SIR,—A suggestion, which seems to be of considerable practical value, has been made to me by a lady who has lately had one of her sons confined in a fever-ward; and, with the lady's permission, I send the suggestion to you. It is, that the instrument in question should be used for convalescent patients within fever-wards to converse with their friends, to whom immediate access is necessarily denied on account of infection. A telephone can easily be carried from bed to bed within a ward, and the corresponding instrument might be fixed in any office at a distance. Possibly, if the arrangement were found serviceable, the proprietors of the patent for the telephone might see fit to supply the instruments to hospitals at a less cost than that charged for those employed for commercial purposes.—I am, etc., February 1878. M.A. OXON, F.R.S.

MEDICAL ETIQUETTE.

SIR,—In Dr. Beresford's letter to me, published in my statement in the JOURNAL of December 8th, he says about Morris's arm: "I found the arm very much deformed and its utility impaired; in fact, it was so angular that the most unskilful observer would have pronounced it a very crooked fracture." In his letter to you, published in the JOURNAL of January 12th, he admits that the radius was well united, and could not have been interfered with by his manipulation. Is it any wonder that I expected him to reconcile these two statements, and that I have asked him to state specifically what there was the matter with the arm that induced him to take this man into hospital, to risk his life under chloroform, and to keep him there, against rule, at the expense of a not very rich charity? what he did to remedy the evil, and how he did it?

Dr. Beresford calls it a trivial case—too trivial to trouble a colleague about (see his first letter)—but I think that a case that would justify Dr. Beresford acting as he has done is not a trivial case, either for the patient or for me, and certainly not for Dr. Beresford. Dr. Beresford carefully avoided meeting me at Shrewsbury (see also his first letter). He has closed his case by carefully avoiding answering my questions. I have nothing further to say, and I now leave the case in your hands.—I am, sir, yours obediently, W. H. BOX.

*. The correspondence must now cease. Mr. Box must feel that he has amply vindicated his professional character; and the profession generally will not have failed to have formed their opinion of the conduct of which he has justly, we think, warmly complained.

BOOKS, AND ILLUSTRATIONS IN THEM.

SIR,—It would, I think, be a great advantage to us in many respects if our medical publishers would cut the books before leaving the press, as in America. We should then have neat looking volumes on our bookshelves, instead of the ragged edges which attract the dust, not to mention the loss of time to the busy practitioner in cutting them. Again, with regard to illustrations, which are of undoubted value in enabling the reader to comprehend what no written description could possibly make so clear. Photography is now extensively used for exhibiting cases at medical societies; but for book illustration it is a very expensive method, besides that the photograph in after years becomes yellow, and ultimately indistinct from the action of light, or of the hyposulphite of soda which is used in finishing, and which is difficult to entirely wash out of the print. But an engraving on either wood, stone, copper, or steel, cannot be compared to the truthful representation by photograph. Except those who study the photographic art, I think there are few who know of the great advancement it has made in the subject of permanent photography or "photographs in printers' ink". I will not now enter into the details of this process, but will briefly remark the names of the two methods—viz., the Woodburytype and heliotype. These methods are also less expensive than ordinary woodcuts, each engraving costing about threehalfpence per copy. Mr. Briggs of Baker Street has been very successful with his process. The portraits of insane patients in the late Dr. Thompson Dickson's work on *Mind in Relation to Disease* were by him. Several other works have also been illustrated by permanent photography, but it is not so generally adopted as I think it deserves to be. I trust these few remarks may attract the attention of both authors and publisher.—Very truly yours, February 1878. GEORGE CHARLES COLES.

SIR,—It is a very prevalent belief amongst females (both rich and poor) that, in curing hams, women should not rub the legs of pork with the brine-pickle at the time they are menstruating, or the hams will go bad. I shall be glad if any of your readers can tell me if this be mere imagination, or if such be really the case, and if so, how it is to be explained. I have seen it twice tried, and both times the hams did go bad; but whether this was in any way due to the menstruation I cannot tell.—I am, sir, yours faithfully, A MEMBER.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

JUDICIAL POST MORTEM EXAMINATIONS IN SCOTLAND.

SIR,—Having read your remarks in the BRITISH MEDICAL JOURNAL of February 9th, on the unpublished correspondence of Dr. Angus Fraser, which raises the question of the duty of the Procurator-Fiscal in issues that affect the medical profession in common with the general public, I have a complaint to make, which more nearly concerns the members of our profession themselves, on which I desire to solicit your opinion. I was some time ago called to see a man who had come home intoxicated, had fallen down the stairs of his own house, and, judging from the symptoms, had fractured the base of his skull. I visited him twice the night he fell, and twice next day. On the day of his death, I saw his friends, and told them I would make a *post mortem* examination that day at one o'clock, to which they readily consented. On proceeding to his house with an assistant at the hour appointed, I found the door locked; and, on inquiring the cause of a neighbour, was told that the police, who had been there before me, had locked the door and given orders that no one should be admitted, as the surgeon of police himself would perform the necropsy that afternoon. Considering the man a patient of my own, I confess I felt somewhat indignant, having received no notice that such an examination was contemplated.

I would not have brought forward this case, had it not been that medical men in Aberdeen have not unfrequently of late had to complain of similar treatment. In cases where a judicial investigation is required, many of us here are of opinion that it would only be a matter of common courtesy to request the presence of the ordinary medical attendant; indeed, we think he should always (unless in some exceptional cases) be conjoined in the remit with the medical expert.—I am, yours truly,

JAS. D. WYNESS, M.D.

Aberdeen, February 23rd, 1878.

*. If the Procurator-Fiscal were aware that our correspondent had attended the deceased immediately before death, we think that he should have handed the remit for a *post mortem* examination to him, or at least, as a matter of courtesy, have requested him to attend and perform the necropsy with the surgeon of police. Coroners and Procurators-Fiscal have the power to nominate any surgeon to make the *post mortem* examination; but this power should always be exercised with discretion. In this case, we cannot see that there was any circumstance to justify the *post mortem* examination being handed to a stranger.

TURPENTINE IN POST PARTUM HÆMORRHAGE.

SIR,—Mr. Pollard's letter in this day's JOURNAL reminds me of a case I met with many years ago, and which I shall never forget. I was sent for in a great hurry to see a dispensary patient, and declined to visit her, as the dispensary medical officer had been sent for. The messenger replied, "I believe, sir, she will be dead before he comes." I went at once, and found the woman pulseless and quite insensible from loss of blood. I sent for some turpentine immediately, and with difficulty got down half a teaspoonful with an equal quantity of milk—rather a stiff dose. It saved her life, but she had no recollection of taking it. The midwife to a lying-in charity with which I am connected always takes turpentine with her, and never hesitates to give a dose if she thinks it is required. I believe a slight stimulant after delivery never does harm. Turpentine is not so expensive as the aristocratic brandy and egg, which I always administer on these occasions, and which ladies much appreciate; nor are they likely to take it for the love of drinking as they might other stimulants.—Yours, etc.,

R. B. KUDDOCK.

Clifton, February 23rd, 1878.

VOLUNTEER SURGEONS.

APPLICATIONS for examination must be made through the commanding officer to the Assistant Adjutant-General of the district. The examining board consists of the principal medical officer of the district and two other army officers. The form of certificate is as follows.

"We certify that — of the — (who is registered under the Medical Act of 1858 as qualified to practise medicine and surgery in Great Britain and Ireland) is well acquainted with the nature and intended application of the various articles comprising the equipment of Army Hospitals in the field, and with the authorised means for the transport of sick and wounded soldiers, and the proper modes of employing them. We also certify that he has a competent knowledge of the treatment of the wounds and injuries to which troops are liable in the field, particularly with regard to the special circumstances of campaigning; and that he is acquainted with the duties to be performed by army medical officers in camps and bivouacs, and during marches, as named in Section 21, Sanitary Regulations for Field Service, pages 82, etc., of the Official Code of Army Hospital Regulations."

This certificate indicates sufficiently the subjects with which the candidate should be acquainted. Intending candidates for examination, in addition to possessing the knowledge derivable from the ordinary standard text-books on medicine and surgery, should study the following:—*Parkes's Hygiene*; Longmore on *Gunshot Injuries*; Longmore on the *Transport of the Sick and Wounded*; Porter's *Surgeon's Pocket-Book*; the *Manual of Instructions for the Officers and Men of the Army Hospital Corps*; and the *Army Medical Regulations*.

LOCUM TENENS.

SIR,—It would be satisfactory to know the opinion of the medical profession on the following questions, since I believe engagements, as a rule, between the *locum tenens* and the medical agent are not defined accurately, and often lead to many grounds of complaint. 1. When an agent engages a *locum tenens* to take charge of a practice, is that agent responsible to the principal if the *locum tenens* defraud the principal? 2. When an agent engages a *locum tenens* to take charge of a practice, is that agent responsible to the *locum tenens* if his expenses and salary be not paid by the principal? It is only fair to state, that both principal and *locum tenens* pay an office-fee of ros. 6d. to the agent for each engagement. What do they pay the fee for? To know this, in my opinion, is most important to principal and *locum tenens*.—Yours faithfully,

M.D.

SIR,—A correspondent, through the JOURNAL of the 9th instant, inquires whether there be an English translation of Bouchut's *Traité des Maladies des Enfants*. Dr. Peter Hinckes Bird translated the work, with notes and additions, and published it in one thick volume, in 1855.—I am, etc.,

E. N.

16, Bloomsbury Street, London, February 9th, 1878.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

PHYSICIANS' FEES.

SIR,—I quite agree with a "Country Surgeon," who in your issue of February 2nd supports the suggestion that "some fair and reasonable scale of fees should be arranged either by the General Medical Council or by the British Medical Association, and that steps be forthwith taken for their universal adoption by the profession." Many of us rejoice with the "Country Surgeon" that "the subject has at length been taken up," for it is only by vigorous and united action that we can obtain our rights from the public; and to do this, we must turn our Association into an "union," in the best sense of the term, adopting an organisation for making ourselves better paid and respected than at present. Let us do nothing gratuitously, for people put no value on what they obtain without cost. But there must be no tinkering; we must back up the policy of the British Medical Association from beginning to end. The "one portal" scheme of entrance to the profession must be strenuously and continuously supported, while examining boards must be encouraged to pluck candidates freely, so as to prevent the profession from being oversocked, and to put an end to the disgraceful competition which now exists by means of "gratuitous advice" and "open surgeries."

Charity begins at home. Why should I treat another medical man gratuitously? *A fortiori*, why should I so treat his wife and children? The custom exists in no other profession; so let us abolish it at once, to show the public we are in earnest in refusing to work for nothing. A clergyman who is absent on Sunday has to give another clergyman two guineas to do his duty for him, and very often he pays his substitute's expenses in addition. No lawyer gives his opinion to another without charge; and imagine his amazement if he were requested to give any one gratuitous advice on the plea of relationship to a professional opponent! I know medical men in their inmost soul object to the present system; for, when my wife and I were both ill, we were very badly attended till we got advice elsewhere and paid for it, not letting the man at the strange place know we belonged to the profession, and the improvement in attentiveness was most marked.

Why should death-certificates and club-certificates be given gratuitously? No clergyman gives a certificate of baptism without a fee; and it is far more trouble to fill up a death-certificate properly than one of baptism. Gratuitous advice should be given only to the really poor, at hospitals and workhouses, or in connection with very carefully managed dispensaries. At the same time, I own there are people who cannot pay ordinary fees, and whose social position prevents them from going to hospitals or dispensaries; so I respectfully beg leave to submit a suggestion for treatment by contract, to be discussed by the profession.

In India, there are hardly any medical men but the Government surgeons, who are paid by Government to treat all Government officials and servants; but these must pay for the treatment of their families, unless they are military officers doing military duty. Military officers in civil employment, drawing more than a certain salary specified by Government, must pay like civil officers for their families; and the custom sanctioned by Government is to give the surgeon a week's pay for a year's treatment, and this is paid whether the family is ill or well: I mean a week's pay reckoned out of the officer's salary, not the surgeon's. As all sorts of officials are constantly being moved about, it comes to be agreed that these officers give the surgeon half a day's pay per month, either annually or when he or they leave the station. The patients must get their medicine at the druggists' at their own expense. But we must remember the surgeon draws a substantial salary from Government for treating his male patients, so that his fees for women and children are mere extras; and allowance must be made for this in estimating what contract a surgeon in England could afford to offer his patients, though I suppose a low rate would suffice when we consider what miserable payment is given by benefit clubs. The week's pay in India for the year's treatment is for only ordinary treatment. Confinements are extra, the fee varying from fifty to three hundred or more rupees, according to the means of the patient's husband. For casual visits or consultations, where no contract exists, the fee is one gold mohur, or sixteen rupees, say thirty-two shillings; for night visits, two gold mohurs.

If the system were introduced in England, a surgeon might contract with his less wealthy patients to attend a man and his family for one day's pay per month, payable monthly. The man's monthly subscription to the benefit club should be reduced, and thus the present touting for club practice would be abolished. We should no longer hear of a club dismissing Mr. A., who has been paid £50 a year many years for careful and conscientious treatment of its members, because some rascally Mr. B. had disgracefully undersold Mr. A. by offering to do the duty for £45. At the same time, if surgeons enforced the rule that no treatment could be given if the subscription were in arrear, I believe they would, on the whole, gain rather than lose by the abolition of clubs. The club-members would often prefer this arrangement, for they frequently complain of being obliged to go to the club-surgeon, and employ some one else in whom they have more confidence to treat their families. The monthly subscription should be for only ordinary attendance by daylight. Medicine should be obtained from the druggists in towns. In the country, a surgeon should supply it at a price sufficient to cover his expense in obtaining it, making it, and conveying it; but this charge should have nothing to do with that for advice. Confinements and major operations should be the subjects of extra charges. For major operations, the charge would vary with the difficulty of the operation and the means of the patient. Minor operations, like vaccination, tooth-drawing, and opening small superficial abscesses, should be included under "ordinary treatment." For a confinement, the patient might be called on to give at once a week's pay of her husband's income as an extra charge. Night visits should cost a day's pay extra, paid at once. Most night visits are unnecessary. The night visit should mean any visit paid before the surgeon's breakfast, and after sunset, or after the surgeon's dinner, if he dine late.

Consultants should abstain from private visiting practice, and be consultants purely, whether medical or surgical, taking their fees at the moment. Special arrangements must of course be made for ovariectomy and other important operations. Strictly speaking, a consultant should see no patient except in consultation with the family-surgeon, or on receipt of a note from him presented by the patient; but perhaps opinion is hardly yet ripe for this.

The senior consultants should refuse single guinea fees, leaving them to the juniors, and should act like barristers who are "leading counsel," taking only high fees which should be fixed by arrangement beforehand between them and the family-surgeon, thus giving a consultant the option of saying he was "too busy to take the brief" if the fee were too low for a troublesome case, details of which should be explained by the family surgeon, as it is a waste of time for the consultant to be obliged to make out for himself the character of the urine, the temperature, pulse, respiration, measurements, and similar details of routine.—I am, sir, your obedient servant,

A JUNIOR.

THE BRITISH MEDICAL ASSOCIATION.

SIR,—As one who signed the circular and answered "No" in regard to the admission of ladies to the membership, perhaps you will allow me to say that after the leader of February 16th on the lady question, Dr. Wilson Fox may with every propriety reconsider his withdrawal—at least for a time—from the Association. There is another matter of far more vital importance than the admission of ladies, and that is, the fact of the Committee of Council taking upon themselves the office of printers, and going to expend £2,000 of the money of the Association without one word having been said at the last annual meeting, or any intimation having been given to any of the members. Besides, sir, it appears from a letter of Dr. W. G. Grigg, secretary of the Metropolitan Counties Branch, that the proceedings of the Committee of Council of January 6th are suppressed to such an extent that Dr. Grigg says they are "marred by large omissions". Should this be so? Who is to blame? Surely not the editor, Mr. Ernest Hart? The whole business of the Association requires careful looking after; and if Dr. Wilson Fox and others who know much of its workings resign over the question of the admission of ladies, and ignore other vital matters, there must be a collapse. After the taunts and gibes so freely indulged in towards the two lady members—Mrs. Hoggan and Mrs. Anderson—their husbands should, out of sheer shame, induce them to resign. It was quite clear that Mrs. Anderson was out of her sphere at the last meeting of the Association in Manchester, and she was only laughed at and formed a butt for all kinds of jokes. They are not wanted, and should not intrude. Seeing that the Association is an irresponsible body, and by its vote has condemned the presence of ladies, they should accept that vote and retire. If they do not, Dr. Wilson Fox, before the next meeting, should give notice, so as to bring the question forward as soon after the opening meeting as possible, and he will be supported; but in the meantime he should reconsider his resignation, and not sever himself from the Association at this very critical moment.—I am, etc.

HENRY BROWN, L.R.C.P., L.R.C.S.

Northallerton, February 18th, 1878.

* The reports of the proceedings of the Committee of Council are purely official, and are furnished by the General Secretary and published in the official column of the JOURNAL, in connection with which the editor, who is not present at the meetings of the Committee of Council, has no responsibility.

THE ADMISSION OF LADIES TO THE MEETINGS OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—It seems that rational arguments against the admission of women to the profession now fail: that those which have hitherto been employed are proved by facts to be fallacious; and that it only remains to the opponents of women doctors to "pity and despise" them. This course (which is, by the way, essentially a weapon of feminine warfare) is at all events that now adopted by Dr. Wilson Fox. He invites the opinion of members of the Association upon a question which he thus states:—"How far public discussion upon medical topics at which men and women are present, and upon which no restrictions are placed, are consistent with the rules of propriety and delicacy which have hitherto been generally held to obtain in the relations between the sexes?"

I demur to any proposal to open up this question afresh in a manner which premises the presence of an element of sexuality in it. Women are not as men in respect of sexual feeling. Men naturally judge women by their own feelings in this matter; yet it is none the less a mistake for men to extend the modes of thought and action, which are by nature rendered necessary in matters sexual, to matters which do not directly involve sexual feeling. If men will leave this view of the subject alone, women will not suggest it. It is contrary to their nature to suggest it, although, just as naturally, they will recognise it when it is placed before them; and that is why the onus of seduction lies on man.

Now, that is very plain speaking, and some apology for it is due. The apology is, that it is men who have introduced this element into the discussion; that it is men who have professed to fail to distinguish between sex and science; that it is men who, after throwing every legitimate obstacle in the way of women who desire to study this branch of knowledge, have at last said, "We think for you" (?). Does any one know so little of women as to suppose that had men been seeking admission to this profession in their hands, the most strenuous opposition would in its last extremity have taken this form? Indeed, I begin to see reason to be thankful for what, hitherto, I have taken as a matter of course—that I can hear without apprehension whatever a woman may tell, be she doctor or nurse, or neither, knowing that she will touch nothing so that I may not listen, if only I will take what she says as she intends it. In matters of science there can be no room for apprehension of this kind. The movements of the heavenly bodies can be no more abstractly considered than the functions of the spinal cord. Both are departments of knowledge, and both are open to both sexes. Yet astronomy and physiology, and every other branch of science, too, may be perverted; but it takes the superior natural powers of man to pervert them in this way.

In thus declining to share in any attempt to interfere with the prerogative of woman to blush for herself upon occasion, I do not resign the right of man to blush for his own sex. I protest against the introduction to this discussion of the element implied in the question I have already quoted.—I am, etc.

February 4th, 1878.

CHARGES FOR COMPOUND VISITS.

SIR,—I should be glad if any of your readers could inform me as to what would be a fair amount to charge in the circumstances I shall describe. The proprietors of an educational and boarding establishment brought his boarders to a house here for summer quarters. An epidemic of diphtheritic sore-throat broke out among them, and was confined to their house alone. Five children were attacked, all of whom recovered. The attendance lasted for three weeks. There were sixteen visits in all; but on most of these there were from two to four patients to see, and, as a general rule, the best part of an hour was taken up at each visit. Of course, I did not, and never do, supply medicine.

If you can give me an idea of what would be a fair charge in such a case in an early number of the JOURNAL, I should be much obliged.—I am, yours truly,

February 1878.

P.S.—I think there were six patients altogether; but as it happened last autumn, I cannot be positive.

A NEW(?) EDITION.

SIR,—Anxious to procure the last work on diseases of the throat, I have lately purchased the so-called second edition of *Lessons in Laryngoscopy* by Dr. Prosser James, which I have seen advertised. To my astonishment, I find that it differs in no respect from the first edition of 1873, except that there is a new titlepage, with the words "Second Edition" imprinted thereon, and a few lines added to the blank portion of preface. In point of fact, the second edition is only a new titlepage to the unbound and unsold copies of the first edition. As a simple comparison of the first and second editions will satisfy you as to the correctness of my statement, I do not think it necessary to do more than sign myself

February 25th, 1878.

A STUDENT OF CHARING CROSS.

HOW TO EMBALM A BODY.

SIR,—“Armenia” asks, in the JOURNAL of February 2nd, “How to embalm a body?” He will find full particulars in a paper by Dr. Richardson in one of the numbers of the *Medical Times and Gazette* about three or four years ago.—I am, etc.,

February 1878.

L.R.C.P.

PROFESSOR TEBALDI (Padua).—The work of A. Monson, on the *Physiognomy of Mental Disease*, is a treatise on the expression and physiognomy of lunatics, with portraits.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Durham Chronicle; The Harrogate Herald; The Snoderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Bnton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Dronon Advertiser; The Exeter and Plymouth Gazette; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; The Western Mail; The Bath Chronicle; The Bolton Chronicle; The Lincolnshire Chronicle; The Chippenham Chronicle; The Crewe Guardian; The West Sussex Gazette; The High Peak News; The Cardiff Times; etc.

* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Bardon Sanderson, London; Dr. J. B. Bradbury, Cambridge; Dr. George Johnson, London; Dr. D. J. Leech, Manchester; Dr. Pye-Smith, London; Mr. Reginald Harrison, Liverpool; Dr. Barlow, London; Dr. Balthazar Foster, Birmingham; Dr. T. K. Chambers, London; Dr. Douglas Powell, London; Dr. Parsons, Hastings; Dr. D. M. Williams, Liverpool; Dr. Kennedy, Elie, Fife; Dr. Reginald Thompson, London; Mr. Walter Hart, Chelmsford; Dr. G. W. Hutchison, Chipping Norton; Mr. R. Clement Lucas, London; M.D. Edin.; The Secretary of the Medical Society of London; Dr. W. B. Cheadle, London; The Secretary of Apothecaries' Hall; Dr. Wilkinson, Manchester; Mr. William Marriott, London; Mr. T. Holmes, London; Mr. Francis Vacher, Birkenhead; The Registrar-General of Ireland; Dr. J. Milner Fothergill, London; Dr. Lyon Playfair, London; Dr. Arlidge, Stoke-on-Trent; The Director-General of the Army Medical Department; Dr. Ruata, Padua; Mr. J. W. Allan, Glasgow; An Associate; Mr. S. M. Bradley, Manchester; The Registrar-General of England; Dr. Warner, London; T.; Dr. J. Ashburton Thompson, London; Dr. Brabazon, Bath; Mr. J. R. Parkinson, Whittingham; Mr. R. B. Ruddock, Clifton; The Registrar of the Royal College of Physicians; Mr. H. A. Allbutt, Leeds; Dr. Urquhart, Aberdeen; Messrs. Hirschwald, Berlin; Dr. Swayne, Clifton; The Secretary of the Foreign Graduates' Association; Dr. John Harley, London; The Secretary of the Harveian Society; Dr. J. A. Mulville Thomson, Newport, Salop; Dr. Saundby, Birmingham; Dr. H. Sutherland, London; Dr. Clifford Allbutt, Leeds; Mr. W. S. Savory, London; Mr. C. E. Davies, Boston; Dr. T. Spencer Cobbold, London; Mr. E. Owen, London; Dr. John Williams, London; Dr. Procter, York; The Lord Advocate; Mr. Chiene, Edinburgh; Mr. J. Fryer, Dewsbury; Dr. H. J. Hardwicke, Sheffield; A Student of Charing Cross Hospital; Mr. J. C. Garman, Wednesbury; Mr. Thomas Shaw, Wilmslow, Cheshire; Dr. George Gray, Castlewellan; A Member of the British Medical Association; Dr. R. Shingleton Smith, Clifton; Dr. James D. Wyness, Aberdeen; Dr. C. M. Crombie, Aberdeen; Mr. Howard Marsh, London; Our Dublin Correspondent; Our Edinburgh Correspondent; Mr. Benjamin Brown, Manchester; Dr. E. J. Tilt, London; Mr. George Pollock, London; Mr. J. Stuart Nairne, Glasgow; Mr. W. Hannen, London; Dr. R. Neale, London; Dr. Galton, Upper Norwood; Mr. J. G. Baker, Birkenhead; Dr. Glyn Whittle, Loughborough; Dr. Mackey, Brighton; Dr. W. A. Sturge, London; Mr. H. J. Bryant, London; Mr. N. A. Humphries, London; Mr. J. H. Craigie, London; Mr. G. C. Coles, London; Dr. Lee, London; Dr. Hickman, Stepley; Mr. H. N. Mosley, London; Dr. Thin, London; Mr. T. Jones, Manchester; Mr. W. H. Box, Chirk; Dr. Lombe Athill, Dublin; M.D.; General Registrar, Dublin; Dr. McCarthy, Harwich; The Secretary of the National Association for the Promotion of Social Science; Dr. T. Hayden, Dublin; Dr. Fairlie Clarke, Southborough; Dr. M. Thomas, Glasgow; Sir W. Jenner, London; Dr. A. S. Taylor, London; Dr. H. Simpson, Manchester; Mr. Samuel Jackson, Oldham; Dr. Chevallier, Ipswich; The Editors of the "Analyst"; etc.

BOOKS, ETC., RECEIVED.

Anatomy: Descriptive and Surgical. By Henry Gray, F.R.C.S. Eighth Edition. By T. Holmes, M.A. Cantab. London: Longman, Green, and Co. 1877.
Text-Book of Science: Treatise on Photography. By W. de Wiveleslie Abney F.R.S. London: Longman, Green, and Co. 1877.

ABSTRACT OF CLINICAL LECTURE

ON

A CASE OF ACUTE ATROPHY OF THE LIVER.

By R. SHINGLETON SMITH, M.D.Lond., B.Sc., M.R.C.P.,
Physician to the Bristol Royal Infirmary, and Lecturer on
Physiology in the Medical School.

J. G., AGED 42, married, a labourer, was admitted to the Bristol Royal Infirmary on August 29th, 1876. He stated that he was quite well till a month ago, when he became sick on two or three occasions, and he noticed that his urine had become of a high colour; he felt a little pain in the bowels at times, but it was never severe. These symptoms continued for a fortnight, and then he first noticed that his skin was getting yellow. His usual weight had been fourteen and a half stone, but he had become much thinner during the last month. His general health had been good; he was never laid up from illness, and never had jaundice before. He said that he had not been intemperate, but admitted that he had taken beer freely during the summer, and had been frequently drunk, as often as once a week. He was formerly in the 13th Light Dragoons, and served through the Crimean campaign; since then, he had been to New Zealand, but had never resided in any tropical country.

Condition on Admission.—He was a finely built robust man, well nourished, but found to weigh on August 7th only eleven stone seven pounds. The skin and conjunctiva were very deeply jaundiced. Urine was abundant in quantity, 116 ounces on September 1st, of specific gravity 1012, of a very deep brown colour, with sediment of lithates; no albumen. He did not complain of pain, nor had there been sickness of late. He felt weaker than usual, and was becoming rapidly thinner. He could eat well, but the tongue was furred. The bowels acted regularly, but the evacuations were of a light grey colour. Pulse 52, regular. The sounds of the heart and lung were normal. On examining the abdomen, it was found that the amount of liver-dulness had considerably diminished, there being only just two fingers' width of percussion-dulness in the line of the right nipple, the lower margin of dulness being nearly three inches above the margin of the ribs, the upper line of dulness being about two inches below the nipple. The liver could not be felt by palpation. There was no tenderness on pressure. There was no evidence of splenic abnormality. His temperature on September 1st was 97.6 deg.; and the temperature varied night and morning as follows.

Morning.			Evening.		
September 2	..	97.2	..	98.4	
" 3	..	97.4	..	98.6	
" 4	..	98	..	99	
" 5	..	98.6	..	98.8	
" 6	..	98	..	98.4	
" 7	..	98.2	..	98.8	
" 8	..	98	..	98.6	
" 9	..	97.8	..	98.2	
" 10	..	98	..	97.8	
" 11	..	97.6	..	97.2	

There was no ascites, no enlargement of the abdominal veins, no history of piles, nor of any discharge of blood from the intestinal canal. The pulse varied slightly from day to day. On September 1st, it was 48; and on this day, a trace of albumen was detected in the urine. On September 2nd, the pulse was 64; on the 4th, 48; on the 5th, 52; on the 6th, 56; on the 7th, 64; on the 8th, 72. On this day, it was noticed that the urine had been slightly paler in colour and did not assume so deep a tint on adding nitric acid; the fæces were also found to contain a little bile. On the 9th, the pulse was 76; 122 ounces of urine were passed. On the 11th, the pulse was again down to 56; and on the 12th, the pulse was 60; urine, 130 ounces, specific gravity 1013, darker in colour than before. On the 13th, the pulse was 76; the urine 104 ounces, specific gravity 1013, the colour again lighter, and some bile was again observed in the fecal evacuation. On the 16th, the pulse was 92; urine, 130 ounces, specific gravity 1012, paler; and again there was a little bile in the fæces. He had been slightly delirious in the night. Hitherto his mental condition had been that of health; he had been able to get up, and took food well; but, nevertheless, he emaciated very rapidly. On the 18th, the pulse was again 52; the urine was brighter in colour, but became very deeply coloured

by nitric acid. The pulse was noticed to be irregular and variable in volume. The urine and breath had a peculiar feculent odour. He had been again delirious in the night, and had vomited frequently since the morning before. On the 19th, he was apathetic, but conscious, with no delirium. The vomiting had been allayed by a hypodermic injection of morphia (one-sixth of a grain) and atropine (one-sixtieth of a grain). There had been no vomiting since the injection. The pulse varied from 72 to 96. On the 20th, he became totally unconscious at 3 A.M., and remained so during the day, moaning almost incessantly. The pulse was 120, small and weak. An enema was administered, and some yellow coloured motion came away. There was no return of consciousness, and he died at 3 A.M. on the 21st.

POST MORTEM EXAMINATION, thirty-four hours after death.—The body was fairly nourished, and was that of a very muscular, robust, well built man. The skin was everywhere deeply jaundiced. A scar was visible on the left knee from a bullet-wound received at Balaclava. On opening the abdomen, the liver was not seen, the intestine coming into contact with the diaphragm. The liver, pancreas, and duodenum were removed together, and the common duct, opened above, was traced down to the duodenum; no obstruction was found, a probe passed easily into the intestine; the lining membrane of the duct presented the normal appearance, and the orifice in the duodenum was free. There was a condition of catarrhal-like congestion of the mucous membrane of the stomach and duodenum, and this was particularly marked around the orifice of the duct; the mucous membrane was distinctly stained with bile. The gall-bladder was small, containing only about an ounce of dark-coloured, viscid, inspissated bile; no calculi were present. The liver was small, of about one-half the normal size, not altered in shape, fairly smooth on the surface, of a bright yellow colour. It was firm in consistence, not tearing easily, not easily penetrated by the finger. No marked flattening of the organ was present; nevertheless, it was flaccid, although tough and somewhat leathery. The yellow colour was not uniform either on surface or on section; distinct lobules could be seen of a brilliant yellow colour, but these were separated by a pale interlobular tissue. The pancreas was of a very dark colour externally from bile-staining, but its substance presented nothing abnormal internally. The spleen was small, of u-al consistence. A white patch on the surface, about three-fourths of an inch in diameter, was found to be due to fibrous thickening of the capsule. The kidneys were of a deep brown colour, and congested, but their texture appeared to be healthy. The heart, lungs, and brain presented no marked abnormality.

Examination for Leucine.—The patient's urine was on several occasions examined by Dr. J. Greig Smith, who found that, on concentrating the urine to the consistence of a thick syrup, a whitish-flaky substance collected on the surface of the fluid, consisting of bodies which were found to be globular in form; some of them had concentric markings and some of them assumed a crystalline appearance, with lines radiating from the centre. They were freely soluble in water and in spirit. They were very friable, the pressure of the cover-glass being sufficient to destroy the shape of many of them. Several slides of the leucine-globules were mounted in glycerine jelly; but, in the course of a few days, they changed their character almost completely, and were found to have become much more crystalline than before. A more or less irregular globular outline, looking very much like an oil-globule, the centre of the globule being occupied by a number of fine acicular crystals (tyrosine), which traversed the globules from side to side and did not appear to radiate from the centre, was the condition now prevailing; in some few of the masses, the acicular crystals were seen to project beyond the edges of the globular body.

Leucine was also found in abundance in the liver after death. A small piece of the liver was immersed in methylated spirit, and in two or three days the spirit had assumed a brilliant yellow colour. On filtration, a perfectly clear yellowish fluid was obtained, which after a few minutes' exposure to the air became turbid; this turbidity was due to the precipitation in great abundance of yellowish globular masses of leucine, which were found to be insoluble in ether and in water, and only sparingly soluble in alcohol. When mixed with water, they floated just beneath the surface and would not subside.

Microscopic Examination of the Liver.—Fresh sections, made with Valentin's knife and examined in glycerine, showed the following morbid conditions:

1. Considerable hypertrophy of the fibrous stroma of the organ. The lobules were distinctly marked in consequence of the development of a considerable quantity of interlobular fibrocellular tissue. The whole of the lobules, too, were pervaded by a distinct inter-cellular network of fibrous tissue prolonged from the interlobular growth.
2. An atrophic condition of many of the lobules, their diameter being considerably reduced.

3. Almost complete disorganisation of the liver-cells. Yellowish brown masses, resembling the cells, could be seen here and there occupying the position of the cells; but, under the higher powers, were resolved into granular masses of *débris*.

4. The whole tissues of the organ were pervaded by small globules looking like oil, but many of them were found with higher powers to be leucine-globules.

5. The yellow colouring matter was seen to have crystallised in small rhomboidal masses, looking like minute crystals of hæmatoidine. Many of the leucine-globules obtained from the urine during life, and many of those found in sections of the liver, had lost their original yellow colour, but contained instead one or more minute crystals of hæmatoidine.

After hardening in chromic acid, these appearances were considerably modified.

1. The interlobular stroma resolved itself into a small-celled growth resembling adenoma, and the lobules were infiltrated with cells of a similar character.

2. The liver-cells were much more distinct than before, and now presented the aspect of a cohering mass of brown granules, preserving the shape of the original cells, excepting that they appeared to be smaller than the healthy liver-cell. No nucleus and no distinct oil-globules were visible.

3. The leucine-globules and the minute crystals of hæmatoidine were not present.

It will be observed that the effect of the chromic acid was to reduce the appearance to a condition resembling the early stage of *cirrhosis of the liver*; but the fact that the liver was reduced to one-half its normal size without becoming granular, and without giving rise to any indication of portal obstruction, clearly indicates that the condition was not one of simple cirrhosis. Then, again, the appearance of the hepatic cells, or rather their *débris*, when examined in fresh section not acted on by chromic acid, was characteristic of acute yellow atrophy. Indeed, such an amount of cell-disintegration does not always exist in typical cases of the disease. In one case, examined by M. Robin, quoted by Cornil and Ranvier, it was found that "les cellules, bien que granuleuses, infiltrées de pigment et en partie atrophiques, n'étaient pas détruites. On pouvait les voir en place dans toute l'étendue de l'ilot". It is added that "le tissu conjonctif périlobulaire n'était ni épaissi ni enflammé".

The appearances of acute yellow atrophy are summed up by MM. Cornil and Ranvier as follows. "Telle est la série des lésions des cellules hépatiques, commençant par l'état trouble et l'infiltration biliaire et aboutissant à la fragmentation et en ramollissement destructifs de ces éléments. En même temps le tissu conjonctif périphérique aux ilots et même celui qui accompagne les vaisseaux capillaires des ilots, subit, d'après la majorité des auteurs d'anatomie pathologique, une infiltration albumino-fibrineuse, et on y trouverait des cellules lymphatiques épanchées." The authors themselves have never seen such thickening or inflammation of the perilobular connective tissue; but M. Winiwarter reports a case, fatal in twenty-four hours, in which the condition was marked, and he considers that inflammation of the peripheral connective tissue of the lobule constitutes the initial lesion of the disease in question. The case reported tends to bear out M. Winiwarter's opinion, presuming that we had to deal with a simple disease; but it is quite open to us to consider whether the condition, acute atrophy, was not secondary to early cirrhosis. Pathologically, the interlobular condition was indistinguishable from that of cirrhosis; but, clinically, there had been no indication of any interlobular infiltration or of any interstitial cicatrisation. The habits of the patient and his history were such that an early stage of cirrhosis would be not improbable; and the peculiarities of the case, which distinguish it from a typical one of acute atrophy of the liver, point to the same supposition. These peculiarities were:

1. The intensity of the jaundice, much more so than is usually observed in acute atrophy.

2. The fact that the hepatic dulness had diminished to one-half when the patient first came under observation, and that no further decrease occurred during the following three weeks.

3. The tardiness in the development of the special symptoms—delirium, vomiting, etc.

4. The duration of the disease. Death took place five weeks after the jaundice was first observed, and seven weeks from the commencement of illness. Frerichs states that, of twenty-eight cases, as many as thirteen died in the first week, and only four lived to the fourth week; but he also states that the stage of premonitory symptoms may be prolonged, that jaundice may supervene after several weeks, and even then may exist in the simple form for a period of eight to fourteen days.

5. The absence of petechiæ, and of the various hæmorrhages which are usually present in the later stages of acute atrophy.

6. The toughening of the liver which was found at the *post mortem* examination, and the consequent absence of flattening of the organ, which is usually so marked a feature of the acute atrophic liver.

On the other hand, the features in the case which decisively characterise the disease as acute atrophy were sufficiently prominent. They were:—1. The marked atrophy without contraction, and portal constriction or granulation; 2. The disintegration of the liver-cells; 3. The presence of leucine, detected in the urine during life, and abundant in the liver after death, and the coexistence with it of crystals of hæmatoidine; 4. The low temperature of the patient and the slowness of the pulse, together with the peculiar variations in the pulse during the last few days of life; 5. The more special symptoms of acute atrophy—vomiting, delirium, and coma—which first presented themselves five days before death.

The coexistence of cirrhosis with acute atrophy is a condition not usually recognised by authors. The case is an interesting one, whatever view we adopt concerning it; whether we consider that it establishes the above connection, or whether we regard the interlobular tissue as one of the features incidental to the changes of acute atrophy. If we adopt the latter hypothesis, the case strongly supports the opinion held by M. Winiwarter, that an inflammatory condition of the connective tissue around the lobules forms the initial lesion of the acute atrophic disease.

THE TREATMENT OF AORTIC ANEURISM.*

By HENRY SIMPSON, M.D. Lond.,

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HAVING had, during the last two or three years, cases of aneurism almost constantly under my care, I venture to bring before the Section some of the thoughts suggested by clinical observation. Passing over the causation of the disease, and also all historical retrospect as regards treatment, on account of the brief period allotted to a paper, I will proceed at once to the special subject of my remarks.

The two objects aimed at by treatment are the solidification of the contents and the strengthening of the walls of the sac.

As regards the first, we may adopt measures for retarding the arterial flow by rest, position, diet, and medicines; or we may try to produce deposit of fibrin and coagulation by galvano-puncture, compression, etc. I purposely omit deligation and the various expedients of the surgeon in aneurism affecting the vessels of the limbs. As regards the second indication, there is some evidence that art is not wholly without power to modify the condition of the vessel-walls.

It seems to me that Mr. Tufnell has put before the profession abundant evidence of the influence of rest and the recumbent position in retarding the blood-current and so favouring the deposit of films or layers of fibrin on the wall of an aneurismal sac; and it is probable that position and rest, if carefully carried out, may, in a certain number of cases, be sufficient to bring about the cure of aneurism. I have, however, had no experience of this treatment alone, and it will rarely, if ever, happen that it cannot be aided by other measures.

To reap the full benefit of it, we have to do all we can to make the patient comfortable in body and content in mind during a period of three months, or in some cases even longer. Mr. Tufnell's directions as to the best mode of doing this are extremely judicious, and I would recommend everyone about to treat a case of aneurism to read them carefully. The patient's room should, of course, be "light, cheerful, and airy"; and Mr. Tufnell gives minute directions as to the preparation of the bed, the object being to secure a smooth even surface to lie on. It requires a good deal of self-control, and indeed courage, for a man who may feel perfectly well, with the exception possibly of some slight beating he does not quite like, voluntarily to lie down, knowing that he must not raise himself in bed for some months; but, with intelligent patients, who understand the gravity of their condition, little difficulty is usually found. There is, however, a considerable difference in the way in which patients bear the irksome monotony of enforced quiet, and this difference varies according to the temper and temperament of the individual. Your ingenuity may be well employed in devising means for diminishing the tedium of this period. Cheerful but not exciting books should be provided, which, if held by the patient, ought to be light. It is better, however, for friends to read aloud than for the patient himself to read. Cheerful but not exciting conversation

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is desirable. At the same time, all business anxieties or domestic trouble, and the insignificant but fretting worries which make up a good deal of the unpleasant friction of life, are to be avoided so far as it may be possible. A gentleman who was for some months under my care illustrated the importance of these matters very clearly. He is possessed of large landed property on a part of the coast where a scheme was brought forward to reclaim extensive sands, and I could almost always tell when he had had an interview with lawyers or other people on troublesome business. Emotional excitement will very soon tell on the impulse of an aneurism, and indicate the force of the blood-current distending its cavity.

The judicious use of anodynes will aid in lessening the bad effects of excitement, which, in these times of eager restlessness and arduous struggle, no doubt, plays a more important and more injurious part in illness than in the less ambitious days of our forefathers, when tasks were simpler and wants fewer. The bowels and bladder must be relieved, without raising the patient, by the use of the bed-pan and urinal. With some there is a little trouble as to the bowels, especially at first. The alteration of diet which usually accompanies this treatment, and the loss of exercise, sometimes produce constipation, which, if not speedily overcome, may give great trouble and discomfort. On the whole, I think it is better to give enemata than aperients; but your own judgment will tell you how to deal with any individual case. There is not usually much liability to bed-sores; but, if the skin over any of the bony prominences should threaten the least tenderness, it should be rubbed with brandy or whiskey.

Mr. Tufnell speaks with more confidence as to the effect of position in reducing the pulsation than I should do; for, though it is, I believe, the best means we have, it is one that I have found in some cases almost inoperative. One man, who was under my care for a long period, was so susceptible that I could seldom, if ever, get his pulse down even to the ordinary standard. In this way, the temper and disposition come to be of importance as affecting the circulation, and so influencing the success of treatment. In some cases, the pulse falls readily to 66 or 64; and these, of course, are in a condition much more favourable for the consolidation of the aneurism than where it remains, as in some of my cases, in spite of treatment, as high as or higher than 100.

Next, with regard to the diet; I have been accustomed to recommend a diet almost identical with that which Mr. Tufnell gives, the aim being to reduce the fluid to as small a quantity as the patient can comfortably do with, and so to diminish the quantity of the blood, but, at the same time, to maintain nutrition at a sufficiently high standard. Some patients are comfortable and free from thirst with the quantity of fluid recommended by Mr. Tufnell, *i.e.*, with eight ounces of fluid in the twenty-four hours: two ounces of milk or cocoa at breakfast, four of water or light claret at dinner, and two of milk or cocoa at tea or supper. I have not given the wine, but have often substituted milk for it; nor do I think that, theoretically, it ought to be given. If small quantities only be used, it will perhaps have no bad effect, but is useless, while larger quantities may be mischievous from its effect on the circulation.

With some patients, however, a good deal of discomfort, and even suffering, would have to be endured if this quantity were rigidly enforced; but it is desirable to exceed it as little as possible, and two or four ounces more will meet the requirements of most cases. In a gentleman who had at one time a good deal of sugar in his urine, thirst was a very troublesome symptom, and I was obliged to increase the drink for a time, as he was falling almost into a typhoid condition. Fortunately, the sugar decreased in quantity, and finally disappeared, and, so far as I know, has not returned, as I heard, about a week ago, that he remained in good health. This happy disappearance of so formidable a symptom took place while he was taking salicylic acid.

The amount of solid food can often be kept down to Mr. Tufnell's standard; namely, for breakfast two ounces of bread and butter; for dinner three ounces of cooked meat, with three of potatoes or bread; and for tea or supper two ounces of bread and butter again. If, however, the patient wish more solid food, I should give some more; but, as a rule, a small addition would suffice. It is of importance not to bring it down too low, as our object is by no means to impoverish the blood, but, on the other hand, to maintain it in a healthy condition. I have seen irritability of the heart and a quickened pulse brought on by cutting down the supplies too much, and the heart's action has been quieted by food. It is remarkable, however, that patients will sometimes get comparatively fat on what to many would seem a starvation diet. This was notably the case in a man named Evans, who was for a good while under my care in the Manchester Infirmary with abdominal aneurism, and who left greatly improved in health, and with his aneurism apparently consolidated.

As regards treatment by drugs: anodynes and opiates should be given, when necessary, to relieve pain, allay cough, and procure sleep, in such doses and at such periods as the individual case may require. Your own judgment will be a safer guide than any suggestions of mine; but it seems to me better to give them when needed, and then to omit them, than to let them be taken in a routine fashion, whether required or not. Digitalis is a medicine I have not used much, if at all, in the treatment of aneurism, because, although it might be convenient at times in reducing the frequency of the pulse, the increased force of the cardiac beat would, I think, more than nullify this advantage.

The drug that has attained the greatest popularity of late in this disease is doubtless the iodide of potassium. It seems now almost universally accepted as being beneficial, though as to this there may still be exceptions. One of those sceptical as to its virtues in aneurism was our ever to be lamented friend and associate the late Dr. Sibson. I had some correspondence with him as to a case in which I believe it was very useful, a few months before his death, and the adverse opinion he then gave was subsequently repeated in conversation. He seemed to think that, if it were ever of service, syphilis was concerned in the production of the disease. In the case referred to this could, I think, certainly be excluded; and I should by no means limit its employment to cases where we either know or suspect a syphilitic influence.

Two opinions have obtained with reference to its action: one that it helps to solidify the contents of the sac by increasing the coagulability of the blood, and the other that its influence is in some way exerted on the walls of the vessel. Its latest and warmest advocate, Dr. G. W. Balfour, has brought forward strong testimony as to its beneficial effects, and, from his large experience, any opinion he may have formed of its action is entitled to our greatest respect. He thinks that, in some way or other, its influence is exerted not on the blood, but on the vascular walls; "that relief is obtained by some peculiar action on the fibrous tissue, whereby the walls of the sac are thickened and contracted; while, if coagulation should take place within the sac, it plays but a very secondary and unimportant part, depending for its occurrence solely on the remora of the blood, and is in no respect due to the iodide of potassium". I entirely agree with this view of its action, and am not aware of the existence of any evidence showing that it does in any way cause coagulation of the blood in the aneurism, or directly bring about the deposition of fibrin on the walls of the sac. The only point that suggests itself to my mind is that, if it favour the induration of the sac-wall and the production of calcareous plates, a projecting fragment or roughened surface may lead, in some instances, to a minute deposition of fibrin which would serve as a nucleus for further accretion. My experience also leads me to endorse his statements as to the remarkable effect it so often has in relieving the pain accompanying aneurism. Sometimes it produces coryza, but certainly, I think, as seldom in large as in small doses, if not more seldom. How this is I do not pretend to say, nor do I attempt to explain its action in syphilis or rheumatism, though, in all these cases, we may believe that it is chiefly exerted on the fibrous tissue.

When first I began to use iodide of potassium in aneurism, I gave about five grains for a dose, and gradually increased it to twenty or thirty; but, for some time, I have at once put the patient on full doses, as saving time and more quickly producing saturation of the system. Tolerance of the drug is the rule; and, when exceptions occur, the dose may be diminished or its use given up for a day or two, or various combinations may be employed. I frequently give with it small doses of carbonate of ammonia and a vegetable bitter. By some, the administration of the iodide is dreaded from the fear of its depressing effect; but I cannot recall an instance where it has had to be omitted on this account, and have often remarked on the fact that it may be given for long periods, not only without injury, but apparently with benefit to the general health. The assimilation of food and the nutrition of the body go on unimpaired; and one patient, as I mentioned before, contrived to lay on flesh under the somewhat rigid diet recommended by Mr. Tufnell, while he was taking half a drachm of the iodide three times a day.

But, while it gives great and even wonderful relief to the patient, who, in consequence, is apt to think in a few days that he is almost well, and will be so very shortly, I am bound to say that, even with the important auxiliaries of perfect rest in the recumbent position and a carefully regulated diet, some of my cases have not improved as I could wish, and the aneurism has progressed. How far this could be prevented by increasing the dose of iodide I cannot say, and shall be glad to know the experience of the members present. I have seldom, if ever, pushed the dose beyond two scruples thrice a day. It is important, I think, to bear in mind the injurious effect of any im-

poverishment of the blood in keeping up an irritable condition of the heart, and to try to remedy this by giving some mild preparation of iron.

Sometimes I have found, when an aneurism has enlarged rather rapidly and begun to protrude externally, good effects from the application of ice, which has been soothing to the patient, and has apparently had a sedative influence on the vascular system. But, in several instances, more striking benefit has followed the employment of galvano-puncture. He was a bold man who first passed a needle into an aortic aneurism, and we who follow are sometimes apt to forget the sagacity and courage of our pioneers.

I have employed this method in five patients, and, in some of these, have repeated it several times. Two cases have been recently reported in the *BRITISH MEDICAL JOURNAL*: one patient, a man named Butler, is now in the Manchester Infirmary, and I have twice assisted my colleague Dr. Dreschfeld with one of his cases. It has also been used by Mr. Heath in a case of subclavian aneurism under the care of our President Dr. Wilkinson. I ought not to omit another case operated on several years ago by my colleague Dr. Browne, where it was very beneficial. The only instance where any ill-effects have followed was in Bowker's case reported in the *JOURNAL*.

The conclusions at which I have arrived so far, subject of course to correction or modification as experience increases, are briefly as follows. I do not look upon galvano-puncture as the treatment for aneurism generally; it can be used only when the tumour projects on the surface, or when we are sure that it is in contact with the parietes, no viscus intervening. The last condition is one which will very easily allow of its being used in abdominal aneurism.

In aneurisms of the thoracic aorta, it is more likely to be useful when they are sacculated than when fusiform. Sacculatation is an important element, as the contents of the sac, being out of the main channel, are comparatively quiet, like the gentle eddy close to the current of a rapid stream, yet are not altogether motionless, and so are in a favourable condition for the deposition of fibrin.

I may remark that the statistics collected by Dr. John Duncan show a better result in external aneurisms than in those of the aorta; but of its use in these cases I have no personal experience. My impression would be that they would be better suited for the ordinary surgical proceedings, such as deligation and the various modes of compression, which are inapplicable, of course, to the cases we have to consider. But, even in those most fit for galvano-puncture, I should abstain from its use until the other means mentioned had been carefully and thoroughly tried, except possibly where the patient could not or would not submit to prolonged rest, or where hæmorrhage seemed imminent. Two objects have been aimed at by this method: the coagulation of the whole contents of the sac, on the one hand, and, on the other, the production of a comparatively small but firm clot, which may serve as a nucleus for the further deposition of fibrin. When two needles connected with the poles of a galvanic battery are introduced into a solution of albumen, it is well known that a large loose clot containing much hydrogen gas in bubbles entangled with it is formed at the negative pole, while at the positive pole the clot is small, firm, and white, which fact lies at the foundation of the electrolytic treatment both of tumours and aneurism. Dr. Poore gives a good summary of the subject in his very useful book on *Electricity in Medicine*. The method I have employed in the treatment of aneurism is briefly as follows. Most frequently I have inserted one, two, or, in some cases, three needles into the aneurism, endeavouring to make sure as to the penetration of the sac, which is pretty clearly indicated by the oscillation of the needles, but not passing them more deeply than from one-fourth to one-half an inch. The object of this is to have the clot formed in contact with, and adherent to, the sac wall, so that, on the withdrawal of the needle, it will not be floating loose in the cavity of the aneurism. These needles I have connected with the positive pole of Foveaux's battery, with few exceptions, while the negative pole has been applied to the walls of the chest by means of a large sponge moistened with salt and water, and moved about if the skin have become reddened. This proceeding was adopted, of course, from the wish to produce a small firm clot on which further deposit might take place. Twice or three times recently, I have introduced two needles and connected one with each pole of the battery, because we are thus most certain of producing electrolysis of the blood. The results, however, have not been so much more favourable or better marked than those following my first procedure, though no bad effects have followed, that, on the whole, I feel disposed to return to it.

The first method would produce a firm though comparatively small clot, highly favourable as a nucleus for further deposit. The second would produce a larger though looser clot, and, in some instances, coagulation of the whole contents of the sac might take place. But,

when a large coagulum has been rapidly formed, it has not always been stable, and pulsation has returned in the sac. This suggests the danger of embolism, though I am not aware of any record of its actual occurrence, unless we consider the peculiar and remarkable case mentioned by Dr. Clifford Allbutt as one of this nature.

It seems to me that the first method is safe, and, so far as my experience goes, it may be called satisfactory, and that there are fair grounds for the hope that it will be more so in the future, as our knowledge of its uses and limitations becomes more exact.

With regard to the second, though Dr. Duncan gives the weight of his great authority to the rapid coagulation of the whole contents of the sac, I should be disposed to use it as a sort of forlorn hope to avert death, if rupture or hæmorrhage were imminently threatened. Great pain has been said to attend galvano-puncture; but such has not been my experience, except on one occasion when Stöhrer's battery with large elements was used, and then only when ten or twelve pairs were in action. This freedom from pain was, no doubt, due in great part to the perfect insulation of the needles where they were in contact with the skin, and also to the employment of a battery consisting of small elements. In all the cases where the positive needle was passed into the aneurism, the point became blackened and sometimes much corroded; but increased firmness and consolidation of the tumour have certainly taken place when the amount of action on the needle has been small.

And this suggests the question whether, in some cases, part of the effect may not have been in some measure due to the needle merely acting as a foreign body. I may say that, in all my cases, the condition of the battery has been tested. The current has been passed through the tumour for a variable period, most frequently for about two hours; and, where pain is not produced, there seems no reason why this should not even be exceeded.

Dr. Duncan gives the dangers of galvano-puncture, as hæmorrhage and inflammation of the sac or its contents; for we may practically exclude embolism. The first is best avoided by using well insulated needles, which we may almost take for granted will be invariably employed. In Riley's case, recorded in the *JOURNAL* of July 14th, death took place from syncope, preceded by slight hæmorrhage; but, in his case, galvano-puncture was used almost as a forlorn hope. Should a similar case occur to me again, I should probably introduce two needles and connect one with each pole of the battery, in the hope of producing rapid coagulation of the whole contents of the sac.

In Bowker's case, recorded in the same *JOURNAL*, though no bad symptoms occurred for a fortnight after the operation, I am disposed to blame the battery—Stöhrer's, with large elements—rather than galvano-puncture itself for the abscess involving the sac and its contents, which led to his death from hæmorrhage. The best mode of avoiding this danger seems to be by using a battery of small elements.

I have had no experience of the ligation of a distal branch of the thoracic aorta as used by Mr. C. Heath, nor of compression of the abdominal aorta, as successfully adopted by Dr. Philipson, and therefore will not discuss them in this paper.

Such is a brief and fragmentary sketch of the principles and practice I have been led to adopt in the treatment of aneurism. They are very simple. Rest in the recumbent position, maintained for a long period and most carefully and thoroughly carried out. This is of importance if benefit be looked for. The avoidance as much as possible of all sources of excitement. The use of suitable anodynes to relieve pain, allay cough, and procure sleep. A careful but sufficiently nutritious diet, with as small a quantity of fluid as the patient can comfortably bear; the exhibition of iodide of potassium in full doses for a long period, and of iron if there be any anæmia. Where these means have been insufficient, I have used galvano-puncture with a sufficient amount of success to justify me in adopting it again in suitable cases.

In all my patients, life has been prolonged and much relief obtained. In four, what we may almost venture to call a cure has been effected, though I should always be cautious in speaking positively as to the cure of a disease where, when things look most promising, a thin film or a portion of clot hidden from view and inaccessible to observation may be all that separates life from death. Three deaths have occurred: two already recorded, and the third where the patient was removed from treatment by the occurrence of violent mania, though even here he only succumbed after many months of apparent health. Other cases are still under treatment with prospects more or less encouraging. I must not burden this paper with cases, but hope shortly to give a brief record of them.

In conclusion, I would venture to hope that my experience, though chequered, is not so dark as to discourage those who have to undertake the treatment of internal aneurism.

TWO CASES OF ANEURISM OF THE ABDOMINAL AORTA;

ONE CURED BY THE ADMINISTRATION OF IODIDE OF POTASSIUM, THE OTHER BY ARTERIAL COMPRESSION.*

By G. H. PHILIPSON, M.A., M.D. Cantab, F.R.C.P. Lond.,
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DURING the year 1876, two hundred and sixty-seven patients were admitted at the Newcastle-upon-Tyne Infirmary, under my care, of whom one hundred and eighty-three were in-patients and eighty-four were out-patients. Of the whole number, four were suffering from aneurism; one of the arteria inominata, and three of the abdominal aorta. Of the three cases of abdominal aneurism, I propose giving the particulars of two; the third patient was only eight days in the hospital. For comparison, therefore, this case is of little value, and, consequently, will not be recounted.

CASE I.—Robert R., aged 26, labourer, married, living at Crook, in the county of Durham, was admitted on June 8th, 1876. He stated that he had been unable to follow his employment for nine weeks, in consequence of pain in the back, which pain was severe and passed round the abdomen to the region of the umbilicus, where, at times, it was excruciating. Upon carefully examining the abdomen, a faint pulsatile prominence was seen near the umbilicus, at which situation, upon placing the hand flat, yet firmly, a pulsation was felt, more to the left of the umbilicus, which pulsation was expansile in character. At the spot where the pulsation existed, there was dulness upon percussion, and a blowing systolic murmur was heard. Upon auscultating the left vertebral groove, a distinct systolic murmur was heard. The respiration, over the whole of the chest, was of natural frequency and character. The heart-sounds were normal. He was of sanguineous temperament, and in good nutrition. He had no knowledge of having sustained a fall, blow, or strain, and denied ever having suffered from syphilis. The case was regarded as one of aneurism from the following physical signs: the pulsation visible, perceptible, and expansile; the dulness upon percussion; and the murmur heard at the site of the pulsation in the abdomen and in the left vertebral groove. And further, it was inferred that the aneurism was of the abdominal aorta, from the situation of the pulsation, and of the variety, lateral, sacculated, and not peripheric, dilating, from the pulsation and the dulness being to the left of the umbilicus.

The patient was selected for the clinical medical examination for degrees in Medicine of the University of Durham. The diagnosis was confirmed by my colleague Dr. Arnison.

The patient was ordered to maintain the horizontal position in bed, to take ten grains of the iodide of potassium in one ounce of water, three times each day, and to have the ordinary meat diet.

June 15th. Of his own accord, he mentioned that he was sensible of a beating in his abdomen, and that he had experienced a beating for fully six weeks previous to his admission. The iodide of potassium was increased to fifteen grains.

June 24th. The pulsation was decidedly less forcible. The iodide was increased to twenty grains.

July 1st. He still complained of pain in the back and round the abdomen. The pulsation was less expansile. No murmur was heard. The iodide was increased to twenty-five grains.

July 8th. There were still paroxysms of pain, accompanied with difficulty in micturition. The iodide was increased to thirty grains.

July 15th. The pain was less severe, more continuous. Upon careful palpation, scarcely any pulsation was felt. The iodide was increased to thirty-five grains.

July 22nd. There was now very little pain. The iodide was increased to forty grains.

July 29th. No pulsation was visible or perceptible; no murmur.

August 12th. As no pulsation had returned, or murmur was to be heard, the patient was permitted to leave his bed for a portion of the day. The iodide of potassium was continued in doses of forty grains.

The condition of immunity from pulsation and from murmur continued, and he left the hospital on October 7th, 1876, to resume his occupation. He was instructed to present himself after an interval of two months, which he did on December 20th, 1876, when after very careful examination, no pulsation was detected, nor was any murmur heard. He expressed himself as feeling well, free from pain, and had been able to continue at work as a general labourer.

CASE II.—John H., aged 25, married, a shingler at the Ironworks,

living at Stockton-on-Tees, was sent to me by my friend Dr. R. W. Foss of that town on October 28th, 1876, as a patient suffering from abdominal aneurism, to be placed under treatment in the Newcastle Infirmary. After careful examination, I coincided with Dr. Foss in the opinion expressed, and gave instructions for the patient to be admitted into the Infirmary.

On October 30th, my colleague Dr. Embleton, the Senior Physician to the Newcastle Infirmary, being at that time engaged in delivering the clinical medical lectures, selected this patient for examination and consideration by the class of students in medicine, as a case exemplary of abdominal aneurism. The patient stated that for four months he had been unable to follow his employment, on account of pain in the back, more especially in the lumbar region, and at times round the lower part of the abdomen and the inner surface of the thighs. He described the pain as "burning" and "plunging". For five weeks, he had been sensible of a beating in his abdomen near the umbilicus. On the abdomen being uncovered, it was noted that there was a prominence, which pulsated. The site of the pulsation was to the right of the umbilicus, and for about one inch above the umbilical line. The pulsating surface was smooth to the eye. When the hand was placed on the prominence, a tumour was distinctly felt, equal to an ordinary orange in size, which pulsated out of proportion with the moving mass. On the anterior prominence, the hand received a single systolic impulse of considerable force. The hands placed on each side of the mass received an impulse laterally as well as anteriorly, which impulse was distinctly expansile. The chief pulsation was to the right of the spine. The tumour was immovable, and was dull upon percussion. A slight thrill was perceptible, which was systolic; a second impulsive or shaking action, diastolic in time, was also felt. Upon auscultation, a systolic murmur was heard. Upon applying pressure to the abdominal aorta, between the tumour and the ensiform cartilage, the pulsation in the tumour and in the femoral arteries was arrested. Upon being interrogated respecting syphilis, he admitted that, five years ago, he had suffered from gonorrhœa, and from a bubo which had suppurated; but had not suffered subsequently from sore-throat or eruption. In his occupation, he had been exposed to great heat, and had been accustomed to drink largely of ale, some days taking as much as ten pints, and, at times, spirit in addition. He was fair in his complexion, and of a spare build. The case was regarded as one of aneurism of the abdominal aorta, situated just above the bifurcation, and in variety as lateral, sacculated, and enlarging to the right. He was ordered to remain quiescent in bed, in the recumbent position, to take ten grains of the iodide of potassium in one ounce of infusion of quassia three times each day, and to have the ordinary meat diet.

November 8th. He complained of having a troublesome cough. Upon careful examination of the chest, sonorous rhonchi were heard on both sides, but nothing more abnormal. He was ordered the customary cough-mixture each night.

November 11th. He stated that his cough was much relieved, but that the pain was still severe in the back and loins. Upon inspection, no pulsation was recognised. Upon auscultation, no murmur was heard. Upon palpation, the pulsation was less forcible, and the tumour was smaller. The iodide was increased to twenty grains.

November 18th. The pain in the back had been less severe. The pulsation was more evident to the eye, and was more perceptible to the hand. It was elicited that the patient, against the instructions given, had been leaving his bed each day. Quiescence was again strictly enjoined. The iodide was increased to thirty grains.

November 25th. The pulsation was very slight. The iodide was increased to forty grains.

November 29th. A pustular eruption had appeared on the forehead and chest.

December 1st. The pulsation had continued very slight. After consulting with Dr. Embleton, it was determined to employ arterial compression on the cardiac side of the aneurism.

December 2nd. The patient being uninfluenced by chloroform or other anæsthetic, Lister's abdominal tourniquet was applied to the abdominal aorta, four inches above the umbilicus, by Mr. G. E. Williamson, senior house-surgeon, who was aided by Mr. J. D. Dixon, junior house-surgeon; Mr. G. B. Craig, clinical clerk; and Mr. A. M. Goyder, clinical clerk. I readily avail myself of this opportunity of acknowledging the kind and valuable assistance of these gentlemen, and of expressing my appreciation of their willingness to carry out my wishes. The compressing pad was firmly screwed down, but the patient complained of such extreme pain, that the administration of an anæsthetic was necessitated. He was at once placed fully under the influence of chloroform, and the compressing pad was screwed down until pulsation was arrested in the aneurism and in both

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

femoral arteries. The pressure was continued for half an hour, and upon being removed, the pulsation in the aneurism immediately returned.

December 5th. The patient was placed fully under the influence of chloroform, and the pressure was applied in the same manner as before stated, and was continued for three-quarters of an hour; and upon its removal, the pulsation returned as before.

December 8th. When the patient was fully anaesthetised by chloroform, the pressure was applied in the same manner as on the two preceding occasions; and while it was being continued, the radial pulses became so feeble that it was deemed expedient to discontinue the administration of chloroform, and to maintain the anaesthesia by ether, under which the circulation revived. The pressure was maintained for one hour and a half (from 8.30 P.M. to 10 P.M.), and upon its removal, the pulsation in the aneurism returned as before.

At 1 A.M., on December 9th, the clinical clerk was hastily summoned, and found the patient restless, complaining of pain in the abdomen, which was general and not fixed to one spot, and passing bloody mucus from the bowels. A hypodermic injection of morphia (one-third of a grain) was administered, and a draught containing thirty minims of the tincture of the perchloride of iron in water was given internally.

December 9th, 11 A.M. The patient was still restless, passing bloody mucus from the bowels, vomiting and retching continuously, and complaining of general pain in the abdomen. He had passed urine, which was of specific gravity 1020, and contained no albumen. Upon very careful examination of the aneurismal tumour, the pulsation was considered to be more marked than it had been previously to the application of the pressure. He was ordered to take milk with potash-water, to have a morphia suppository (one-third of a grain) administered in the evening, and to continue the iron draught every four hours.

December 10th. Mr. Williamson, at his morning visit, observed that the aneurismal tumour felt harder, but was still pulsating; and at his evening visit, found that there was no pulsation in the tumour or in the femoral arteries. The patient still complained of pain and uneasiness in the abdomen, and was occasionally troubled with vomiting, and voided bloody mucus *per anum*.

December 11th and 12th. The patient's condition had remained unchanged, excepting that the temperature of the lower extremities had been perceptibly diminished, and had required the application of additional blankets and the hot-water tin for the maintenance of warmth.

December 13th. The vomiting had ceased and the passage of bloody mucus had stopped. The radial pulse was 60 and steady. At the site of the former pulsation, in the abdomen, there was a hard tumour, of about the size of a cricket-ball. There was no pulsation visible or perceptible to the hand, and no murmur was heard. Upon careful palpation in the line of the abdominal aorta, on the cardiac side of the aneurism, no pulsation was discernible. At the ensiform cartilage the heart-sounds were distinctly heard; but, about one inch and a half below the ensiform cartilage, no sound was heard, and no sound was recognised in the line of the abdominal aorta. The heart-sounds were normal both at the base and the apex. There was no pulsation in either femoral arteries. There had been no suppression of urine, and the urine in character had been normal, of specific gravity 1020, and had contained no albumen. There had been no complaint of headache or of change of vision, or alteration of any of the special senses.

Perfect repose was enjoined, and he was ordered to continue the milk and potash-water.

December 16th. The patient had continued easy. The radial pulse was 72, and regular. The bowels have acted naturally, and the evacuation was free from blood. The tumour was decidedly smaller and was less hard.

December 20th. In both groins some pulsation was noted, weak but distinct, and not in the situation of the femoral arteries. Upon deep pressure, a cord could be felt on each side, which was regarded as the femoral arteries. The cord did not pulsate. In the posterior-tibial arteries slight pulsation was perceptible.

December 23rd. The tumour had considerably diminished in size. The patient was permitted to be raised in bed upon the rest, and was allowed the ordinary meat diet.

December 27th. The temperature of the lower extremities had increased, so that the hot-water tin had been dispensed with.

December 30th. At the site of the aneurism, there was not anything to be seen, felt, or heard. The condition of the abdominal aorta remained as last stated, and there was no pulsation in the femoral arteries.

January 10th, 1877. For the last fortnight the patient had been walking about in the ward. When interrogated, he answered that he was quite free from pain or other discomfort, and that "he felt as well as

he had ever done in his life". He expressed himself as wishful to return to his home; but when informed that it was important for him not to resume his previous occupation, he readily consented to remain.

At the monthly meeting of the Northumberland and Durham Medical Society, held on Thursday, January 11th, 1877, the patient was introduced, the site of the aneurism was pointed out, also the position where the compression had been applied; and it was demonstrated that there was no pulsation in the aneurism, in the abdominal aorta, or in the femoral arteries.

January 31st, 1877. The patient was placed under the influence of ether, and a careful examination was instituted. At the site of the aneurism, no tumour was distinguished. Some arterial pulsation was felt to the left of the umbilicus, which was regarded as the enlarged colica sinistra branch of the inferior mesenteric artery. In all respects the condition was satisfactory.

On February 1st, 1877, the patient left the Infirmary to return to his home.

As Case No. 11 undoubtedly was cured by the compression of the abdominal aorta, it will be desirable that reference should be made to the first recorded case of the cure of an aneurism of the abdominal aorta by pressure, which case occurred in the practice of Dr. William Murray of Newcastle-upon-Tyne, in the year 1864. The interest and value of the case are enhanced by the importance of its verification on necropsy.

The following outline of the case is taken from Mr. Timothy Holmes's Lectures on the Surgical Treatment of Aneurism, delivered before the Royal College of Surgeons of England, in the year 1872, and reported in the *Lancet*. "The patient was a spare young man, aged 26. The tumour was situated so high that the aorta was believed to be felt below it, pulsating naturally. It extended up to within three inches of the margins of the left ribs. Still there was room between the umbilicus and the ribs for the pad of the tourniquet, which was applied on the first occasion (April 16th, 1864) for two hours, and on the second occasion (April 19th, 1864) for five hours. On neither occasion was the circulation completely and permanently suspended, except for the last hour of the last and successful attempt. At the end of the second application of pressure, 'very slight pulsation was felt, and hopes were entertained that some advantage had been gained'; but, to the operator's surprise, the pulsation in the tumour altogether disappeared that evening, and the cure was complete and permanent. The man remained well, gaining his livelihood by a 'variety of labouring occupations', till the year 1870, when, having resumed his original occupation of a pavior, he again presented symptoms of aneurism of a higher part of the abdominal aorta, and died on July 1st, 1870, from rupture of this aneurism, which affected the vessel near the coeliac axis. The preparation which was removed from the body showed the first aneurism perfectly consolidated, and seated in the abdominal aorta, extending from close above its bifurcation to about an inch above the origin of the inferior mesenteric artery. The aorta was occluded above the aneurism and its walls atrophied. The aneurism itself was also converted into a fibrous mass. The aorta was largely dilated up to the new aneurism, which had become 'diffuse' before death. As regards the collateral circulation, outside the abdomen, 'it was carried on between the internal mammary and the deep epigastric; between the hepatic artery and a branch of the epigastric; between the intercostals and the deep epigastric; between the intercostals and the superficial epigastric; and between the lower intercostals with the superficial circumflex iliac'. Within the abdomen, 'the circulation was carried on between the colica media of the superior mesenteric artery and the colica sinistra branch of the inferior mesenteric, including its sigmoid and hæmorrhoidal branches; between the upper lumbar arteries and the ilio-lumbar; and between the lower lumbar arteries and the circumflex ilii'. The superior mesenteric artery was dilated to nearly the size of the aorta itself, and the trunk of the inferior mesenteric was so much dwindled that its trunk was hardly half the size of its branches, in consequence of its supply of blood being cut off by the consolidation of the aneurism from which it springs."

REMARKS.—In contrasting the two cases that have been recounted with each other, and Case No. 11 with Dr. Murray's case, it would appear that the establishment of the diagnosis of aneurism, the correctness of the situation fixed upon of the aneurismal tumour, the etiology, the anatomical or specific character of the aneurismal sac, the treatment that was employed, the changes consequent upon the treatment, and the deductions inferable from the treatment, are the points for critical disquisition.

Diagnosis.—In both cases there was a tumour, which was immovable, which pulsated to the eye and to the hand, which was dull upon percussion, and upon auscultation of which a murmur was heard. Now,

such physical signs, when in association, are evidence of aneurism, and of no other kind of tumour, let it be glandular, cancerous, hydatid or other, or of psoas or iliac abscess.

Situation of the Aneurism.—In both, it was looked upon as of the abdominal aorta, near its bifurcation. The position and the immobility of the pulsating tumour, together with the neuralgic pains in the spine, pointed to the correctness of the supposition; while the fact that the cure of the aneurism, in Case No. II, was accompanied by the disappearance of the pulse in the femoral arteries, rendered the possibility of the aneurism being situated in the inferior mesenteric artery, or in one of its branches, as highly improbable.

Etiology.—Both patients were under thirty years of age. The history of previous syphilis in the second was clear. The supposition, therefore, that in both the lesion of the arterial coats was inflammatory in nature, and not atheromatous, was rendered very certain. If it be true that, in this lesion, an inflammatory process commences just external to the lining membrane, leading to a deposition of lymph there, producing elevation of the internal surface, and, as a consequence of the pressure and of the interruption of the nutrient supply, atrophy and erosion of the endarterial membrane, it may readily be understood how easily the already thinned arterial wall will dilate, and become in time converted into a lateral sacculated aneurism.

Anatomical or Specific Character of the Aneurism.—In both, it was observed that the aneurism was of the lateral sacculated variety. In the first case, the sac was enlarging to the left; in the second, to the right. Whilst coagulation of the blood within the aneurism is scarcely obtainable in the peripheric dilating aneurism, in the lateral sacculated variety there is a natural tendency to such coagulation, and coagulation does actually promote anatomical cure. Hence, it would seem that the clinical distinction of these two great varieties of aneurism is not mere scholastic refinement, but of practical importance. For this reason, therefore, is the value of estimating the physical condition of the aneurism; for upon such determination is the treatment to be decided upon.

In the treatment, whether constitutional or mechanical, the principle was recognised that it is necessary for the circulation to be enfeebled or impeded, in order that the aneurismal sac may become filled with the constituents of the blood, and in process of time rendered impervious; the term constitutional treatment being regarded to include the dietetic, medicinal, and postural requirements. In the first case, the object was gained by constitutional treatment alone; in the second, by mechanical treatment, after the constitutional treatment had been unprofitable. The effect, then, of the administration of the iodide of potassium, in association with the rest and the regulated diet, in the first case, may be conjectured to have been the gradual filling, with the constituents of the blood, and the subsequent shrinking of the aneurismal sac, but without obliteration of the aorta, on the cardiac side of the aneurism, the circulation in the arteries on the distal side of the aneurism continuing uninterrupted. In the mechanical treatment, that by the application of pressure, more than this is effected; for it may justly be assumed that the current of the blood along the aorta, and thence into the aneurism, is either wholly or in a great measure arrested. This temporary condition of the aorta and of the aneurism being the same, or nearly similar, to that which arises when a ligature is applied to a large artery on the cardiac side of an aneurism, namely, upon the drawing tight of the ligature, there would be a cessation of the pulsation and of the murmur in the aneurismal tumour, which would at the same time subside, becoming partially emptied of blood. Though the direct flow of blood is arrested by the ligature, after a varying interval of time, blood will enter the aneurismal sac by the interosculating circulation; and it is from this blood that the sac becomes filled, it is supposed, by fibrin, deposited in stratified layers, as in spontaneous cure of the disease. So far, therefore, the mechanical treatment of aneurism by arterial compression, and that by the application of a ligature on the cardiac side of the aneurism, may be compared, and may be regarded as analogous; but, when the compression is removed and the blood again circulates, the condition is very different—in that, where the compression has been employed, the blood circulates directly, passing to the aneurismal sac in its usual channel; but where a ligature has been applied, the blood comes indirectly to the aneurismal sac, passing in a circuitous route. The question presents itself: is this difference such as to determine the deposit of the constituents of the blood, either in laminated fibrin or in coagulum? The interval of time that elapsed between the compression and the consolidation would be in favour of laminated fibrin being first deposited, and subsequently that a coagulum was superadded, filling the aneurismal sac and blocking the aorta. This is the explanation that is offered. The difference of time in Case No. II, in Dr. Murray's case, and in others, for the process to be accomplished, possibly was dependent upon constitutional differences,

more especially upon a difference in the quality and plasticity of the blood.

If it be admitted that the supposition is the correct one: that the filling up of the aneurismal sac is by stratified fibrin, and finally by coagulation of blood, it is unnecessary to apply pressure to wholly interrupt the circulation; but rather moderate compression only is necessary to lower the force of the circulation, and the mechanical treatment should be in accordance with the constitutional treatment.

The channel through which the blood was carried, after the cessation of the circulation in the abdominal aorta, in Case No. II, for the present is visionary; but, from the similarity of the position of the aneurism to that in Dr. Murray's case, which was disclosed on necropsy, and which it was deemed expedient to give when the case was referred to, it may be presumed that the circulation was similarly carried on.

The bloody mucus that was passed *per anum* was regarded as the result of the congestion of the intestinal vessels, following upon the pressure—not the consequence of rupture of the vessels produced by the compressing pad; for, if such had been the condition, blood, either liquid or in the condition of coagulum, would have been voided.

The conclusion deducible from this consideration is, that aneurismal tumours of the lower portion of the abdominal aorta may be successfully treated by arterial compression on the cardiac side of the aneurism; but that this method is a dangerous one, and should not be employed until the constitutional treatment has failed; and that, if arterial compression be employed, it should be moderate and prolonged, rather than complete and of short duration.

A CASE OF CONGENITAL CYANOSIS, IN WHICH A PATENT FORAMEN OVALE WAS ASSO- CIATED WITH A PRESYSTOLIC BASIC MURMUR.

By GEORGE JOHNSON, M.D., F.R.S.,

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ON June 1st, 1870, I had, through the kindness of my friend Mr. Charles Hood, the opportunity of examining an inmate of the British Home for Incurables, who from his birth had been cyanosed. I copy *verbatim* the notes which I made on the day of the examination.

"Henry Burgess, aged 27, has been blue from birth; has spat blood; legs œdematous and purple; thumbs and fingers clubbed; pulse feeble, rather small. A bellows-sound over base, alternating with the impulse, rather presystolic than diastolic. The probable cause is a current of blood from the stronger left to the weaker right auricle through the open foramen ovale during the auricular systole. The blueness, the hæmoptysis, and the œdema of legs, are consequences of overfulness of veins, the result of arterial blood going from the left to the right side. He often has headache and giddiness. The normal second sound (valvular click) scarcely audible."

I saw the patient only on that one occasion; and I heard no more of him until the 23rd of last November, when I received a note from Dr. Fairfield, the Medical Officer of the British Home for Incurables, informing me of the man's death, and inviting me to attend the inspection of the body on the following day. Unfortunately, I was unable to attend; but Dr. Fairfield did me the favour to send me the following "Notes of the *post mortem* appearances. Henry Burgess, aged 35. Cyanosis. November 24th, 1877. Lungs healthy. Liver and spleen much enlarged. Heart of an extraordinary size, with open foramen ovale about as large as a five-shilling piece. The hypertrophy general, but especially the right ventricle. The walls of great firmness when cut through, measuring an inch in thickness. Chambers much enlarged. Weight of the heart estimated at twenty ounces. Pulmonary artery natural size; valves properly formed; ventricular septum complete; mitral and aortic openings natural; valves healthy; large vessels in connection with the heart regularly distributed."

I regret that I have not a more complete history of this interesting case of uncomplicated patulous foramen ovale; but there is, I think, conclusive evidence that the presystolic basic murmur was the result of a current of blood through the foramen ovale during the auricular systole; and that the current was from the left to the right auricle is rendered nearly certain by the evidence of systemic venous fulness, with comparative arterial emptiness. The general lividity, the enlargement of the liver and spleen, and the œdema of the legs, are all results and evidence of systemic venous engorgement. The hæmoptysis, too, was probably a result of bronchial venous and capillary congestion; the bronchial veins forming part of the systemic venous system, and opening through the vena azygos and the left superior

intercostal vein into the superior vena. Again, the great hypertrophy of the right ventricle is to be explained partly by the extra effort required to propel the excess of blood on the venous side of the heart; partly, perhaps, by the impeded passage of a mixture of arterial with venous blood through the pulmonary arterioles: an impediment analogous to that which a mixture of venous with arterial blood encounters in the systemic arterioles. On the other hand, the deficiency of blood and of pressure in the systemic arteries is indicated by the radial pulse being "feeble and rather small", and by the "normal second sound (valvular click) being scarcely audible". There is, I admit, a deficiency in this part of my clinical record. I ought to have noted the second sound over the pulmonary and the aortic valves respectively. It seems probable that, while the aortic second sound was enfeebled by the want of tension in that vessel, the pulmonary second sound to the left of the sternum may have been intensified by the increased tension resulting from the hypertrophied right ventricle and the before suggested resistance in the pulmonary arterioles.

This case throws no light upon the disputed question of the relative share which venous turgescence and the admixture of venous with arterial blood respectively have in causing cyanosis. As I have already pointed out, there was abundant evidence of systemic venous engorgement; but there was probably also some mixture of venous with arterial blood in the left auricle and ventricle, and therefore in the systemic arteries. It seems likely that this would occur in the following mode. During the systole of the auricles, the right auricle, in consequence of the influx of blood from the left through the foramen ovale, would empty itself less completely than the left; then, during the succeeding auricular diastole, some blood would flow from the partially filled right auricle into the left. There would be a to-and-fro tidal flow of blood through the open foramen ovale, an active propulsion of arterial blood to the right during the auricular systole, and a passive flow of venous blood to the left during the auricular diastole. The general result would be an excess of blood in the right cavities of the heart and in the whole systemic venous system, with some mixture of arterial and venous blood in the left cavities and in the systemic arteries.

In a paper on Cyanosis (*Medical Times and Gazette*, September 1859), Dr. Tilbury Fox argued from *a priori* considerations that, if a patulous foramen ovale gives rise to a murmur, the murmur must be presystolic and synchronous with the auricular systole. It is only within the last few days that I found a reference to Dr. Fox's paper, and so had the opportunity of reading it. He will probably be interested to find in the case which I have here briefly recorded a confirmation of his theory published nearly twenty years ago.

Finally, I would remark that this case appears to me to afford confirmatory evidence in support of Dr. Gairdner's auricular systolic theory of the so-called *presystolic mitral murmur*.

CASE OF UTERINE HYDATIDS TREATED BY THE INTRA-UTERINE INJECTION OF HOT WATER.

By LOMBE ATTHILL, M.D.,
Master of the Rotunda Hospital, Dublin.

On the 18th of December last, I was asked to see a lady stated to be threatened with a miscarriage. She was a very delicate woman, a member of a family of whom several had died of consumption, she herself having suffered from ulcer of the stomach. On my visiting her, she stated that she had reached the twelfth week of pregnancy, had that morning been attacked with hæmorrhage, but was quite free from pain. On making a vaginal examination, I found the uterus to be of the size corresponding to the three months of pregnancy, and the os very slightly dilated. I ordered an ounce of the infusion of ergot to be given every third hour, and enjoined absolute rest. Everything went on satisfactorily for some days; the hæmorrhage ceased; she suffered no pain, and felt so well that I had much difficulty in inducing her to observe the recumbent posture. On the 20th, she began to go about; and on the 21st, having stood about a good deal, hæmorrhage again set in, this time profusely. On seeing her after the lapse of some hours, I found her very weak. She had lost a great deal of blood, and it continued to flow. The os was about the size of a threepenny-piece. There were not any pains, and nothing could be felt inside the os. I decided on plugging the vagina, and recommended the exhibition of ergot.

The next morning, I removed the plug, and was disappointed to find that no portion of the ovum protruded; but the os uteri was more patulous, and something soft could be felt inside it.

As she began to lose blood again, I decided to dilate the os and remove the ovum. With this view, I introduced a large sponge-tent. This I removed in six hours, but was again disappointed at finding that no ovum could be detected; while the hæmorrhage continued, and no uterine action had been excited.

Matters were now becoming serious. The patient had become very weak. Evidently the uterus must be emptied of its contents, whatever it was; and the hæmorrhage checked. After some hesitation, I decided on trying the effect of hot water, and accordingly introduced the tube of a Higginson's syringe into the uterus, and injected about a pint of water at the temperature of 112 deg. This within ten minutes induced uterine action. The pains were very sharp; and in a short time a mass, which on subsequent examination proved to be hydatids, was expelled. No further hæmorrhage occurred for about six hours, when, pains again setting in, slight hæmorrhage, followed by the expulsion of another mass of hydatids, occurred. From this time, no further trouble was experienced. The lady made a rapid recovery.

In this case, I was quite uncertain as to what the contents of the uterus might be. I had not previously heard of hot water being injected in cases of abortion; but my experience of it in *post partum* hæmorrhage was so favourable, that I resolved to try it in this case; the only other alternative being either plugging the vagina again or the continuing of the process of dilating the cervix. Either of these courses seemed to me, under existing circumstances, to be by no means free from risk.

My idea in injecting the hot water was to restrain the hæmorrhage, and I was not prepared for its acting as such a powerful stimulant to the uterus as to induce uterine action within the lapse of a few minutes. I need hardly add that I was much gratified by the result.

Since this case occurred, I have treated three cases of abortion accompanied by hæmorrhage in a similar manner. In two of these, the like results followed; namely, the exciting of uterine action and the arrest of hæmorrhage. In the third case, the hæmorrhage was arrested for twelve hours; but no pains followed. Hæmorrhage then recurring, I again injected hot water, with similar results. The ovum was not expelled till the lapse of twenty-four hours after the second injection.

Judging from these cases, I look on the treatment of hæmorrhage occurring during abortion by the injection of hot water (of a temperature not under 110 deg.) as perfectly safe; and that it is, on the whole, more reliable and satisfactory than any other method.

CLINICAL MEMORANDA.

CATGUT DRAINAGE.

In reply to Mr. Chiene, I beg to state that my assertion that catgut drainage is most inefficient is based upon the following facts. 1. After the gut has become saturated by the contiguous fluids, it ceases almost entirely to drain at all. In proof of this, the following experiment may be performed. Place one end of a skein of catgut in a glass vessel containing water, and let the other end hang over the side of a second empty vessel: it will be found that very shortly the water begins to come over by capillary attraction, but, as soon as the point of saturation is reached, the flow becomes quite arrested, owing to the increase of friction which capillarity fails to overcome. 2. Catgut drainage is inefficient, because it does not remove the fluids from the deepest part of a wound, but only acts upon the fluids near the surface. This statement is true in all the cases in which I have seen catgut employed for the purposes of drainage, where a skein is used which traverses the wound from side to side but does not touch at any point the deepest parts of the incision: this, perhaps, might, to some small extent, be obviated by pushing one end to the bottom of the wound, and allowing the other end alone to hang dependent from the line of incision; but, if so placed, the deeper portion would in a short time become quite sodden, and no longer convey any of the fluids to the other from the end of the skein, even if it were possible, which I question, to maintain the gut in this position. 3. Catgut is inefficient, because it softens and breaks down before the wound has ceased to discharge. After a few days, the skein of catgut divides into two and comes away on traction at each end, and this very generally before drainage can be dispensed with. It may be affirmed that this constitutes no real objection, as it is an easy matter to introduce a fresh skein; but, in reply to this argument, I should say that such fresh introduction cannot take place without, in many cases, an undesirable opening up and separation of newly adhering tissues.

S. MESSENGER BRADLEY, Manchester.

THE ELECTRIC TELEPHONE AS A MEANS OF TESTING OR MEASURING THE HEARING POWER.

MR. JAMES BLYTH, F.R.S.E., Secretary to the Society of Engineers of Edinburgh and Leith, has so adapted the electric telephone that, by a double ear-piece arranged so as to fit accurately to both ears or to one ear, without conveying the sound to the auditory nerves through the bones of the head (it can be made to conduct the sound through the bones as well), we can, by increasing or diminishing the resistance to the force of the sound-wave, accurately measure the hearing power of one or both ears. By interposing a certain number of resistance-coils in the conducting apparatus in a given instrument, or not, as required, we can obtain a normal standard. The diminishing of the resistance (the number of resistance-coils of a fixed value) would give us the hearing power of the auditory apparatus under examination. The telephone may also be made so as to improve or entirely supersede the present artificial means used for conducting and intensifying the sound-waves to the auditory nerve; a clear distinct sound, not too loud, properly conveyed to the auditory nerve, would be better heard and not so apt to do injury as many, if not all, of the ear-trumpets, etc., now in use do.

J. J. KIRK DUNCANSON, M.D., Lecturer on Aural Surgery at the Edinburgh School of Medicine.

DEATH FROM ANÆSTHETICS.

IN reference to the case of death under anæsthetics which occurred in the Moorfields Ophthalmic Hospital in August last, cited (No. 16) in Mr. Dawson's excellent paper in the JOURNAL last week, I wish to make the following observations.

The apparatus used was Clover's smaller inhaler, with a slight modification, which I have introduced so as to avoid the inconvenience of having to remove the inhaler when desirous of giving a few breaths of fresh air. At the angle of the tube going to the bag is a small spring valve, on depressing which, and compressing the neck of the bag between two fingers, the carbonic acid is shut off, while the inhalation of ether mixed with air can be continued. If a little chloroform be poured on a piece of lint, and this held by the finger on the top of the depressed valve, you can have the additional anæsthetic action of chloroform removable at pleasure. I have used this apparatus now in fully one thousand cases, and have found it work very satisfactorily. In the case in question, the chloroform and ether were administered in this way. I do not consider that the patient had really inhaled more than five or ten minims of the former, while the ether-indicator had been gradually turned on from zero to two (i.e., 50 per cent. of ether-vapour). On the first alarm, all anæsthetics were at once removed; but the ether-inhaler alone was then once reapplied for a few seconds, under the hope that it might act as a cardiac stimulant. As no voluntary respiration took place, it was removed. It will thus be seen, as was not rendered sufficiently clear in the former reports of the case in the JOURNAL of August 25th and September 1st, 1877, that the mixture was not a fluid one, and that the anæsthetic was not "applied on and off for some time after the first alarm".

I may mention that, as the above inhaler frequently obstructs the light in ophthalmic practice, Messrs. Mayer and Meltzer have supplied me with a long slightly flexible tube, which can be expeditiously attached between the face-piece and the ether-receiver, while the latter can be then hooked on to the administrator's button-hole. This is, of course, only to be used during the operation and after the production of sound anæsthesia.

R. MARCUS GUNN, House-Surgeon.

CASE OF LEFT FACIAL PARALYSIS FOLLOWING EXTRACTION OF A LOWER MOLAR ON THE RIGHT SIDE.

J. F., AGED 25, warehouseman, had the second molar in the lower jaw on the right side extracted for toothache on January 13th, at 8 P.M., by a dentist in Glasgow. On the following day, he found what he described as a "stiffness" in the left cheek, which increased daily. There was a considerable amount of bleeding after the extraction, which continued for two days; it then ceased, and began again on the third day, and continued during the whole of that day and night; it then ceased entirely. As matters were becoming worse, he again called on the dentist on the 22nd, who pronounced the right side of the face to be at fault, prescribed a dose of salts, and desired him, if there were no improvement on the second day afterwards, to come back and have the first molar on the same side extracted, as this was thought to be the *causa morbi*—a small fleshy tumour appearing in

its centre. No improvement took place, and on January 24th he consulted me. I found complete motor paralysis of the left side of the face. He had great difficulty in eating, as the food always lodged in the left cheek; in drinking, as part of the fluid ran out of the mouth at the left side. The left eyelids were quite immovable; the left side of the tongue hung curving down and inclined towards the right side. The usual experiments in such a case gave the usual result. In addition to this motor paralysis, there was diminished sense of taste in the left side of the tongue.

A shade was placed over the eyeball to protect it, and quinine in grain-doses four times a day was ordered. Under this treatment, he rapidly improved, and on February 4th was able to return to business, there being then little trace of the malady. On February 8th, when I saw him last, he was perfectly well, both motion and sensation being completely restored. He had taken in all sixty grains of quinine.

REMARKS.—This case, so far as I have been able to determine, is unique as to its probable cause; for there can, I think, be little doubt that it was primarily due to the extraction of the tooth. At a previous time, he had had a tooth taken out, and then also there had been bleeding from the cavity for several days; but no other evil result had followed. Of course there remains the possibility of its having been a coincidence, not an effect; but what, then, was the cause? He was not in ill-health; he suffered at that time from nothing but the tooth-ache. In regard to treatment, this is the third case of facial paralysis in which I have administered quinine only, and used no counter-irritation, no blistering, and no faradisation; and they have all done well, and that rapidly. It is curious to note that from January 13th to 24th there are eleven days during which matters were undoubtedly becoming worse; and that from the 24th, when the treatment was begun, up till February 4th, when the cure was virtually complete, there are also eleven days. Was this a simple coincidence too; or is it an evidence of periodicity in what may be called traumatic paralysis?

J. STUART NAIRNE, Surgeon, Glasgow.

CONGENITALLY IMPERVIOUS PREPUCE.

A CURIOUS case of congenital malformation was brought under my notice a few days since. In passing through one of the villages in this neighbourhood, I was called in by a woman, who asked me "to look at the infant of her neighbour, three days old, which had never passed water, and she felt sure there was something wrong". I learned that the mother had been attended by a midwife, who told my informant that "it would come all right".

On examining the child's penis, I found it was impossible to retract the prepuce to look for the orifice of the urethra, as the prepuce was impervious. After carefully verifying my opinion, I lifted the most anterior part with forceps, stripped it off with scissors, and, passing a director under the prepuce, slit it up, and retracted it. There was but little hæmorrhage; and on my visiting the child next day, I learned that he had urinated freely, and the wound was healing satisfactorily.

I cannot find an account of any similar case of malformation in any of the books on which I can lay hands.

J. INGLEBY MACKENZIE, M.B. Cantab., Rugby.

MOLLUSCUM CONTAGIOSUM.

I HAVE under my care at the St. George's and St. James's Dispensary an infant suckling, aged 8 months, the mother, and sister aged 7, all of whom are affected with true molluscum contagiosum. The disease first appeared in Louisa D., aged 7, on her hands and face. She nursed and played with the baby, who caught it, and communicated it from his face to the mother's breast. The father, James D., next caught it, having two tubercles under his left eye. The next and last to catch it was the brother, James D., who caught it from the baby. My colleague Dr. Thomas Fox has seen the mother, infant, and little girl. In order to satisfy himself fully on the nature of the tubercles, which were numerous on the face of the infant, he expressed the contents of several of the tubercles, which contained the characteristic sebaceous matter. This seems an unusual example of the contagious nature of true molluscum. It has spread through the whole family of five, one by one, having commenced in the little girl Louisa D.

FANCOURT BARNES, M.B.,

Physician to the British Lying-in Hospital.

VACCINATION.—Mr. T. Palmer Stephens has received a Government grant of £6:12 for successful vaccination in No. 1 District of the Westbourne Union. This is the fifth grant that has been awarded to Mr. Stephens.

SURGICAL MEMORANDA.

ANTISEPTIC SURGERY.

I READ with much interest Mr. Messenger Bradley's paper in the BRITISH MEDICAL JOURNAL of February 23rd on antiseptic surgery. That interest was deepened by the knowledge that it was in the Glasgow Royal Infirmary that antiseptic surgery was first introduced by Mr. Lister; and it was here he achieved his first, and, I believe also his greatest, triumph—greatest, because of the severity of the accidents he had to treat. The results he obtained were something marvellous; and eleven years' observation of his system has only confirmed me in awarding it the palm over all other methods which I have hitherto seen practised in the treatment of amputations, open wounds, etc. It is thought, however, by some that his mode of dressing is too cumbersome and complicated; and many, whilst believing in the theory, have attempted to simplify the practice. Mr. Messenger Bradley is one of these, and takes credit, through his statistics, for the method of antiseptic dressing he has used during the last two years, and claims for himself a success equal to that of any of Mr. Lister's followers. Happening to have finished my operation statistical table for last year, it occurred to me that a fair comparison might be made between his results and those of one of our surgeons who is a follower of Mr. Lister, and who faithfully carries out his plan of dressing even to its latest development. I therefore give his results for the same period that Mr. Bradley has given his—viz., from 1st January, 1876, to 31st December, 1877, tabulating them, so far as practicable, in the same manner, for the purpose of comparison, under the heading B. and F., the latter representing the Listerian mode of dressing.

TABLE.—Amputations.

	B.			F.		
	Recovered.	Died.	Total.	Recovered.	Died.	Total.
Forearm	3	0	3	1	0	1
Elbow-joint ..	0	1	1	0	0	0
Arm	4	0	4	6	0	6
Shoulder-joint ..	1	0	1	4	0	4
Hip-joint .. .	1	0	1	1	0	1
Thigh	12	3	15	5	0	5
Both thighs ..	0	0	0	1	0	1
Knee-joint .. .	0	0	0	6	1	7
Leg	2	0	2	5	0	5
Ankle	8	0	8	1	0	1
Total	31	4	35	30	1	31
Mortality per cent.	11.42			3.22		

A glance at these tables will show the great superiority, so far as results are concerned, of Mr. Lister's method over Mr. Bradley's. This superiority is further brought out if we subtract from F.'s table those operations which are proved to be the least serious of the major amputations—viz., the one amputation of the forearm and the other at the ankle; and if we reckon as two amputations the patient who had both his limbs lopped off, we have thirty of the most serious operations in surgery with only one death, or a mortality of 3.33 per cent. The same analysis of the operations of B. gives twenty-four similar serious amputations, with a mortality of 16.66 per cent. As Mr. Bradley has in a manner said he would stand or fall by his statistics, I apprehend that those I have put against his fairly and unequivocally prove that his mode of dressing is not quite so good as that of Mr. Lister: and though his object in endeavouring to discover a simpler and equally efficacious method of antiseptic dressing is commendable, it must be acknowledged that he has as yet failed to do so. There is no doubt that Mr. Lister's mode of dressing is, if anything, more expensive than the ordinary method, though this depends a good deal on how it is used; but the extra expense is not so great as to appal or prevent hospital surgeons from adopting it, if by doing so they can reduce the mortality of amputations from one in nine to one in thirty-three.

M. THOMAS, M.D., Superintendent, Royal Infirmary, Glasgow.

CHESTER-LE STREET.—There were 1,021 births and 440 deaths registered in this district during 1877. The death-rate is calculated at 20.9, which is 1.5 per 1,000 less than in 1876. There were 161 deaths of children under one year, which are equal to 15.7 per 100 births and 36.6 per 100 deaths; and Mr. Linton expresses his belief that these deaths were partially caused by early marriages, inexperienced mothers, and insufficient nurture; and notices the difficulty in getting good milk in villages.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE NEW ANTISEPTIC THYMOL GAUZE.

MESSRS. SQUIRE of Oxford Street write to us:—As many of your readers are no doubt interested in the new antiseptic thymol, and may wish to have some detailed information about it, its price, and the various forms in which its preparations are to be had here, we beg to inform you that, at the desire of Mr. Spencer Wells, we procured from Germany last January some of the thymol gauze prepared with spermaceti. We have supplied this gauze during the past month to several of Mr. Wells's patients, and, before ordering or preparing more, we were anxious to ascertain his opinion as to its utility. His reply (which we are permitted to send you) is to the effect that, "while appearing to be quite as trustworthy an antiseptic as carbolic gauze, it is free from the objections of stiffness, of irritating action on the skin, and of the disagreeable odour of the carbolic acid. It readily permits transudation of any fluid escaping from a wound, but does not appear to increase any secretion, nor to irritate the edges of a wound, nor the skin surrounding it. The wound, as a rule, does not require dressing until it is time to remove the sutures, and one more dressing is all that is required. A solution of 1 part of thymol in 1,000 of water appears to answer well for irrigation, for spray, and as an antiseptic bath for instruments and for sponges." A solution of thymol in water of a strength of 1 in 1,000 is all that is required. Thymol is soluble in warm-water in that proportion, and there is no separation on cooling.

As your readers may wish to know the price at which this gauze can be supplied, we may add that at present it is sold in packets, of six yards long by a yard wide, at 3s. 9d., or 8d. per single yard. When manufactured on a large scale, some reduction may possibly be effected. Thymol itself cannot be sold here for less than 2s. 6d. per ounce. Calvert's carbolic acid, No. 1, is 6d. per ounce; but if, as is expected, a solution of 1 thymol in 1,000 prove as efficacious as 1 carbolic acid in 40, the relative cost is in favour of thymol in the proportion of 5 to 1.

It may interest your readers to know that we have prepared for Mr. Wells an adhesive plaster, containing 1 part of thymol in 1,000 of plaster, which appears likely to fulfil the desire so often expressed of a non-irritating antiseptic adhesive plaster.

PROBYN AND CO.'S PREPARATIONS OF IRON.

MESSRS. PROBYN AND CO., of 7, Pall Mall East and 55, Grosvenor Street, operative chemists, have forwarded us a neutral preparation of iron (oxychloride) in the colloid form obtained by dialysis; the iron being, it is alleged, separated from its combinations by endosmosis according to the law of the diffusion of liquids, and presented in a state as nearly as possible as it exists in the blood. They state with justice regarding this preparation—which can be procured in the form of syrup (dose for an adult, two teaspoonfuls, with or without water); or as a liquor (dose ten to thirty minims)—"that it is agreeable to take, and that it does not discolour the teeth"; and they add that it is easily assimilated, and does not disagree with the stomach or constipate the bowels.

We have before us medical reports, from an independent source, of cases in which this preparation in both of these forms has been administered, with marked benefit, to convalescents from scarlet fever and to others who were in need of ferruginous compounds. A good formula, our reporter adds, for prescribing the liquor consists of: Liquoris ferri dialysati ℥x ad xxx; glycerini ℥j ad 3ss; infusi quassie ʒvj ad 3jss; tincture aurantii ʒj ad 3ss; to be taken three times a day.

BAILDON AND SONS' APERIENT LOZENGE.

MESSRS. BAILDON and Sons, of 73, Princes Street, Edinburgh, have brought under our notice a fruit-lozenge rendered aperient by a few grains of the extract of Rhamnus Frangula or black alder, and made into a very palatable form by the addition of black currant paste. Since Mr. Baildon first introduced this bark to the notice of physicians and pharmacists in 1871, the concentrated decoction has been largely prescribed, and, we believe, is very generally satisfactory; and this aperient lozenge will probably contribute to extend the use of the black alder as an occasional aperient.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 9TH, 1878.

THE FACTORY ACTS AMENDMENT BILL.

PARTY government may possess great merits under a constitution like our own, when general politics, domestic and foreign, are the subjects dealt with; but its value and adaptability in determining on social questions, among which those relating to the health of the people may particularly be cited, where no party principles or prejudices should obtain, are, to say the least, very doubtful. Indeed, in our estimation, it will operate in such matters detrimentally to the public good. And has not every Parliamentary session produced a crop of examples? The recent debate in Committee of the House of Commons on the Factories and Workshops Bill can be adduced as a striking instance. This Bill had the advantage or disadvantage, according to the standpoint from which we regard it, of being introduced by the Home Secretary, and consequently ranked as a Government measure claiming support from the Government benches to a greater or less extent, irrespectively of the real value of its provisions; although, so far as party views between Conservatives and Liberals were concerned, it possessed a colourless character.

Moreover, its objects and its machinery had the approbation both of the members of the House and of the public outside. They were not new; for their importance and value had been well established through a long series of years. It put forth as a primary object the consolidation of a number of Acts of Parliament passed in various sessions during nearly fifty years aiming at the same end; viz., the physical well-being of the working-classes employed in factories and workshops, and particularly of the women, young persons, and children.

Yet, notwithstanding these circumstances and the character of the Bill, to anyone who followed the debate in the Commons, as reported, it was at once clear that party spirit intruded itself as a disturbing force, and brought about results to be deplored by those who desired the sanitary purposes of the Bill to be fully sustained and to be extended. The action of party was especially manifested in the divisions called for on amendments; for, although these might obtain some support on both sides the House, yet, when they did not perish prematurely under the veto of the Home Secretary, their struggle for existence was, on the demand for a division, speedily and effectually terminated by the strong reinforcement of members summoned from all parts of Westminster Palace by the division-bell to the aid of the right honourable gentleman. These trusty reserves could make no pretence to a knowledge of the arguments adduced *pro* and *con*. on the amendment submitted to their vote, and to but a slender one in respect of its purpose and intent. It was enough for them to know that they, as general supporters of the Government, were wanted to vote in favour of a measure introduced by a minister. Had the subject to be voted on been a political one on which Conservatives and Liberals differed as a matter of principle, then doubtless the opposition side of the House would have whipped up its reserves. But such was not the position occupied by the Factories Bill, which was regarded as an affair of its promoter and of manufacturers.

But there was a third party materially concerned in the measure; but one, alas! which the course of the debate showed to be held in light esteem by honourable members. This was the medical profession, specially represented by the large corps of factory medical officers engaged in the carrying out of those portions of legislation by which the physical health of factory operatives is sought to be maintained and improved. It is incumbent upon us, indeed, to acknowledge gratefully the recognition accorded to the certifying surgeons by Mr. Cross for their assiduity and efficiency in the discharge of their important functions, and the decided stand he made against some attempts to set aside medical supervision and control. And we have also heartily to thank Dr. Lyon Playfair and Dr. Cameron, together with those medical and other members of Parliament who joined with them in vindicating the claims of the profession, and in supporting the amendments proposed in the interests of the health of the working classes. We have, however, to lament the loss of almost every such amendment. They fell a sacrifice to party action.

The amendments brought forward were assuredly of a modest and moderate character. They sought little else than the retention of the same position and remuneration to the medical men to be employed under the Bill, as had in past times been accorded them under old Acts. They did, indeed, also point out ways wherein medical supervision and knowledge might be advantageously extended; but they made no demands for additional payment for such extended work. But all without success. The Home Secretary had set his face like a flint against alterations in his Bill. A proposal to introduce a new clause met at once with its quietus, on the ground that the Bill was simply a consolidating measure. If it were sought to sustain an existing statute or an established usage sacrificed by the Bill, the fate of the amendment was as inexorably sealed by the official refusal to be bound by it. Against such tactics, backed by a host of accommodating voters, it was hopeless for a small band of independent members to contend.

On the part of the promoters of the Bill, it was forgotten, or else kept out of sight, that it was in reality something much beyond a simple consolidation Bill; that to a very large extent it was the fruit of a lengthened inquiry by a Royal Commission empowered to report on the operation of the Factory and Workshops Acts, and to suggest amendments required in those Acts, as shown by the history of their past working. In short, it was largely based on the Report of that Commission, and actually adopted numerous changes therein recommended. Resistance to amendments to the Bill in its course through Parliament, on the score of its being simply a consolidation measure, was consequently out of place.

Had the opposition to the medical amendments been marked by nothing more than a determination not to entertain them, the profession, from past experience of its small weight in Parliament, might have bowed submissively; but it becomes a duty on its part to protest against the conduct and speeches of some honourable members in the course of debate on the Bill in question. It was, we maintain, insulting to the profession to derisively cheer the remark that a fee of sixpence for any professional service could not be proposed to the members of any other profession than that of medicine, and that lawyers would resent such a proposal. Quite true, and lawyers have to be thankful for their very large representation in Parliament; yet withal they should not mete out to members of another profession, not of less importance in the community than their own, a scale such as they would not tolerate.

But, however annoying this incident may be, it was outdone by the observations of Sir A. Lusk—whose name should not be forgotten—who argued on the regulations for cabmen, that, in lieu of the liberal fee of sixpence, as fixed by the Bill, for each completed half-mile above a mile from the residence of the factory medical officer, this gentleman should only receive that sum for each complete mile! It is

well that this member's medical constituents should know that he appraises them and their time by the standard of a London cabman. We write a London cabman, because a country one will not give his services under a shilling a mile. But what imparts a worse complexion to this matter is, that Mr. Cross promised to give the point his consideration—oblivious at the moment, we must presume, of the insulting comparison made in the proposal. For the right honourable gentleman to perceive it, must be tantamount to its being immediately scouted by him.

THE FUTURE GOVERNMENT OF COUNTY ASYLUMS.

WHEN any institution in this country happens to be exceptionally well administered, it is pretty safe to be reformed. When the administration of any institution happens to be a public scandal, it is very likely to be extended. Under the County Administration Bill, the government of our county asylums is about to be transferred from boards of visiting justices to hybrid boards of justices and Poor-law guardians, under whom it needs no prophetic faculty to foretell the fall of the English system of treating the insane poor.

On the last day of February, a deputation from the Medico-Psychological Association waited on Mr. Sclater-Booth, to expostulate with him, on behalf of the Association, on his proposal to reconstitute asylum boards of visitors by substituting one-half of the number of visiting justices appointed by the Court of Quarter Sessions, or, if the number be unequal, the greater moiety, by persons elected by boards of guardians. The medical superintendents had taken the alarm, on their own account, at the proposal; and Drs. Manley and Rogers urged upon the President of the Local Government Board the necessity of protecting the interests of medical superintendents with regard to their retiring pensions from the parsimonious greed of the guardians. The President replied that his Bill in no way affected the salaries, pensions, or any other rights of the officers of asylums, and that he could not assume that the newly constituted asylum boards would or could be capable of any injustice in carrying out existing engagements. Dr. Bucknill, however, speaking on behalf of the insane poor, who are incapable of entering into engagements, and who are absolutely dependent upon the constituted authorities for their proper care and treatment, frankly told the President that he was going the way to spoil the government of medical institutions of which the public had just reason to be proud. If the medical superintendents are alarmed about their pensions, the insane inmate of the county asylum, if he could see the cloud which is gathering, might well dread the abstraction of sustenance and the diminution of comfort. Dr. Bucknill pointed out that insanity, which was involuntary, needed a different treatment, not only in degree but in kind, from pauperism, which was more or less voluntary; and that the spirit of the government of county asylums had been as different as possible from the spirit of the government of union houses; and that any fundamental interference with it would be disastrous to the interests of the most miserable and helpless members of the community. He pointed out, moreover, that this long discussed reform in the financial administration of county funds had nothing whatever to do with the care and treatment of the insane, which implied detention and control, and was as much a part of magisterial duty as anything else in which the liberty of the subject was abrogated for the general good, and that such administrative magisterial duties had never been asked of the guardians, who were, as a rule, most unsuited for their proper discharge. The proposed new boards, he said, composed of country gentlemen and guardians of the poor, half and half, would never act together comfortably to themselves or beneficially for the patients; but the course of events might very easily be foreseen. The guardians would elect their most fluent talkers and the men whom they thought their most stringent economists, whom the county justices would find not the most agreeable colleagues and would not choose frequently to encounter, so that very soon the government of the county asylums, or

of many of them, would pass entirely into the hands of the new and more self-asserting element, to the grievous detriment of the helpless inmates.

We very heartily trust that the county justices will estimate aright the real import of this proposed change in good time, and that whatever they may consent unto with regard to the county finances, they will strenuously resist any extension of their deposition from the administrative control of these county institutions, the proposal for which comes with so bad a grace and so strange an augury from the present Government, which is said to be that of the country party. We care not very much ourselves that country gentlemen should have agreeable colleagues ensured to them in any public business which they may undertake; but we do care very much that they should not be displaced by the blundering initiative of *doctrinaire* politicians, from administrative duties which they have, on the whole, discharged with admirable wisdom, liberality, and humanity; and we expect they have fostered the development of an important department of medicine, and have provided for the best attainable treatment of a vast number of those who are of all the most sick, and sorry, and suffering.

THE CRISIS IN THE ARMY MEDICAL DEPARTMENT.

IT is announced, as well it may be, that the question of the medical organisation of the army is engaging the serious attention of the Secretary of State for War. We reprint in another column statements of the main grievances of the medical officers of the department, inattention to which has brought about the present unpopularity of the department; and proper means have been taken to bring those statements under the notice of Mr. Hardy. Hitherto Mr. Hardy has been reputed to have pursued the system of taking the advice of one or two personal acquaintances in the medical profession, as to what are likely to be the best remedies for the discontent and disorganisation of the department; and it has been understood that that advice has not been always in accordance with the suggestions tendered to Mr. Hardy by the Association and other public bodies, in furtherance of the views of medical officers of all ranks in the medical department. Rightly or wrongly, it was very extensively reported at the time that one civil adviser was responsible for suggesting the short-service system, to be followed up by the weeding of the department at the end of ten years, with a *congé* and a bonus of a thousand pounds to those who were not wanted. It was made known to us that this scheme was in contemplation before it was finally adopted; and we took occasion at once to warn the authorities that no such proposition would be acceptable to the profession, or likely to succeed in recruiting the department or in contributing to its efficiency. The experiment was, however, persisted in, in spite of remonstrances, and with a disastrous result. Mr. Hardy has now, he announces, nominated a committee. There can be no doubt that the short service expedient must now be abolished, and that it must be replaced by the old system of continuous service, together with such conditions of service and of retirement as will make the service tolerable, and the flow of promotion and the conditions of retirement reasonably satisfactory. Within the lines of this programme, Mr. Hardy will find no difficulty in deciding upon the plan which will be likely to be accepted by the profession at large and by the department as satisfactory.

In a recent semi-official communication, it was intimated that the pressure exercised by this Association has done much to deplete the ranks of candidates for the Army Medical Service, and thus to make the requirements of the Service a matter of much more serious consideration for Ministers than they have been at previous times. If the *Army and Navy Gazette* notes this as a reproach, we, on the other hand, accept it as a warm tribute of praise. When the deputation of the Parliamentary Bills Committee waited on Mr. Hardy on this subject, it was very respectfully intimated to him

that, unless conditions of service reasonably satisfactory to the medical profession at large were granted, the whole influence of the Committee, for the Association and through the JOURNAL, would be exerted to maintain the fair requirements of the department. It is a source of great satisfaction that it has been found that that intimation, which was not in any sense intended as a threat, had nevertheless a very real meaning, and could not safely be ignored. The eminent men who accompanied the deputation, and the pains taken to elaborate all the points in the statement submitted to Mr. Hardy, were sufficient vouchers that the Parliamentary Bills Committee did not address the Minister without having very carefully investigated the whole question; and it is unnecessary to say that its relations with the most eminent members of the Army Medical Department, as well as with medical men of all ranks, are such as to enable it to get information from the most various and extensive sources as to what may fairly be considered the legitimate demands and requirements of the service. When so presented, we believe that no Minister can now afford to treat those representations with anything less than attentive and respectful consideration. At any rate, the former disregard shown by Mr. Hardy on many leading points which have been urged upon his attention as essential to the fair settlement of the question, has resulted most unsatisfactorily for the welfare of the army, and for the comfort and safety of both officers and soldiers, whose interests must always be the first as well as the principal sufferers from any deficiency in the quantity and quality of the medical attendance which is essential to the health and well-being of the force. The urgency of the situation will give Mr. Hardy the best possible reason for treating the question afresh, and taking a new departure from a more extended and generous point of view; and his appointment of a committee, together with the conciliatory tone of his speech in moving the estimates, indicates that Mr. Hardy has awakened to a sense of the gravity of the situation. With this object, we submit the list of grievances to be found on page 346; and we trust that they will be considered in a generous conciliatory spirit, and with the desire of bringing about a permanently satisfactory organisation of the department.

THE name of Dr. E. H. Greenhow has been added to the Royal Commission recently appointed to inquire into the working of the Penal Servitude Acts, in the place of Dr. Gny, who, we regret to hear, is disabled by severe illness.

WE understand that the Committee on the Army Medical Department, mentioned by Mr. Gathorne Hardy when introducing the army estimates, consists of Mr. Thompson, C.B., Assistant Under-Secretary of State for War; Sir William Muir, K.C.B., Director-General Army Medical Department; and Mr. Robinson, War Office Actuary.

A TELEGRAM from Rio Janeiro, dated March 1st, states that yellow fever had been raging there. From forty to forty-five deaths in the city had been registered in the first fortnight of February.

IT will be seen that the first award of the Marshall Hall Memorial Prize of the Royal Medical and Chirurgical Society has been made to Dr. Hughlings Jackson, for his investigations into the Pathology of the Nervous System. Few physicians have added more by their labours to the scientific progress and contemporary reputation of British medicine than Dr. Hughlings Jackson, whose labours have always been carried out in the true scientific spirit, and accompanied by a reserve and modesty which have heightened their value. This award will be received throughout the profession with high approval.

WE understand that the Fothergillian Gold Medal of the Medical Society of London has been awarded to Dr. J. Milner Fothergill, Physician to the West London Hospital, for his essay on the Physiological Antagonism of Certain Poisons.

THE silver medal of the same Society has been awarded to Dr. J. Althaus, for the best paper of the session; the subject of his paper being the Lesions of the Anterior Cornua of the Grey Matter of the Spinal Cord.

A PROJECT is on foot, which does not seem to be very wisely founded and may possibly not come into practical operation, for establishing another lying-in hospital in the west end of London.

MEANTIME, we hear that considerable changes are likely to be made in the management of the General Lying-in Hospital, York Road, with the view to increasing the efficiency of that old-established and endowed charity.

THE changes effected in the management of the Queen Charlotte's Lying-in Hospital have, we hear, operated most satisfactorily in the reduction of the rate of mortality, and in the production of excellent vital results such as have not always been attained at that institution.

SOME dissatisfaction has, we hear, been caused at the Charing Cross Hospital by the resolution of the Governors to accord to the Senior Surgeon a further extension of five years, in addition to one already accorded to him, after the completion of the term of age at which, in accordance with the rules, he should cease to act as surgeon.

WE understand that a Committee of Council is summoned for Wednesday next, and that before it will be laid a proposal for calling a special general meeting of the members to discuss the propriety of framing a by-law for the purpose of carrying into effect the vote of the Association of 1876 against the admission of women to the Association, and also of taking into consideration the case of the two ladies who were admitted prior to that vote. At the same meeting of the Committee of Council, the recent correspondence relating to the official Report of Proceedings of the Committee of Council will come under notice.

A SPECIAL general meeting of members can only be summoned by the Committee of Council, who have power to convoke it spontaneously, or who must convoke it upon the requisition of fifty members. By-laws may of course be recommended for adoption at such meeting; but such by-laws can only have legal effect when adopted, after two months' notice, by the annual general meeting.

A LETTER from Dr. W. O. Markham, which we have been compelled, from pressure on space and late arrival, to print in small type in another column, deals with the question of the two lady members of the Association which has already been much discussed in our columns.

DR. HENRY BROWNE has resigned the office of Physician to the Manchester Royal Infirmary, after a tenure of a quarter of a century, during which long period he has rarely been absent for a day from attendance to his hospital work. His resignation creates no vacancy, as the staff is for the future to comprise but four full physicians. It is true that there is a proposition to increase the number of assistant-physicians to three; and if this be carried, we understand that Dr. Ross, who is at present pathologist to the hospital, and who is well known to the profession by his important work on *Graft-Theory of Disease*, and other varied work, will be a candidate.

DR. COHNHEIM, Professor of Pathological Anatomy in Breslau, has accepted an invitation to the same chair in the University of Leipzig; and Dr. Ponfick, Professor in Göttingen, has been invited to fill the vacancy thus created at Breslau.

IT has been determined to hold the sixth session of the International Medical Congress in Amsterdam, in September 1879. A Committee, of which Professor Donders of Utrecht is President, has been formed to make the necessary arrangements.

THE DENTAL PRACTITIONERS' BILL.

THE Dental Practitioners' Bill was set down for adjourned discussion on the second reading on Tuesday last, but did not come on, its promoters being unable to keep a House. This Bill may be counted among the things of the past. It is improbable that it will have a second reading; and, although it has been greatly modified, to meet the objections urged against it by our Parliamentary Bills Committee and by other bodies, it may be accepted as certain that it will not pass into law. We should think this to be regretted, now that the Bill has been modified in much that was seriously open to objection, and remained only as a Bill destined to afford reasonable organisation for a profession which much needs such organisation, but that we have reason to believe that such organisation will be provided for the dental profession without independent legislation on their part. The support given by Mr. Cross to the second reading of the Dental Practitioners' Bill was, we understand, not intended to signify the Government approval of that Bill, although it was universally so interpreted. The Bill had not, and has not, been submitted to the General Medical Council; and contains even now, as amended, clauses to which that body would be unlikely to assent. There has been, however, a very inconvenient practice pursued in promoting this Bill, of alleging individual assents, supposed to convey official approval by corporate bodies, and this on insufficient grounds.

BOARDING-OUT OF PAUPER CHILDREN.

WE see with great satisfaction that the boarding out of pauper children, which has long been firmly established in Scotland, and largely also in Ireland, is steadily making its way in this country, and is gradually overcoming the prejudice and reluctance in the official mind which impeded its adoption. Nothing can be more lamentable than the physical results of the herding together of vast masses of children in district schools, away from all the influence of home, and destitute of the healthy and necessary action of family life. Miss Preusser of Windermere, Miss Hill, in her *Children of the State*, and some others, led the way in this great measure of reform, and they have been zealously aided by many others who have helped them to carry their views into practical effect. The last report shows that the system is gradually extending, and that it is being employed with great success by the Guardians in Birmingham, in Leeds, at Bristol, and at the East end of London, and in numerous other unions. We recorded only lately the fact that, notwithstanding all that has been done to root out ophthalmia from the district schools, a well-known oculist recently reported that all the five hundred children at Mitcham were more or less afflicted with ophthalmia. The endemic character of this contagious local affection is probably as good a test as could be devised of generally low vitality; and, indeed, we venture to doubt whether the most perfect sanitary arrangements which could be devised will ever equal in efficiency for each child the more ductile, varied, and adaptable conditions of family life found in boarding out, even among poor families. Of course, thoroughly organised supervision is a primary necessity for preserving the health of children in boarding out, as well as for other objects in view.

VENTILATION OF PUBLIC BUILDINGS.

IT is difficult to say whose grievances are the greater in the law courts and other public buildings: those of the persons ventilated, or of the expert in charge of the ventilation. For the most part, the latter is expected to do that which is impossible, viz., to provide an adequate flow of air for the respiration of a mass of human beings packed like herrings in a barrel, without passing through the chamber air at any considerable speed, when it is declared to produce draughts, or too dry, or too moist, or too warm, or too cold air. The solution of the problem would already be impossible in this variable climate, and with the great susceptibility of all persons to rapid currents of air, and their morbid fear of them, even if human beings had approximately similar feeling and taste in respect to temperature and quality of the air in

rooms; but the fact is that one man freezes from cold where another dissolves from excessive heat, and each attributes his discomfort to defective ventilation. Elderly men, such as the Lord Chief Justice, like to be kept very warm, and have a particular horror of any rapid movement of air; and it is very well known that, in the archives of the ventilation department of the law courts, may be found numerous missives from that and other eminent judges, directing every window of the court to be shut at a moment when other persons in the court are suffocating from what they consider to be want of air, and are penning heated missives of complaint to the public papers. Of course, the usual remedy against defective ventilation is found where a sufficiently large cubic space can be given to each individual, since, under these circumstances, the air required for the consumption of each person can be supplied without frequent renewal. But, where a large number of persons are packed into one room, and where it is necessary to provide them all with 8,000 or 10,000 cubic feet of air for breathing per hour, the air needs to be changed from minute to minute; and the problem of supplying rapid currents of air, at a temperature of particular dryness or of moisture to please every one, has never yet been solved. As, however, persons whose word is law are mainly seniors, it will generally be found that they are satisfied with a much less rapid change of air than their juniors, and that they require a higher temperature. In other words, to please them the younger men suffer; and that we take to be the moral of the complaints both in the law courts and in the House of Commons. Possibly, however, in the new law courts, arrangements will be made more nearly resembling those of the Houses of Parliament, where the ventilation is as near perfection as may be, although it is all the same exposed to periodical attacks of grumbling, and requires the constant attendance of an intelligent expert.

ARMY MEDICAL DEPARTMENT.

WE find some difficulty in reconciling the two different statements which Mr. Hardy seems to have made in the House of Commons respecting the number of vacancies existing in the Army Medical Department last week. He stated, in reply to Dr. Ward, according to the reports, that for forty vacancies in that department there were only nineteen candidates forthcoming, leaving a deficit of twenty-one void appointments in that department. Since the 11th of last month, when only these nineteen candidates were then forthcoming, the retirements from the department have outnumbered the reappointments from the half-pay list, and no other candidates have been forthcoming. We do not understand clearly, therefore, by what process this deficiency, which, in reply to Dr. Ward, Mr. Hardy stated at a minimum of twenty-one, became a few nights afterwards eight. No doubt there is an official explanation to be had; but it might be interesting if it were made public.

MOSQUITOES AND MEN.

THE mosquito has been regarded as a particular nuisance by man wherever they have met. The bite of this peculiarly objectionable insect has an irritating effect upon most people, over and above the mere discomfort produced thereby. But it would appear that mental disturbance and systematic bleeding are not the only injurious actions which the mosquito can and does exercise upon us. From what was said at the Pathological Society on Tuesday evening, it would appear that the mosquito is the means of spreading the filaria sanguinolenta amongst human beings. They suck up this tiny entozoon with the blood of their human victims; and the female mosquitoes, after their banquet, go to the rivers to deposit their eggs. In doing so, the filariæ and their larvæ find their way into the water, and again to other human beings who drink it. In order to ascertain how far the mosquito is thus a carrying agent of disease from man to man, a patient known to have the filaria in his blood was placed alone in a chamber, and an opportunity furnished to mosquitoes to feed upon him. After that, the spoilers were captured and dissected, and in the stomach of one no fewer than one hundred and twenty filariæ were

found. This newly found relation of the mosquito to man adds materially to its objectionableness; for not only does it feed upon us, but it helps to spread among us an entozoon which is known to cause a definite series of unpleasant pathological consequences by its presence in the blood.

FEVER IN KENSINGTON.

FOUR deaths from "typhus", so-called, have been reported from Kensington within the last two months, without any other inmate of the houses having been infected, or any unsanitary conditions being discovered on inspection. Dr. Dudfield, believing from these circumstances that they were not cases of typhus, made special inquiry of the medical attendants, and was informed that two were typhoid, another doubtful; and the fourth was certified as a death from "typhus-rheumatic fever". In this latter case, Dr. Dudfield believes that death arose from heart-disease supervening in the course of rheumatic fever. It is well known that much looseness still prevails as regards the giving of certificates for febrile diseases; and that "typhoid", and occasionally "typhus fever", are certified as causes of death in connection with pneumonia, rheumatic fever, puerperal fever, scarlet fever, and other similar diseases. This practice should be discontinued, and the word "typhoid" either be used only as a synonym of "enteric fever", or not employed at all.

SEWER-GAS.

DURING last year, there were numerous cases and many deaths from diphtheria in the Withington district, which in almost every case were caused or aggravated by nuisances, such as waste-pipes passing direct from the nursery to the drains, ash-pits immediately below the bedroom windows, untrapped entrances to the drains, and in one case by a choked and broken drain; the most frequent nuisance being waste-pipes in the house passing directly into the drains. In connection with this, we may mention the frequency with which this disease has occurred amongst the inmates of bedrooms which were near to open joints in rain-water water-pipes, or to small pipes receiving the rain-water from the top of bay windows. Dr. Railton, the medical officer of health, also states that the streams running through the town are highly charged with excrementitious matters of all kinds, which may have caused a predisposition to the disease, and which have been gradually rendered worse year by year through increase of the population.

JAIL-BIRDS.

DR. JOHN MOORE of Belfast has published some very striking figures, indicating the costly and ineffectual nature of the present practice of dealing with criminal habitual drunkards by repeated short periods of imprisonment. The figures are very eloquent. On October 1st, 1877, there were in Belfast Jail ten prisoners who had had one thousand six hundred and thirty-six convictions recorded against them, an average of one hundred and sixty-three convictions. They had cost while in prison £1,780. In 1875, there were a thousand persons in prison in Ireland against whom in all five thousand convictions had been recorded. Of these, two hundred and fifty had been imprisoned in Belfast Jail; their imprisonments amounted to eleven thousand, and their cost in prison to £14,000. These figures, which may be multiplied indefinitely, speak eloquently of the utter uselessness of the present mode of dealing with habitual drunkards by sending them to prison for short periods: a method which, as Dr. Moore points out, is neither punitive, curative, nor preventive. He recommends that any person convicted of drunkenness four times within twelve months should be considered an habitual drunkard. Habitual drunkards should be committed like prisoners under remand; but the remand should be for a period of not less than three months. When so remanded, they should be set to work in prison; and those who earn more than covers the cost of their maintenance should have such sums placed to their credit, to be applied to their use after their discharge, or given to their families in the meantime if such were dependent on them. Habitual drunkards, when discharged before a period of three

months, should be placed under police supervision, which would extend over twelve months. Short sentences, he points out, do not permit the effects of the drink to be eliminated from the system. The discharge of such persons at the end of a short term tends to break down any moral reformation, should such have begun. It prevents any system of remunerative labour being carried out in prisons; and it exposes the public to suffering from crimes committed which would otherwise be prevented. Dr. Moore's suggestions are set forth at greater length in an excellent pamphlet on *Prison and Prison Discipline*. They have received the approbation of many eminent prison authorities, and certainly have this practical side to them, that they propose to take measures to bring about a reformation of a class of habitual drunkards who by their acts have already brought themselves within the arm of the law, and whose present treatment now involves enormous cost to the country, without any adequate deterrent or reformatory result.

SMALL-POX AT HARWICH.

THE hopes of a clean bill of health last week at the Temporary Hospital, Harwich, have been disappointed; for, besides two fresh cases, the admission of which we recorded last week, two more appeared on Wednesday in Dovercourt, a suburb of Harwich, just at the time when the authorities were congratulating themselves on the complete freedom of the town from small-pox, as the six cases in hospital were all that remained in any stage. The two cases admitted last week were of a favourable character. The man, a severe case, reported last week, died, as anticipated.

TYPHUS FEVER AMONG RUSSIAN SOLDIERS.

THE following telegram, dated Jassy, February 28th, has been received at St. Petersburg: "The number of typhus cases among the wounded soldiers who were brought to Jassy in the course of January and February has considerably increased, and now reaches 19 per cent., whereas it was previously only 5 per cent. All the railway-carriages on the Fratisti-Jassy line are infected, and disinfecting processes have only been applied to a partial extent, as they appear to have no effect. All along the Simniza and Fratisti line, large numbers of unburied corpses are lying in a state of decomposition. It is therefore absolutely necessary that the Russian troops returning from Bulgaria and Roumelia should be conveyed by way of the Black Sea, and not *via* Simniza, Fratisti, and Jassy. The Sanitary Committee in Jassy remains inactive."

THE EDUCATION OF MIDWIVES.

THE education of midwives appears to stand in the Sandwich Islands in the same position as it does in Great Britain, and seems to be the source of similar difficulty. At a coroner's inquest reported in the *Timaru Herald*, it appears that a midwife was in attendance in a case in which there was rupture of the uterus; and, after hearing the evidence of the midwife and the medical man, the jury added to their verdict that they quite disapproved of uncertified females acting as midwives without the supervision of a duly qualified medical practitioner. Hence in this point they are no better off in Timaru than we are in Great Britain, and are precisely in the same state of frequent expression of public opinion on the subject, with which every one agrees, while nothing is done.

THE METEOROLOGICAL SOCIETY.

AT the monthly meeting of this Society on Wednesday, February 20th, Dr. Tripe read a paper on the Winter Climate of some English Seaside Health-Resorts. The places selected were Scilly, Torquay, Penzance, Guernsey, Barnstaple, Ventnor, Llandudno, Ramsgate, and Hastings; and the climatic features of each were compared with those of London. The results of the discussion may be briefly summed up as follows. The mean daily winter temperature of these seaside places, and especially of those situated on the coast of Devon and Scilly, is higher than at London. The mean daily maxima and minima are also

higher, and especially the latter; so that the daily and monthly ranges of temperature are smaller. The mean humidity is less; the general direction of the wind about the same; but the number of rainy days and the rainfall are greater at the seaside. As regards the wind, therefore, the chief point to be especially noticed is the amount of shelter afforded by high land, as at Ventnor, and especially of protection against the stormy and cold winds which ordinarily prevail at the end of February and in March. The soil also should be considered, as heavy rains at gravelly and chalky places are not so objectionable as on clayey ground. The discussion on this paper was adjourned until the next meeting, which will be held on March 20th.

THE LANCASHIRE AND CHESHIRE BRANCH.

THE intermediate meeting of the Lancashire and Cheshire Branch of the British Medical Association, held at Oldham, on Tuesday, March 5th, was highly successful. About eighty members were present at the reading of Dr. Broadbent's interesting paper on the Mechanism of Speech. Several short papers followed; and keen interest was evinced in the demonstrations of Drs. Ross and Dreschfeld of the Physiology and Pathology of the Spinal Cord by means of projection on to the screen. Subsequently the members dined together at the Angel Hotel, and much gratification was expressed at the character of the meeting.

HOSPITAL FOR DISEASES OF THE THROAT AND CHEST.

THE special meeting, convened through the action of a requisition of twenty subscribers to this institution, was held on Saturday; Lord Calthorpe, President, in the chair. After the report had been read, the Rev. H. R. Haweis, in accordance with a notice on the agenda paper, moved the first resolution, which was to the following effect: "That, considering the circumstances which led to the formation of the Committee of Inquiry, and the manner in which the investigation was conducted (as detailed by the Committee of Management at the annual meeting of subscribers, held February 9th, 1878), and considering further that no copy of the report of the so-called Committee of Inquiry was ever forwarded to the Committee of Management, this meeting declines to receive such report." This was seconded by Mr. Sterne. Captain Hughes Hallett moved, as an amendment: "That the report be read and not necessarily received", which was also duly seconded. After a good deal of discussion, some of it of a personal nature, the amendment was rejected by a large majority; whereupon Sir Charles Legard stated that he could not avoid the conclusion that the meeting, in refusing to allow the report to be read, were afraid to meet the serious charges against the administration, which it was admitted that it contained, and left the room; together with those who were in favour of the report being read, amongst whom was Dr. Semple, one of the physicians of the hospital. It is to be regretted that this report, which is entitled to much consideration from the subscribers, inasmuch as it is the report of high officers of the institution, such as Lord Clarendon, the Duke of Grafton, Lord Dunmore, together with Sir William Gull, appointed at the instance of the Prince of Wales, was not read to the meeting and fairly discussed; a course which we have throughout steadily urged upon the well-wishers of the institution, as being the most consistent with the ordinary practice of public institutions, and most likely to conduce to salutary reform. It is obvious that the refusal to read the report, and fairly to face its conclusions, must greatly weaken any claims which this institution may have to public and professional esteem; although we have already stated that the conclusions of the report are, in our opinion, seriously in conflict with the evidence adduced, and very unjust to Mr. Morell Mackenzie.

HUNTERIAN SOCIETY.

AT the recent annual meeting of the Hunterian Society, the following gentlemen were elected officers for the ensuing year:—*President*: T. B. Crosby, M.D. *Vice-Presidents*: Walter Moxon, M.D.; J. McCarthy, M.B.; Buxton Shillitoe, Esq.; G. Lichtenberg, M.D. *Trustees*: H. I. Fotherby, M.D.; D. de Berdt Hovell, Esq. *Orator*: W. Rivington, M.S. *Librarian*: P. L. Burchell, M.B. *Secretaries*: R. Clement

Lucas, B.S.; Stephen Mackenzie, M.D. *Council*: J. E. Adams, Esq.; Fletcher Beach, M.B.; A. E. Durham, Esq.; T. R. Fendick, Esq.; R. Fowler, M.D.; J. Greenwood, M.D.; A. Galabin, M.D.; C. R. Nicoll, M.D.; A. H. Smee, Esq.; G. J. B. Stevens, Esq.; W. C. Toulmin, Esq. The annual dinner of this Society was held at the Albion Tavern on February 22nd, when the retiring President, Mr. A. E. Durham, took the chair. He was supported by Professor Owen, the President of the Royal College of Surgeons, the President of the Medical Society, and many other distinguished members of the medical profession.

MR. LIEBREICH ON OIL-PAINTINGS.

IN an extremely interesting and brilliantly illustrated lecture at the Royal Institution on Friday last, Mr. Liebreich, Ophthalmic Surgeon at St. Thomas's Hospital, whose accomplishments in the arts almost rival his scientific acquirements, discussed a curiously-interesting subject, to which he has devoted a good deal of his leisure, and which might be aptly described as the pathology and therapeutics of oil-paintings. Adopting a strictly scientific medical method, he discussed in the most complete manner the pathology of the various diseases of oil-paintings, separating those which are constitutional from those which are accidental. He investigated their causes, and wound up by some rapid and singularly successful demonstrations of methods of restoration derived from this study. The number of medical men who find time, in the midst of busy practice, to devote their leisure to artistic and scientific pursuits, sometimes cognate and sometimes altogether diverse from their medical studies, is on the increase; and the feeling which existed that medical men should, as far as possible, in their pursuits, stick to the shop, has yielded to the more general spread of culture, and to the opinion that many-sided interests and varied culture are not only compatible with the highest grades of skill, but may indirectly conduce to it.

TREATMENT OF ELEPHANTIASIS BY NERVE-SECTION.

DR. THOMAS MORTON of Philadelphia has successfully treated a case of elephantiasis Arabum of a very marked character, in which ligature of the femoral artery had been ineffectually tried, by a new operation consisting in the excision of one-and-a-half inches of the sciatic nerve at the upper third of the thigh. On November 9th, prior to the performance of the latter operation, the leg measured twenty-one inches in circumference. On January 3rd, two months after the excision of the nerve, it was found to be but twelve-and-a-half inches in circumference—a reduction of eight-and-a-half inches; and the thick ichthyotic crust which covered the limb from the knee to the ankle and foot had desquamated, leaving a perfectly clean, soft, and pliable skin beneath. The sensibility of the larger part of the limb operated upon was but slightly impaired. On the whole, the result of this novel and well-conceived proceeding appears to have been most satisfactory.

ANTISEPTIC DRESSINGS IN GERMANY.

AN article with this title, in a recent number of the *Progrès Médical*, gives an account of the antiseptic materials which seem to have superseded Lister's carbolised gauze, and which claim for themselves greater economy, diminished irritability, and freedom from liability to poisoning. Thiersch has come to the conclusion that a saturated solution of salicylic acid—that is to say, 1 to 300—prevents putrefaction of the blood and secretions of a wound, while it produces no irritating effect upon recent or granulating wounds, and gives no cause for alarm by the passage of salicylic acid into the circulation. He uses a solution of salicylic acid for washing instruments, and the hands of the operator and his assistants. The spray is of salicylic acid, which proves, however, very irritating to the mucous membranes of the persons engaged in the operation. The dressings are simple enough. Salicylic acid being non-irritant, no protective is required, according to Thiersch; but, at least in healing surfaces, the protective has the additional advantage of protecting the granulations and the delicate new

epithelium covering them from the danger of sticking to and being injured by the dressings or their removal. But Thiersch uses no protective. He places immediately upon the wound a layer of wadding containing 3 per cent. of salicylic acid; then another layer containing 10 per cent. Blaser, pharmacist to the hospital at Leipzig, employs the following formulæ for the preparation of these dressings. For the 3 per cent. wadding: Dissolve 750 *grammes* of salicylic acid in 7,500 *grammes* of alcohol of specific gravity 830. Add 150 *litres* of water at 70 to 80 deg. cent. (158 to 176 deg. Fahr.) Place in the mixture 25 *kilogrammes* of cleaned wadding. For the 10 per cent. wadding: Dissolve 1 *kilogramme* of salicylic acid in 10,000 *grammes* of alcohol of specific gravity 830. Add 60 *litres* of water at 70 to 80 deg. cent. Place in the mixture 10 *kilogrammes* of cleaned wadding. To saturate the wadding, he uses a shallow vat, in which it is laid layer by layer, taking care not to put in more than two or three *kilogrammes* at one time, and that one layer is well saturated before the next is put on. When all are in, they are to be turned over, so that the bottom one comes to be at the top and left for ten minutes; then removed; and, as they cool, the salicylic acid crystallises out. Finally, the wadding must be dried in a warm place. Thiersch has also tried a dressing composed of jute saturated with salicylic acid; but the powder was disengaged in large quantities, and was extremely disagreeable to the surgeon; and it proved, besides, too permeable to the secretions of the wound, being less cohesive and fine than the wadding; so Thiersch himself has abandoned it. Köhler, Medical Director-General of the Prussian Army, has suggested the use of carbolised jute. The preparation is very simple. The jute is made up into cakes one to two *centimètres* thick, fifteen *centimètres* in diameter, and weighing four or five *grammes*. They are left to soak some hours in a five per cent. solution of carbolic acid, and are then left in two per cent. solution until required for use. To apply them, the wound is covered with a slip of gutta-percha instead of the protective; then some cakes of jute; and the whole is kept in place by a gauze bandage. It requires to be renewed every three or four days; earlier, if there be discomfort, or the discharge have come through; later, if the patient remain well. It is calculated that Thiersch's wadding is about a third cheaper than Lister's gauze, while Köhler's dressing only costs about a twentieth of the price of the latter. Cheaper and at the same time efficient antiseptic dressings are desiderata, and we think that these may be found as useful here as they are said to be in Germany.

SCOTLAND.

THE Edinburgh Institution for the Relief of Incurables exhibited a report, at its annual meeting held last week, which shows how much good may be done by helping people at their own homes. They annually distribute among the poor suffering from incurable diseases the sum of nearly £1,000, in donations of £1 a quarter, to upwards of two hundred recipients. The cases are carefully inquired into, and the whole business of the society is conducted on a satisfactory and very economical footing.

A GENERAL meeting of the managers of the Inverness Northern Infirmary was held last week, and a committee was appointed to report on the desirability of appointing a medical man of experience to take charge of the institution, and to report on what rearrangement of the staff was advisable. The Secretary reported that the excess of expenditure in the year 1877-78 over income was upwards of £700.

ASYLUM FOR IMBECILE CHILDREN.

AT the seventeenth annual meeting of the supporters of this institution, it was stated that the buildings may now be considered as completed, the additional accommodation proving most useful in allowing a more distinct classification of the inmates, and in supplying work-rooms, class-rooms, and rooms for amusement, the want of which had long been felt as a serious drawback to the children. A portion of the

new buildings had been furnished, and was now occupied. The directors were anxious to have the whole of the new buildings finished, so as to admit of the reception of a largely increased number of applicants from the election-roll; but, in order to do this, about £1,000 was necessary for the purpose. Dr. Ireland, in his report, stated that there were 101 patients—63 males and 38 females—in the institution. During the year, there had been 35 admissions, 21 discharges, and 3 deaths. An unusually large number of those admitted last September were of the uneducable class; and that very little could be expected from a good proportion of the inmates, might be guessed from the fact that there were at present in the house twenty-six who were either mutes or spoke very little. The work of training and teaching the children had been carried on with patient industry during the year. The finances were in a satisfactory state.

THE AIR OF GLASGOW.

AFTER some delay, the reports of Mr. Dixon for the months of September and October last have just been issued. They present no essentially striking features, as compared with the statistics previously reported, except that, so far as sulphur in combination is concerned, the quantity present in the air during October was in excess of any of the months since May last. The highest amount of this impurity noted was .42. The substances are estimated in one hundred cubic feet of air and expressed in weight, the unit employed being the *milligramme*. There has been comparatively little fluctuation in chlorine. Organic matter, as represented by nitrogen in the form of ammonia and albuminoid ammonia, was high in September as compared with October, but not in excess of what has been previously found. The stations at Stirling Square and the Calton come in highest in that respect.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

IN the Registrar-General's quarterly return of births, deaths, and marriages in Scotland during the last quarter of 1877, we find that births occurred at the rather high rate of 3.51 per cent. of the population; the births were, indeed, far more numerous than during the corresponding quarter of any of the last ten years. The death-rate, on the other hand, was decidedly below the average; deaths occurred at the rate of 2.01 per cent. of the estimated population, the average death-rate during the corresponding quarter of the last ten years being 2.193 per cent. Among the deaths in the eight principal towns, zymotic diseases claim only 15.9 per cent., indicating a very satisfactory state of public health; only three deaths were from small-pox; typhoid was far more common than typhus; but the ruling epidemic of the quarter was whooping-cough. Diseases of the respiratory system caused a very large proportion of deaths.

PROFESSOR BALFOUR.

WE understand that a movement has originated in the University of Edinburgh to procure a portrait of Professor Balfour, in recognition of his services to the University in having for thirty years acted as Dean of the Medical Faculty. This movement has been joined in by the Fellows of the Royal Society of Edinburgh, in recognition on their part of the services he has for many years rendered to the Society in the character of Secretary. It is to be hoped that the combined efforts of these important bodies will make this movement the success it deserves to be, as a gratifying compliment and acknowledgment of a very long period of valuable work.

IRELAND.

MR. PASCAL P. LAW last week presented the Stewart Institution for Imbeciles with securities to the value of £3,165, for the purpose of building an additional wing to the Institution now being erected at Palmerstown. The thanks of the managing committee has been given to Mr. Law for his very handsome donation, and the warm interest he has always taken in the Institution.

SMALL-POX IN DUBLIN.

WE regret to announce that the epidemic is most seriously increasing. Last week, we reported that there were forty-three small-pox patients in Cork Street Fever Hospital. This number is now almost doubled; there having been eighty cases of the disease under treatment in the hospital on Tuesday last. The largest number of cases in this hospital during the past fourteen years—a period which embraces the epidemics of 1864-5 and 1872-3—did not exceed the present number.

SMALL-POX IN BELFAST.

A SERIOUS outbreak of small-pox has recently taken place in this town. On February 12th, a fatal case was registered, and, between that date and February 27th, twenty cases occurred, all of which were immediately removed to hospital, and every available means used to check the spread of the infection. At a meeting, last week, of the Guardians of Belfast Union, Dr. Reid requested the Board to make arrangements for increased accommodation for patients in the wards of the Workhouse Hospital; and it has been decided that, if parties continue to be admitted to hospital, more infirmary-wards should be opened in the workhouse, into which non-contagious cases could be transferred from hospital, in order that additional wards in the latter could be obtained. The disease has been traced to Ballymacarett, where small-pox prevailed some time ago.

DEATH OF MR. HENRY M. JOHNSTON OF BELFAST.

THIS gentleman died on last Sunday morning, in his fifty-second year, at Bangor, where he had been temporarily residing. A few years since, a severe attack of illness occurred, which rendered his ultimate recovery hopeless, and he was necessarily obliged to give up all professional duties. By his medical brethren he was highly esteemed, and possessed the regard of many attached friends. His funeral was, according to his last wishes, a strictly private one, the remains being interred in the family burial-ground at Tullylish.

FEES IN SANITARY PROSECUTIONS.

MR. DEELY, Sanitary Officer of Kilconnel District, recently applied to the Ballinasloe Board of Guardians for a fee of one guinea for giving evidence in a sanitary prosecution. The guardians declined to comply with the request, and obtained the opinion of the Local Government Board as to their liability in the matter. The reply of that Board was received last week, and was to the effect that, according to the terms of their Sanitary Orders of September 9th, 1874, paragraph 2, "executive duties", the sanitary officers are required to attend and assist in the proceedings in which their assistance may be required by the executive sanitary officers. The salaries allowed are, it appears, intended to cover those duties, as well as those specified in the previous parts of the order referred to.

CORK DISTRICT LUNATIC ASYLUM.

At a meeting of the Governors of this Asylum held on the 1st inst., Dr. Lombard J. Tanner was elected Assistant Medical Superintendent in the vacancy caused by the resignation of Dr. Atkins. Lord Mountcashel proposed the following resolution, which was unanimously adopted: "That in receiving the resignation of Dr. Ringrose Atkins, on his promotion to the office of Resident Medical Superintendent at the Waterford Lunatic Asylum, this Board desires to express its high sense of the manner in which Dr. Atkins discharged his duties while connected with the institution; and though the Board with much regret parts with so valuable an officer, they rejoice on his own account that his merits have received so marked and advantageous a recognition." Dr. Eames, the medical superintendent, applied for an additional assistant, as the work of the Asylum was very heavy; it containing an average daily number of seven hundred and fifty-two inmates. Notice was given by one of the Governors to appoint a resident medical pupil under the terms of the fifty-second rule of the Privy Council.

RATHFARNHAM WATER-SUPPLY.

THE guardians of the South Dublin Union last week, by a majority of votes, resolved to supply this town with the Vartry water. At present, the supply is insufficient, the water from the Rathfarnham pump being also extremely hard, and from an analysis of the city analyst it has been found that it contains sixty-seven and a half grains of solid matter per gallon, whilst Vartry water contains about four and a half grains.

BELFAST ROYAL HOSPITAL.

THE usual quarterly meeting of the General Committee of this Institution was held last week. The report of the Board of Management for the past quarter stated that they had accepted from some medical gentlemen the portrait of the late Andrew Marshall, M.D., who was formerly one of the consulting surgeons to the hospital, and had placed it in the board-room of the Institution. Reference was made to the Convalescent Home, donations to which have already amounted to upwards of £6,000, and £500 in addition from Lady Johnston for furnishing same. It has now been completed, and is occupied by patients; but a further sum of £1,000 is still requisite to place the Home out of debt. Mr. S. Coates, senior resident surgeon, having resigned, has been succeeded by Mr. Jefferson, the junior resident surgeon, the vacancy thus occurring being filled up by the appointment of Dr. Henry O'Neill.

THE SANITARY CONDITION OF CORK.

SOME time since, we referred to the inquiry instituted by Dr. MacCabe into the prevalence of enteric fever in this town; and, in reference to this subject, the recent report of the Cork Fever Hospital is interesting and instructive. It was proved, at the late investigation, that the sanitary state of Cork was capable of improvement in very important particulars; and from the evidence given, it could not be expected, in such a state of sanitation, the town could escape from periodical visitations of preventable disease. Dividing the nine years, from 1866 to 1875, into three periods, we find that, from 1866 to 1869, forty-six cases of typhoid fever were treated in the hospital; from 1869 to 1872, eighty-three were treated; and from 1872 to 1875, one hundred and thirty-one cases; making a total in the nine years of two hundred and sixty cases. The report points out that, although repeated analyses of the pipe-water have been satisfactory, yet this does not remove the responsibility resting on the sanitary authorities to free the river which supplies the reservoirs of all those impurities which should otherwise be disposed of; nor are we to be deceived by the disease not assuming, numerically, the character of an epidemic. The danger in the case of typhoid fever is the tendency to become endemic. The presence of the specific poison itself being primarily necessary, and the locality possessing the ingredients which favour its development and increase, the typhoid poison takes hold of the soil, it may be, or the water, remaining latent, and bursting out now and then with periodical vigour; and again, owing to circumstances of temperature or rainfall, retreating as it were for a period of rest. The greater the concentration of the poison, and the longer it is permitted to accumulate unchecked, the greater the virulence of subsequent outbreaks, and the further the penetration of the soil with the poisonous material. The characteristic relationship which exists between the prevalence of enteric fever and the rainfall does not appear to have held good in Cork. This relationship exists, and has been specially traced in certain cities where enteric fever is endemic, notably Basle, Berlin, and Munich. The evaporation from the surface, and the increased putrefactive processes with dry and warm weather, are supposed to account for this. The report adds that, when a competent and responsible superintendent medical officer of health is appointed for Cork, it may be hoped that all the various details of sanitary engineering, in which the town is now defective, will be entered into; and that, both as regards the source of the water-supply and the sewerage of the city, there may be no reasonable ground of complaint. The appointment of such an officer is the first step towards an improved hygiene; and we cannot too forcibly press the urgent necessity which exists for at once securing the independent services of a medical superintendent who is thoroughly acquainted with sanitary engineering.

MEDICAL REFORM.

WE are informed that the Duke of Richmond will, in the course of a day or two, introduce into the House of Lords a Bill for the Amendment of the Medical Acts, having a tolerably wide scope. This Bill, which has been submitted to and altered by the Cabinet and will be introduced as a Government measure, has been officially laid before individuals, among whom are the members of the Executive Committee of the General Medical Council. It was so submitted, however, on the understanding that their opinion was requested officiously but not officially, but that they were not in a position to communicate the contents of the Bill to the General Medical Council at large, or to do more than offer their comments upon it with the view to assist the judgment of the Privy Council in the matter. Nothing, therefore, can be officially stated about the Bill until it has been introduced into the House of Lords by the Duke of Richmond. Opportunities will be given for its full consideration before it passes through its various stages.

We have reason to believe, however, that those will not be wrong who anticipate finding in the Government Bill—1. Provision for conjoint examining boards in the three kingdoms, with provision for the admission of women to examination by such conjoint boards; 2. Adequate provision for the amendment of the fortieth section of the Medical Act; and 3. Provision for the registration, under suitable regulations, to be made by the General Medical Council, of foreign and colonial degrees. To these will, we expect, be found added provisions for the education and registration of dentists and of midwives and obstetric nurses. As, however, the Bill has undergone modification since it was submitted to the Cabinet, the Government alone is responsible for the form in which it will be presented to the House of Lords. We fear it will be found to contain no provision for direct representation of the profession in the General Medical Council.

THE RIGHT OF PRESCRIBING.

WE publish in another column a letter from Mr. Stanger of Nottingham, which relates to a matter of great importance. The case of the Apothecaries' Society *v.* Shepperly has, by the course of events, been transformed into a test-case by which the rights of the profession under the Apothecaries' Act will be decided. Previous decisions have already affirmed that the right of prescribing assumed by chemists in what is called counter-practice has no legal existence; and that this habit of counter-prescribing (largely carried on, to the great detriment of their patients and obvious danger of the poorer classes, and to the injury of a large section of the medical profession) is an infringement of the law. The actions in which these judgments have been obtained have been carried on nominally by the Apothecaries' Society; and it will be seen that in this case the Apothecaries' Society has not only contributed its name and authority to the conduct of the case, but has given a donation of £50 towards the expenses. Judgment has once already been given by an able County Court Judge in favour of the plaintiff; but, as is explained in Mr. Stanger's letter, the Judges of Appeal have sent the case back for re-trial, on the ground that the court which gave the judgment had not, in their opinion, sufficient material fully to decide all the questions in dispute. They have, moreover, removed the case from the County Court to the High Court of Justice, in order, probably, that the opportunity of appeal in the last resort to the House of Lords may be afforded to either party. The costs hitherto have fallen upon a small medical society in Nottingham, of which Mr. Stanger is the representative. It will, we believe, be very generally felt that the costs of a case intended to test the general rights of the profession ought not to fall upon a small section; and, as the question to be decided is one which concerns so large a body of the profession, the funds for prosecuting the case should be furnished by all who are interested in the subject. Directly or indirectly, the profession at large is concerned in it. Under these circumstances, Mr. Stanger's appeal is, we consider, founded on equity, and will, we anticipate, meet with a prompt, wide, and generous response from the members of the profession at large.

THE ARMY MEDICAL DEPARTMENT.

THE following memorial has been forwarded to the Right Honourable Gathorne Hardy, M.P., Her Majesty's Secretary of State for War.

"The memorial of the President, Vice-President, and Council of the Royal College of Surgeons in Ireland humbly sheweth,—

"That your memorialists upon the 3rd of June, 1875, officially expressed to Her Majesty's Government their conviction that, unless active steps were taken to amend the condition of the Army Medical Department, 'serious public inconvenience would be felt in consequence of there being a deficiency of properly educated surgeons for the service of the army': a state of things which, your memorialists regret to learn, has come to pass.

"Your memorialists beg to state that, in pursuance of charters granted to them by Her Most Gracious Majesty and her royal predecessors, they have 'provided a sufficient number of properly educated surgeons for the army'; but your memorialists find that, with hardly an exception, these gentlemen will not take service in the Medical Department as at present organised.

"Your memorialists, therefore, feel that they would be deficient in their duty to the Crown and to the public were they not to call your attention to these facts, and again to urge Her Majesty's Government to take such measures as will tend to restore the Army Medical Service to its former position in professional estimation and public favour.

"ROBERT MACDONNELL, President, PHILIP CRAMPTON SMYLY, Vice-President, J. STANNUS HUGHES, Secretary, Royal College of Surgeons in Ireland."

"Dublin, March 5th, 1878."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual meeting of this Society was held on Friday, March 1st. The President, Dr. WEST, took the chair at 8 P.M., and the ballot for the election of officers and Council for 1878-79 was immediately opened; Dr. C. Fish and Mr. E. Newton being nominated by the President as scrutineers.

The Report of the President and Council gave the usual details as to the numbers and position of the Society. These were of a favourable character. The deaths had been three below the average of many past years, and the new Fellows seven above the average, being respectively twelve and twenty-seven. The deaths comprised two honorary Fellows, five resident, and five non-resident Fellows; and the new Fellows, twenty-four resident and three non-resident. There had been an upward movement in the number of subscriptions from 258 to 265; and the total number of Fellows, honorary, resident, and non-resident, had risen from 651 to 665. The receipts exceeded those of the previous year by about £100; but, the year having commenced with a deficiency instead of the usual balance in hand, the available income was slightly less. The expenditure also was less; its details varying little from those of the previous year, with the exception of an excess of £50 expended on the library and a decrease in the cost of the *Transactions* of about £70. The balance in hand was £33 19s. 3d. The report then gave some details of the founding and settlement of the regulations of the Marshall Hall Memorial Prize, and stated that the Council recommended to the Society that the prize should be awarded to Dr. John Hughlings Jackson, for his investigations into the Pathology of the Nervous System. The Committee on Membranous Croup and Diphtheria were still engaged in sifting the material in hand, and their final report would not be long delayed. The Council recommended that a change should be made in the days of meeting. In the old arrangement, the meetings had been held from "November to June". In 1871, an alteration had been made to "October to May". It was now recommended that the meetings should be held from the fourth Tuesday in October to the second Tuesday in June.

The Honorary Librarians gave their annual report as to the increase of the library, the number of works added last year being 443; and they stated that the new catalogue and index were making progress through the press, and would probably be in the hands of the Fellows by the close of the year.

The adoption of the report (subject to a distinct motion on the paragraph relative to the alteration of the times of meeting, which involved an alteration in the by-laws), which was moved by Mr. CHARLES HAWKINS (who congratulated the meeting on the improvement in the financial condition over that of the previous year), and seconded by Dr. BUZZARD (who especially referred to his gratification at the excellent adjudication of the Marshall Hall Prize), was carried unanimously.

Change of Days of Meeting.—The alteration of the by-laws, relative to the proposed change in the days of meeting, was moved by Mr. COOPER FORSTER, and seconded by Mr. SPENCER WELLS. The Secretary, Dr. JOHN HARLEY, explained the reasons which had led the Council to adopt the recommendation in the report, among which were the injurious effects of too early a commencement of the session in lowering the number of members present at the first meetings, and the increase of the difficulty always felt by the Secretaries in obtaining papers for reading at that period. Mr. COOPER FORSTER, in moving the alteration, supplemented the Secretary's remarks by suggesting that some of the papers in excess at the end of a session might be held back to supply the probable deficiency at the beginning of the next. Mr. CURLING stated one objection to the change, in that it would again throw the consideration of some of the papers by the Council to a later period of the summer, when the Councils were not so well attended; and Mr. THOMAS SMITH referred to the small attendance at the June meetings, which, however, was replied to by the SECRETARY, who stated that, in making up the average, the numbers at the June meetings had been found to exceed those of the subsequent October ones. The motion was carried by a considerable majority.

The Marshall Hall Prize.—THE PRESIDENT then called upon Dr. Hughlings Jackson to receive the diploma of the Marshall Hall Prize, and addressed him as follows: "Dr. Hughlings Jackson,—I could have wished that, for this night at least, the chair might have been occupied by another than myself, so that you might have received your well-won honours from the hand of some one who had himself gathered laurels in the same field as you. But as this cannot be, I have at least the satisfaction of assuring you how much I am your debtor for the light you have thrown on my path in the daily practice of my profession; how often I have found your doubts worth more than many another man's assertions; how, even when I have hesitated to adopt your conclusions, it has been with the feeling that probably you were right and I was wrong, that your keener insight had shown you clearly facts the outline of which seemed to me still blurred and indistinct. Though all the Fellows acquiesce in the justice of the Council's award, it is yet perhaps fitting that I should mention the three chief grounds on which that award was made: 1. Your contribution to the increase of our knowledge of aphasia, and to the increased certainty of that wonderful discovery by which we are now enabled to localise the power of intelligent articulate speech in a certain district of the brain. 2. Your careful clinical observations on epilepsy, and the light you have thereby thrown on many points connected with the structure and functions of the brain. 3. Your researches with the ophthalmoscope, that instrument by means of which we see through the eyes as through windows to the brain. I hope, in time, we may arrive by its means at something approaching that certainty of diagnosis which auscultation has enabled us to attain in diseases of the chest. In handing you this diploma, which records your selection as the first Marshall Hall prizeman, I need not engage you to continue your investigations with the same diligence as heretofore, for 'the labour we delight in physics pain'; but do it with the same absence of self-seeking as has characterised your work hitherto, and you will continue to enjoy still the rare good fortune of praise without detraction, of honour without envy."

Dr. HUGHLINGS JACKSON, in receiving the diploma, made a reply, thanking the President and Society for the very high honour conferred upon him.

President's Address.—THE PRESIDENT then addressed the meeting, and after a few introductory remarks, entered upon his obituary notices of such Fellows as had been lost to the Society during the preceding year. The deaths were not so numerous as usual. Among them were five resident fellows: Mr. William Conlon, Dr. Thomas Heberden, Dr. Basham, Mr. Robert Dunn, and Dr. Cotton; five non-resident: Dr. Wm. Carr of Blackheath, Mr. Julian Jeffreys of Richmond, Mr. George Cooper of Brentford, Dr. Charles Mayo, and Dr. Frederick Davies; among the Honorary Fellows, the losses were Dr. William Stokes of Dublin, and Professor Claude Bernard of Paris.

The President concluded his address in the following words: "One thing has struck me much in drawing up these short notices of the deceased Fellows of our Society, that almost without exception they may be said, in words used long ago, to have 'served their own generation', not themselves. The sphere in which one worked was a wider, in which another a narrower one; this man threw his energies into the welfare of the parish where he lived; another devoted himself to the interests of the dwellers in the great continent of India; a third to the vindication of the principle which seemed to him to underlie the highest interests of our profession; while a fourth, not greedy of the gain which he might have had every day, nor thirsting for public distinction, helped the poor and taught the student almost to his dying day. I know that to praise the days that have fled, to live in the long retrospect rather

than in the short remaining future, is the natural disposition as life goes on and its sun declines. But for all that, I cannot refrain altogether from the question whether the spirit of the present day, the hurry to get on, the anxiety for wealth in order to meet a needlessly lavish expenditure, do not tend to emasculate the character by putting self, and that not a high self, in the place of something wider, nobler, better. Pardon me for raising the question here. Some may deem it out of place. It appears to me, however, that the first Medical Society in the kingdom should assert the highest principles in conduct, as well as the soundest in science; and strong in the strength which the position I owe to your kindness has given me, I have ventured to ask a question which of myself I dare not ask, which even now I crave your pardon for asking."

At the conclusion of the address, it was moved by Mr. J. MONCRIEFF ARNOTT, and seconded by Sir JAMES PAGET, and carried with great applause: "That this meeting expresses its best thanks to the President, Dr. Charles West, for his most excellent address; and that he be requested to allow it to be printed." Votes of thanks were also moved by Mr. GEORGE POLLOCK, and seconded by Mr. ERICHSEN, to the retiring Members of Council; and by Mr. CURLING, seconded by Mr. THOMAS SMITH, and carried with acclamation, to the retiring officers, Dr. John Harley and Mr. J. W. Hulke, Honorary Secretaries; and Dr. Charles Murchison and Mr. Timothy Holmes, Honorary Librarians; for their zealous and valuable services to the Society during the periods they had respectively held their offices. The two secretaries returned thanks; and on the motion of Dr. Harley, which was seconded by Sir JAMES PAGET, a vote of thanks was also given to Mr. Wheatley, the Assistant-Librarian. The scrutineers having returned from examining the lists, the President announced the result of the ballot for officers and council for 1878-9. The list of officers and council was given at page 309 of last week's JOURNAL.

ARMY MEDICAL DEPARTMENT.

THE following is a bare statement of certain grievances affecting the officers of the Army Medical Department, and of some of the causes tending to damage the efficiency of that Department.

1. Prejudicial abrogation, by Royal Warrant of April 1st, 1873, of the double organisation—staff and regimental—guaranteed by Royal Warrant of October 1st, 1858; and of its Clauses 1, 3, 4, 7, 17, and 21, upon the faith of which many medical officers were induced to enter the Department.

2. Sudden and totally uncompensated deprival, by Royal Warrant of April 1st, 1873, of regimental appointments, whereby many medical officers were caused considerable pecuniary and other losses.

3. Abrogation of Paragraph 1, Section 5, of the Army Medical Regulations of 1859 (relating to service on the West Coast of Africa), by Royal Warrants of 1866 and 1867, whereby serious damage has resulted in the case of at least one medical officer accepting these Regulations, as regards pay, promotion, and retirement.

4. Continued refusal of such terms of exchange as are freely allowed to all other officers of the army.

5. Continued refusal of such leave as is fully enjoyed by all other officers who, like the medical, are obliged* to serve in all parts of the world: *a.* For due attention to private affairs; *b.* For professional study and improvement; *c.* For the recovery of lost health. One consequence of this latter deprivation is that the death-rate amongst army surgeons is twice that of other officers (*vide* Addendum).

6. Lowering the position of the senior executive medical officers by placing them on one common duty roster with the youngest juniors, and compelling them to perform such subordinate duties as hitherto have always been performed by the subalterns of the department.

7. The arbitrary, injurious, and prolonged deprivation of all means or opportunities of medical and surgical practice in the army; and, as a result of the existing ill-considered arrangements, many talented medical officers find it very difficult to keep pace with the continual and rapid progress of their profession.

8. The continued withholding, in certain instances, of the clerical assistance necessary to enable medical officers to comply satisfactorily with the rules by which they are required to have certain statistical returns, reports, and records prepared, furnished, and retained in safe custody.

9. Abrogation of the Royal Warrant of April 1st, 1873, by Regulations of 1876, depriving executive medical officers of the five years' tenure of regimental appointments guaranteed them by that Warrant.

* British Army chaplains, commissariat officers, and storekeepers are not so obliged.

10. The seriously reduced and rapidly declining strength of the department (owing to a long-continued failure of candidates), leading to much and increasing overwork in the case of many medical officers.

11. A greatly diminished efficiency in the department, partly from the last-named causes, and otherwise by reason, not only of the prolonged absence of competition, but that also of the low standard of marks now accepted as merely qualifying for appointments in the Army Medical Department under the present ten years' system.

12. The wholesale supersession of many senior executive medical officers, of high character and professional ability, by the unexpected enactment of certain alleged rules, which were made to operate retrospectively, and which, if ever published at all in Great Britain or the colonies—which is doubtful—were certainly not communicated to those most concerned until, if ever, at any rate, a great many years after their entry into the department, on the strength of other and quite different rules.

13. Want of proper representation, protection, and sympathy towards the executive ranks by the administrative ranks of the department.

14. The worrying uncertainties of the position and prospects of army medical officers caused by the many breaches of agreement with them by the Government or its representatives during the last nineteen or twenty years.

ADDENDUM.—*Average Mortality amongst Army Medical Officers as compared with other Classes Civil and Military.*—The average annual death-rate per 1,000 of adult males in England is 9 to 10; Army officers, exclusive of medical officers, 15; Army medical officers from 1839 to 1854, 34; *a.* During Crimean war, 67; *b.* Since Crimean war, 20; Average death-rate of army medical officers during the last thirty years, 30. This increased death-rate does not take place among the older men, as in civil life, but the chief mortality is among the younger men of the department. The actual death-rate of the department is 44 per cent. greater than that of the males in civil life of all classes, and 75 per cent. greater than that of males of the same class as the army medical officers (including medical men) in civil life.

For the above data, *vide* paper by Dr. De Chaumont (now Professor of Hygiene at Netley) in the *Edinburgh Medical Journal* for November 1874, page 405.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A SPECIAL MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday next, the 13th instant, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., March 6th, 1878.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting will be held at the Crystal Palace Hotel, Upper Norwood, on Thursday, March 14th, at 4 P.M.: R. M. MILLER, M.D., in the Chair.

The following papers are promised.

1. Mr. Golding Bird: The Treatment of Scrofulous Glands by the Electrolytic Cautey.

2. Dr. Poole: On the Non-Alcoholic Treatment of Post Partum Hæmorrhage.

3. Mr. Sidney Turner: A Case of Abdominal Tumour.

4. Mr. Sidney Turner: A Case of Opium Poisoning.

Dinner will be laid at 6 P.M. Charge, 6s. a head, exclusive of wine.

JOHN H. GALTON, M.D. Lond., *Honorary Secretary.*

Woodside, Anerley Road, S.E., February 26th, 1878.

BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the session will be held at the Museum and Library, at the top of Park Street, Bristol, on Wednesday evening, March 13th, at half-past 7 o'clock; H. MARSHALL, M.D., President.

The following papers are expected.

1. J. G. Swayne, M.D.: Case of Puerperal Convulsions.

2. W. H. Spencer, M.D.: The Use of Salicylic Acid in Combination with Opium and Aconite.

3. E. Markham Skerritt, M.D.: Cases illustrating the Treatment of Pleuritic Effusion.

4. A. E. A. Lawrence, M.D.: On certain Forms of Non-Puerperal Uterine Hæmorrhage.

A train leaves Bath at 6.35 P.M., and returns from Bristol at 10.15 P.M., Great Western Railway.

E. C. BOARD, }
R. S. FOWLER, } *Honorary Secretaries.*

7, Caledonia Place, Clifton, March 6th, 1878.

THAMES VALLEY BRANCH.

THE next general meeting will be held on March 14th, at the Griffin Hotel, Kingston, at 5 o'clock.

Papers will be read by—

1. Dr. Price Jones.

2. Mr. George Farr White: On Cerebro-spinal Meningitis.

3. Dr. Fenn: On Paroxysmal Hæmatinuria.

There will be a dinner at the above hotel at 7 o'clock. Charge, 7s. 6d., exclusive of wine.

Those members who intend to be present are requested to notify the same to the Honorary Secretary as soon as possible.

F. P. ATKINSON, M.D., *Honorary Secretary.*

Kingston-on-Thames, March 6th, 1878.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

THE next meeting is appointed to be held at St. Bartholomew's Hospital, Rochester, on Tuesday, March 19th, at 4.30 P.M.: Dr. BURNS, R.N., in the Chair.

Dinner will be provided at the Bull Hotel, Rochester, at 6.15 P.M.

Papers have been promised by A. W. Nankivell, Esq., on Acute Necrosis; and by J. Thoresby Jones, Esq., on a Case of Displacement of the Sacrum.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary.*

Rochester, March 5th, 1878.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT MEETINGS.

THE next meeting of the above District will take place at the Surrey County Hospital, Guildford, on March 21st, at 3.45 P.M.

Members wishing to read papers are requested to communicate with the Secretary at once.

There will be a dinner at the White Lion Hotel, at 6 P.M. Charge, 7s., exclusive of wine.

A. ARTHUR NAPPER, *Honorary Secretary.*

Cranleigh, February 26th, 1878.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next meeting of the above District will take place at the Harp Hotel, Dover, on March 21st, at 3 P.M.

Members wishing to read papers are requested to communicate with the Secretary at once.

There will be a dinner at the Harp Hotel, at 5 P.M. Charge, 6s. 6d., exclusive of wine.

WM. KNIGHT TREVES, *Honorary Secretary.*

Margate, March 2nd, 1878.

YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Infirmary, Rotherham, on Wednesday, March 27th, at 3 P.M.

Members wishing to read papers or bring forward cases are requested at once to communicate with the Secretary.

After the meeting, the members will dine together at the Ship Hotel at 5 P.M. Tickets (exclusive of wine) 6s. 6d. each.

W. PROCTER, M.D., *Honorary Secretary.*

York, February 26th, 1878.

LEEDS.—Dr. Goldie states that the rate of mortality was rather high in this borough during the five weeks ending December 1st, especially amongst infants. Scarlet fever was still prevalent, but was much reduced by closing the schools in the infected districts; whilst small-pox was entirely absent from the death-returns. The uncertified deaths were 2.4 per cent. of the whole.

CORRESPONDENCE.

THE PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

SIR,—In reply to Dr. Grigg's last letter, I beg to state that I have decided to adhere to the statement made in my first letter; namely, not to publish any fuller report of the proceedings of the last meeting of the Committee of Council, until I receive instructions from the Committee to do so. I intend to call a meeting of the Committee of Council as soon as may be convenient to consider Dr. Grigg's letters, and he will then have an opportunity of submitting his objections to the Committee and explaining fully his views on their proceedings. I may be allowed to express my surprise that the secretary of so important a Branch of the Association as the Metropolitan Counties Branch should have failed to attend regularly the meetings of the Committee of Council, when he could not be unaware that matters of importance are frequently brought under its notice, and that the subject of acquiring premises for the publication of the JOURNAL has been for some time under the consideration of the Committee of Council, and no secret whatever has been made of their intentions.—I am, sir, yours, etc.,

R. WILBRAHAM FALCONER, M.D.,

Bath, March 6th, 1878.

President of Council.

SIR,—As an old member of the Metropolitan Counties Branch, who has had some experience of the working of the Association during the last quarter of a century, I ask permission to make a very few remarks on the controversy raised by Dr. Grigg regarding the proceedings of the Committee of Council.

As to the publication of the minutes in the JOURNAL—a question which will be fully considered next week at a special meeting of the Committee of Council—I shall only remark that it has always been the practice to publish a selection from the minutes; and that the irksome task of making the selection has for some time past been laid upon the President of the Council, because the members of Committee, impatient to get away, will not remain, as they ought, to decide what portions shall be made public. After so bitter a personal attack as has, I regret to think, come from the secretary of my own Branch, I should imagine that Dr. Falconer and his successors will henceforth insist on the Committee of Council doing this difficult and often delicate piece of business itself.

But when I find Dr. Grigg lecturing the President and Committee of Council in the month of February on their misdeeds in regard to the new premises in the Strand, I ask where he was in October, when the subject was discussed in a full meeting of Committee, and every one who could make it convenient was requested to visit the premises and judge of their eligibility for himself? So much for the charge of secrecy brought against the Committee, and for the lynx-eyed vigilance of Dr. Grigg as a guardian of the pecuniary interests of the Association. I went, in common with others, to see the house, on the 10th of October; and while the general impression was that the situation was unexceptionable, some thought that the rent was high; and I am sure that every member of the Subcommittee specially appointed to look out for premises, of the Journal and Finance Committee, and of the Committee of Council, would have been heartily thankful to Dr. Grigg or any one else who could have put them in the way of securing so wonderful a bargain as that which Dr. Grigg now tantalises us with! Let him deplore in silence, if he will, the cruel fate that has prevented his conferring so great a benefit on the Association; but let him not hold up to the condemnation of their brethren those who *were* at their posts, and discharging their duties to the best of their information and ability.—Yours, etc.,

A. P. STEWART.

London, March 6th, 1878.

SIR,—I enclose, for publication in the JOURNAL, a copy of two resolutions which were passed without dissenting remark at the meeting of the Council of this Branch held on the 27th ult. They had been previously circulated amongst all the members of the Council. Letters were read from some influential members, who were unavoidably prevented from attending, expressing their warm approval.

A third resolution, which had also been previously circulated, would have passed, but, out of deference to Mrs. Garrett-Anderson as a lady, it was thought it would be better if the President had a personal inter-

view with her before proceeding to such an extreme measure as to request her to abstain from attendance at the meetings of the Association, where her presence was personally objectionable to several distinguished members of the Branch.—I have the honour to remain, etc.,

W. C. GRIGG, Honorary Secretary to the Metropolitan Counties Branch.

1. That this Council is of opinion that it is desirable that the Reports of the Proceedings of the Committee of Council should be published with as much fulness as is consistent with the conduct of business, and should in no case omit any important resolutions affecting the general interests of the Association.

2. That this Council desires to express its opinion that, in the selection of a central building and house for the Association, it is desirable that the meeting and committee rooms and central office should be separate from the printing and publishing offices.

AN IMPORTANT APPEAL.

SIR,—I venture to make an appeal to the readers of the BRITISH MEDICAL JOURNAL on a matter in which I feel sure of obtaining their hearty sympathy, as it is one which seriously affects the interests of the whole medical profession. You have probably not forgotten the case of the Apothecaries' Society *v.* Shepperley, which was argued in the Exchequer Court during part of two days last November. It was an appeal from a judgment in the Nottingham County Court, by which a leading chemist and druggist in this town was fined in the full penalty of £20 for counter-prescribing. On the hearing of the appeal, several counsel were engaged, Sir Henry James leading for the appellant and Mr. Day, Q.C., for the respondents; but, after Sir Henry James had spoken for some hours, and before Mr. Day was heard, the Lord Chief Baron and Mr. Baron Cleasby, who were hearing the case, refused to give any judgment at all, and ordered that a new trial should be had, on the ground of the great importance of the case, and because, in their opinion, the court had not sufficient material before it fully to decide all the questions in dispute, especially the construction of Section 28 of the Apothecaries' Act, under which proceedings had been taken, a section which is somewhat ambiguously worded, and appears at first sight to exempt chemists and druggists from the penalties inflicted by the Act; and they directed that the case should be removed from the County Court to the High Court of Justice, in order, no doubt, that an opportunity of appealing in the last resort to the House of Lords might be afforded to either party. At the present time, the pleadings preparatory to the new trial are being delivered between the parties; but it is doubtful whether the plaintiffs will have sufficient funds at their disposal to justify them in going to trial, and it is quite possible that, at the last moment, the whole case will have to be abandoned. It is to prevent, if possible, so impotent a conclusion that I now venture to appeal to your readers. The nominal plaintiffs in the action are the Apothecaries' Society; that, as is well known, is rendered necessary by the Apothecaries' Act; and the Apothecaries' Society, when this case was commenced, gave it their sanction, and promised £50 towards the expenses: a sum which I need hardly say has already been considerably exceeded. The real plaintiffs are a society of medical men in this neighbourhood of whom I am the president, and, as our funds are not large, many of our members feel much reluctance to embark in a course of litigation which may very possibly not come to an end before the House of Lords has given its decision in the matter.

If it were, as at first we thought it would be, merely a matter in our own county court, or which at most would go no further than the court for hearing inferior court appeals, we should have considered it unworthy not to depend on our own resources; but, now that it has become a case of so much larger dimensions, and since we feel that its issue will affect the general interests of the profession just as much as those of our own particular society, we think we are justified in laying the matter before your readers, in order that they may have an opportunity of enabling this most important issue to be decided. The object of the trial, in short—or at any rate one of its objects—is to test in the most decisive and final manner the legality of counter-prescribing, and to define precisely the relative functions of chemists and druggists and medical men. That this object should be attained is to be desired both by medical men and by chemists and druggists; and, as the case on the other side has been taken up by the Chemists and Druggists' Association, so we hope that our side will receive the support of the general body of medical men. I shall be happy to supply any of your readers who may wish it with any further details respecting the case.

Contributions or promises of support may be sent to me; to the Honorary Secretary, Dr. Hatherly of Wellington Street, Nottingham; or, with your permission, to the office of the BRITISH MEDICAL JOURNAL.—I am, sir, your faithful servant, GEORGE EATON STANGER.
North Circus Street, Nottingham, March 5th, 1878.

THE LIVERPOOL MEDICAL INSTITUTION.

SIR,—My attention has been called to a paragraph in the JOURNAL of Saturday last, headed "The Midland Medical Institute", in which, after reference to the prospects of a building being erected in connection with that institute, the following statement occurs:—"Liverpool has failed for many years to obtain such an institute or library", etc. Now, the fact is that Liverpool has enjoyed for many years the advantages of a separate and independent medical institution: a building which was erected expressly for the purpose in the year 1837, at a cost of about £4,000; containing two theatres for holding meetings, a committee-room, large accommodation for a museum, and a library which, from the number and variety of its contents, will compare very favourably with other large medical libraries. The facilities afforded by the institution, which is the property of the members, are very great, and have been increased by recent alterations, the cost of which, over £600, has been defrayed partly out of the funds of the institution and partly by voluntary contributions. The institution now numbers one hundred and seventy-seven members; and its meetings, which are held fortnightly from October to May inclusive, are largely attended. On the occasion of the anniversary of the Association being held here in 1859, the meetings took place in the institution, which was found large enough to accommodate the members who were present.—I am, faithfully yours,

A. T. H. WATERS, M.D., President of the
Liverpool Medical Institution.

Liverpool, March 5th, 1878.

MATERIA MEDICA EXAMINATIONS.

SIR,—With all due deference to the views of Dr. Robert Farquharson on the above subject, I venture to think that the solution to them is to be found, not in lessening druggery to the medical student, but in endeavouring to make him more efficient by practical work. It is waste of time to lecture to students who have no knowledge of drugs practically. What knowledge can they get in a public hospital or dispensary? None, absolutely none; the very worst form of dispensing and the worst possible teaching. The only method is the pupil-system, either to a medical man in the country or a good chemist and druggist, for a limited time.

The *armamentarium* of the physician is the *materia medica*, just as the carpenter's tool-box is that of the surgeon. The man who knows the appearances, uses, properties, smell, and taste of drugs, and how they make up in combination, is the best physician; likewise, the man who can saw a plank without splintering, the best surgeon.

Having passed through a two years' pupilage with a botanical lecturer (where I also had the advantage of collecting all the specimens for the course), in which I made up every compound in the *Pharmacopæia*, gathered and made from fresh plants every drug (possible) that was to be used in medicine, I did not find, on going to a medical school, that my time had been wasted. On the contrary, I simply extended my knowledge *with ease*, and could laugh at the ignorance of those who prescribed *incompatible* mixtures. I need not weary you with the scores of such prescriptions I have seen from hospital experts; but two have lately come under my notice which I may mention. One is a mixture of diluted nitro-muriatic acid and prussic acid; I have been told it comes from Edinburgh. The other, I have been told, comes from Dublin; it is quinine mixture in a mineral acid solvent with Fowler's solution. I have not a London one in my memory just at present, but one could easily be found.

Pray, sir, will you be kind enough to tell me how young men are to learn that such drugs are incompatible, if they never learn practically the *Pharmacopæia*? If the youngster do not know the druggist's work, he certainly will never get credit for his prescriptions; and if he were to stand (invisible) behind the counter, he would hear what would make his ears tingle. As a pupil, I never lost an opportunity of going into a wholesale druggist's warehouse and looking at drugs in bulk. One or two months so spent would be of great benefit to every medical student.

I certainly cannot agree with Dr. Farquharson that a knowledge of adulteration of drugs is not essential; nor yet that the botanical characters of drugs are unimportant; a youngster thrown in a foreign clime can by the latter knowledge always find a substitute for the drug he

lacks, and he will find the former knowledge of paramount importance. No man can learn pharmacy out of a book, any more than he can learn anatomy; but he can learn the properties of drugs by trying them on himself or watching their effects on others. Perhaps the first is too much to expect, but it will teach caution.

I look on knowledge of the *Materia Medica* as the most important of all the studies a student has to learn, and least learned. It is the knowledge by which the druggist vies with the medical man and takes his bread out of his mouth; it is the knowledge which above all others should not be a sham; it is the knowledge which, combined with the rest of the medical student's curriculum, enables him to come down like a sledge-hammer on the quack; but let him lack this knowledge, and what is the use of his anatomy and the like in a case, say, of dyspepsia or troublesome cough? He knows not how to use and combine his drugs; the patient becomes disgusted and goes off to the druggist for medicine for "the wind" or "a cough", which should have been cured by his doctor. These are facts well known to every one.

With reference to Dr. Farquharson's remarks under "sixthly", I have only to say that the subject comes under the head of Toxicological Chemistry in the Forensic Medicine course, but I agree with him that it should be included in the *Materia Medica* examinations, and studied alongside with Practical Chemistry. A student well grounded in these essential details would learn his Anatomy and the rest twice as quickly as under the present system. It is true, Anatomy is very important, but *Materia Medica* is more important. Anatomy may ascertain for us where the dyspepsia or cough is situated, but it will not cure the cough or dyspepsia; and that is what our patients want, and our pockets.

For one, then, I sincerely trust that *Materia Medica* examinations, in the interest both of medical men themselves and their patients, will be made more searching and severe, and that a student shall know intimately every preparation and its incompatible in the *Pharmacopæia*.

—I am, sir, yours truly,

CHARLES MOORE JESSOP.

Clifton, March 2nd, 1878.

SIR,—That, after having spent much time in learning facts in *materia medica*, we all of us forget three-fourths of them, cannot be denied. But, when it becomes a question what shall in future be learned and what omitted, probably somewhat different views may be found to exist. For instance, I agree with Dr. Farquharson, that a student should not, with respect to any drug, be required "to furnish in writing any of the elaborate descriptive detail laid down in the *Pharmacopæia*"; but, on the other hand, if it be wished to make him thoroughly observant, he should be liable to be asked not merely the name of any drug or substance, but also how he knows its name; he should be asked, in fact, to describe it at sight, a feat which students, in common with most other people, have much more difficulty in performing than would be supposed prior to experience.

Dr. Farquharson, again, would give up the study of adulterations; but others would possibly regard that branch of the subject as very important under existing circumstances. A volunteer practical class, formed last summer for the purpose of experimenting on adulterations, proved, though quite an embryonic affair, the least unattractive part of the whole course. Indeed, I found that whatever could be seen or done was attractive and interesting to the students, but it was not always easy to interest them by mere lecturing, especially upon drugs strictly.

But the General Medical Council has suggested that we should teach nothing else than drugs, and that therapeutics should be taught by the lecturers on medicine. Now, it is true that first year's students have in some cases a surprising want of knowledge of simple facts in physiology, and, therefore, cannot appreciate remarks on therapeutics; but there is a very easy remedy for this. For its cause is as follows. Freshmen, often utterly ignorant even of such facts as might previously have been very easily gained in a month by the study of a dead animal or two, with the aid of a science primer, attend the same physiology class with second year's men. Before this intellectually heterogeneous mixture, a mass of details, experiments, arguments, and theories is necessarily placed for the benefit of the seniors. Bewildered by this multiplicity of details, now for the first time ever dreamt of, the freshmen realise nothing distinctly—they "cannot see the wood for the trees". But, now that science is beginning to be taught in schools, it is not too much to expect men to know something of physiology before they come to the schools of medicine. This should be added to the matriculation subjects. What would happen to an intending freshman at Cambridge who, proposing to study mathematics there, did not know beforehand something about triangles, circles, and other regular figures? Would he not be referred by the College authorities to his schoolmaster to learn from him the rudiments of his subject? But the medical schools

are the colleges of the medical students, and should have similar power to govern themselves in a matter of this kind, impelled as they very properly are by the examining boards to do their utmost in imparting real knowledge in what they may find to be the readiest way. But it is obvious that the colleges should agree among themselves to enforce a common rule—hence, it seems that the conclave of teachers of materia medica and therapeutics suggested by Dr. Farquharson is eminently desirable from this point, as well as from some other points, of view—I am, sir, your obedient servant,
T. CHURTON, M.D.
Leeds, March 5th, 1878.

THE LOST MEDICAL SCHOOL.

SIR,—In the *Life and Letters of Lord Macaulay*, I find, in a conversation between the late Prince Consort and Lord Macaulay in the year 1851, reference made to what they considered an efficient cause of the decadence of a great medical school. I am sorry to record that there is a monetary reason attached to it.

"I had a few words with the Prince about the Regius Professorship of Medicine. I remarked that it was impossible to make either Oxford or Cambridge a great medical school. He said, truly enough, that Oxford and Cambridge are larger towns than Heidelberg, and yet that Heidelberg is eminent as a place of medical education. There was, hardly, he said, a physician in Germany, even at Berlin, even at Vienna, who made £1,000 a year by his profession. In that case, a professorship at Heidelberg may well be worth as much as the best practice in the great cities. Here, where Bright and Brodie make more than £10,000 a year, and where, if settled at Cambridge or Oxford, they probably could not make £1,500, there is no chance that the academic chairs will be filled by the heads of the profession"—I am, sir, yours,
SAMUEL JACKSON.

Peel Cottage, Oldham, March 1878.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS—Thursday, February 28th, 1878.

The Medical Acts.—The Duke of RICHMOND and GORDON gave notice that upon an early day he should call attention to the Medical Acts, and present a Bill upon the subject.

HOUSE OF COMMONS—Thursday, February 28th, 1878.

The Factories and Workshops Bill.—The House considered this Bill in Committee. On Clause 67, which forbids the appointment of any surgeon as certifying surgeon to any factory or workshop in which he is interested, Dr. WARD moved to insert after the word "workshop" the words "provided always that this shall not apply to the case of a person who is a shareholder in a public company". By passing the Clause as it stood, they would be doing a great injustice to the medical profession, for the terms were very wide.—Mr. CROSS could not accept the amendment. No alteration in the law was proposed, and no inconvenience had arisen from the restriction.—After some remarks from Mr. Gray, Mr. Gorst, and Mr. Macdonald, the amendment was withdrawn.—On Clause 68, making the regulation that certificates shall be given only at the factories or workshops where the children or young persons are employed, except where the number of children employed was less than ten, Dr. PLAYFAIR moved, as an amendment, that the word "ten" be omitted, in order to insert the word "five". His object was to secure, as far as possible, that the certifying surgeons should visit the factories and workshops for the purpose of examining children and young persons. As the law stood at present, it was only in cases where fewer than five children or young persons and children were employed that they were allowed to be examined at the surgeon's, and he wished that law to be maintained. Very strong evidence had been given against allowing children to be examined at the houses of the surgeons, as it tended in many cases to defeat the intentions of the legislature. He would also draw attention to the fact that, if the surgeon went to the factory, he got a small but reasonable fee—2s. 6d.; but, if the children went to his house, the small fee of 6d. was allowed in each case. Under Clause 87, a copy of the certificate might be given, and the clerk copying it would receive 1s.; and similarly, under Clause 97, if a copy of the certificate of birth was wanted, a fee of 1s. had to be paid the clerk; and yet the surgeon, who had to judge of the age, bodily health, and fitness of a person for a particular kind of work, was only to receive 6d. If he sent his horse to a veterinary surgeon, he had to pay a fee of 10s. 6d.; and if he sent his dog, he had to pay 5s. In the country, it might be only half this; but still, he thought, when they compared the payment of 2s. 6d. for the examination of a

dog with the payment of 6d. for a child, they would see that great injustice was done.—Mr. CROSS said he put in the word "ten" on the recommendation of the Royal Commission, and he thought there were some excellent grounds for adopting it. There was a great deal in what had been said about the desirability of children being examined at the factories, however, and he would, therefore, accept the amendment.—The amendment was, after discussion, agreed to; and the Clause as amended ordered to stand part of the Bill.—Mr. CROSS, in reply to Mr. Hopwood, said there was no appeal from the certifying surgeon's decision, except the general power of appeal to the Secretary of State which the Bill gave. He promised, however, to consider, before report, whether he could not introduce some provision in this respect.—On Clause 69, which provides that the fees to be charged by the certifying surgeons shall be as follows: 2s. 6d. for each visit, and 6d. for each person after the first five examined at that visit; a mileage fee at the rate of 6d. for every half mile completed over and above one mile from the surgeon's residence, and 6d. for every person examined when the examination is at the residence of the surgeon, Dr. CAMERON moved an amendment to the effect that the surgeon's fee should be 2s. 6d. for the visit, and 6d. for each person after the first examined at the visit. He said the amendment, if carried, would leave the remuneration of the surgeons as at present, inasmuch as in 1871 the inspectors of factories, on being appealed to, recommended that the maximum fee should be what he now proposed. The proposal of the Bill was to decrease that remuneration; and, as the tendency was for the wages of all classes to rise, he thought the surgeons had a good claim to be at least left in their present position.—Mr. CROSS said that under this Bill the certifying surgeons would receive many more fees than formerly; but, as before, he had no doubt that they would, as a rule, make their own agreement with the manufacturers. Whenever there was a vacancy for a surgeon, he received so many letters, addressed to him under the impression that he had the appointment, that he was induced to believe, from some cause or another, there was a great ambition among medical men to obtain these appointments.—Dr. PLAYFAIR urged that, as the Bill was professedly a consolidation Bill, it was inconsistent to make any alteration in the amount of fees to be paid to the surgeons. He quoted some figures showing the number of surgeons at present appointed, and the amount they were receiving, from which it appeared that there were 167 surgeons receiving from £50 to £500 a year (only two or three receiving the latter sum), and also that there were 445 surgeons who made less than £10, and not above £20 a year.—Mr. MUNDELLA objected to any increase in the fee, because such increase would fall upon the poor workers.—Dr. WARD was afraid that, if the Clause was passed as it now stood, the appointments would be filled by men of inferior qualifications.—Mr. CROSS said that no difficulty was experienced in obtaining the services of efficient men, who performed their duties in a most satisfactory manner.—Mr. GORST, Mr. HERMON, Mr. MUNTZ, Sir A. LUSK, and Mr. MACDONALD opposed the amendment, which was briefly supported by Dr. WARD, Dr. BRADY, and Mr. O'SHAUGHNESSY.—Mr. BIGGAR said that it was merely a doctor's question, and ought not to be considered when they were making laws for the whole community.—Dr. CAMERON denied that he proposed by his amendment to raise the fees at all. He should take the sense of the Committee upon it.—The Committee then divided: For the amendment, 54; against it, 223; majority, 169. The amendment was accordingly lost.—Sir A. LUSK moved that, when the examination was at a place more than a mile from the surgeon's residence, instead of "an additional sixpence for each complete half-mile over and above that mile" being lawful, that additional sixpence should only be chargeable for "each complete mile".—Mr. CROSS promised to consider the point; and the motion was withdrawn.—Dr. WARD moved that "shilling" be substituted for "sixpence". Practically, the sixpence was never taken, as surgeons would rather do the work for nothing than lower their professional status by taking so contemptible a fee. It was reducing them to something lower than the cabmen.—After some discussion, the amendment was withdrawn.—Mr. BIGGAR moved an amendment, the effect of which was that all surgeons who attended trials should receive a fee of ten shillings.—The SOLICITOR GENERAL explained that, if the medical man attended on being commanded, he would receive his fee under the law as it at present stood.—The amendment was negatived without a division.

Army Clothing and Infectious Diseases.—Mr. TORRENS asked the Secretary of State for War whether his attention had been called to the report of a Commission appointed by the *Lancet* to inquire into the risks attending the manufacture of clothing supplied to the army; and whether it was not urgent to take other and more effective measures than those at present adopted to detect and prevent the contamination of uniforms, etc., made for the British troops by workpeople who were

in contact or live with persons suffering from scarlet fever, small-pox, or other infectious diseases.—Mr. HARDY: On becoming acquainted with the article in the *Lancet*, the Surveyor-General of Ordnance inquired into the subject previous to the question being placed upon the paper; and, from his inquiries, I am bound to say there appears to be no ground for apprehension. Great care is taken that no infected clothing shall be given to the troops. I may mention that, among the people who have to do with the Clothing Depot at Pimlico, there has been only one case of small-pox known within five years; and in that case the patient, as he stated himself, had come from a neighbourhood in which the disease was raging. In conclusion, I may say that instructions have been given to the medical men to use every effort to prevent contamination.

Monday, March 4th.

The Army Medical Service.—In the course of his speech on the Army Estimates, Mr. GATHORNE HARDY said: I now come to the subject of the Medical Department. I feel I owe an apology to those honourable gentlemen who take an interest in this department for anything that may have fallen from me with respect to it to which they think exception might fairly be taken; but the worst I said was that it might lay itself open to criticism if, like a certain character in one of Dickens's novels, it continued to go on asking for more. The medical, I may add, is not the only department which does that, and I am far from wishing to throw any discredit upon it; though I adhere to the opinion that, in the case where there is not a horse to be kept, there cannot be a good claim for forage. The department has, at all events, done justice to the army, for the health of the troops has never, I believe, been better than during the last year, with the exception of those stations in the West Indies, where there have been some severe attacks of yellow fever. In the United Kingdom, the death-rate has not been higher than 8 per 1,000, while there has been no great amount of illness, there having been, I think, only 41 per 1,000 in hospital during the year. In India, the number in hospital has been 56 per 1,000, and the deaths have not been quite 14 per 1,000—a rate of mortality and disease which, I am sure, those who are acquainted with that country will not regard as very great. In the Mediterranean also, the health of the troops has been very good; and the most favourable accounts are given of the condition of those serving at the Cape of Good Hope up to the date of the very latest returns. It is supposed, it appears, from an answer which I gave to a question which was put to me in this House the other day, that I regard the condition of the Medical Department as being most unsatisfactory. I do certainly look upon it as unsatisfactory that there should be so many vacancies in the department; but I believe that in India, where the service is popular, the number of candidates very little exceeds the number of vacancies. I am told, indeed, that there is a very considerable reduction in the number of medical men altogether in proportion to the population, and that the demand for them in civil employment is very great. I have been assured by a member of this House that it is a common thing for a young man having £300 or £400 to buy a practice, and there is, no doubt, some difficulty in getting candidates for service in the army on the terms which we are able to give. The opening of the Civil Service and the competition for appointments in India tend very much to draw young men away from medical pursuits; but, be that as it may, the real state of the Army Medical Department on the 27th of February last was as follows. The number of executive medical officers on the Army List was 836. Six have since retired, leaving 830. To these must be added 25 surgeons, whose names have been sent in for the *Gazette*, and three surgeons who have come back from half-pay. Thus, the whole establishment for executive medical officers is, for 1877-78, 885, giving 27 vacancies. Nineteen candidates go to Netley on the 30th of March to meet these vacancies, so that there will be only eight vacancies unfilled. I cannot, therefore, say that the condition of the department is so bad as many seem to suppose. It is, however, at the same time quite clear that we must have medical men for the army. Our medical expenses this year are increased by the necessities of the Cape. I mentioned the other day that a good number of civilians had gone out to the Cape, inasmuch as it was impossible to obtain military medical officers to attend every detachment. We have done everything we could to make the labours of the medical men in the service less burdensome; and, although I have got a great many letters of complaint, I am quite unable to ascertain exactly what it is they want. There are, no doubt, those who wish to return to the regimental system. That system, however, has gone, and it would be impossible to recall it. It was put an end to in 1873, not only on the ground of argument, but of economy, and the certainty that in time of war it would break down at once. We must have all our hospitals on one plan and one basis, and it would be perfectly unfair, as to the roster for foreign service, that whoever happened

to be at the head of the department should not be in a position to give every man his fair turn of home and foreign duty, which can be done effectually under no other than the present system. I quite admit that system is on its trial; but the terms which I proposed were considered at the time by many medical men extremely favourable. The system may not answer, but I think it is entitled to receive a little longer trial. All that I have to add with regard to the whole subject is, that I have referred the questions of complaint to a very small Committee, having only one medical man upon it, and two others perfectly qualified to deal with them. They will formulate the complaints made on every point, and report to me with respect to such amendments as they may deem necessary in order to render the service more acceptable to medical men. I should be very desirous to make it so, because I feel there is no department in which it is more important to have efficient medical men than in the army, and that it is very bad when they happen to be dissatisfied with the service.—Dr. LUSH admitted that there appeared to be an indisposition among medical men to enter the army. He did not know to what cause that indisposition was attributable, but the fact was a very grave one, and he hoped the right honourable gentleman would continue to give the subject his best attention to discover if there was any grievance that could justly be complained of, in order that it might be remedied. The right honourable gentleman had fairly stated that the scheme he had introduced was yet on its trial, but he had no reason to believe that it would really be successful. He did not think there was any deficiency of persons entering the medical profession. Not long ago, a procession of three thousand medical students came down to the House; and one would have imagined that, with such warlike tendencies as had been attributed to them, there would have been no indisposition to join the army. In his own county, there had had recently been an election of a medical officer to the county asylum, when no fewer than fifty-six applications were made for the appointment. He hoped this question would receive careful attention, for it would be a most serious matter if our army should be undermanned as regarded the medical staff.

Public Health (Ireland) Bill.—On the motion for going into Committee on this Bill, the ATTORNEY-GENERAL for IRELAND expressed his willingness to postpone further progress with the Bill for a fortnight; which, after a few remarks, was done.

OBITUARY.

JAMES BLUNDELL, M.D.

On January 15th, Dr. James Blundell died at his house in Piccadilly, aged 87. He had retired from the practice of his profession for many years previous to his death, and was personally known to a comparatively limited number of the senior members of the medical profession. He studied medicine at the united schools of St. Thomas's and Guy's, under his uncle, Dr. Haighton, who was then lecturer on midwifery at Guy's Hospital. He afterwards studied at Edinburgh, where he eventually graduated in Medicine. On his return to London, he was associated at an early age as a teacher of midwifery with Dr. Haighton; and later, succeeded him in the chair of Midwifery. In his earlier days, Dr. Blundell devoted much time and energy to the study of physiology. His experiments went to show that the peritoneum could be subjected to surgical treatment without leading, as was generally supposed, to a fatal issue. He boldly advocated the operations of ovariectomy, and of laparotomy for the removal of the uterus and the relief of intussusception. He successfully removed the uterus in 1828, and the patient survived the operation for some months. The outcome of his earlier physiological studies was a volume of *Researches, Physiological and Pathological*, published in 1825. This work contains all the original investigations of Dr. Blundell on the subjects of ovariectomy and transfusion of the blood. He performed transfusion several times with success, and is justly looked upon as the father of the operation in this country. Three years later, his *Principles and Practice of Obstetric Medicine* appeared. It was still in the days when the custom of dedicating books to high personages was universal; and so the publishers of this work thought it would be an appropriate act to dedicate a book on midwifery to "Arthur, Duke of Wellington, the hero of a hundred fights".

If we may judge by the following extracts from his work on obstetric medicine, the students of his day must have been exceedingly clumsy, or of less than ordinary intelligence. What would a student of to-day say if he were advised thus? "Get the tape; and, after trying whether it is sufficiently strong, put it round the umbilical cord, and tie it very tightly (with a reefers knot) at the distance of an inch

or an inch and a half from the navel. Put another ligature on the cord, about an inch beyond the former, and cut between them. While doing this, you should put your hand between the scissors and the body of the child; for the latter is kicking about very vigorously, and one might cut off the penis by mistake. Such an accident as this the mother would never forgive; and the women would tell it from one to another till you lost all your practice." Again: "There is one other error which you may commit in using the short forceps. Most extravagant it is, and tremendous as extravagant! I mean the introducing of one blade into the rectum and the other into the vagina, the recto-vaginal septum becoming enclosed between the blade and the head. The error is possible, but is scarcely pardonable. The man who is guilty of such an enormity ought to relinquish the name of 'an accoucheur.'" At the same time, Dr. Blundell himself was certainly in advance of the obstetric practitioners of his day. He was in the habit of using the uterine sound to aid in the diagnosis between cystocele, inversion, polypus, and other uterine diseases.

His mode of lecturing was characterised by a careful attention to minute detail upon many points which now-a-days, in a midwifery course, pass unnoticed; yet entertaining withal. Speaking of the treatment of leucorrhœa, he says: "Women prefer colourless astringents; as Nature—with a view, I presume, of correcting the effects of the impurities peculiar to their sex—has given them the same fondness for cleanliness which we observe in kittens and other playful animals; and they do not like their dresses to be stained. The astringent which I generally use is alum; and it scarcely ever fails me. Our Saxon ancestors complained that the Danes stole away the hearts of their women by the fascinating custom of purifying their persons once every week. For aught I know to the contrary, many an accoucheur may have made his way to fortune by a commendable attention to the neatness of a shirt-plaiting! *Sic itur ad astra.*"

In his mode of practice, Dr. Blundell was somewhat eccentric. We believe he was not in the habit of rising much before twelve o'clock. He would then receive patients at his own house till about six in the evening. Having dined, he would start on his rounds about eight or nine in the evening. He took with him in his yellowish chariot a lamp, by the light of which he would read one of a number of books which he always took with him. His rounds sometimes lasted several hours, and it was not uncommon for him to visit a patient in this way at as late an hour as midnight.

Dr. Blundell was well grounded in his youth in the classics, and in his later days he spent much of his leisure in the study of Greek. He had collected upwards of three hundred volumes of works on obstetrics and diseases of women. Many of them have the name of the late Dr. Orme written inside the cover. Some of them are rare and curious old books. Amongst others, there is a beautifully illustrated monograph on uterus bipartitus, entitled *Tabula quatuor uteri duplicis*, with Latin text. The whole of this interesting collection has been purchased by the Obstetrical Society of London from Dr. Blundell's executors for the sum of £20. He had also formed a collection of pathological specimens, which we believe the authorities of Guy's Hospital contemplate purchasing in a similar manner.

It is almost unnecessary to inform medical readers that the large fortune—nearly half a million—which Dr. Blundell left was not made in the exercise of his profession; it was bequeathed to him at different times. Although he early relinquished the practice of his profession, he did much, in conjunction with the late Dr. D. Davis, to elevate the department of obstetrics to a more scientific position.

PRESENTATION TO MR. ROBERT THOMPSON.—On Tuesday, February 28th, a very handsome bronze clock and pair of candelabra were presented to Mr. Robert Thompson, of Brandon, Suffolk, as a mark of esteem on his relinquishing practice. The clock bears the following inscription: "Presented to R. Thompson, Esq., upon his retirement from medical practice after a residence in Brandon of thirty-seven years, as a mark of respect and esteem by those patients and friends whose names are inscribed on the accompanying address." Along with the clock and candelabra, the following illuminated and richly framed address was presented: "Robert Thompson, Esq., Dear Sir,—We, the undersigned inhabitants of Brandon and its vicinity, feel we cannot allow you to retire into private life, after a residence of thirty-seven years as medical practitioner in Brandon, without some expression of our sincere esteem and regard. We, therefore, beg your acceptance of this address and the accompanying testimonial, consisting of a clock and pair of candelabra; and trust, by the blessing of God, both yourself and Mrs. Thompson may be spared for many years to enjoy that happiness and repose which your long and arduous professional labours so well deserve."

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 28th, 1878.

Appleton, Thomas Alfred, Cathcart Road, S.W.
Atkinson, John Mitford, Winchester
Davis, Arthur Randall, Langport, Somerset
Pitt, Francis Dingley, Edward Street, Hampstead Road
Wright, Harry Claude, Wynbery, Cape of Good Hope

The following gentlemen also on the same day passed their primary professional examination.

Curde, Charles, Charing Cross Hospital
Hope, William More, University College
Hughes, Thomas Montgomery, Charing Cross Hospital
Hume, Walter Augustus, St. Bartholomew's Hospital
Pegge, William Joseph, Manchester Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

BROMYARD UNION, Parish of Cradley—Medical Officer and Public Vaccinator. Salary, £50 per annum, and fees. Applications to be made on or before the 6th instant.

CLIFDEN UNION—Medical Officer for the Clifden Dispensary District (Inishboffin). Salary, £90 per annum, exclusive of Registration and Vaccination Fees. Applications to the 13th instant.

GORT UNION—Medical Officer of Ardahan Dispensary District. Salary, £140 a year as Medical Officer, and £10 as Sanitary Officer, with Registration and Vaccination Fees. Election on the 14th instant.

DUNFANAGHY UNION, Donegal—Medical Officer of Gweedore Dispensary District. Salary, £100 per annum, with £10 as Sanitary Officer, exclusive of Registration and Vaccination Fees. There are also two Police Stations and a Coast Guard Station in the district, which are usually placed in charge of the Medical Officer. Applications to the 17th instant. Election takes place on the 22nd instant.

MILLSTREET UNION, Cork—Medical Officer of Workhouse, at a salary of £70 per annum. Applications, with Testimonials, to the 21st instant.

NARBERTH UNION—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

SLIGO UNION—Medical Officer for Carney Dispensary District No. 2. Salary, £120 per annum as Medical Officer, and £20 per annum as Sanitary Officer, with the usual Registration and Vaccination Fees. Applications to the morning of the 13th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*BELLAMY, Edward, F.R.C.S., elected Surgeon to Charing Cross Hospital.
CLIPPINGDALE, S. D., M.B., appointed House-Surgeon to the London Hospital, vice R. Atkinson, B.A., resigned.

Cooke, Edward M., M.B., appointed Medical Superintendent of the Wiltshire County Asylum.

CRADDOCK, F. H., B.A., M.R.C.S., appointed Senior Assistant Medical Officer and Deputy Superintendent of the Worcester County and City Asylum, at Powick, vice Edward M. Cooke, M.B.

*MACREIGHT, W. W., M.D., appointed Consulting-Physician to the Torbay Infirmary.

MARSH, E. A., L.R.C.P.Ed., appointed House-Surgeon to the Torbay Infirmary, vice J. B. Richardson, M.B., resigned.

*RICHARDSON, J. B., M.B., appointed Physician to the Torbay Infirmary, vice W. W. Macreight, M.D., resigned.

ROBERTSON, William Smith, M.B., appointed a Second Assistant Medical Officer to the County Asylum, Fareham, Hants, vice John Thomson, M.B., resigned.

*TAAFFE, R. G. B., M.D., appointed Consulting-Physician to the Sussex and Brighton Infirmary for Diseases of the Eye.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

ROBERTSON—MAXWELL.—At Rosehill Cottage, Hamilton, on the 5th instant, by the Rev. H. M. Hamilton, assisted by the Rev. M. P. Johnstone, *R. T. C. Robertson, M.B., L.R.C.S.E., to Jessie, daughter of the late James Maxwell, Hamilton, N.B.

DEATHS.

SWAIN.—At 20, Ker Street, Devonport, on February 26th, Harriet Eliza Cleeve, the wife of *William Paul Swain, F.R.C.S.

*WALLACE, Samuel, M.D., at his residence, Elderslie House, Cardiff, on January 21st, aged 51 years.

PRESENTATION TO MR. J. B. RICHARDSON.—Mr. J. B. Richardson has lately been presented with a testimonial on resigning the post of Senior House-Surgeon to the Torbay Hospital. The testimonial consisted of a handsome black marble time-piece, with the following inscription:—"Presented to J. B. Richardson, Esq., M.B., on his leaving the Torbay Hospital, by his patients, as a mark of their gratitude for his kindness and attention to them"; and also of a handsomely framed portrait of Professor Spence of Edinburgh, whose pupil Mr. Richardson formerly was.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Lund (of Manchester) will read a short paper, and show a patient from whom both Astragali were removed for severe Double Talipes; Mr. R. Davy will show cases in which he has subdivided the Tarsal Arch for confirmed Talipes; Mr. Adams will exhibit an improved Scarpa's Shoe for the Treatment of Talipes Equus Varus.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Sir Henry Thompson, "Analysis of Five Hundred Cases of Operation for Stone in the Bladder of the Adult Male." The Calculi will be shown.

WEDNESDAY.—Hunterian Society, 7.30 P.M.; Council Meeting, 8 P.M.; Dr. Fletcher, "On the Diagnosis and Treatment of Idiocy, illustrated by Cases"; Mr. Jacobson will show a Child whose Tibia has been divided for Rickets.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

DR. PROSSER JAMES ON LARYNGOSCOPY.

SIR.—If the person who uses the signature "A Student of Charing Cross" had read the preface of the second edition of my *Lessons in Laryngoscopy*, he would have found the following passage: "On returning to practice after a lengthened absence, occasioned by severe illness, I have not thought it necessary to revise the text of this little work. My attention has, therefore, been confined to the colouring of the new plates. These, I trust, will be found, if anything, an improvement on those in the former issue, on the accuracy of which I have often been congratulated."—I am, yours obediently,
PROSSER JAMES.
3, Dean Street, Park Lane, March 4th, 1878.

"MENSTRUATION."

SIR.—I keep pigs myself, and, though I cannot speak from actual experience, believe there is truth in the remarks of your correspondent "A Member" about hams going bad occasionally from the process of curing; with this difference, however, as to its cause, that if the *sows* are menstruating or "hogging", they should never be killed till a week afterwards. I have never heard that women who happen to be menstruating at the time they are helping to cure the hams would render the latter unfit for eating.—Yours, etc.,
F.R.C.P.

THE following communications have been handed to the General Manager:—Mr. Anthony Temple, Kingston; Mr. Alfred P. Watkins, Worcester; Mr. Frederick Trevan, Port Isaac; Medicus, Newmarket; Mr. A. G. Macgregor, Canisbay, Caithness, N.B.

DIALYSED IRON.

A MEMBER of the British Medical Association requests the editor will have the goodness to say, in the answers to correspondents, what advantage the dialysed iron has over other oxides of the metal.

*. Dialysed iron is alleged to have all the good effects of iron without producing constipation, disturbing digestion, or blackening the teeth. (See a notice in a previous page of the present number.)

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the JOURNAL Office or any stated address other than a Post Office.

LADY-MEMBERS OF THE ASSOCIATION.

SIR.—Surely the good sense of the Association can settle the question of the admission of lady-members without resorting to angry language or displaying passion. Such superfluities can effect nothing but injury to the Association. Societies in this country decide questions, however burning, by reasonable majorities, duly obtained and determined; and it is not to be doubted, in the settlement of this question, that whatever individual opinions may be, the voice of the majority will be accepted. All, therefore, required is, that the proper steps be taken to frame a law, which shall meet the wishes of the majority of the Association. Not many of our members will, I hope, approve the inconsiderate action or follow the lead of Dr. Wilson Fox and Mr. Lister—the one in resigning his membership, and the other in threatening to do so—because two ladies are members of the Association. These ladies have been members, we are told, for a period of five and three years respectively, and up to the annual meeting at Edinburgh their membership does not appear to have inflicted inconvenience or umbrage in the Association: in fact, it is probable that scarcely one member in ten up to that time was aware that we had ladies for our associates; and since that meeting, it seems that no one of those gentlemen who are so aggrieved by the presence of these associates have taken the proper and legal steps to prevent a recurrence of what they deem a great scandal—the admission of lady-members. I think most of your readers will agree with me, that it would have been time enough for Dr. Wilson Fox to resign, and Mr. Lister to threaten resignation, when a majority of members had decided in favour of the admission of female members. The world at large would reasonably say that only prejudice or passion could refuse to await the decision; and this resigning and threatening are the more surprising, because on the face of it they are quite unnecessary. The fact is before us, that three thousand out of (say) four thousand members have given their opinion against the admission of lady-members, thereby indicating pretty clearly what the vote of the majority will be when the question is placed before the Association for legal settlement. Moreover, I cannot believe that there will be found many members of the Association who will accept the advice given them as to dealing with the two ladies now members. These ladies were admitted in accordance with the laws of the Association, and, until better informed, I conclude that they cannot be legally ejected from the Association merely because they happen to be of the female sex, as has been suggested. Even if the ejection be legal, I am sure it would not be creditable to us. A new law may decide that ladies shall not in future be admitted, and would thus so far indicate that the admission of these two ladies was a mistake; but in this particular case, the mistake, supposing it to be one, was made by the Association, and those who make mistakes must themselves bear the burden of them as best as they may. The last thing they can honestly do is to inflict the punishment due to their own wrongdoing on those who are entirely innocent in the matter. To endeavour to expel these two ladies from the Association, or (as has been suggested) to write them a polite letter, enclosing their money-payments, and requesting them to take themselves out of it, seems to me, under the circumstances, a proceeding wholly unworthy of our great Association, and would for once justly render us obnoxious to some of those reprobations so often ignorantly and profusely dealt on our profession by outsiders. Surely we may anticipate that these ladies, knowing the feeling of the majority, will not ruffle the temper of members by their presence at Association meetings; and for the rest, as their membership does not appear hitherto for several years to have inflicted any other inconvenience on the Association, one would think (the principle of the non-admissibility of the female sex having been settled by vote) that eight thousand medical men might put up with the leaven of two lady-members. And one more plea might be fairly added why a majority should be content not to drive things to their ultimate conclusion as regards these two ladies, and that is, that of four thousand (say) members who answered the question put to them, one thousand (say) replied in favour of the admission of lady-members. A reasonable majority, it should be remembered, always has the magnanimity of paying respect of some sort to a worthy minority.—Your obedient servant,
W. O. MARKHAM.

London, March 2nd, 1878.

SIR.—May I ask you to allow me space for a few lines in your valuable *JOURNAL*? As a member of the British Medical Association, I was present at the Discussion on Pleurisy at Manchester last year. As soon as a "medical woman" began to speak I rose, intending to go out. Some gentleman near to me said, "Sit down; don't you hear a lady is speaking?" Without venturing to give you the precise words of my answer, I may tell you that I did not sit down, but left the room at once. Apart from other overwhelming reasons why women should not be present at such meetings, there seems to be this powerful one, that no matter what she says, or who she is, the gentlemen present must sit and listen *because of her sex*—in other words, it would check healthy discussion. I may say that throughout the discussion members were constantly coming in and going out. Of course, it is needless to observe that the admission of these two "medical women" was totally irregular, as the rules do not specify properly qualified men or women.

I should not have ventured to address you on this subject, but that I am so pleased to see that the strong feelings of a humble individual like myself against the propriety of women practising medicine are only the same as those of my much respected teachers Sir William Jenner, Dr. Wilson Fox, and many other eminent members of the profession.—I am, sir, yours faithfully,
Bradford, March 1878. EDWARD T. TIBBITS, M.D. LONJ.

SIR.—Please remove my name from the list of the members of the British Medical Association. I am quite in accord with Dr. Wilson Fox as to the admission of females to the meetings of the Association, and would have earlier withdrawn my name had I been aware of the rules permitting their admission to the Association.

I hold that free discussion upon many subjects (surgical and medical) is impossible by men of refined feelings in the presence of females, who should be equally sensitive.—I am, my dear sir, yours very truly,
J. F. WATSON.
Heigham Hall, February 20d, 1878.

DR. I. MASSEY (Nottingham).—Since the vote to which Dr. Massey refers, no women have been elected members of the British Medical Association. The vote was taken in 1876, and was taken in consequence of the fact that two ladies had previously been admitted members of the Association—one by the Council of the Metropolitan Counties Branch, and one by the Committee of Council. These ladies had, however, as has already been stated, been admitted before the vote, and none have been admitted since.

MEDICAL CERTIFICATES OF THE CAUSE OF DEATH, AND UNQUALIFIED ASSISTANTS.

SIR,—Will you kindly inform me, in your notices to correspondents, if an unqualified assistant having charge of a branch practice can legally sign death-certificates (not the registration form) for the principal? and if he can at present, will the new Medical Bill, should it pass, prohibit him?—Yours truly,
X. Y.

*. It is undoubtedly illegal for unqualified medical assistants to fill up medical certificates of the cause of death and to sign thereto the name of their employer. Such a practice, however, supposing it to be sanctioned by the principal of the unqualified assistant, is not easily detected or prevented. Registrars are instructed that when they receive a medical certificate purporting to be signed by a registered medical practitioner, it is no part of their duty either to question the genuineness of the signature or to raise the question whether the deceased person had really been attended during his or her last illness by the practitioner whose name is appended to the certificate. It is evident that to sanction registrars to doubt the *bonâ fides* of certificates would seriously imperil the relations between registrars and medical practitioners. At the same time, we have reason to believe that very few unqualified assistants accept the grave responsibility of signing medical certificates with the names of their employers.

MEDICAL REFERENCES.

SIR,—In the JOURNAL for February 23rd, Mr. Pollard of Torquay brings under the notice of your readers the value of spirits of turpentine in *post partum* hæmorrhage, as a remedy not generally known. In the *Medical Digest* of the New Sydenham Society will be found the following references:—*Medical Times and Gazette*, vol. ii, 1859, p. 342, Dr. Warren's specific; *Lancet*, vol. i, 1861, p. 305, Mr. Bradley reports one hundred and ninety-two cases, all successful; *Medical Times and Gazette*, vol. i, 1858, p. 143, Mr. Elliott states that since 1840 he has injected four ounces of turpentine as an emema, mixed with an equal quantity of cold salt water, and never knew it to fail.

Thinking the above notes may be interesting and useful to your readers, and illustrate the value of the *Digest* to every busy practitioner, for whose use it was specially compiled, I should feel obliged by their insertion.—Yours, etc.,
February 1878.

RICHARD NEALE, M.D. Lond.

P.S.—In the same number, "A. M. D." expresses his surprise that calomel is not used in hydrophobia. Had he referred to Section 527, vol. v, of the *Digest*, he would have seen the value some practitioners entertained of this mineral in combating this disease.

A GROSS INSULT.

SIR,—When a man breaks into your house in the dark you call him a burglar, and when you meet him you may shoot him. The case is clear and the remedy decisive. But how stands the matter when the burglar attempts a breach in your moral sense, and what is the remedy? If indeed the offender intrude himself into your presence and convey his odious suggestions directly to your ears, you still have an easy remedy, and in its use may relieve to some extent, the injury done to your feelings; but when the moral burglar approaches you through the medium of a letter, and flings his filth from an obscure distance, how are we to cast it off and secure ourselves against a future attack? The enclosed letter, which has suggested the foregoing remarks, came to me by this morning's post; and in the interests of the profession which it dares to insult, I would—I was going to write "ask" you to publish it in its entirety, but the insult conveyed in the letter is too obvious and gross to need a request that you will permit me enough of your valuable space for this purpose.—I beg leave to remain, sir, very faithfully yours,
Brook Street, Grosvenor Square, March 2nd, 1878.

JOHN HARLEY.

The letter enclosed is from an undertaker, and runs as follows:—"Dear Sir,—In returning the profession my sincere thanks for the liberal patronage and recommendations which I have received from them for the last ten years, I beg respectfully to intimate that, owing to my largely increasing business, in future instead of remitting cheques half-yearly, as hitherto, they will now be sent regularly every quarter. Furthermore, in reference to silk hatbands, etc., I have made arrangements, when they are returned, in future to allow the full value of them, and place the same to the credit of the account. I would also here advise, when favouring me with your recommendations, that you will as soon after as possible send me your card, with name of deceased, so that there may be no mistake made in crediting you with the same. I also deem it necessary in recommending or sending servants, that you will warn them against making any mistake in the name and address, as there is another establishment within a few doors of me with which I have no connection whatever."

*. We have received many indignant protests against this insulting circular.

LOCUM TENENS.

SIR,—In reply to the letter of "M.D.," the agent is *not* liable to the principal for any act of dishonesty on the part of the *locum tenens*; neither is he liable to the *locum tenens* for salary which the principal declines to pay. The agent's duties consist merely in introducing to each other the two parties, using of course his discretion and every precaution to secure suitable and reliable gentlemen. The fee of 10s. 6d. is paid by the principal for the help provided for him, and by the *locum tenens* for the introduction to what is often a lucrative engagement; but no fee is paid by the *locum tenens* unless the engagement be for more than one week; and, moreover, the fee is uniform, however long the engagement lasts. The two cases quoted by M.D. are, as he must know, very rare; and when either arises, it is still more rarely the fault of the agent.—Yours faithfully,
A MEDICAL AGENT.

J. P. K. writes:—Some time ago, the Obstetrical Society appointed a Committee to report on the means of recognising an Uterus which had borne Children. It was in connection with the Waitwright case. I have seen no report. Has one been sent?

*. We expect that the Committee has never met.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

CONSTANT READER (Nottingham).—1. Dr. Chambers's *Handbook of Diet*, published by Smith, Elder, and Co., will probably suit you best. Dr. Pavy has also published a valuable and elaborate work on the subject of diet. Some other practical hints are to be found in Dr. Dobell's book on the subject. 2. *Diseases of the Skin*: Tilbury Fox, Erasmus Wilson, and Livinge, choosing the larger or smaller hand-books as you prefer. 3. Morell Mackenzie and Lennox Browne.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Derbyshire Courier; The Auckland Times and Herald; The Auckland Chronicle; The Western Mercury; The Daily Courier; The Lincoln Gazette; The Scotsman; The Cork Constitution; The Freeman's Journal; The Hampshire Post; The Somersetshire Herald; The Isle of Man Times; The Sussex Advertiser; The Herts Advertiser; The Manchester Guardian; The Evesham Journal; The Devonport Independent; The St. Pancras Gazette; The Bath Herald; The Western Morning News; The Hull News; The Redditch Indicator; The Derby Mercury; The Preston Guardian; The Scarborough Express; The Jewish World; The Durham Chronicle; The Harrogate Herald; The Sunderland Times; The Lincolnshire Chronicle; The Bromsgrove Weekly Messenger; The Manchester Courier; The Broad Arrow; The Cork Examiner; The Cork Daily Herald; The Rotherham and Masbro' Advertiser; The Liverpool Daily Courier; The York Herald; The North Wales Chronicle; The Sheffield Daily Telegraph; The Blyth Weekly News; The Glasgow Herald; The Nottingham Journal; The Eastbourne Standard; The Scarborough Daily Post; The Isle of Wight Observer; The Sussex Daily News; The Metropolitan; The Leeds Mercury; The Belfast News Letter; The Richmond and Ripon Chronicle; The Cambridge Independent; The Madras Mail; The Ashton Reporter; Saunders' News Letter; The Western Mail; The Bath Chronicle; The Bolton Chronicle; The Lincolnshire Chronicle; The Chippenham Chronicle; The Crewe Guardian; The West Sussex Gazette; The High Peak News; The Cardiff Times; etc.

*. We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. R. Shingleton Smith, Bristol; Mr. R. Clement Lucas, London; Dr. Lombe Athill, Dublin; Dr. J. Burdon Sanderson, London; Dr. H. Simpson, Manchester; Mr. A. E. Durham, London; Dr. A. B. Brabazon, Bath; Dr. Edis, London; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. J. Milner Fothergill, London; Dr. Joseph Bell, Edinburgh; Mr. Eastes, London; Dr. J. W. Moore, Dublin; Dr. F. Warner, London; Dr. Bradbury, Cambridge; Dr. W. O. Markham, London; Dr. W. Fairlie Clarke, Southborough; Dr. G. de Gorrequer Griffith, London; Dr. J. Ingleby Mackenzie, Rugby; Dr. Falconer, Bath; Dr. John Harley, London; Mr. R. S. Fowler, Bath; Mr. W. H. Michael, London; Mr. W. Knight Tieves, Margate; Mr. Berkeley Hill, London; Mr. E. C. Board, Clifton; Dr. T. K. Chambers, London; Mr. C. M. Jessop, Clifton; Dr. Tripe, Hackney; Mr. S. Messenger Bradley, Manchester; The Secretary of the Eustesian Society; Dr. Norman McCaskie, Great Ouseburn; Dr. George Brown, London; Dr. W. M. Harman, Agra, India; Mr. Gravely, Newark; An Associate; Dr. S. W. Smith, Pershore; The Secretary of Apothecaries' Hall; Mr. H. N. Hardy, London; Dr. J. C. Renton, Glasgow; The Secretary of the Medical Society of London; Mr. N. A. Humphreys, London; Mr. W. Russell, Carlisle; Dr. F. J. Brown, Rochester; Dr. W. Smith Robertson, Fareham; Dr. A. T. H. Waters, Liverpool; Mr. G. Searaneke, Gronant; Our Edinburgh Correspondent; Dr. R. T. Wright, Hodnet; Mr. R. M. Gunn, London; Mr. W. Clibborn, Birmingham; Mr. G. E. Stanger, Nottingham; Mr. A. P. Watkins, Worcester; Mr. A. Temple, Kington; Dr. John Dougall, Glasgow; F.R.C.P.; Mr. J. J. Pope, London; Mr. F. H. Craddock, Powick; Dr. Satchell, Groombridge; Mr. Teevan, London; Mr. J. Stuart Nairne, Glasgow; Dr. Prosser James, London; The Secretary of the Royal College of Surgeons, Edinburgh; Dr. Theobald A. Palm, Nūgata, Japan; Mr. F. Trevan, Port Isaac; Mr. Macnamara, Dublin; Mr. John Ewens, Bristol; Dr. Kirk Duncanson, Edinburgh; Dr. T. Churton, Leeds; Mr. R. B. Ruddock, Clifton; Dr. A. P. Wilks, Ryde; Dr. Taaffe, Brighton; Mr. H. J. Ashburner, Horsham; Another Member; Mr. J. G. Langley, London; Medicus, Newmarket; Mr. E. A. Marsh, Torquay; Constant Reader, Nottingham; Mr. E. Chapman, Oxford; Dr. A. Ransome, Bowdon; W.; Mr. Frederick Bronley, Oldham; Mr. Robert Johnson, Boyton, Suffolk; Dr. D. J. Leech, Manchester; Mr. Wm. J. Smith, Rotherham; The Registrar General of England; Mr. A. Wilson, Castle Eden; Our Dublin Correspondent; Mr. J. W. Dix, Pershore; Mr. Balmanno Squire, London; M.D. Ed.; The Registrar-General of Ireland; Dr. A. P. Stewart, London; Dr. E. T. Tibbits, Bradford; Dr. I. Massey, Nottingham; Dr. G. McCarthy, Harwich; Mr. William Hoar, Maidstone; Mr. John Becke, Northampton; Dr. Elliot, Carlisle; Dr. Christopher Elliott, Bristol; Mr. F. G. Baker, Birkenhead; Our Manchester Correspondent; Dr. Arlidge, Stoke-upon-Trent; Mr. A. H. Beeson, Dublin; Mr. R. H. Wickham, Newcastle-upon-Tyne; Mr. A. G. Macgregor, Canisbay, Caithness; Dr. Joseph Rogers, London; Mr. Wanklyn, London; Dr. Drysdale, London; Dr. R. J. Lee, London; etc.

REMARKS ON PROVIDENT DISPENSARIES.

By TIMOTHY HOLMES, F.R.C.S. Eng.,
Surgeon to St. George's Hospital, etc.*

I HAVE been asked to open a discussion this evening on the subject of provident dispensaries in a paper which shall not take more than about twenty minutes to read, and which is intended more to elicit the various opinions and experience of those present, than to enforce any conclusions of my own; which, in fact, my acquaintance with the subject does not as yet qualify me to do.

We seem at last to be approaching a time when the reform, so long acknowledged to be necessary by most of those intimately acquainted with the working of our medical charities, will be taken seriously in hand both by the medical and lay public. This reform has been as yet advocated chiefly by medical men, though we have to acknowledge with gratitude the vigorous assistance given by a section of the laity, among whom Sir Charles Trevelyan and his coadjutors in the Charity Organisation Society are conspicuous. But it is clear that no real progress will be made until the conviction of the necessity of reform becomes general in the minds of the governing bodies of hospitals and other medical charities; and it is also clear, since no allegation is made of any flagrant abuse or corruption, and no demand is made for any sweeping or "sensational" change, that we cannot hope to excite the public mind by those picturesque declamations and stirring appeals to which they have now become accustomed, and wanting which their attention is apt to be but languid. We, on the contrary, being all of us sober men of business, and recognising fully, as we do, the many excellencies of our hospital system, are anxious that the changes which we believe to be necessary should be made after the fullest deliberation and discussion, and with such circumspection as will least endanger the other parts of a system of which we are proud and which many of us spend a great part of our lives in administering.

I think I need not take up much of your time this evening in enumerating the faults with which we charge the system of out-patient medical relief in the country in general and the metropolis in particular, or in the still more invidious task of proving those charges. The subject of this discussion is that of provident dispensaries, and I shall here assume that those present are convinced that our system of seeing out-patients is faulty in the following respects. 1. Admission is too indiscriminate, so that a number of persons are admitted beyond the powers of the institution adequately to deal with. 2. In consequence, it is impossible in those hospitals attached to medical schools to give that instruction which the students ought to derive from the out-patient practice. 3. Also as a consequence of this excess of numbers, the poor are made to wait an inordinate time for the advice given, and such advice, when obtained, is often hurried and worthless. 4. A great number of improper applicants are admitted; some who are better off than gratuitous patients should be; and a far greater number who are suffering from trivial maladies, the ordinary lot of humanity, which require no special skill for their cure, which are to be expected almost as surely as hunger and thirst, and which should equally be provided against as a part of necessary expenditure, reserving public charity for real emergencies.† 5. This

* Read before the Metropolitan Counties Branch.

† The first conclusion arrived at by Sir William Fergusson's subcommittee was: "That a very large proportion of the out-patients of general hospitals (variously estimated at from *three-fifths to nine-tenths* of the whole) consists of *trivial cases* which do not require any special skill, and might be properly left in the hands of ordinary medical men. An inordinate number of trivial cases wastes the time of the consultee, wears the attention of the students, and fosters a habit of hasty diagnosis and careless observation, which tend to erroneous and ineffective treatment. In fact, out-patient work, as generally conducted, neither conduces to the sound advancement of professional knowledge, nor to the advantage either of the students or the public. And, bearing in mind that the staff consists exclusively of consultees, and that clinical teaching is one of the most important advantages derived by the public and the profession from the institution of public hospitals, the Subcommittee are of opinion that some special claim ought to be made out for perfectly gratuitous hospital advice, such as sudden emergency, surgical requirements, long-continued ineffective treatment, peculiar, obscure, and complicated disease, unforeseen and unavoidable distress, or some other special cause, making it desirable that the attention of a consultee should be given to the case. . . . As the hospital staff consists of consultees—not general practitioners—it is only consistent that their services should be asked for chiefly in cases of peculiar difficulty, prolonged anxiety, deep professional interest, etc.; and it is altogether unreasonable to call upon them to treat case after case for many hours together, without, it may be, the occurrence of any single point of interest. . . . The Subcommittee, therefore, believe that the foundation of a series of

indiscriminate charity debauches and pauperises the persons to whom it is administered, and deprives medical men of a substantial part of the fund from which they are to draw their subsistence: an injustice and an injury both to the givers and receivers. 6. In attempting the impossible task of treating a vast number of affections, which really require rest and good hygiene more than anything else, by consultations and medicine given out at the hospital, positive harm is done to a great proportion of the patients, whose ailments are really thereby protracted. They get more harm from the exhaustion and crowd of the waiting-room and the exposure of the journey to and fro than they can possibly get good from the medicine supplied.*

Assuming this, which I do merely to save time in the discussion, I am now to inquire how far the system of provident dispensaries seems calculated to remedy the evils complained of, and how far, in this metropolis and in the country, as far as my time allows me to treat that branch of the subject, it has really been successful.

I shall, I hope, be pardoned if, as an old hospital surgeon and teacher of surgery, I look on this matter mainly from the point of view of medical tuition. The chief motive, as far as I can understand, on the part of the medical officers of hospitals, for the retention of these overgrown out-patient departments, is that, out of the crowd of applicants, some "good cases", as they are technically termed, may be selected for treatment as in-patients. No one seriously contends that the time at the disposal of the out-patient physicians and surgeons is really sufficient to deal with all the cases they have to treat. I have never met with one of these officers who did not feel, as I felt myself when employed in that work, utterly dispirited and disgusted while struggling hopelessly to understand and give some rational advice and assistance to a crowd of trivial worthless cases, which, if they were worth dealing with at all by public charity, should have had the services of at least three times the number of consultants. Yet no one is more convinced than I am of the vital importance of selecting proper cases to occupy the beds of our hospitals, and especially those which are connected with medical schools, so as to supply the schools with the material necessary for efficient teaching; and I am most anxious that the medical profession should enlighten the public on this head. At present, it is too much the fashion for lay governors to pass over all matters connected with medical tuition as being merely technical, or as being the business of the doctors, not of themselves. The truth is that the function of hospitals in teaching medicine is a matter of equal, if not greater, importance to the public than their function in relieving a certain proportion (and let me say, in passing, only a small proportion, as far as in-patients go) of the sick of the community. Now, the out-patient department ought to be, and might easily be, as useful as the wards in teaching, and possibly even more useful. But its utility is in a great measure sacrificed to the supposed necessity of admitting a crowd of worthless routine cases.

In the first reaction caused by the increase of this crowd beyond all reasonable limits, attention was directed almost exclusively to the abuse of the out-patient department by persons able to pay for advice, and the only attempts made to reduce the numbers were by excluding those able to pay, *i.e.*, those earning more than a certain income. But it is clear that such a test is neither sufficient nor satisfactory. It is not sufficient; for, in our general hospitals at any rate, the exclusion of trivial cases is a far more important matter than the exclusion of well-to-do persons, who indeed are probably almost sufficiently deterred by the discomforts and fatigues of our overcrowded waiting-rooms. And the wages-test is highly unsatisfactory, unless the nature of the case is taken also into consideration; for it is obvious at once that a man earning forty shillings a week, but labouring under some very obstinate affection, or one requiring some special means of treatment, is a far more deserving, and a far more eligible, candidate for hospital relief than one earning thirty shillings a week, whose ailment is of a trivial nature.

Now, it is easy to imagine a state of things in which all this

provident dispensaries is a necessary condition of any improvement in the out-patient department of our public hospitals. The law has, in their opinion, amply provided for the careless and improvident, and the funds contributed by the benevolent should be given in preference to the assistance of those who are inclined to help themselves.—Sir C. Trevelyan's pamphlet, p. 15.

* Sir W. Gull said very happily at the meeting to which Sir C. Trevelyan's pamphlet was read: "Most of you know—I see many of the most eminent members of the medical profession present—that the poor have an idea that disease comes from Providence, and that it must be cured by drugs. Now, if there is an idea which ought to be rooted out, it is this. Children are often brought to be drugged when in reality they require to be washed and fed. I believe that one of the beneficial effects of our meeting here to-day will be that it will have a tendency to spread abroad the fact that disease should be prevented by attending to hygienic laws, by eating good food which has been properly cooked, by regulating the quantity and guaranteeing the quality of that which is taken."

might be put right; in which the hospital might regain its proper place as a consultative institution; might have out-patients in moderate number, whose cases would be available for the instruction of students; and in which provident dispensaries might take a very important share; whilst, at the same time, the complaints made against hospitals—both by medical men, as taking away from them much of their practice among the artisan class; and by economists, as pauperising the people—would be obviated. The leading principle of this change in the out-patient department would be this—that admission could only be obtained through some medical authority. The present methods of admission are extremely faulty. The unlimited admission of very poor persons, who come in out of the street, can hardly be described as otherwise than an absurdity. The haphazard admission of a limited number, though a great improvement on the former, yet does not insure any fitness in the cases admitted. Admission of out-patients by governors' letters is open to very grave objections; and, in fact, has been found to work so badly, that it has been given up in most of our general hospitals. The admission of out-patients by payment is liable to almost every objection which can be urged against all the other methods put together, besides many others which apply to it especially, and is besides utterly irreconcilable with the "charitable" character of our hospitals. But the admission for medical reasons, combined, of course, with a due regard to the patient's condition in life, is exactly in harmony with our usual method of admitting in-patients—where the letter of recommendation is supposed to guarantee the fitness of the patient's condition in life, and the preliminary inspection by the hospital physician or surgeon ascertains the medical fitness of his case. Now, if we had a perfect system of provident dispensaries, and if each of these was affiliated to one or other of the great hospitals of their district, it might be possible to carry out a regulation of this kind: That no person should be admitted—of course, this is exclusive of street-accidents and of persons transferred from the wards to the out-patient room—as an out-patient, except on the recommendation of some medical authority residing in that district, be the medical authority a private practitioner, a provident dispensary, or a Poor-law dispensary. The numbers to be admitted daily might, as now, be limited; and of those admitted, some (I think a large proportion) might be admitted only for consultation, not for treatment. The medical man recommending the patient might join the consultation under certain regulations.

Some such scheme as this would insure a due supply of cases sufficiently grave to be worthy of charity, yet lying quite within the ordinary sphere of everyday practice, and in numbers proportioned to the opportunities of the institution.

Another method of connecting hospitals with provident dispensaries is that which has been adopted, and, as we learn by the Reports for 1875-6, successfully adopted, at the Royal Albert Hospital, Devonport; viz., to turn the out-patient department into a provident dispensary. Admirable as this method appears to be when applied to a country hospital, it seems quite unsuited to the circumstances of the metropolis—at least to those of our great hospitals connected with medical schools. The time allotted to me compels me to abstain from discussing the interesting question how far the smaller metropolitan hospitals might benefit, or the reverse, by conversion into provident dispensaries having beds attached.

But I am well aware that all this is as yet imaginary. Hitherto provident dispensaries have, in London at least, maintained a hard struggle for existence against the overwhelming competition of gratuitous institutions long established and of world-wide reputation.* That they have maintained their existence at all testifies, we may hope, to a deep-rooted spirit of honesty and independence in a large portion at least of the poor of this city. That, if relieved from such competition, they would supply a widely felt want is proved by the experience of such institutions as the provident dispensaries at Torquay, Leicester, and Reading.

But, if we want the provident dispensaries to be relieved from such

* The table on p. 104 of Sir C. Trevelyan's pamphlet on Metropolitan Medical Relief is the latest available list of Provident Dispensaries of the Metropolis to which I can refer. It shows only twenty-eight in the whole metropolis police area, none of them in the immediate vicinity of any large hospital, except St. George's, where the out-patient department has during the last few years been restricted in numbers. At the general hospitals in the East and South of London, the numbers admitted were, according to the last published reports:

St. Bartholomew's Hospital	137,313
London Hospital	40,717
Metropolitan Free Hospital	39,968
Guy's Hospital	75,804
St. Thomas's Hospital	61,824

355,631

the in-patients at the same hospitals in the same year (1875) having been only 217,370. No provident dispensary is possible in the districts under the influence of these institutions.—Sir C. Trevelyan, p. 13.

competition, it is necessary that we should found them on principles essentially just to the subscribers, the medical attendants, and the public, and with regulations which will harmonise with those of the great hospitals, and if possible increase, instead of impairing, the efficiency of those charities. It is our business to-day, as I take it, to see how far the provident dispensaries now in action meet these requirements.

In the first place, what is a provident dispensary? It should be, above all things, a public and permanent institution, having this, at any rate, in common with a sick club or benefit society, that it is supported by a regular fund, on which its members can rely as a guarantee that they will always find what they have paid for, with accounts duly audited and published, and managed by a public body, who can elect successors to the medical men as they resign. The private clubs which some practitioners establish, however meritorious they may be, have not these necessary elements of a provident dispensary, and have no right to the name; which, however, they sometimes assume.

Nor can I doubt that a very great advantage would be gained if it were found possible to consolidate all existing provident dispensaries into one great institution, the members of any branch of which should be admissible to any other branch on equal terms. (See Dr. West's speech on p. 126 of Sir C. Trevelyan's pamphlet.)

Another question—and it is a very serious one—is how this fund is to be created, whether partly by charity or entirely by the contributions of the members themselves. Opinions differ on this point. At present, in this city, there is, I believe, no institution, or at most one, unsupported by charitable contributions in aid; and few of those in the country are, I believe, entirely self-supporting. Probably, therefore, it is necessary to acquiesce in the arrangement suggested by the Charity Organisation Society (pamphlet, p. 73), that there must for the present be some charitable fund as well as the members' fund; yet many will agree with the spirit of Sir C. Trevelyan's note to the passage to which I refer,* to the effect that such an arrangement should be only temporary, and that the scale of subscription should be so fixed as to make the dispensary in course of time self-supporting. Others will hold with Mr. Brudenell Carter (pamphlet, p. 122), that, as much of the illness under which the poorer classes suffer is due to the neglect of the public health on the part of the governing classes, it is only fair that the richer members of the community should help their poorer neighbours in this particular.

Another view of the matter is this: the better and more self-reliant part of the artisans are as anxious to maintain that manly spirit of independence which they possess, as any social reformer can be to infuse such a spirit into those who, unhappily for themselves, do not possess it. To these men the idea of belonging to a charitable institution is not agreeable. Much of the difficulty would be smoothed away if it were found practicable to adopt Sir C. Trevelyan's pregnant suggestion (*op. cit.*, note on p. 147) to appropriate to provident dispensaries "a portion of the vast unused or misused metropolitan charitable endowments". No poor man could, I think, object to send his child to a dispensary partly supported out of the benefactions of former ages, any more than a rich man does to take advantage for his child of the endowments of a school or university. The great City companies are now said to be intending to devote some of their large revenues to objects of immediate utility, such as technical education. Could not the members of this Association exercise some influence in obtaining a portion of these ample funds for the improvement of the present medical attendance on the poor of the metropolis?

Another and hardly less important detail is what is to be the qualification of members. The mere amount of wages is, of course, a fallacious standard,† and especially if combined with a fixed rate of contri-

* "The time has arrived for adopting a simpler and stronger arrangement than the one here suggested. Any fixed apportionment between a 'Members' and 'Honorary Subscribers' fund, causes an imperfect appreciation of the real object to be kept in view—viz., that the honorary subscriptions should be merely of a temporary nature, and that the dispensary should become self-supporting at the earliest possible period. It also leads to the adoption of inadequate rates of contribution at the commencement which it is difficult afterwards to increase. The monthly payments should, from the first, be fixed so as to secure the independent position of the institution as soon as those families or individuals residing in the neighbourhood, who might reasonably be expected to join it, have become members, and the honorary subscriptions should be regarded merely as a provisional arrangement to tide over the transition period, until the dispensary can be fully organised. In other words, there should be only one fund based upon the members' payments, and the honorary subscriptions should be applied in aid of it as long as any are required."—C. E. T. May 1877.

† Possibly the rules suggested by the Hon. R. Capel at the Great Northern Hospital are as fair as any merely pecuniary standard can be.

"I drew up a scale in which I endeavoured to draw a line as to who were the proper persons to receive relief, those who should be referred to the poor-law, and those who should be referred to provident dispensaries. The real question to be solved is—Who are the people who ought to be gratuitously treated by our hospitals? In drawing up this scale, we said that the labourer who was in receipt of eighteen shillings a week, and single, was not the man who ought to receive medical

bution. Nor is it at all easy to fix in any case what the latter rate should be. The present rate of subscription is believed not to remunerate adequately the medical officers, as shown by an article in the *BRITISH MEDICAL JOURNAL*, January 1874; yet it could hardly be raised, at least in the case of the poorest members. Perhaps, as Mr. Nelson Hardy suggests in a note to me, it may be found possible to establish a sliding scale, as is done to some extent at the Battersea Provident Dispensary, where Class A, not earning more than 30s. a week, pay 1d.; and Class B, between 30s. and 50s., pay 2d. a week.

That a considerable fund might be raised for the remuneration of the medical officers of such institutions is shown by the fact stated in the first report of the Hospital Saturday Council, that, "on a moderate computation of the working population of London, a subscription of a halfpenny a week from the males, and of a halfpenny a month from the females, would produce £69,530". Now, at most provident dispensaries, the subscription is about twice this sum, and this would produce a fund which, I believe, would amply recompense the medical officers, and make the institutions independent of charitable support. But such an assumption would, of course, involve the absorption into the system of provident dispensaries of all the existing sick clubs; and it seems clear that, if the provident dispensary system do ultimately succeed in establishing itself firmly in the metropolis, the sick clubs might easily be amalgamated with them on equitable terms, one rate of subscription entitling the subscriber to medical attendance only, and a higher to an allowance also when sick.

There is another way in which I conceive that provident dispensaries, if affiliated to the schools of medicine, might be very valuable; I mean in giving our students that initiation into home practice which they used in old times to get during their period of apprenticeship, but which they now hardly get at all till they begin to have patients of their own. Some care would be necessary, of course, to see that the students were only employed in students' work, not, as used at any rate to be the case in some departments, in doing work nominally allotted to their seniors; but, with such regulation, the system would supply a want now widely felt in medical education.*

Let me turn to another aspect of the question. We have been speaking of the benefits of these dispensaries, but we have met here also to hear the objections to them; for, as I said at starting, we are not enthusiasts, but sober men of business, fully alive to the benefits of the system we hope to improve, and fully convinced that no effort to found provident dispensaries can succeed unless all sides of the question have been carefully considered. The objections to provident dispensaries proceed from two sides. Those who will turn to the appendix to Sir C. Trevelyan's pamphlet will see a very interesting and curious collection of opinions on the scheme from a number of artisans of a high class, the printers in Messrs. Spottiswoode's office, containing the objections to it from their point of view. The main gist of these objections is, that the proposal is regarded as a movement on the part of the medical profession to restrict the benefits of the charity now extended to the working classes, for the purpose of putting money into their own pockets; as pressing hardly on the poor, who have already as many burdens as they can bear; and as tending to substitute

for the skilled attendance of hospital physicians and surgeons the inferior advice of young or unsuccessful practitioners. Now, it is of no use to deny that there is something in each of these objections. It looks, at first sight, hard to say "we mean to diminish the number of out-patients at the hospitals by about two-thirds, and we hope to raise a fund of some £140,000 a year from the working classes, which is to go, in a great measure, into the pockets of medical men". But let us remember that the proposal rests on the assumption (which we think we can prove) that the two-thirds relief of which we intend to deprive the working classes, is not only worthless in itself, but impairs the efficacy of the other third; also that the attendance which will be given in consideration of the payment required, is that which hospital out-patient departments neither do nor can supply, and which it would be impossible to have provided gratuitously; viz., the domiciliary treatment of all the poor in the metropolis on reasonable terms by experienced medical men: a benefit almost necessarily involving the improvement of the dwellings and other conditions of life of the patient.* That the necessary funds could be contributed without any difficulty by the persons interested, is the opinion of almost everybody who knows the circumstances of London artisans; nay, it is probable that the expenditure would repay itself in the saving of time, the shortening of sickness, and the improvement of general health. Nor would the extra expenditure be at all equal to the gross total of the fund. Much of the assumed £140,000 a year is already spent on medical attendance in other ways, and would be simply transferred.

As to the qualifications of the medical officers, that is a matter which ought to be in the hands of the members or managers of the dispensaries themselves. If the pay be adequate, plenty of skilled candidates will be forthcoming; and the rules of election should be so contrived as to insure an intelligent choice. Nor have the advocates of the scheme the least wish to curtail the benefits really extended at present to the working classes by our hospitals. Far from this, they wish to increase them. Only the real benefit they believe is by no means measured by the number of persons seen. It is obvious that, to give deliberate advice and treatment to one person is a greater benefit than to hurry over three cases, none of which is, or can be, properly attended to.

I may mention that Sir C. Trevelyan has put into my hands two little tracts, one styled *Doctor's Bill and No Doctor's Bill*, published by the Ladies' Sanitary Association, and the other *Provident Knowledge Papers*, published by the Provident Knowledge Society, which put the claims and advantages of provident dispensaries in clear, familiar, and sensible language, and in a style adapted to those for whom they are intended. In this meeting, however, we are probably more likely to hear the objections to the scheme made by medical men; and the full discussion of such objections will much enlighten and assist those who advocate it. It is, perhaps, hardly my province to anticipate what will no doubt be urged with more force and fuller knowledge by others: for I hope the meeting will be attended by gentlemen who are, or have been, actually engaged in working these dispensaries, and who can tell us their weak points. My object in this meeting will be fully attained if it elicit any general assent to the view which I have long held with regard to out-patients of hospitals, that none should be seen gratuitously except for special reasons guaranteed by some medical opinion, and that the out-patient department of a hospital should be a consultative department for the institutions and practitioners who treat the poor of the district.

I have endeavoured to restrict myself within the narrowest limits of space, content if I can indicate the chief points on which the discussion may, I think, usefully proceed.

relief from the hospital, and was to be referred to the provident dispensary; that the married man, with slightly higher wages, ought also to be so referred; and that the married man with twenty-six shillings a week, no matter how many children he might have, should depend upon the provident dispensary for his medical assistance."—Sir C. Trevelyan's pamphlet, p. 123.

* The following is from Sir William Fergusson's Subcommittee on General Hospitals:—"One of the most glaring defects in the present system of medical education—a defect which has become more and more prominent since the discontinuance of the system of apprenticeship—is the entire absence of practical acquaintance with the domiciliary treatment of disease. In the hospital, everything is at hand—the formula for the prescription, the nurse with every convenience, the dietary fixed and suitable, and the ward with perfect cleanliness and space—whereas even in the most perfect private dwelling the medical attendant is called upon to tax his ingenuity and resources to the utmost. He must give instruction as to ventilation, cleanliness, feeding, nursing, etc., and these and other directions have to be varied in almost every dwelling. He must also write out in full his prescription, so that it may be clearly understood. The Subcommittee are, therefore, of opinion that the teaching power of the out-patient department would be very largely increased if students of three years' standing were required to attend for six months as assistants at a provident or Poor-law dispensary; and they think that some provision might be made by which serious and interesting cases admitted to these institutions shall, through the instrumentality of the dispensary, be transferred to the hospital for special treatment and clinical illustration. By such an arrangement, the consulting staff of hospitals would at all times be able to secure the attendance at the hospital of a series of cases illustrating special diseases, and by this means also carry out and test special modes of treatment; whilst, as in Edinburgh, the affiliation of such dispensaries to hospitals would always secure the prompt admission of acute diseases and of cases requiring the peculiar resources of the hospital. It is believed that an ample field of useful and interesting observation would always be secured to the out-patient staff, without the possibility of abuse, and they therefore think that the out-patient department ought to be recognised for purposes of special clinical teaching in the same way as the in-patient department is already."—Sir C. Trevelyan, note to p. 29.

* "The slender resources of a working man are soon broken down by 'doctors' bills', but there are few who cannot afford a small continuous payment made from month to month on the principle of mutual assurance. For this each family obtains, not as an act of charity, but by right, medical attendance and medicines at their district dispensary, or, it need be, at their own home; and they also have the privilege of selecting their own medical attendant from among the officers of the dispensary. Not the least advantage of this system is that the homes of the people are brought by it into just prominence. Much has been said of late years about the salutary influence of a trained nurse upon a working-class ménage. The practised eye of a well instructed medical officer from the district provident dispensary, in the numerous cases better treated at home than in any institution, would not be less efficacious, and, besides giving useful support to the nurse, would much promote the object we all have at heart, of providing improved dwellings for the working-class."—Sir C. Trevelyan's pamphlet, p. 17.

LINCOLN URBAN.—There were 1,286 births and 670 deaths registered in this city during 1877. The death-rate is estimated at 22 per 1,000, and, exclusive of deaths in public institutions, only 19. There were 14 deaths from typhoid fever, and 8 from scarlet fever, as well as several from whooping-cough and diarrhoea. About 25 per cent. of the deaths were caused by diseases of the respiratory organs.

ON INTERNAL URETHROTOMY BY AID OF A NEW URETHROTOME.*

By ARTHUR E. DURHAM, F.R.C.S. Eng.,
Surgeon to Guy's Hospital, etc.

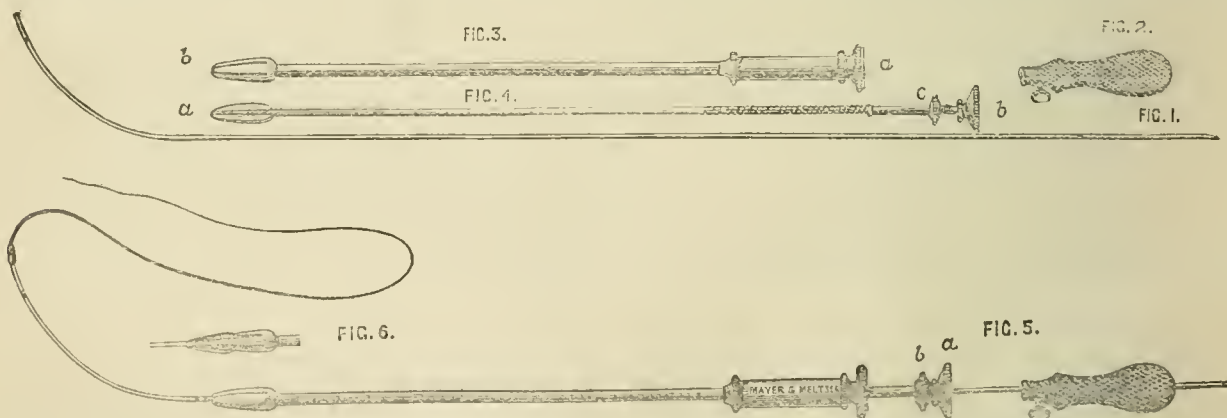
I DO not propose on the present occasion to discuss in full the general merits and demerits of the operation of internal urethrotomy, nor to comment upon and criticise the published opinions and experience of the many distinguished surgeons who have hitherto praised or condemned this operation; still less do I propose to discuss in detail the comparative advantages and disadvantages of the several methods and instruments that have been from time to time devised and recommended for its performance.

I wish rather, in the first place, to indicate the circumstances and considerations that have led me to make trial of the operation of internal urethrotomy, and to the belief that this operation will probably prove to be a safer and more permanently successful method of treatment in exceptional, if not in ordinary, cases of urethral stricture than, so far as I know, is at present commonly supposed and represented. Further, I wish to submit to the meeting the instrument I have devised, and the method I have adopted, and to point out and illustrate, so far as I may be able, what appear to me to be their especial merits and advantages. And, lastly, I propose very briefly to state the results of my experience hitherto, however limited and imperfect, and therefore inconclusive, such experience must be considered to be.

Although, however, my experience of internal urethrotomy is at present limited to but few cases, I may venture, without undue assumption, to assert that my experience in the treatment of stricture of the urethra has been both considerable and extensive: considerable in regard to the number of cases, and extensive in regard to the variety of forms and complications presented, and the methods adopted for giving relief. In common, I believe, with every surgeon of experience, I have become more and more impressed by the want of permanence in the success obtained by the ordinary methods of treatment of stricture of the urethra, however great and striking may have been the relief temporarily afforded; and, from time to time, with increased opportunities, I have met with an increased number of cases in which the ordinary methods have been either altogether inapplicable, or at best have proved ineffectual in affording any satisfactory measure of even temporary relief.

my care in which internal urethrotomy had been previously practised, but in which I am convinced equally good (if not better and more permanently good) results might have been easily obtained by ordinary methods of dilatation. And I have at the present time under treatment one of the most difficult cases of stricture I have ever had to do with, in which it seems to me manifest that the obvious tortuosity of the existing passage is due to the effect of an internal urethrotomy performed some time since. It seemed to me that what was wanting was some method by which the natural passage should be restored, and the stricture-substance (if I may use such a term) got rid of by absorption or otherwise, rather than a method by which a new passage should be made above or below the strictured part. With the view of supplying such method, I devised the instrument which I now venture to bring before you. It has gone through several modifications suggested by experience in its use, and I do not for one moment pretend that it has yet reached anything like perfection; but I cannot help believing that the principles involved in its construction and application are worthy, at any rate, of consideration and more extended trial than has yet been made of it.*

The instrument consists, in the first place, of a slender steel guide curved in catheter form. (Fig. 1.) This is hollow, and either open at the extremity, for adaptation by screw to a filiform whalebone bougie previously passed after the method of Otis and others, or else closed and rounded at the extremity with openings like those of a catheter for the indicative escape of urine. This guide has four longitudinal grooves (too fine to be represented in the figure) throughout the extent of the straight portion. To facilitate the manipulation of the guide, a small ebony handle (Fig. 2) is slid on to it and fixed by a screw. When the guide has been introduced through the stricture and the bladder has been reached, as evidenced by the escape of urine or otherwise, the handle is removed, and the main part of the instrument is slid on. This consists of a tube (Fig. 3) having a hollow cylindrical handle at the proximal extremity (a), and at the distal extremity an elongated slightly tapering olive bulb in which are four slits (b). Sliding within this tube is a second (Fig. 4), somewhat longer, and furnished at the distal extremity with four sharp-pointed sharp-edged blades (a); its proximal extremity is expanded into a circular flat plate (b), between which and the top of the handle of the outer tube is an adjusting screw (c); when this adjusting screw is down on the top of the handle, the blades are securely fixed within the olive bulb of the outer tube, and in this state the instrument is slid down upon the guide until the stricture is reached. The whole instrument put together is shown in



Such being the case, I have often considered the question of internal urethrotomy. But, without doubting or wishing to dispute the excellent results recorded by others, I have been deterred until recently from adopting the operation, because none of the methods with which I was acquainted commended themselves satisfactorily to my judgment. In this I may have been mistaken; but it appeared to me that, in many of the successful recorded cases, simpler and less hazardous methods might have proved equally efficacious, and, still more emphatically, that the various instruments devised were either wanting in precision and accuracy of application, or else that they served to cut a fresh way by the stricture into the urethra beyond rather than effectually to operate upon the strictured part itself. I have had cases under

Fig. 5, with the filiform conductor attached: a is the plate of the inner tube, pressure upon which causes projection of the blades; b the adjusting screw. The bulb being then firmly applied to the face of the stricture, the adjusting screw is turned up so far as may be deemed desirable. Pressure upon the top plate of the inner tube will then cause projection of the blades through the slits in the bulb (Fig. 6), and the strictured part of the urethra will be cut to a slight depth at four points in its circumference. Removal of the pressure is followed by withdrawal of the blades within the bulb by spring action (the spring being in the cylindrical handle of the outer tube). The bulb is then pushed on. If the stricture have been divided to a sufficient extent, the bulb will pass freely on. If it should still be arrested, another and another

* Read before the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

* I am much indebted to Messrs. Mayer and Meltzer for the pains they have taken in carrying out my suggestions.

projection of the blades may be necessary, and can, of course, be easily accomplished. Such projection of the blades is repeated until it is manifest that the strictured part has been sufficiently divided, and the bulb can glide on beyond it. The instrument is then withdrawn and a full-sized catheter at once introduced.

The advantages which this instrument seems to me to offer are these:

1. The facility and safety with which it may be used, and the accuracy and precision with which it may be made to act upon the strictured part of the urethra and no other.

2. The exactly limited depth to which the incisions extend. They can scarcely be made to a greater depth than what corresponds to the proper circumferential extent of the urethra.

3. Four incisions of slight depth into the stricture-substance (if I may use such a term as I have said), are made instead of one incision of comparatively great depth, as with the ordinary instruments, and which may, and probably often does, extend considerably beyond the stricture-substance into healthy tissue. Thus the stricture-substance is more effectually treated, and the healthy tissues have better chance of escape. And here I would point out that the effect of incising the cartilaginous hard stricture-substance may be not inaccurately compared to the effect familiar to all surgeons produced by notching or incising the thick callous edges of certain old external ulcers. In this latter case, we see how speedily new action is set up, and how the indolent indurating material disappears and a healthy healing process is started and established. May it not probably be the same with the stricture-substance?

4. The stretching and dilatation of the previously strictured part is obviously rendered more uniform.

5. And, lastly, the healing or cicatrising process is facilitated, inasmuch as the extent of cut margin from which cicatrization can go on is necessarily greater in the case of four shallow cuts than it would be in the case of one cut made so deep as to allow of equal dilatation of the passage.

Having thus described the instrument I have devised, and indicated what appear to me to be its advantages, I pass on to state the results of my experience of its use; and, very limited although such experience has at present been, the results have been such as to encourage me to persevere in its use in any seemingly appropriate cases that may come before me. Hitherto I have only had what seemed to me legitimate occasion for resorting to this method of treatment in twelve cases, but in all of these the results have been so far most satisfactory. To two of these cases I would especially ask attention, inasmuch as in them a degree of success was easily and speedily obtained far beyond anything that could have been expected to have been attained with equal ease and speed by any other method with which I am acquainted.

In none of the cases was there any hæmorrhage worthy of note. I have often seen more follow attempts at catheterism. In one case only was there anything like severe constitutional disturbance; but the patient in this case was a man of very intemperate habits; the symptoms from which he suffered more resembled those of a slight attack of delirium tremens than those of traumatic delirium; he had but one rigor, and his temperature was only over 100 deg. on one day. In one case only was severe pain complained of after the operation; but in this case I am inclined to believe that the pain was due to the fact that I had introduced and left in a catheter of too large size (No. 12). In no instance was there any indication of extravasation of urine or of perineal abscess. In all cases, when last seen, the patients were able to pass urine in full stream, and a large sized catheter (10 or 12) could be introduced without hitch or hindrance. In all instances, the progress was more rapid, and the satisfactory result was obtained with less confinement to bed than, so far as I can judge, would have been the case if the ordinary treatment by gradual dilatation had been adopted, even supposing that such treatment had been applicable. In all cases except one, a catheter changed from time to time was fixed in for some days after the operation, the number of days varying according to the conditions and indications of the case. In the one exceptional case alluded to, the patient himself pulled the catheter out during the night after the operation. I thought the opportunity a good one for testing the desirability of dispensing with the retained catheter, and did not replace it; but the result of the experiment was not such as to encourage me voluntarily to repeat it. The first day, the patient passed urine in an excellent stream; but afterwards the stream became very much smaller, and there was considerable pain during micturition. It was not until a week afterwards that a No. 10 could be again introduced with facility, smaller instruments having been passed in the meantime, but not fastened in.

The questions, as to whether a catheter should be fastened in after the operation, and, if so, how long it should be retained, appear to me

to be very important, in regard both to the rate of progress and to the ultimate result of the case. I am inclined to think that the catheter should, unless contraindicated, be retained until the granulating process has been fairly established on the cut surfaces. But the only safe rule appears to me to be that in this, as in other points in practice, we must always be guided by the conditions and indications presented by the particular case with which we have to do, regardless of any hard and fast rule, however well founded, according to general or average experience, such rule may appear to be.

I may be permitted to give a few details of the two cases to which I have referred, as affording, in my experience, the best illustrations of the success and value of the operation.

The first case is that of a gentleman, thirty-eight years of age, who had suffered very severely from stricture of the urethra during the long period of nearly twenty years. He had had several attacks of retention, relieved from time to time by opium and hot baths. During the years 1867-1868, he was treated by constantly repeated applications of potassa fusa. After submitting to this treatment for two years, and, to use his own words, "enduring the most agonising pain with fortitude, he considered he had been sufficiently patient and persevering". No larger sized instrument than a No. 2 could ever be got into the bladder. He gave up his case as hopeless, and went to reside in Jersey. While there, his sufferings were somewhat diminished. He returned to London in January 1870, and again submitted himself to the potassa fusa treatment; and, although he experienced no benefit whatever and suffered excruciatingly, he continued some months under this treatment, and then gave it up in despair. From May 1870 to May 1876, he received no surgical treatment whatever, the frequent attacks of retention being relieved by opiates, warm-baths, and suppositories. He became altogether "incapacitated from attending to business, could not enter society, and indeed was unable to venture many yards from home, in consequence of the bladder being unable to retain more than an infinitesimal quantity of urine". "More than fifteen minutes' sleep at a time could not be taken; and by May 1876, his general health was completely broken down, and his condition was such that neither he nor his friends believed he could survive much longer." Under such circumstances, I saw him; and his condition was indeed deplorable. Any attempt to touch the urethra with an instrument gave rise to the most excruciating pain; and it was obvious that, even supposing a fine instrument were introduced under chloroform, it would be impossible to retain it so as to effect any good. The bladder was in most wretched condition. The only thing to be done appeared to me to afford relief by means of opening the urethra behind the stricture, according to the method of Mr. Cock. This I did with most satisfactory result. His sufferings were at an end. He slept excellently well the whole of the night after the operation. The bladder, which before more resembled a sloughy abscess-cavity than anything else, gradually regained a healthy condition, and he steadily progressed, gaining health and strength until, free from all pain, he was able to get about, comparatively strong and well, with ease and comfort. He passed his urine freely through the perineal opening either with or without the aid of a catheter. I have mentioned these details to show the severity of the case with which I had to do. For some months, he was so well satisfied with his condition, that he declined to have any attempt made to restore the natural passage. In January of the present year, he wished, however, to have an attempt made; and, accordingly, chloroform having been administered, I performed internal urethrotomy in the manner I have described. There was some considerable difficulty in getting the guide into the bladder; but the long rest the urethra had enjoyed had permitted, at any rate, some of the inflammatory swelling to subside, and I was able to succeed. By alternately projecting the blades of the instrument and pushing on the bulb, I at last succeeded in tunnelling through all the strictured part of the urethra. The cutting must have extended through a length of at least two inches and a half. A No. 10 catheter was at once passed and fastened in. There was very little bleeding. From the day of the operation, the patient never suffered any pain worth speaking of, nor had he any bad symptom of any kind. The passage was perseveringly kept open by catheters, retained at first, and afterwards introduced whenever he wanted to pass urine, for some time; and the perineal opening was allowed to close. Now, seven months after the operation, he passes urine in a good full stream, and a No. 10 catheter slips along the passage without hitch or hindrance. The urine is clear, and he has returned to active business occupation. I know no other method by which a like result could have been expected to have been attained.

The other case is that of a patient, thirty-six years of age, who had been the subject of stricture, gradually increasing in severity during ten or twelve years. He had led a very hard life in India and South America, constantly in the saddle, exposed to all sorts of hardships, and

never able to get proper surgical treatment. When he came under my care, in March last, his perineum and scrotum were riddled with sinusses, through which the urine escaped, only a few drops coming from the orifice of the urethra. He was emaciated and broken down in health, and was evidently suffering most severely. After several attempts, I passed a No. 1 elastic catheter into the bladder, and, two days afterwards, performed internal urethrotomy. In this case, I had to cut through three distinct strictured portions instead of one continuous one. A No. 10 catheter was passed and fastened in. The sinusses were laid open to such extent and in such manner as seemed desirable. No bad symptom followed; but the greatest relief was experienced. In three weeks, the patient was up and about. The sinusses had apparently almost filled up. He was not allowed, however, to pass his urine without the aid of the catheter for another fortnight or three weeks, at the end of which time the old sinusses appeared fairly closed up. The improvement in general health and condition was rapid and marked. Three months after the operation, he declared himself better and stronger than he had been for years, and altogether free from pain and trouble about his urinary organs. He continued, however, to use the catheter at least once daily.

How far the good results obtained in these, and the other cases to which I have more briefly alluded, will prove permanent, remains to be seen. But, at any rate, a large measure of immediate relief has been afforded. And I cannot help believing that the new cicatricial tissue of an incised surface may prove less likely to contract speedily than the tissues around a stricture after ordinary methods of dilatation, and to become the seat of fresh inflammatory swelling and thickening.

In conclusion, I would venture to say that, although I have spoken so far in favour of the operation of internal urethrotomy, and so hopefully as to the results to be expected from it, I should be very sorry to leave the impression that I would advocate or practise this operation indiscriminately in all cases of stricture. For ordinary cases, I believe the ordinary method safest and best. Internal urethrotomy must be regarded as an exceptional operation, to be practised in exceptional cases. But, as such, I believe it well worthy of adoption—at any rate, of more extensive trial than it has yet had in this country.

ON STRICTURE OF THE URETHRA; WITH SPECIAL REFERENCE TO URETHROTOMY.*

By EDWARD ATKINSON, M.R.C.S., F.L.S.,

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THE selection, by the officers of the Section, of Stricture of the Urethra, with special reference to Urethrotomy, as one of the subjects on which they invited discussion at the present meeting, must be my apology for offering the following remarks, rather than because I have much that is new either to suggest or to relate.

Perhaps their choice may owe something to the remark of my colleague Mr. Wheelhouse, in his communication to the JOURNAL last July, upon his method of performing perineal section: that, although the operation, as performed at Leeds, had been before the profession for some years, having been published by him in 1869-70, it had received but little notice either in the journals or in recent surgical works. Be that as it may, Mr. Wheelhouse's letter was followed in three months by the appearance of Mr. Teevan's most interesting and ingenious paper on an Improved Method of Performing the *Boutonnière* Operation, in which he truly says: "In Leeds the operation is performed systematically, frequently; and I should say that, in that town, it is done more often in one year than in all the hospitals in London put together during the same period."

In support of this statement, I may say that I have performed it myself nine times in the last three years in hospital and once in private, and that each of my colleagues has done it many times within the same period. I can also assert that, of my own ten cases, eight were successful, and of most of them that they were seen several months after their discharge from hospital, when the results were found to be quite satisfactory as regards the cure of the stricture. In no case had perineal fistula resulted, and in one only had there been any untoward effect of any other description. To this case I will refer more particularly afterwards.

The two instances in which I was unsuccessful were both desperate cases. In one, extensive extravasation of urine had occurred before admission; in the other, there were large abscesses both in the scrotum and perineum, with several fistulous openings from old abscesses, and

the patient was in a very low condition generally. Both these cases died within three to six days after operation.

The total number of operations for perineal section, done in hospital during the last three years, is thirty-nine, of which seven died; this gives a mortality of nearly 18 per cent.

According to surgical authorities, both English and French, various modes of procedure for the relief of stricture by urethrotomy are recommended; some of which are deemed to be preferable in one class of cases and some in another. Distinctions are drawn between the circumstances which render this or that operation the most applicable to a given case. Thus, in old cartilaginous strictures of the membranous portion of the urethra, complicated or uncomplicated by fistulæ in the perineum, one or another modification of the *boutonnière* operation is preferred. In cases of retention, where all attempts to pass an instrument through the stricture fail, and the urethra is distended behind the constriction, Mr. Furneaux Jordan counsels the opening of the distended urethra and division of the stricture from behind forwards; while in very tight strictures, where extreme sensibility of the passage resists treatment by dilatation beyond a certain limit, or where such treatment, as soon as discontinued, is followed by a return to the *status quo ante*—and especially when the stricture of this character exists in any part of the straight portion of the canal—internal urethrotomy by Civiale's method, or some modification of it, is often advised.

It is no doubt true of these operations, as it is of many other surgical procedures, that one method proves more frequently successful in the hands of one surgeon, while another method succeeds best in the hands of his friend. This is intelligible enough; for he who has familiarised himself with the steps and the minute details of a given operation, by the habitual adoption of it in a long series of cases (in which numerous varieties of conditions are sure to occur), is more likely to be able to accommodate it to the special requirements of an exceptional case; whereas his occasional adoption of a different method, with the minutiae of which he was not so familiar, might not improbably result in disappointment.

At Leeds, it has now for some years been customary to pursue that mode of perineal section—or "*boutonnière*," as Mr. Teevan prefers to call it—(though why we should go to the French for a name when English serves our purpose I do not exactly understand) which has been fully described by Mr. Wheelhouse; and this, not only in the class of cases referred to above, but in almost every instance where it is considered necessary for the cure of a stricture, whether literally impermeable or not, to incise it, so as to pass a full-sized catheter into the bladder.

The main features of the operation (though they are before the profession) may be briefly epitomised here.

1. The introduction of Wheelhouse's straight button-ended staff, grooved to within half an inch of its extremity, down to the strictured point, with the groove looking forwards.

2. The opening of the urethra *in the groove and not upon the point* of the staff, so as to secure at least a quarter of an inch of healthy urethra in front of the stricture.

3. The seizing of the cut edges of the wound in the urethra by two pairs of straight-bladed nibbed forceps, while the staff is turned round and withdrawn sufficiently to hook up the upper angle of the opened urethra. A lozenge-shaped window is thus obtained, through which the stricture can be seen, and often the orifice in it can be detected.

4. The introduction of a finely probe-pointed director into the stricture, and through it on towards the bladder. This, of course, is the *crux* of the operation. It is readily to be conceived that, in cases complicated by false passages, the danger of proceeding to cut on the director, upon the supposition of its having entered the bladder, when it has not, should haunt the mind of the operator; but, as a matter of fact, I think I am justified in quoting Mr. Wheelhouse's expression, that its entrance is "clearly demonstrated by the freedom of its movements." Though difficult cases sometimes occur, I have never seen one in which the director has failed to guide safely.

5. The groove of the director having been turned *downwards*, the stricture is divided on its under surface by the scalpel, and a straight probe-pointed bistoury is afterwards carried along the groove, beyond the external wound, to insure complete division of all obstruction; and then,

Lastly, a most important and essential step, in order to insure the safe conduct of the catheter into the bladder: Teale's probe-gorget is guided along the grooved director into the bladder, dilating the stricture, proving by the gush of urine which flows along it that the viscus is reached, and forming a metallic floor over which the silver catheter cannot fail to pass safely to its destination.

Of the eight cases successfully operated on by myself, three were old cartilaginous strictures, which would admit of no instrument being passed through the meatus. Two belonged to the category of tight

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

strictures in highly irritable urethrae, which admitted the passage of a No. 4 and No. 6 catheter respectively, but resented further dilatation, which always set up constitutional disturbance. One case was admitted with complete retention; and hot bath, chloroform, opiate enemata, and the evacuation of the bladder by the aspirator, having failed to obtain the introduction of any instrument through the stricture, urethrotomy was resorted to. The last case in which I operated came under none of these heads. He was a man aged 46, who had suffered from spasmodic stricture for five or six years. He was a highly nervous subject and a thorough hypochondriac. Attention to his diet and general health, and the occasional passing of a catheter after a few days' rest in bed, gave only temporary relief. If I attempted to introduce an instrument when going round the wards with my class, I never succeeded; but on returning to him alone half an hour afterwards, I could pass No. 12. Thinking that, by opening the urethra in the perineum and allowing the urine to drain away for a week or two, I should give the irritable urethra a complete rest, and so permanently relieve the spasm, I consulted my colleagues on the case; and, as they all fully concurred in my hopes of the good to be anticipated from such a course, I performed perineal section, freely dividing the membranous portion of the canal throughout its extent, and, having introduced a full sized catheter, withdrew it again, and did not reintroduce it for ten days. This case is still under treatment, but hitherto there seems to be every prospect of a favourable result. Whenever the catheter has been left in in this case, even for four or five hours, a severe urethral rigor, with sudden rise of temperature, has taken place, and that since, as well as before, the operation, sufficiently showing the sensitive condition of the part; and showing also, I think, not only the insufficiency, but the inappropriateness, of treatment in this instance by dilatation alone.

I have now only to refer to the case in which an untoward effect followed the operation, and which was not discovered until six months afterwards.

The patient was a young tradesman, aged 25, who consulted me for a tight and somewhat oblique stricture seated at the junction between the spongy and membranous portions of the canal. No metal instrument would pass, but after many trials I passed a soft *cathédre à boule*, first a No. 3, and at subsequent sittings Nos. 4 and 5. Beyond this point I made no advance; and in addition to the unyielding character of the stricture and its obliquity, the urethra was so exquisitely sensitive, that every time the instrument was used, though with the most gentle manipulation and without ever causing bleeding, the patient was in pain for twenty-four hours or more after it. I therefore resolved on dividing the stricture, and, accordingly, performed perineal section, in the manner above detailed, in September 1875. The bulb was notched, and the anterior half of the membranous portion was divided in the middle line. The stricture was cleanly divided, and the probe-*gorget* having been used to dilate the posterior portion, a full-sized silver catheter was carried along it into the bladder and retained for thirty hours only. After this, it was introduced every second day for a fortnight, then twice a week for a fortnight more, when he went into the country; but visited me once in a week or ten days to have the instrument passed. The perineal wound closed at the end of three weeks after operation, and he never had a bad symptom nor failed to pass his urine in a good stream. Six months afterwards, he married; and in April 1876, he came to me complaining that he had no satisfaction *in coitu*. The act was completed, but there was no ejaculatory power. The seminal discharge was emitted (or, as he expressed it, "oozed out"), without any sensation of propulsion. I imagined that this was due to recontraction of the canal, but found no difficulty in passing a bougie, and he afterwards passed urine, without assistance, in a good stream. I encouraged him to hope that he would regain the power in time, and recommended him to abstain from sexual intercourse for a while; but several months later, he returned with the same story, and more downcast than before, because there was no promise of his marriage becoming fruitful. Now, what had happened? Was it the division of the fibres of the accelerator muscle? This would have been the explanation which would probably occur to one at first. But is this muscle the real agent of ejaculation? According to Professor Küss of Strasburg it is not; or, at any rate, only in a secondary degree. That physiologist says: "At the moment that the sperm is poured into the prostatic portion, this portion of the canal is isolated from the bladder, on account of the turgescence of the *verumontanum*, which is, during erection, in contact with the anterior wall (as shown by Kobelt); and we all know that micturition is impossible during the state of erection. On the other hand, the efferent ducts of the vesiculæ seminales, incorrectly called "ejaculatory ducts" open in front of and at each side of the *verumontanum*; so that the sperm readily passes into the prostatic urethra, which it fills up, but it can go no farther, because at this moment the urethral sphincter (called Wilson's muscle)

contracts and obliterates the membranous portion. The fluid, therefore, accumulates in the straight part of the canal between these two points under high pressure. But the sphincter muscle cannot long maintain its contraction; it relaxes, and immediately the seminal fluid is ejaculated with force due to the sudden relief of the pressure, while the rhythmical character of the emission is due to alternate contraction and relaxation of Wilson's muscle; though doubtless, also, the contact of the seminal fluid with the mucous surface influences the intermittent and tetanic contraction of the urethral sphincter." (Küss.)

It appears to me, therefore, that in the case related above, the loss of ejaculatory power is more probably the result of injury to Wilson's muscle, or the nerves supplying it, either by division or distension, than to injury of the bulb or the bulbo-cavernous muscle, generally called the ejaculator seminis. Whichever be the true explanation, it appears singular that this result should not be more frequently heard of after perineal section.

ON INTERNAL URETHROTOMY.*

By W. F. TEEVAN, B.A., F.R.C.S.,

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WITHIN the past few years, the operation of internal urethrotomy has occupied much attention in this country; the principles of the procedure have been more clearly established and better carried out, great improvements have been effected in the instruments used, and I think it may be safely predicted that internal urethrotomy will, in the future, attain that position to which it is justly entitled.

I would firstly remark that I consider most urethral strictures are best treated by gradual dilatation, carried out by means of soft instruments; that an operation is but seldom called for, and ought, as a rule, to be only resorted to after milder measures have failed. I would also observe that, pathologically, there is no evidence to prove that a stricture can be cured; but practically all strictures are curable, provided an instrument is occasionally passed at regular intervals for life.

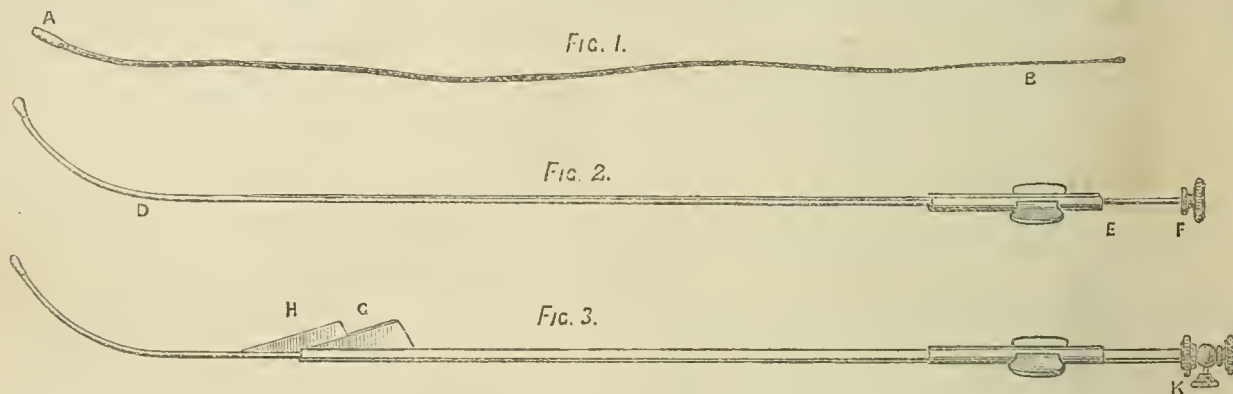
Now, if an operation be indicated, what are the requirements it must fulfil? what, in fact, is demanded of it to prove successful? I do not think the answer can be found in any English work; we must ask French or American surgeons. The former would reply that the insertion of the "*pièce d'allongement*" is required; whilst the latter would say that a "cicatrical splice" is wanted. The above expressions convey, in a very clear and concise manner, what is indicated. We have to enlarge the contracted urethra by letting into it a splice of new tissue, which is of a necessity cicatrical. We know that cicatrices are endowed with varying powers of contraction; those, for instance, which result from the clean cut of a surgeon's knife shrink but little, whereas those following lacerations contract greatly. Hence, therefore, a cicatrix made by a clean incision possesses the minimum amount of contraction, whilst that following a laceration has the maximum degree; and, inasmuch as we want a cicatrix which will contract as little as possible, we must choose a cutting operation, and not a tearing one, like the so-called "immediate dilatation".

Let us not forget these two following important surgical facts, which we constantly see, and which vividly show the relative results of cutting and laceration. When a surgeon incises the healthy urethra of a man, in the operation of lithotomy, no stricture follows when the wound is healed; but if the same man had been kicked in the perineum and his urethra torn, a stricture of the worst description would have ensued. Hence our choice is limited to cutting operations. Now, there are three forms of urethrotomy—external, subcutaneous, and internal. The external I regard as a severe procedure, which ought to be very rarely required; the subcutaneous is only adapted for cases where there is but a single stricture; whilst internal division can deal with any number of strictures; and, as it is a procedure which is attended with but little risk to life, it must be regarded as our stock operation for stricture. In what cases would I operate? If the stricture be non-dilatable, or, if dilatable, it contract again as fast as it is stretched; or if there were numerous fistulae combined with a tough stricture; or if the process of gradual dilatation were attended with great pain or constitutional disturbance; or, lastly, if continuous dilatation had failed. It may also be premised that penile strictures and those of traumatic origin are not usually amenable to dilatation, and require to be cut. Having determined on internal urethrotomy, shall we divide the stricture from before backwards, or from behind forwards? The answer to this question has divided surgeons into opposite camps, and acrimonious discussions have taken place. As both parties have obtained good results, they have

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

each attributed them to the particular method they have employed. I would venture to say that, in the hands of a skilful operator, equally good results will follow either method, but that the division from behind forwards requires a great deal more skill and care than the other, in order to determine the length of the incision, for it is not always so easy to judge where it shall end. The cutting operations may be of two kinds. Firstly, scarification. In this operation, a number of notches or small cuts are made into the stricture, but not through it, for they are not extensive enough for that. The instrument which makes the cuts is called a scarificator, and usually has two, three, or even four small blades. Secondly, internal urethrotomy, in which the stricture is completely divided at one cut by an instrument named an urethrotome, which generally has but one blade. There is a very great difference in the results of the two operations. The scarificator merely notches the stricture sufficiently to allow itself to pass through, whereas the blade of the urethrotome cuts the stricture in two, and permits of the passage of a vastly larger instrument than itself, for the simple reason that, the stricture having been completely divided, there is no longer any resistance. At one time, scarification was much employed in France; but it has, I think, been almost completely abandoned, as the results obtained by it were of a very fleeting character. It has been almost unanimously and emphatically laid down by French and American surgeons that, to obtain a good result, a stricture must either be torn through or cut through; and, as the former operation does not

of the stricture, and so prevented their division. I have removed the button on the blade, and protected the urethra from injury by encasing the knife, *see fig. 3*, in a double sheath, *G*. The peculiarity of my double sheath is, that it runs outside the staff in telescopic fashion, and not inside it, as in the urethrotomes of Sédillot and Gouley. By this modification, the calibre of the staff is not increased in bulk, whereas it is greatly strengthened by the stem attached to the sheath embracing it. The sheath also represents the surgeon's finger in the urethra; for it feels for the obstruction, tells him where it begins; and, when he thinks he has divided the stricture, it assures him of the fact or otherwise. Lastly, it makes the parts tense for us when we stretch the penis forcibly upwards towards the handle of the urethrotome. I have had the end of the staff of the urethrotome tunnelled like Dr. Gouley's, so that the instrument can either be slipped over a fine filiform bougie introduced into the bladder, or it can be screwed on to the "bougie conductrice", *see fig. 1*, and made to follow it into the bladder. The groove in my staff stops at *D* (*see fig. 2*), two inches from the end; so that, when the urethrotome is in the bladder, the curved non-grooved extremity is in the prostate and bladder. Inasmuch as there is never any stricture in the prostate, there is no object in carrying the groove to the end of the staff, as it is in the urethrotomes of Sédillot, Gouley, and Maisonneuve. The conducting bougie *A*, *fig. 1*, is of great value; for in some cases it is impossible to introduce the urethrotome, not because the stricture is so tight, but because the passage is so tor-



fulfil the requirements I have alluded to, it only remains for us to cut completely through the contraction with the urethrotome.

An enormous number of urethrotomes have been invented, and many of them have, I think, earned the late Professor Syme's condemnation, that they were "terrible engines of war". Until a few years ago, Civiale's urethrotome was, perhaps, more used than any other for dividing from behind forwards, and Maisonneuve's for cutting from before backwards: the latter instrument has been considerably improved. A good urethrotome ought to fulfil the following indications. 1. It should, when introduced, declare with certainty whether it be in the bladder or not. No urethrotome ought to be used which does not do this, for much discredit has been unjustly brought on internal urethrotomy by surgeons employing instruments which did not prove where they had gone to. Hence, false passages, and even the rectum, have been divided instead of the stricture. 2. The knife should not wound the healthy urethra. 3. The staff of the urethrotome should be very slender, so that it can be passed through very tight, narrow, non-dilatable strictures. 4. The instrument should not only tell where the incision is to begin, but where it is to end.

Now I believe that the urethrotome, as modified and improved by Sédillot, Gouley, and myself, fulfils all the above requirements. In Maisonneuve's instrument, the groove in the staff extended through its entire length, so that the knife went into the bladder, which was unnecessary; and, as the slit was usually blocked up by blood or mucus, and hence the withdrawal of the urine, which formed no part of the operation, could not be effected. The groove in my staff is filled with a closely fitting stylet (*see fig. 2*), so that, when the wire is taken out, urine will flow if the instrument be really in the bladder. Maisonneuve thought he had protected the healthy urethra from possible injury when he put a metal knob or button on the apex of his triangular blade. *Post mortem* examinations made in Paris and New York demonstrated that with his knife the healthy urethra might be cut in numerous places undesignedly. In one instance, the mucous membrane of the canal was cut in its entire longitudinal axis. Then, again, this knob on the blade pushed away some of the outlying fibres

tuous. If, however, the bougie be first passed, and the staff of the urethrotome be screwed on to it, it will follow the former into the bladder. This procedure must be conducted very slowly, otherwise the bougie may be doubled up if the urethrotome be pushed too quickly after it. When the instrument is apparently in the bladder, I withdraw the stylet *E F* (*see fig. 2*) to verify its position. If urine flow, I operate; if it do not, I withdraw the urethrotome and try again another day. Supposing, however, that the urine escapes, I stand on the right of the patient, and take the knife enclosed in its double sheath, and, protruding the former a little, I insert it into the groove of the staff, and immediately slip the double sheath over and outside the staff. I then withdraw the knife within the sheath, and, clutching hold of the penis just behind the gland, I draw it forcibly towards the handle of the urethrotome, which is held by an assistant standing opposite me; and with the right hand push the stem of the sheathed knife slowly down the urethra till it arrives at the obstruction, against which I keep it steadily pressed. By these two manoeuvres, I have ensured that the stricture is made perfectly tense, so that it can be cleanly and completely divided. I now protrude the knife for half an inch, knowing that that is the minimum cut required to divide even a ring-stricture not thicker than a thread. The knife is then withdrawn into its sheath, which is pushed forwards to see if the stricture be completely divided or not. If it be not, the process is repeated, each cut being half-an-inch long, till everything is cut. I generally divide the strictured urethra in the roof, as I think that is the best situation, for the bulb is thereby avoided. If the surgeon prefer, however, to cut the floor of the canal, all he has to do, when he has passed the staff of the urethrotome, is to reverse the instrument, so that its point is turned behind the prostate, as in lithotomy. The urethrotome can be made with a lateral or inferior blade, if desired. As soon as I have ascertained that the canal is perfectly free from one end to the other, I withdraw the instrument and introduce a No. 25 silver catheter, for the purpose of demonstrating that the urethra has been restored to its normal calibre and to completely empty the patient's bladder. By ensuring that the bladder is empty, the patient can go for some four or six

hours without wanting to make water, by which time the wound will be covered with a firm clot, and the pain in micturition be considerably diminished. I do not leave any catheter in the bladder after the operation, and I allow the patient to pass his urine naturally. I believe I was the first surgeon in this country to dispense with the use of the catheter after the operation. If there be one practice more persistently insisted on than another in English surgical works, it is that of the necessity of the use of the catheter after urethrotomy, the instrument to be either left in the bladder or else employed to draw off the patient's urine; and the writers point out the disastrous consequences which will take place, in the shape of abscess, fistula, or infiltration of urine, if the practice be not observed. To Dr. Gouley of New York belongs the credit of having shown the utter groundlessness of the surgeon's fears.

After the operation, I am in no hurry to commence the passing of instruments, usually waiting till the fourth day, and not introducing them oftener than twice a week. At the end of ten days, I begin to teach the patient how to pass a catheter for himself, and order him to do so every Saturday night till further orders. By passing a large No. 25 bougie or catheter several times after the operation, the insertion of a good "cicatrical splice" is guaranteed.

Now as to results. I have operated in all on thirty-three cases, all of them of the worst description, and for that reason relegated to the operation, without a single death. In one instance, the urethra was so indurated in its entire length that I left in a catheter after the operation, to set up urethritis, and so lessen the thickening. The inflammation was, however, more than I desired; and abscess, followed by fistula, ensued. The case ultimately got quite well. In one case only had I troublesome bleeding. It proceeded from the meatus, which I had divided, and was a hint to me for the future not to cut the meatus at the same time as the stricture, but several days before. As a rule, not more than about a dessertspoonful of blood escapes either at or after the operation. Secondary hæmorrhage I have never seen. Rigors occurred in about two-thirds of my cases. I look upon them as entirely nervous and of no importance. It is stated in books that rigors are due to the passage of the urine over the wound. This, however, cannot be the correct explanation; for, unless pyæmic, they are never seen after lithotomy or external urethrotomy. I look upon rigors after internal urethrotomy as caused by the sudden stretching of the nerves in the wound through the distension of the canal by the urine. In three of my earlier cases, I had to repeat the operation, as my incisions had not been sufficiently free. I am sure that every one who performs the operation will be pleased with the soft supple cicatrix which follows it, so different from the rough, tough, irregular cicatrix which forms the so-called "immediate treatment", which is neither more nor less than absolute laceration, not always of the tough stricture, but sometimes of the unoffending healthy urethra, where, as elsewhere, "the weaker goes to the wall".

Now for statistics. I think they will be found to be eminently satisfactory, and will carry conviction. They are the largest, I believe, which have ever been placed before the profession, and show what internal urethrotomy can accomplish. No other operation for stricture with which I am acquainted can produce such favourable results. I consider that no operation can be performed on the urethra without a certain amount of risk; but how slight that risk is you will immediately see. I find by examination that the operation has been performed by six surgeons in London, Paris, Mobile, and New York, one thousand and ninety-five times, with but ten deaths; and there would probably have been two deaths less had it not been for the crowded state of the wards in the Necker Hospital during the Commune.

In conclusion, gentlemen, let me say that the deductions drawn from the experience of a solitary surgeon may be misleading, but that the conclusions which must be arrived at from the overwhelming mass of figures which I have placed before you loudly proclaim that the operation of internal urethrotomy claims your consideration and demands your support.

NEW MODE OF TREATING VARICOCELE.

I find the following simple procedure an efficient method of treating varicocele. Pass a long and strong hare-lip pin between the veins and the scrotal walls, bringing the point of the pin close beneath, but not through, the scrotum; then make the point retrace its course, but passing now behind the veins, until it emerges near the puncture through which it entered. In a word, by employing that form of acupressure known in the Aberdeen School as the method of retroclulsion, a varicocele may be effectually compressed and the veins obliterated.

S. MESSENGER BRADLEY, Manchester.

HISTORY OF OVARIOTOMY IN ITALY.

By T. SPENCER WELLS, F.R.C.S.,
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I HAVE just received from Dr. Peruzzi of Lugo a pamphlet upon my practice of ovariectomy. This pamphlet, which is a reprint of articles in the ninth volume of the *Raccoglitori Medico*, consists in great part of a translation of one of my lectures, published in the BRITISH MEDICAL JOURNAL of December 15th, 1877. It also contains so very cordial a recognition of the effects of my work upon Italian surgery, that I should have received it with silent gratification, if it had not also contained a correction of an historical error into which I had fallen, but which I now hasten to acknowledge and correct.

In my work on *Diseases of the Ovaries*, there is a chapter on the Rise and Progress of Ovariectomy. At page 314, the following sentence may be found: "In Italy, the first successful ovariectomy was performed by Professor Landi of Pisa, in September 1868; the second by Professor Peruzzi of Lugo, in 1869; the third by Dr. Marzolo of Padua, in July 1871." On page 313, I had stated that Professor Vaozetti, the distinguished Italian surgeon, had performed the first ovariectomy in Russia in 1846. My work was published in 1872; and Dr. Peruzzi is not unnaturally surprised that I did not allude to a case by Emiliani of Faenza, in 1815, which had been published in 1843 in the *Bullettino delle Scienze Mediche di Bologna*, and had been again brought to light by Dr. Peruzzi himself, in the form of a letter to M. Boinet, entitled "*Aperçu Historique sur l'Origine et les Progrès de l'Ovariectomie en Italie*".

As this letter appeared in *L'Ipocratico di Forlì* in 1869, I should certainly have noticed it in 1872, if I had seen it. I now see it for the first time, in pamphlet form, reprinted from *L'Ipocratico*.

The author shows that, so long ago as 1752, Dr. Tarziani Tozzetti, in a published *Selection of Medical Observations*, had not (as supposed by Boinet) proposed to extirpate a diseased ovary, but only discussed the question of tapping and palliative treatment. So Morgagni, in 1761, admitted that ovariectomy might be considered in cases where the cyst was not adherent and the pedicle single and slender. Peruzzi goes on to quote from Monteggia in 1814, and Sacchi in 1832, sentences to prove that these surgeons were theoretically in favour of ovariectomy. These will not much interest your readers; but the account of the case of Emiliani, in 1815, is very remarkable.

Dr. Gaetano Emiliani of Faenza was a provincial surgeon. A married woman, twenty-six years of age, mother of three children, while nursing her third child, lifted a heavy pan of water, resting the edge of the pan against the lower part of the abdomen. There was no immediate suffering, but the next night she was awakened by acute pain in the left iliac region, which continued during the next day. Dr. Brunetti was called, and "discovered at the seat of pain a tumour almost isolated in the cavity, without any alteration externally, very painful to the touch". Four months passed without much relief, and the patient suspected pregnancy. In two months, with a great loss of blood, she passed a very large mole ("*una assai voluminosa mole*"); uterine discharge continuing for twenty-five days. Dr. Emiliani was called in, and found his patient feverish, with evening exacerbations; the tumour, a hard circumscribed spheroid, indolent to the touch, but the seat of occasional spasmodic pain. The diagnosis was "scirrhus condition of the ovary and tendency to carcinoma", and the only hope, extirpation. The proposal was approved by Brunetti, who, with a phlebotomist, assisted at the operation, which I describe in the words of the son of the operator, who first published the account of the case.

"My father divided the common integument along the linea alba for about two inches and a half, divided the subjacent muscles and the peritoneum very carefully, and exposed the left ovary, which was recognised by its position, form, connections, although enlarged beyond all ordinary degrees, scirrhus, superiorly covered by small vesicles, from which a feetid ichor ran, and adhering by its whole inferior part to the colon; around, some varicose vessels were observed. The ordinary connections and the unusual adhesions were promptly separated, and the arterial twigs were tied one after another as they were divided. The blood lost was calculated at less than half a pound. The lips of the wound were united by one suture."

The after-treatment appears surprising in these days—rigid diet, bleeding repeated on the following day, tartar emetic, and lemonade. But recovery was complete; menstruation reappeared; and a year after the operation twins were born, which both died after a few hours. Five other children were born after these, two of whom, with their mother, the patient, were alive and well when the report of this case

was published by the son in 1843. Dr. Brunetti and the phlebotomist were also living.

"The ovary, after having been preserved twenty-eight years in alcohol, is pyriform, is nine *centimètres* long and five in its greatest breadth (three inches and a half by two inches). The peculiar structure is searched for in vain, being entirely degenerated by scirrhus. The specimen has been taken from my private museum, and is now deposited in that of the illustrious Medico-Chirurgical Society of Bologna."

There are several interesting points in this narrative. The ligatures appear to have been left in the abdominal cavity; and it is certainly desirable that the specimen should be carefully examined. If it be really an ovary, it will certainly appear that the first case of ovariotomy in Europe was that by Emiliani of Faenza in 1815. I have written to Dr. Peruzzi, suggesting that the specimen should be examined by some competent morbid anatomist.

THE CONNECTION BETWEEN STOMACHIC AND LABYRINTHINE VERTIGO.*

By EDWARD WOAKES, M.D.Lond.,
Surgeon to the Throat Hospital.

A GREAT deal of attention has recently been devoted to what is commonly called Menière's disease, but, which, from the anatomical organ to which the symptoms are mainly referred, is also known as labyrinthine vertigo. The elaborate treatment of Dr. Gowers, Dr. Hughlings Jackson, and Dr. Ferrier compasses the present knowledge of the subject, so far as it relates to that form of vertigo resulting from the progressive invasion of the labyrinth from lesions of the middle ear.

But there is another class of vertiginous patients in whom the auditory apparatus is, up to the time of the attack, perfectly healthy, and may remain so after it has passed off, whose symptoms are, nevertheless, due to a more or less temporary lesion of the labyrinth, to which organ, in fact, the general consensus of opinion refers every such disturbance of equilibration as expresses itself in giddiness. It is to this class of cases I wish to invite your attention this evening, and, as in their investigation we shall get some insight into stomachic vertigo, the area of interest of the subject will be proportionately widened.

The form of vertigo to which I allude is that in which the patient, without being aware that he is otherwise than quite well, is suddenly attacked with giddiness and falls prostrate. This may never in that patient's experience be repeated, or the attack may recur after a shorter or longer period. The cases in question differentiate themselves from those treated of by the authors referred to in the fact, already stated, that the auditory apparatus is previously quite healthy, though they possess this feature in common with them: that there is no loss of consciousness. After the attack, the patient finds himself in one of the following conditions: his hearing may be normal, as heretofore; or he may be quite deaf on the side to which he fell; or there may remain some impairment of hearing only, with probably confused noises in the head.

As regards concomitant symptoms, nausea and a splitting headache may remain. There is also a painful sense of fear, a horror lest the attack should be repeated, and a dread of becoming epileptic; to which apprehension the members of our profession who suffer from the attacks are specially prone.

The following example, the subject of which was a medical man personally known to me, illustrates some of their features. When about thirty years of age, and being fully engaged in a very arduous country practice, he was one evening summoned to a patient, being already fatigued with the usual day's work. On reaching the house, he became giddy, and, as the door was opened, fell into the hall, a proceeding which, though perfectly conscious, he was quite unable to avoid. It is needless to say he was very much frightened by the attack, but was not otherwise affected by it. In the course of the following year, a second seizure occurred exactly corresponding in character to the former; but, for more than twenty years subsequently, there was no repetition of the attack, although he was for a lengthened period the subject of intense headaches, with tinnitus, for which he submitted to the ordinary method of depletion then in vogue.

The time at which these events happened was over thirty years ago. Menière's disease was, of course, unheard of; and Flourens had not yet experimented on the semicircular canals. It was not, therefore, extraordinary that this patient should be haunted with the dread of becoming epileptic.

Adhering to the principle laid down in a former paper, we shall seek the clue to the symptoms in the source and vaso-motor relations

of the blood-vessels supplied to the region manifesting them: a proceeding which will show that this particular region, the labyrinth, possesses some very remote, and possibly unlooked for, alliances. At this point, it will be necessary to repeat what I have elsewhere had occasion to insist upon; viz., that the receptive part of the auditory apparatus receives its vascular supply from a totally distinct source—the vertebral artery—to that which is furnished to the conductive portion of the ear. This in itself is a suggestive fact, as the internal carotid, in its bony canal, is placed so close to the internal ear that one might naturally look to it as the source whence its vessels would be derived. As a matter of fact, however, neither the external nor internal carotid is in any way concerned with the circulation of the labyrinth. It is the vertebral artery and its relations we have to consider. The origin of this vessel, from the subclavian deep down in the neck, and its prolonged course upwards, guarded by the bony sheath formed by the vertebral foramina, acquire an increased importance when its relations to certain nerves are considered. In the first place, this position brings it into very close proximity with the inferior cervical ganglion, from which it derives a rich plexus of nerves, communicating, in their upward course, with the several cords which form the brachial plexus. It is important here to note that this lower cervical ganglion furnishes also the principal inhibitory nerve of the heart; viz., the inferior cardiac nerve. The experiments of Burdon Sanderson and others show that this nerve is capable of slowing the heart's action even to the extent of stopping it. We wish to point out its close relationship with the nerve which regulates the supply of blood to the labyrinth, both passing through the same sympathetic ganglion. Nor can it be without design that such an arrangement exists. Glancing for a moment at one aspect only of the functions of the semicircular canals, that, viz., by which, under circumstances of altered tension of their endolymph, they are capable of causing the individual to lose his equilibrium and fall to the ground, we get some insight into the object gained by associating the nerve which regulates this tension with that which tends to check the heart's action. The connection is such that an impression influencing the heart will affect the labyrinth. Thus a strong mental emotion arising centrally and propagated to the heart through its inhibitory nerve, which tends to stop its action, will also be deflected in the ganglion to the nerve regulating the blood-supply of the labyrinth, and, by suddenly changing the tension in this organ, will cause the subject to fall to the ground, so removing the mechanical impediment to the circulation which the upright posture implies. In this way, time is allowed for the excited influence of the heart to subside while the subject of it is placed perforce in the recumbent attitude.

Referring now to the communication between this ganglion and the brachial nerves besides those already mentioned, there are others proceeding directly from the ganglion to the brachial plexus. It is this arrangement doubtless which explains an occurrence noticed in gunshot-wounds of the plexus. It was first pointed out by Drs. Moorhouse, Mitchell, and Keen, in a treatise on gunshot-wounds of nerves published after the late American war. These observers record most succinctly that the subject of such a wound, whether received in the arm, axilla, or neck, immediately falls to the ground, without losing consciousness. This circumstance is quite unique; it has not been observed in connection with wounds of any other correspondingly non-vital part of the body. A certain amount of collapse attends these cases, from which it may be legitimately inferred that the shock is conveyed, not only in the direction of the labyrinth, but also through its inhibitory nerve to the heart.

Anyone who is conscious of the possession of what is popularly called the "funny bone" may, if he choose, verify these statements, at least to a certain extent, by giving it a blow considerably in excess of that which is sufficient to induce the well known tingling sensation in the fingers. It once happened to the writer to witness such an experiment in the instance of a lad who was struck on this spot by a hard tennis-ball thrown with considerable violence. Immediately he became giddy and confused in his head, and would have fallen but for the support of some railings, and altogether the extreme distress which he manifested appeared out of all proportion to the slightness of the cause. At the time of the occurrence, the symptoms were quite inexplicable by any known relations of the injured part. The observation of the American surgeons just quoted, as well as the anatomical continuity established through the inferior cervical ganglion between the brachial nerves and the labyrinthine circulation, afford, we venture to submit, a ready explanation of the phenomena to anyone who candidly examines them.

It will be apparent that we are taking for granted the physiological fact, that a shock communicated to the inhibitory nerve of a vessel temporarily withdraws its function, allowing it to become greatly distended with blood; it is this sudden distension which produces the pressure on the endolymph, and the consequent subversion of the

* Read before the Medical Society of London.

function of equilibration, which will be proportionate to the severity of the shock.

Having thus seen how labyrinthine vertigo of a very severe type may be excited through these far off alliances of the semicircular canals, we shall be in a better position to understand the corresponding relations existing between the stomach, with its adjacent viscera, and the labyrinth. Before tracing these, it will be of service to refer to Trousseau's remarks on this subject, he being probably the first writer to call marked attention to *stomach vertigo* in his chapter entitled "*Vertigo e læso stomacho*", where he discusses it with his usual candour. No one, we venture to think, can carefully study the instances he adduces of this disease without sharing the conviction that the gastric lesion was only a subsidiary factor in the production of the symptoms he refers to it. That Trousseau had himself some suspicion of this is evidenced by his own statement. Thus, after describing the case of a lady in whom distressing giddiness, brought on by the bustle of the street, the passing of a carriage in rapid motion (causes exactly calculated to interfere with the organ of equilibration, when unduly susceptible), and who became worse by depletion and abstinence from generous diet, but was cured by tonics and restoratives, he remarks:—"I have frequently asked myself whether the treatment which, in these cases, I directed against the affection of the stomach was not, unknown to me, addressed to the nervous system; and whether I had not diagnosed a gastric affection rather than the effect of treatment than from the symptoms of the disease; whether I had not been led into an error in diagnosis by obtaining success for treatment usually employed with benefit in dyspepsia." (*Lectures on Clinical Medicine*: New Sydenham Society, vol. iii, p. 544.)

In this candid commentary, my own experience of so-called stomach-vertigo would lead me entirely to concur. A fair example is afforded in the following case. A gentleman, a member of the Society of Friends, consulted me, about five years ago, for symptoms closely corresponding with those enumerated in the foregoing quotation. He was about seventy-three years of age, and, though never robust, was otherwise in good health, except that any exertion brought on giddiness, and walking in the streets was attended with a feeling that he would fall forwards. His appetite was good, although the tongue was loaded; and it was observed he had no teeth, not even artificial ones; but it was ascertained that he ate meat with a relish. In view of the edentulous state of his jaws, and with Trousseau's teaching in recent recollection, he was prohibited from taking any solid food. Small doses of bromide of potassium were given at six hours' intervals. Under this treatment, he made a rapid recovery. After an interval of nearly a year, he returned to a mixed diet, and, in a short time, his old symptoms returned, but to a less extent than formerly. The same treatment was again had recourse to with a like result, and, in the period that has since elapsed, the *role* of circumstances just detailed has been enacted on several occasions. In fact, the sensitiveness of this patient's stomach to solid food appears to be proportionate to the motility of his equilibrating nervous centre. It is a suggestive feature of this case, as also of others that have occurred to me, that the progress towards recovery was invariably expedited by the bromide. Obviously, the point at issue is how to associate stomach-vertigo with the labyrinth. A very direct channel of communication is established between the pneumogastric nerve and the lower cervical ganglion by means of a fasciculus given off by the former about the point where the recurrent laryngeal leaves the trunk of the nerve. That the course of this branch is from the stomach to the ganglion will be apparent when it is remembered that vaso-motor fibres associated with cerebro-spinal nerves pursue an opposite course to the latter. When it is further remembered that nerves entering a ganglion break up and communicate with its corpuscles, by which means they contract new relationships with other nerves entering the ganglion, it will not be difficult to understand how the stomach is brought into relationship with the labyrinth. There can be no doubt, we think, that this correlation is effected in the inferior cervical ganglion through the medium of the communication from the pneumogastric to the ganglion, impressions passing along which become in it transferred to the inhibitory nerves furnished to the vertebral artery from the ganglion.

Having established this relationship anatomically, it seems impossible to resist observing the analogy between the shock propagated from a contused brachial nerve to the vertebral artery, with its concomitant vertigo, and the lesser shock caused to the nerves of the stomach by the lumps of unchewed meat swallowed by the toothless patient, and propagated thence to the same vessel, and attended with the same condition, viz., giddiness. *Mutatis mutandis*, the cause, the method, and the result are one and the same thing; the experiment is the same, the conditions only are varied. Hence it would seem that Nature had in the labyrinth erected a signal-box, in which a note of warning might be

sounded by the much-abused though tolerant viscus, the stomach, whenever the ill treatment it is subjected to threatens to compromise more vital parts of the organism. It would seem to teach us, what the acquired wisdom of advancing years so often fails to do, that the senile stomach is not the fit receptacle of unmastered meat; that it resents the slight shown it in this, and, of course, in many other ways: first of all by the warning attacks of giddiness, which, if not heeded, will shortly culminate in a fall. It was by such a catastrophe that the Duke of Wellington lost his life. The unscathed hero of a hundred fights failed to prove himself master of the situation, when the forces arrayed against him were a vigorous appetite and an acutely sympathetic labyrinthine circulation.

These observations naturally lead us to infer that the doubts which instigated Trousseau to ask himself the question, whether "the treatment which in these cases he directed against the affection of the stomach was not, unknown to him, addressed to the nervous system", were well founded. The fact is it was directed to both. By resting and restoring the digestive apparatus, he appeased those waves of excited vaso-motor sympathy existing between the viscera and the important tissue tracts supplied by the vertebral artery. That these various and distant tissue-tracts are really correlated through the medium of the ganglion in question receives confirmative evidence from the effects of certain drugs. Thus tobacco will produce giddiness, tinnitus, nausea, præcordial distress, and *aching in the arms*, amongst other conditions, indicating its progressive influence over the centres of the sympathetic system. Quinine, again, in large doses, produces giddiness, tinnitus, and occasionally, in extreme cinchonism, such trophic changes in the upper extremity that the cuticle will be shed like a glove. Both these drugs, therefore, may be viewed as having a paralysing influence over the inhibition of the lower cervical ganglion. The bromides, and notably hydrobromic acid, have an opposite effect, because they annihilate the aural symptoms of quinine, cure labyrinthine tinnitus; coupled with suitable diet, they remove stomachic vertigo, and have proved highly serviceable in a case of associated biccough. They have, moreover, a now well established therapeutic relation to epilepsy. But the fact that the treatment of epilepsy, however conducted, is greatly influenced by the diet, that the absolute withdrawal of solid food immensely expedites recovery—a circumstance which I have repeatedly proved—this fact, we say, pointing to a direct influence between the innervation of the stomach and the condition of tone of the vertebral artery, is strongly confirmative of the reality of the correlation advocated in this paper.

From the foregoing remarks, it will be seen that we have, in the infracervical ganglion, an organ for connecting the upper extremities—the heart, the stomach, and upper portions of the digestive apparatus—with the labyrinth. These relationships, in all probability, by no means exhaust its range of influence; but they suffice the objects of this discussion. The ganglion in question brings these widely separated regions into very intimate sympathy by virtue of its regulatory power over the blood-supply of the labyrinth, and of its afferent and efferent branches to the organs referred to. Returning to the case of the toothless patient, who suffered from *vertigo* whenever he partook of solid food, we take the following to be the course of events in this, as probably in all cases of giddiness which originate in the stomach. The ingestion of the irritant gives rise to an impression, which is conveyed along the channel already indicated as forming a communication between the pneumogastric nerve and the infracervical ganglion, whence it is reflected to the vertebral artery in the shape of a wave of diminished inhibition. This is equivalent to an increased flow of blood to the labyrinth, with corresponding pressure on the endolymph. This pressure, physiologically interpreted, means giddiness, so far as it relates to the semicircular canals; and when, as usually happens, the circulation of the cochlea also becomes hyperæmic, there is concomitant tinnitus of a more or less pulsating character. If the vascular dilatation admit of effusion of serum, deafness is superadded; and if the exudation partake of the more solid particles of the blood, so that a clot is formed, the deafness may be permanent. In the milder occurrences, the impression will be transitory, passing away with removal of the exciting cause. It is to be noted that the labyrinth is placed at the extreme periphery of the tract supplied by the vertebral artery; it will, therefore, be the first to appreciate the consequences of the wave of suspended inhibition communicated to it from the ganglion. The phenomena it occasions, under the circumstances, are of such a marked character that they cannot fail of attracting the patient's notice; whether the impression originates in the heart, the upper extremities, or the digestive organs, the first note of warning is thus usually struck in the labyrinth. We are, therefore, justified in regarding this organ as possessing a sentinel like office to warn the subject of changes of blood-supply about to happen throughout the whole of the important regions supplied by the vertebral artery

—such, for instance, as the medulla oblongata and the contiguous nerve-centres at the base of the brain. Hence epilepsy or apoplexy may be about to supervene; the *petit mal* of the former disease being the signal note of the labyrinth, betokening the condition of its circulation, and suggesting the search for sources of suspended nerve inhibition.

In the disturbance of some one or more of the multitudinous sympathies, thus imperfectly sketched, will be found an explanation of the occurrence of those *simple attacks* of labyrinthine vertigo, which come on *without any previously existing ear-disease*, the desire to understand which furnished the key-note of this paper.

AN EXPERIMENT ON THE DISINFECTION OF ENTERIC EXCRETA.

By JOHN DOUGALL, M.D., F.F.P.S.G.,

Lecturer on *Materia Medica* in the Glasgow Royal Infirmary School of Medicine.

In the sixth Public Health Report of the Medical Officer of the Privy Council for 1875, is an extremely able account by Dr. Baxter of an experimental study of certain disinfectants. Mr. Simon, in his preface, states that the investigation was carefully planned by Dr. Baxter and Dr. Bardon Sanderson. It may be mentioned that, in the experiments, three infective poisons, viz., that of glanders, that of vaccine, and that of intensified or infective inflammation, were submitted to the action of four alleged disinfectants; viz., permanganate of potash, sulphurous acid, chlorine, and carbolic acid. At the end of the report, the principal inferences which seemed to flow from the results of the investigation are embodied in a series of eleven propositions. In the fourth proposition, it is stated that, "when permanganate of potash is used to disinfect a virulent liquid containing much organic matter, or any compounds capable of decomposing the permanganate, there is no security for the effectual fulfilment of disinfection, short of the presence of undecomposed permanganate in the liquid after all chemical action has had time to subside".

As this conclusion, which is founded on a great number of very interesting experiments, seemed a safe basis for testing further, in an easy and very practical manner, the disinfecting power of the permanganate, I resolved to try its strength in the form of Condry's fluid with enteric excreta, this fluid being the state in which the permanganate is almost exclusively used by the public. The experiment was conducted as follows. To a newly passed, characteristic, ochry-looking enteric stool, quantity unknown, a portion of a known quantity of Condry's fluid was added. The mixture was then stirred and set aside for a short time, and, when the pink colour had changed to a brown, more of the fluid was added, and the process repeated till the pink colour was found permanent after the lapse of twelve hours; in other words, chemical action in the mixture had subsided, as indicated by the presence of the undecomposed pinkish permanganate liquid. The mixture was now measured, and the quantity of Condry's fluid added being known, this was subtracted from the whole, thus showing the amount of fecal matter acted on. To find the exact relation between the quantity of Condry's fluid deoxidised and the amount of enteric feces disinfected, was now a simple matter of calculation. Avoiding fractions, it amounted to this (and I confess the result astonished me): one ounce of enteric feces had deoxidised not less than ten ounces of Condry's fluid; in other words, there is no security that enteric fecal matter is effectually disinfected by Condry's fluid, unless the bulk of the fluid used be ten times as great as the bulk of the enteric feces to be disinfected. In the same manner, I experimented with a fluid ounce of enteric urine, and here the result was, that one ounce of the urine deoxidised at least two ounces of Condry's fluid.

Now, supposing a typhoid patient passing twelve ounces of fecal matter and twenty ounces of urine during each twenty-four hours, say for a week, which, it will be conceded, are not excessive quantities, and supposing the Condry's fluid sold to the public in eight-ounce bottles at one shilling each is used, it follows that two hundred and eighty ounces of Condry's fluid are required to oxidise or disinfect the week's urine, which, at one shilling per eight ounces, amounts to £1 15s.; and that eight hundred and forty ounces are required to oxidise or disinfect the week's feces, which, at one shilling per eight ounces, amounts to £5 5s.; in all, £7 per week, or at the rate of £364 *per annum*. Supposing a hospital with thirty enteric patients, on an average, constantly under treatment, on these data, it would take £10,920 worth of Condry's fluid to disinfect their yearly excretions.

CLINICAL MEMORANDA.

MOSQUITOES AND FILARIE.

I REQUEST permission to make a correction of a rather serious error that has, not altogether unnaturally, occurred in the annotation that has appeared in the JOURNAL on this subject.

The statement that "the mosquito is the means of spreading the *filaria sanguinolenta* amongst human beings" is absolutely incorrect. It was through the courtesy of the Pathological Society that I was permitted, on the occasion referred to, to combat the error in question, and to explain that the human parasite taken up by the mosquito had no genetic relation whatsoever with *filaria sanguinolenta*.

At the Linnean Society, on the 7th instant, I communicated the details of Dr. Manson's discovery, originally announced on January 12th. In the discussion that followed, a general acceptance of the correctness of Manson's views was accorded by Dr. Allen Thomson, Sir Joseph Fayrer, Mr. Curling, Mr. Ray Lankester, Dr. Collingwood, and also by Mr. MacLachlan, the well-known entomologist. The President of the British Association acknowledged, for his part, that he thought that the authors of the two papers before the Society had fairly proved their case; and Sir Joseph Fayrer characterised the subject as one of unparalleled interest and importance in relation to public health in the tropics.

If there were one point more than another upon which I insisted at the Pathological Society, it was on the necessity of not mixing up the *filaria sanguinolenta*—an entozoon of the dog, known to Redi nearly two centuries ago—with the *filaria sanguinis hominis* of Lewis, the *filaria immitis* of Leidy, and the *hamatoozon subulatum* of Leisegang. Unfortunately, as if the nomenclature of these helminths were not already sufficiently complicated, we have Dr. Beale giving the weight of his great authority as a microscopist to an error which I felt it my duty to expose on the night in question, and which, I regret to see, has now even gained the sanction of the valued columns of the JOURNAL. In the last page of the fourth edition of the *Microscope in Medicine*, the author writes as follows: "Dr. Cobbold seems not to be aware that, in his work on *The Pathological Significance of Nematode Hamatozoa*, published in 1874, Dr. Lewis gives an account of the mature '*filaria sanguinolenta*, with drawings of the male as well as of the female worm.'" If anyone will read the context in Dr. Beale's work (p. 505), they will at once perceive that Dr. Beale's object is to defend Lewis's position on the question of priority in reference to the discovery of the sexually mature worm. Dr. Beale's imagination has led him to fancy that the *filaria sanguinolenta* is the same worm as Lewis's *filaria sanguinis hominis* and my *filaria Bancrofti*; and then he has sought to make it appear that I am ignorant of Lewis's memoir—a little work a copy of which was sent to me by the distinguished author himself, and which, I may add, is scarcely ever out of my sight.

The members of the Pathological Society will testify to the earnestness of the appeal I made in reference to the necessity of precision and accuracy in dealing with the numerous forms of hamatozoa of man and animals. The number of errors that have been published on this head is very considerable. I do not allude to mere questions of microscopic size and so forth, concerning which all of us are liable to err; but when it comes to the confusing of species which have absolutely no connection with one another, and not even any relation as regards their bearers, then I feel it is impossible to remain silent.

T. SPENCER COBBOLD, M.D., F.R.S.

THE ACTION OF OPIUM AND ATROPIA.

THE publication in the JOURNAL of the case of opium-poisoning successfully treated by atropine, and Dr. John Harley's letter of warning, induce me to send a brief account of a case in which the physiological action of these drugs received a *vice versa* illustration.

Early one morning in November last, shortly after midnight, I was summoned out to a lady who had been seized with angina pectoris, of which complaint she had had several attacks during the past few months. On my arrival, I found her sitting up in bed, with her head and body bent forward between her knees, in agonies of pain; the extremities cold, the pulse feeble, and the pupils dilated. She had also frequent retching, and was incessantly pushing forward her tongue and asking for "water, water". I was told she had vomited several times; but what she had thrown up last had alone been kept, and I found this to consist merely of bile and mucus without any peculiar smell. Having brought with me my hypodermic syringe and a solution of morphia, I gave her at once an injection of about a quarter of a grain of morphia. Almost immediately the pain and retching ceased, the

sensation of thirst diminished, and soon afterwards my patient fell asleep. Fearing lest there should be a return of the angina as soon as she awoke, I thought it a favourable opportunity to go to my house for a supply of nitrite of amyl, as I had omitted to bring some with me. On my return, the friends met me looking greatly alarmed; and, when I entered the sick-room, I must own I was myself somewhat frightened, for I found my patient looking ghastly pale and her breathing rather shallow. However, when I placed my finger on her pulse, I found it beating strongly and regularly. The limbs were warm, and the pupils but slightly contracted. I then assured them she was only sleeping; and in a few minutes she awoke with a deep sigh, when I at once administered some brandy. I now learned that, previously to sending for me, this lady had been given at the commencement of the paroxysm of angina, at her earnest entreaties, dose after dose of a mixture I had prescribed for her about a month before, as she had found it to relieve her on former occasions, and sometimes to ward off an attack. The mixture contained five minims of liquor arsenicalis and a minim and a half of liquor atropiæ (*B. P.*) in each dose; and, fortunately for my patient, there were not quite four doses in the bottle at the time when her friends so foolishly yielded to her urgent solicitations, or the result might have been different. She had thus taken nearly twenty minims of liquor arsenicalis, and nearly one-twentieth of a grain of atropia; but, as she could not at any time take more than one dose of the mixture in the twenty-four hours without the atropia causing dryness of the mouth and throat, on this occasion all the physiological symptoms of atropia-poisoning were present to a greater extent than one would be led to expect where so small a quantity of atropia had been taken. The Fowler's solution did not seem to have produced any bad effect, as there was no coryza, cramp, or diarrhoea. I should also mention that the solution of morphia I used contains a small quantity of atropia as well (forty-five minims of the liquor atropiæ in the ounce); but, as only one-eighth of a minim, or 1-320th of a grain, of atropia was given subcutaneously, it is not worth taking into consideration. It was some days before the dryness of the tongue and throat passed away, and shortly afterwards a severe attack of gastritis followed. CHRISTOPHER ELLIOTT, M.D.,
Physician to the Bristol Children's Hospital.

THERAPEUTIC MEMORANDA.

DIALYSED IRON.

"DIALYSED iron" is the name given to a preparation recently introduced, which, judging from the frequency with which it is advertised, must be meeting with considerable favour. Now, to begin with, if "dialysed" means "that which has passed through a dialyser", it is not dialysed at all, as it consists of a solution of the colloid hydrated ferric oxide, which remains behind in the dialyser, being incapable of diffusing through organic membranes. This being the case, it is of course quite incapable of absorption; only the very minute portion dissolved in the gastric juice can be taken up, and consequently the preparation is practically inert. French physicians have already taken this view of it; but its true use seems to have been apprehended in America—viz., as a ready source of hydrated ferric oxide in poisoning by arsenic. JOHN CAVAFY, Upper Berkeley Street.

THERAPEUTIC USE OF IODOFORM.

A. B., AGED 40, mother of six children, caught typhoid fever after nursing a daughter through a very bad attack of the same disease. When she was recovering, a large oval ulcer appeared on the inner aspect of the left thigh; and ten days afterwards a number of vesicles appeared all over the body. These soon assumed the appearance of rupia. I then questioned the husband as to the possibility of syphilis; but he denied having had anything of the kind. (I have since had reason to doubt his veracity.) Yet his wife became absolutely covered with large conical scabs, with inflamed ulcerating bases. I now tested the case by treatment, and simply added iodide of potassium to her medicine. As there was a slight improvement, I asked Mr. McCheane, Surgeon to the Liverpool Lock Hospital, to see the case for me; but he also felt some difficulty in deciding whether it was syphilis or not (on account of the family history), but advised iodoform ointment (5i to 3i), and to continue the iodide of potassium. The improvement was so marked that I added iodoform in pills, containing each one grain, three times a day. In four days, healthy granulations made their appearance; large excavated ulcers filled up and rapidly healed, leaving only slightly depressed scars. I commenced the iodoform on

January 28th, when the body was covered with frightful-looking ulcers, ten being on the face alone, three on the throat; the nose almost destroyed. On February 21st, only a few sores on the legs remained unhealed. D. M. WILLIAMS, Liverpool.

KOUMISS IN OBSTINATE VOMITING.

Miss L. G., a young lady, aged 17, having suffered from anæmia for some time, constant vomiting set in as the result of gastric catarrh. Nourishment of any kind was rejected as soon as taken; and I think I may safely say that all the remedies recommended in such cases were tried without producing any good effect. The patient was kept alive by nutrient enemata. After this condition had continued for a fortnight, I ordered the patient to try koumiss No. 1. Wineglassful-doses were given every half-hour at first, and the quantity gradually increased. At the end of the third day, the sickness had ceased. Twenty-four ounces were now taken in the twenty-four hours; and for three weeks this formed the entire nourishment of the patient. On one occasion during this period, the supply ran short for one day. Milk and soda-water and milk and lime-water were substituted, but were at once rejected. When the stomach seemed to have recovered a little tone, small quantities of fresh milk were added to the koumiss, and in time Miss G. was able to take light nourishment in other forms, and improved steadily, the koumiss being gradually given up.

About three months afterwards, the vomiting and other symptoms returned. All remedies failing, koumiss was again resorted to, and without any other treatment the sickness lessened, and finally disappeared. Fresh milk was then carefully added, with five grains of lacto-peptine to five ounces of the milk. At this date, the patient is steadily improving. No koumiss has now been taken for six weeks, and there has been no return of the vomiting.

My experience of koumiss treatment has been limited to this case; but as it afforded scope for a fair trial, I have reported it at some length. I shall certainly resort to koumiss again in suitable cases with much confidence, its feeding and curative powers having exceeded my expectations.

NORMAN MCCASKIE, M.B., C.M. Edin., Great Ouseburn.

BLACK WASH PRODUCING PTYALISM.

IN January last, I had an elderly gentleman under my care for eczema of the scrotum and penis, accompanied with prurigo senilis and a copious eruption of urticaria. After the irritation of the scrotum had somewhat subsided, I prescribed a lotion composed of one drachm of calomel, an equal quantity of carbolic acid, and lime-water to eight ounces. He was progressing favourably, when, strange to say, in a few days, the system became mercurialised, as evidenced by fetor of the breath, tenderness and swelling of the gums, etc. The result was unfortunate, as an exacerbation of the eczematous eruption occurred; and the patient, becoming dissatisfied, suddenly left Dublin for his home in the North of Ireland.

That this gentleman's constitution was peculiar was also shown by the effect scruple doses of hydrate of chloral (Liebreich's) produced, causing considerable excitement, accompanied with delusions on more than one occasion.

C. H. ROBINSON, F.R.C.S.I., Lecturer on Anatomy,
Lewdwick School of Medicine, Dublin.

THE TREATMENT OF BROMIDE OF POTASSIUM ERUPTIONS.

THE discussion which took place in January, at the London Pathological Society, on bromide of potassium eruptions, having aroused considerable interest in them, and the possibility of their occurrence in cases in which it would be particularly undesirable to suspend the administration of the bromide, have appeared to me sufficient excuse for this note.

The patient, a young woman aged 22, under my care in the outpatient department of the Cumberland Infirmary, was being treated for epilepsy with drachm-doses of bromide of potassium three times a day. As the fits persisted, although lessened in frequency, the dose was increased to eighty grains. Soon after this increase, a pustular eruption, scattered generally over the body and extremities, and of which the patient complained much, began to appear. The bromide was stopped for a time and the eruption disappeared; but the increase in the frequency of the fits made it imperative to resume the remedy. This was done and the larger dose given, and again the eruption appeared. As it is a well known fact that arsenic counteracts the earlier physiological

action of the iodine compounds, at least in a certain proportion of cases, I ordered five minims of liquor arsenicalis to each dose of the bromide. Within a week, the eruption had gone, and no fresh papules appeared. The eruption was first papular, then pustular. None of the pustules were smaller than a good sized dried pea, and the largest were double that size; there was a zone of inflammation round their bases.

Of course, one such case proves nothing; but, in the absence of any more definite knowledge, similar treatment might be worthy of trial when these comparatively rare cases come under our notice.

WILLIAM RUSSELL, M.B. Edin., Carlisle.

SIX CASES OF RHEUMATIC FEVER TREATED SUCCESSFULLY BY SALICINE.

I HAD almost come to the conclusion, from my own experience of the usefulness of salicine in rheumatism, and from what I had hitherto seen recorded, that salicine and its salts had fairly established their claims as a medicine requiring at our hands a fair trial in all cases of rheumatism. As, however, I have observed during the past few weeks reports of some cases unfavourable to it, I think it due to the profession to place on record my observations on the use of salicine.

CASE I.—Eighteen months since, I was called upon to visit J. D., aged 35, a labourer, who had just come from England with his family. He was very ill of acute rheumatism, nearly all the large joints of his body being implicated, with considerable swelling. As I had no salicine, I gave alkalies until it was procured. On the fifth day from the first visit, there was no amelioration of the symptoms; the patient was rather worse. I ordered ten grains of salicine every third hour. Next day (6th), there was no improvement; he complained of pain in the cardiac region. I ordered a large sinapism to the cardiac region and the treatment to be continued (salicine and no stimulating diet). Next day, he was considerably improved. On the third day from commencing salicine, the pains were almost gone. On the fifth day, the salicine was discontinued, as all pain had entirely disappeared, the patient feeling comparatively well, only a little weak. I ordered quinine and iron. Four or five days afterwards, J. D. had a slight relapse, owing to injudicious exposure to cold, which a few doses of salicine again removed, when my patient made a steady and rapid recovery.

CASE II.—G. W., aged 45, a cabinet-maker in search of work, had tramped from Dublin. On my first visit, I found this patient very low, having been ill some time, and in a state of great depression. He refused to go to hospital. He had considerable pain and swelling in all the joints of the lower extremities. Quinine and iron, alkalies, and cotton-wool were of no avail. In the course of ten days, I resorted to salicine in the same doses as in Case I. Great relief was obtained on the third day. The salicine was continued in smaller doses for other three days, when the pains were all gone. He made a steady convalescence under quinine and iron.

CASE III.—J. N., aged 25, a carter, was found at my first visit suffering from a very severe attack of rheumatic fever, with comparatively little swelling of the joints. I ordered alkalies for a day or two; but, the patient growing worse, I gave salicine on the third day in the same dose as the other cases. On the fifth day, he was much improved; his progress towards recovery was steady and uninterrupted. The after-treatment consisted of iodide of potassium and infusion of quassia.

CASES IV and V were ordinary attacks of rheumatism, occurring in adults. Salicine was given with considerable relief after the first twenty-four hours. On the third day, the pains had altogether gone. Both cases made good recoveries under quinine and iron.

CASE VI.—C. Q., aged 38, a washerwoman, living in the country, was found at my first visit suffering from an attack of rheumatism of moderate severity. I gave her alkalies. On the tenth day, the pains having considerably subsided, she left her bed and returned to her occupation at the tub. On the following day, the pains returned with considerable severity. I now gave salicine in the usual dose. Relief was obtained, as in Cases IV and V. She neglected to come for the medicine for two days, and the pains somewhat returned. She was again placed under salicine. Her recovery was steady and complete. No after-treatment was adopted.

In Cases I and VI, there is confirmatory evidence, as it were, of the great benefit to be derived from the use of salicine in these cases, as in both, the medicine having been discontinued, injudicious exposure caused a return of the malady, to be at once benefited by salicine. In Case I, although cardiac symptoms supervened, I continued treatment, only ordering a large sinapism, although my non-experience of this drug might have guided me otherwise. Can salicine do more than relieve the pain? My observations on these cases point to this drug

having fulfilled its mission when all pain ceased. Then we are to look to our old landmarks to complete the rehabilitation of our patient. In Case I, I look upon salicine as having saved my patient from a severe cardiac attack. This medicine is, I think, likely to be highly beneficial in preventing complications, as it seems to act directly on that powerful factor, pain, thereby cutting short the attack by altering, in some way or other, the composition of this peculiar poison, and hastening its elimination from the system.

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REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS.

FEBRUARY 14TH.—*Congenital Deformity of the Lower Extremity.*—A little girl, aged 9, was exhibited before the surgical staff. She suffered from a remarkable malformation. The left leg was much shorter than the right, atrophied and dislocated outwards on the femur, the inner condyle of which bone had grown perceptibly since she had been under medical observation; there was talipes equino-varus of the left foot. Her mother positively asserted that, when three months pregnant with this child, she was much affected by seeing a man with a crippled leg. The child was born with the leg dislocated, but the deformity had much increased as she grew up.—Mr. LANGTON, who brought forward the patient in the absence of Mr. T. Smith, believed that the tibia was quite absent in the deformed limb. He advocated amputation.—Most of the surgeons recommended that operation; but Mr. CALLENDER, bearing in mind the slight risk always attendant on such operations of expediency, suggested that an apparatus might be applied, which would not only serve for locomotion, but also pack up the deformed leg and protect it from injury.

February 28th.—*Congenital Perineal Tumour.*—A male infant, over three months old, was shown, in the operating theatre, by Mr. T. SMITH. A large, round, soft tumour projected from the perineum; it was covered by smooth healthy skin; from its anterior part there projected a tongue of corrugated integument, resembling a prepuce, and about a quarter of an inch in length; from the back of the tumour grew another but smaller cutaneous appendage. The whole looked like a second set of external organs of generation; the tumour was larger than the true scrotum. Mr. Smith found, on examining the growth by palpation, that it contained a rod-like body feeling like cartilage. The swelling was attached to the perineum, close to the left bony boundary of that region; it did not appear to have deep connections.—All the surgeons present were in favour of its removal, which Mr. Smith forthwith decided upon.

Tumour in the Left Iliac Fossa.—Dr. SOUTHEY solicited the opinion of the surgical staff upon the case of a middle-aged labouring man. Three years previously, the man noticed an odd persistent sensation, as though some fluid were dripping into the left testicle; at the same time, his gait became unsteady. A lump gradually formed in the left iliac fossa, and he experienced partial intestinal obstruction. At present, a distinct pulsating swelling could readily be detected by palpation. Dr. Southey believed that there was a tumour in the iliac fossa pushing the external iliac artery forwards, pressing backwards on the sigmoid flexure and on the large nerves around it; this would account for all the symptoms.—After a long and careful examination by the whole of the staff present, Dr. BLACK expressed his belief that a bony tumour existed.—All the surgeons detected masses of scybala, and some were of opinion that there was a new growth as well, but nothing could be decided till the large intestine had been thoroughly washed out by enemata.—Mr. MARSH had seen a case where a similar swelling had been detected in the iliac fossa, and found to be an abscess, bound down by the iliac fascia and surrounded by indurated tissue.—Dr. SOUTHEY declared his intention of submitting the patient once more to examination after the scybala had been cleared by injections.

Results of Pressure on Facial and Trigeminal Nerves.—Mr. SAVORY begged his colleagues to examine at their leisure a remarkable case in Abernethy ward. A young Irish labourer, aged 21, had been subject

to glandular swellings behind the angle of the jaw on the right side, extending over the sterno-mastoid muscle. They were now very firm, increasing slowly, well circumscribed, and free under the integument, which was healthy and not red. Six months before admission, the right eye inflamed; it had been quite blind for six weeks, and the cornea had sloughed. There was deficient sensation of the skin of the right side of the face, and facial palsy on the same side without ptosis; the inability to close the right eye was very marked. The patient could not bear a watch placed against the pinna of the right ear. That the glandular swellings extended deeply behind the jaw there could be no doubt; pressing on the facial and trigeminal nerves, they had produced results already recognised by physiologists through experimental proof.

ST. GEORGE'S HOSPITAL.

DR. DICKINSON'S WARDS.

Hydronephrosis.—A married woman aged 26 was admitted to hospital complaining of an abdominal tumour, tender and painful. Seven years previously, she had a natural confinement; but from that time she dated her present illness; she had never been well and strong since. Five months after that confinement, she was suddenly attacked with pain in the right lumbar region, headache, and vomiting; and, after this, she for the first time became aware of a tumour at the seat of pain. She had since been troubled with similar attacks of pain returning at intervals of three or four months; lately, they had been more frequent. For two or three days before each attack, she usually noticed that the urine was high coloured, while, during the attack, it was natural in appearance. During the seven years of illness, she had had two miscarriages, proving that the disease, whatever it might be, had not prevented pregnancy. Menstruation had continued regular. For a week previous to admission, she was laid up with continuous abdominal pain. The woman was an in-patient last year, and then a rounded mass, of the size and shape of an adult kidney, was felt in the right lumbar region, and was movable; the urine was then highly albuminous. While in hospital, the tumour diminished in size; and, when discharged, she was quite free from pain. At the present time, a rounded tumour, at least eight inches in diameter, is felt in the right lumbar region, extending forward almost to the umbilicus. It is tender on pressure, and indistinct fluctuation can be felt. Dr. Dickinson considered that the tumour was probably a renal cyst, though the possibility of ovarian disease was not omitted from consideration. There was no history of a calculus or gravel having been passed; but the presence of blood in the urine, the intermittent character of the attacks of pain, and the partial subsidence of the tumour when previously in hospital, afforded evidence in favour of hydronephrosis. It was also pointed out that a tympanitic note was obtained on percussion over the anterior portion of the tumour, owing to its being overlapped by the colon, as is usual with renal tumours. The tumour could be well isolated from the liver. It has lately remained stationary in size, and the patient's general health has remained good throughout, thus excluding the idea of cancerous growth. There has never been a sudden subsidence of the tumour, as is sometimes the case with hydronephrosis.

Perityphlitis.—A healthy looking and fairly robust young woman had been quite well, but for a slight catarrh of a month's duration, till eight days previously to admission, when she was attacked at night with diarrhoea and vomiting. The next day, she suffered much abdominal pain; the bowels were costive, and she had completely lost her appetite. There were no rigors or sweats, and the pain subsided at the end of a week. On admission to the hospital, she complained of pain in the right iliac region, increased by deep inspiration, but unaffected by taking food. There was no other pain, and no nausea. She did not appear ill but for the local trouble; the bowels were confined; menstruation was natural. A distinct swelling was felt in the region of the cæcum, which was tender on pressure; there was no sign of mischief in the pelvis. Dr. Dickinson remarked that, though such cases are not infrequently met with, their pathology is not exactly known, as they seldom die. This condition is met with both in men and women; it generally commences with disturbance of the bowels and griping, and appears to commence in inflammation of the cæcum. In this case, the temperature never rose above 100 deg. Fahr., and there was no sign of suppuration. Leeches were applied, followed by poultices. A mixture, containing ten minims of tincture of opium to the dose, was ordered to be taken every six hours. Aperients are here inadvisable.

Salicylate of Soda in Acute Rheumatism.—In cases of acute rheumatism, Dr. Dickinson usually prescribes salicylate of soda in doses of about fifteen grains, with four scruples of bicarbonate of potash, every

four hours, taking care thus to keep the urine distinctly alkaline. The advantages of the salicylate are thus obtained, and, under this plan of treatment, cardiac complications have been less frequently met with than under the simple alkaline treatment. Many cases have, however, relapsed, and some have subsequently developed cardiac bruits.

Chronic Bright's Disease.—A woman aged 25 was admitted to the hospital, on account of albuminuria. There was no history of any hereditary disease in her family; she had been fairly robust, and had not suffered from any previous illness. During last year, she worked in a shop through long hours, much exposed to draughts. Two months ago, she noticed slight swelling of the feet at night; her appetite became defective, and she was troubled with dyspnoea. Three weeks before admission, she was obliged to leave her work, on account of failing strength. Menstruation had continued regular. Physical examination showed signs of cardiac hypertrophy; the heart's apex was slightly displaced to the left of its normal position; the impulse was strong and the sounds distinct, especially the first, which was slightly prolonged at the apex; the second sound was also accentuated; the tension in the radial pulse was high, considerable pressure being required to obliterate it. The quantity of urine was not increased, but it contained a trace of albumen. From the high state of arterial tension, the trace of albumen in the urine, and the almost total absence of dropsy, it appeared probable that the kidneys in this case might be undergoing granular contraction.

Malignant Disease of Cranial Bones.—A lad aged 17 was admitted on account of convulsive seizures, probably dependent on intracranial malignant disease. Nearly two years ago, he was a patient in the surgical wards, and a malignant growth of the superior maxilla was then removed. Some months ago, he became liable to epileptic seizures, each lasting about a minute; usually two or three occurred in succession at intervals of from two days to two months. In these attacks, he never completely lost consciousness; he was able to give a warning of the approach of an attack, and said he then felt "as if something rose out of his stomach". He complained much of headache, which he constantly referred to his left parietal bone; he frequently vomited after his food. No disease of the cranium could be found on external examination. The liver appeared normal. While under observation, he one day had two convulsions closely following one another; each lasted about three minutes. The right side was first convulsed, then the left; there was hardly any period of complete unconsciousness. He has been kept quiet and taken bromide of potassium; the fits have become less severe, and the headache has gone. It appears probable that malignant disease is returning within the cranium. There is no optic neuritis.

Chronic Emphysema.—A woman aged 35 had suffered with pulmonary symptoms three or four years. She complained of languid feeling, loss of appetite, cough occasionally troublesome, and profuse night-sweats; she had also noticed for eighteen months epigastric pulsation. When admitted to hospital (August 1877), she was very weak, and complained of weakness, cough, dyspnoea, and abundant muco-purulent expectoration. The left chest was completely dull, back and front; the respiratory sounds were very faint and sibilant; the heart was felt beating to the right of the sternum. The right side of the chest was apparently healthy. An experimental puncture into the left chest was made with a hypodermic syringe, and pus was withdrawn. She was then aspirated, and twelve ounces of pus were withdrawn. The patient remained in the hospital till December, and was aspirated in all five times, pus being withdrawn each time in quantities from twelve to forty ounces. When discharged, she was free from all pain and dyspnoea. When readmitted in February of the present year, she again complained of troublesome cough, deep-coloured rusty sputum, and loss of flesh. There were also faintness on any exertion, and abundant expectoration of mucopurulent matter. There were signs of bronchitis in the right lung, and the left pleura appeared full of pus as before; it was not, however, as large as before, measuring in circumference only thirteen inches and a half on the left side, against fourteen and a half on the right. The presence of pus being again proved by the hypodermic syringe, the aspirator was used, and eighteen ounces of pus were drawn off. Since this, she has been free of cough. Dr. Dickinson proposes, as the pleural cavity is smaller than it was, to make a permanent fistula and let the pus drain away.

MR. ROUSE'S WARDS.

A Calculus impacted in the Urethra.—A man aged 40 was admitted into the hospital, on account of perineal fistulae. When he was eleven years of age, a perineal abscess formed and burst; it soon healed. Seven years ago, an abscess again appeared in the same situation and discharged for two years; at this time, there were difficulty and pain on micturition. Three years ago, the abscess again formed and burst; there was

swelling of the penis, scrotum, and whole perinæum. Several abscesses occurred; they discharged and left sinuses; there was difficulty on micturition, and the urine began to come away through the sinuses. Eighteen months ago, a surgeon attempted to pass a catheter, but failed, and, since that time, the urine has dribbled from him constantly. When admitted, his scrotum and the parts about the pubis were oedematous and indurated; the perinæum was also indurated, and this condition extended on each side to the buttocks. He had complete incontinence of urine. A catheter could not be passed beyond the bulbous urethra; the finger in the rectum felt a very large hard mass in the situation of the prostate, projecting backwards into the rectum; above, it extended so high that the index-finger could not reach its upper limit. This examination caused blood to pass by the urethra. A few days later, the patient was placed under the influence of ether. The prepuce being long and oedematous, and rendering it impossible to see the meatus, it was slit up. A catheter could not be passed beyond the os pubis, where it was arrested by an apparently dense, rugged, cartilaginous mass. A free incision was then made through the oedematous perinæum on to the urethra; the finger, passed to a considerable depth, felt in the centre of the perinæum a mass harder than the rest; on careful examination, this proved to be a calculus lodged in a dilated portion of the urethra. This was removed with forceps, and was found to be a small uric acid calculus surrounded with much phosphatic deposit. After its removal, there was no difficulty in passing a catheter into the bladder. The seat of the calculus in the urethra was felt to be hard and cartilaginous. A gum catheter was tied in. Since the operation, the general swelling has much diminished, and the patient is progressing favourably.

Lithotomy.—The patient was a boy aged 14. When he was four years old, some operation was performed for the removal of a stone from his bladder. Since that time, the bulk of his urine had passed through the anus and only occasionally by the urethra. During the last two years, he had at times had great pain at stool, with straining, and had sometimes passed blood with his motions, but had never passed blood by the urethra. On examination, a small cicatrix, half an inch in length, was seen a little to the left of the anus, running right up to the mucous surface of the rectum. By using a speculum, a small rounded opening, a quarter of an inch in diameter, was seen in the anterior wall of the rectum, and urine dribbled from it. A sound in the bladder detected a stone, and, with a little difficulty, it was passed through the opening into the rectum.

A month ago, Mr. Rouse performed lateral lithotomy in the usual manner. A large stone was found encysted behind the public portion of the bladder; and, with some little difficulty, it was removed in several pieces. It was for the most part soft phosphatic deposit, with a hard uric acid nucleus; probably the complete calculus was about the size of a small walnut. After the lithotomy, a duck-bill speculum was introduced into the rectum; the edges of the fistula were pared, and brought together with silver sutures without difficulty. A lithotomy-tube was tied in the perineal wound. The wound and fistula are now healed, and the patient is convalescent.

ST. JOHN'S HOSPITAL FOR SKIN-DISEASES.

CASES OF LUPUS AND RINGWORM.

(Under the care of Mr. JAMES STARTIN.)

CASE I. Lupus. J. S., a young woman aged 18, living in London, was admitted into the hospital in June last, as an in-patient, under the care of Mr. James Startin, suffering from an inflamed irritable sore on the right cheek, about two inches broad by three long, of an irregular oval shape, with excavated edges. The surface of the sore was covered with yellow and greenish crusts, and on the exposed intervals a low form of granulation-tissue was seen, freely discharging. The patient said that the sore began as a small isolated inflamed pimple, when she was about seven years old, and that it had gradually spread and ulcerated up to the time of her admission. It was accompanied with a creeping and sometimes acute pain. The outer angle of the eyelid on the side affected was drawn considerably downwards and outwards. She appeared a healthy well-nourished girl, with a clear fine skin, usually diagnostic of a scrofulous tendency. The patient stated that she had applied to several hospitals, with little or no relief.

June 11th. The patient was ordered cod-liver oil twice a day, and a mixture of iodide of potassium and Donovan's solution three times a day. The sore was dressed with a caustic arsenical paste, and the whole covered with flexile collodion, which latter was used twice a day for three weeks.

July 30th. The sore now appeared much diminished in size, and the granulations more healthy. She became an out-patient, and was

ordered a lotion containing two grains of bichloride of mercury to the ounce.

In September, the sore had decreased to the size of a shilling; it was touched with a solution of nitrate of mercury, and the cod-liver oil and tonics were continued.

This patient is now quite well, and the sore has healed, leaving only a small quantity of cicatricial tissue, and the eyelid has resumed its normal position.

CASE II. Lupus. M. W., residing in the neighbourhood of Reading, age 33, applied at the hospital for advice, in October last. He was a tall, fine healthy-looking man, but suffered from an erythematous eruption on the left side of the face, extending from the inner angle of the eye to the lobe of the ear and upon the side of the neck. The outer angle of the eyelid was considerably detracted in this case. The patient stated he was under the late Mr. Startin's care about fifteen years ago, at which time the disease was much worse and was ulcerated; and that he very nearly recovered until the last two years, when it again broke out in the above form. Mr. Startin ordered him large doses of cod-liver oil and a mixture of iodide of potassium, and occasionally applied the mercurial caustic.

REMARKS.—These cases of lupus seem to have yielded to continuous doses of cod-liver oil and alteratives, combined with a cautious use of caustics, being also completely excluded from the septic influences of air-germs and currents by collodion, which is not the least important part of the treatment in these cases, and which, Mr. Startin believes, has not as yet been tried, nor is it mentioned in any cutaneous work.

CASE III. Ringworm. H. K. came to the hospital in February last, and under Mr. James Startin's care in May. By the parents' statement, the patient had suffered from ringworm for nearly three years, caught at school. The disease manifested itself in a dry circumscribed scurfy patch, three inches in diameter, on the posterior and upper part of the head, over the occipital and parietal bones. The hair was cut short, and, upon close inspection with a powerful magnifying glass, seemed to have broken or torn off about a line or so from its exit from the epidermis. There was a slight itching in the part, and the hair appeared dull and brittle; and, upon microscopical examination, after soaking a piece of the skin, with its adherent hairs, in a solution of liquor potassæ, the hairs were seen to be split up and largely invested with numerous bundles of conidia of the trichophyton tonsurans, or vegetable parasite of the hair. These short, dull broken hairs were shown to be the true characteristic of the disease to the naked eye; and it must also be borne in mind that no crusts, discharge, pustules, or pimples accompany the true form of ringworm—indeed, their presence would only indicate some other cutaneous disease. The patient was ordered large doses of cod-liver oil, with occasional local applications, and sent into the country. Mr. Startin saw him in June and July, and again in September, when he was quite cured, and was passed by the medical officer of one of the large metropolitan public schools and admitted as quite free from the disease.

CASE IV. Tinea. F. W., aged 7, applied to the hospital in July last, suffering from three or four patches of tinea tonsurans and one or two of tinea circinata upon the back and shoulders, evidently contracted from the head-affection. His parents stated he had caught the disease at school, and had had it about a year. The treatment was much the same in this case as the last. The patient was discharged cured in November.

CASE V. Tinea Tonsurans. Three children, aged respectively 8, 6, and 14, came as out-patients under Mr. Startin's care, suffering from tinea tonsurans, early in June. The mother said the eldest child caught the malady at school two years ago, the second and third eighteen months ago. They were discharged cured.

Treatment.—The treatment which Mr. Startin finds in these cases to be successful and rapid, and to prevent the spread of the disease, consists of: 1. Complete isolation of the patient; 2. Disinfecting and boiling all brushes, towels, etc.; 3. Disinfection of the rooms occupied with burnt sulphur; 4. Great attention to cleanliness and diet. The ill-fed should be well nourished, and any deficiency in food should be made up by the administration of cod-liver oil and iron. The head should be daily washed with yolk of egg and warm-water, keeping the hair cut short and for a short space round the diseased patches; and the part should be occasionally dressed with some oleaginous preparation containing a parasiticide, viz., oil of cade or tar, sulphurous acid, and iodine, with a daily application of a stimulating mercurial ointment.

The question is often asked: "Is the child cured, and when may he return to school?" The following rule seems to be the safest and best. So long as any trace of the furfuraceous patches remains upon the head, showing dull broken hairs, with their minute vegetable organisms, on careful microscopical examination, the child must not be allowed to return to school.

LIVERPOOL ROYAL INFIRMARY.

CASES OF HERNIA.

(Under the care of Mr. REGINALD HARRISON.)

CASE I.—*Strangulated Inguinal Hernia: Operation, followed by violent Delirium: Recovery.*—J. L., AGED 38, a publican, was admitted into the Liverpool Royal Infirmary on November 9th, 1877, suffering from an irreducible inguinal hernia. The patient appeared to have been ruptured for twelve months previously, and had worn a truss. On November 6th, believing his rupture to be cured, he left off the truss. He was at this time suffering from chronic bronchitis. On the night of the 6th, whilst coughing, the hernia descended, and all attempts made to reduce it were futile.

On his admission, the symptoms of obstruction were not urgent, and for twelve hours, opiates and ice applied to the tumour, were tried.

On the 10th, as the symptoms of strangulation were more marked, Mr. Harrison operated. On opening the sac, a piece of omentum, but no bowel, was found tightly strangulated, but not in such a condition as to preclude its being returned into the abdomen. The absence of intestine explained the slow development of urgent symptoms of strangulation which marked the history of this case. Having regard to the patient's occupation, morphia and a moderate quantity of stimulant were prescribed.

On the evening of the 14th, he became most violently delirious. The excitement was so intense that Dr. Knox, the house-surgeon, thought it necessary to give him chloroform, under the influence of which he was kept during almost the whole of the night. The sleep thus obtained was followed by marked improvement, as on the next day the patient was able to take a fair quantity of fluid food and stimulants. He was also given a mixture containing morphia and bromide of potassium, which appeared to prevent the development of any further symptoms of excitement.

The patient left the Infirmary quite recovered on December 5th.

CASE II.—*Strangulated Femoral Hernia: Operation: Recovery.*—In the following case, the very unusual accident of the hernia-knife snapping as the stricture was being divided occurred.

A. Y., aged 49, a widow, was admitted on December 30th, 1877, with a strangulated femoral hernia. The patient had suffered from hernia for three years. Four days before admission, a very considerable protrusion took place on the patient making an usual effort to carry a heavy weight. Reduction was attempted, but without success.

On admission into the Infirmary, the symptoms of strangulation were urgent. Mr. Harrison at once proceeded to operate. On opening the sac, the intestine was found of a deep claret colour. The stricture was unusually tight. As the hernia-knife was in the act of dividing the stricture, Mr. Harrison felt it snap upon his finger about the centre of the cutting edge. With difficulty he succeeded in retaining hold of the portion that had broken off, and removing it with a pair of forceps. Before returning the intestine into the abdomen, it was withdrawn from the canal and carefully examined, for the purpose of seeing whether it had received any damage during the manipulation necessary to extract the broken blade. A small puncture was found in the bowel, which had evidently been caused by the abrupt angle of the knife where it had given way. This opening Mr. Harrison was able to include within the teeth of an artery-forceps; it was then closed by means of a noose of fine carbolised catgut. The intestines were returned into the abdomen, and the wound in the skin closed by wire sutures. The patient was put under the influence of opium administered by small enemata.

On the fifth day after the operation, the bowels acted spontaneously. The patient made a good recovery, and returned home on January 24th, 1878.

In commenting upon the very unusual nature of the accident that occurred during the operation, Mr. Harrison said that he had no explanation to offer as to the breaking of the knife. It was an instrument which he had frequently used on other occasions, and was in this instance specially selected as soon as the extremely tight nature of the stricture was discovered. No flaw was observable in it. As the broken portion was only supported by the tip of his index finger, it was with the greatest difficulty prevented from falling within the abdomen, and so considerably adding to the danger of the complication. The case further illustrated the great value of the catgut ligature in the case of small punctured and incised wounds of the intestine, where such can be included in the noose. Mr. Harrison considered that the case should be recorded as illustrating the very unexpected contingencies that may arise in the course of an operation, and where every provision against accident has been taken.

ST. MARK'S OPHTHALMIC HOSPITAL, DUBLIN.

AMAUROSIS AFTER ERYSIPELAS OF THE FACE.

(Under the care of Mr. STORY.)

[Reported by Mr. A. H. BENSON, Assistant-Surgeon.]

THIS case is interesting taken in connection with the somewhat similar cases reported by Dr. Hermann Pagenstecher, and Mr. Jonathan Hutchinson, in the *Royal London Ophthalmic Hospital Reports* for February 1871.

John Duke, aged 41, shoemaker, was never a smoker, but was always a "heavy drinker" until July last, when he suffered from stoppage of his urine. He had had perfect sight in both eyes until a few weeks ago. On Christmas night, he fell and cut his lip. Three days afterwards, he got a shivering, and then the right side of his face became swollen, red, and painful. His right eye, which then had perfect sight, closed up entirely, and remained so for a month; when, on opening it, he found it to be totally blind. The doctor, under whose care he was, told him he had erysipelas. On entering the hospital, the red blush was still over the cheek and eyelids. There was also a peculiar xanthelasmic-looking eruption on both upper and lower lids, which soon became elevated, and exuded a thin unhealthy pus. After some days, it acquired a dry warty appearance. The conjunctiva was inflamed and thickened, but the cornea was clear. The pupil was large and insensible to light, but dilated fairly under atropia. The whole appearance of the eye was remarkably dull and glazy. There was considerable paresis of the levator palpebrae superioris, and limited action of all the ocular muscles ($T + 1, V = 0$). In the left eye, the sight was perfectly good, and the refraction emmetropic. In the right eye, the dioptric media were all somewhat hazy. Three small pigmentary specks were visible on the anterior surface of the lens, and some stellate opacities in its substance. The disc was very pale, and had a bluish atrophic appearance, especially at the outer side. The arteries were extremely small, and very many of those running downwards were entirely empty, appearing as white lines, without any central streak of red. Some of the arteries contained blood for a short distance from the disc, others were bloodless throughout. There were a number of dark broad lines radiating from the disc, which were taken to represent veins in which the blood had stagnated. Their margins were rather ill defined, owing to the haziness of the media; but, from their disposition, and the relations they bore to the disc and arteries, there seemed little doubt that they were occluded veins. In some places, the white lines of the empty arteries could be traced over these broader dark lines. There were collections of pigment and possibly some blood effusions in the region of the yellow spot. The heart and urine were not examined. Further observation of the case was prevented, as, owing to the limited accommodation, the patient could not be kept in hospital.

CONGENITAL MALFORMATION OF THE HAND.

THE following malformation of the hand of a girl aged 13 was noticed in the out-patient department of the hospital. The right arm was slight, but shapely. The carpal articulations appeared perfect; but the metacarpal bones were only two in number, apparently those of the thumb and little finger. These, though in contact at their carpal extremities, diverged as in the normal hand, so as to be separated, at their phalangeal extremities, by about an inch of soft muscular tissue. The metacarpo-phalangeal articulations were freely movable, but, between the first and second phalanges, the movements were very slight; these phalanges being united at their peripheral extremities. The third phalanx was single, composed of the conjoined phalanges, and was set at right angles to the second. It supported a single enormous nail, three-quarters of an inch wide and half-an-inch deep. The whole hand thus appeared rhomboidal in shape, with a crook at right angles to its extremity. This crook was of immense prehensile utility; with it she could hold a pencil, lift a book, etc. Her mother, who had a number of other children, all free from deformity, blamed a severe squeeze of the hand which she got from a drunken man, who hurt and frightened her, when three months gravid. The case is interesting as adding another to the list of congenital malformations, apparently the result of maternal impressions.

MATER MISERICORDIE HOSPITAL, DUBLIN.

OPERATION FOR FEMORAL HERNIA: MIXED NARCOSIS.

(Under the care of Mr. COPPINGER.)

R. D. K., A WOMAN aged 72, was admitted on February 7th, suffering from strangulated femoral hernia. The hernial tumour had become irreducible four days before the patient's admission, and was hard and

very tender on pressure, while the characteristic abdominal pain and vomiting were present in a severe degree, and had existed, according to the patient's account, for three days. An operation was determined on at once, and was performed after the antiseptic method, and under a carbolic spray, maintained by one of Mr. Fletcher's foot-bellows. The sac was opened and found to contain a large quantity of omentum with a small knuckle of intestine. The latter was easily reduced, and the entire of the omentum returned, with the exception of a small portion adherent near the neck of the sac.

The patient made a good recovery, a portion of the adherent omentum sloughing away, and the remainder acting as an efficient plug in occluding the abdominal aperture.

REMARKS.—Although ether has been used in this institution almost exclusively as an anæsthetic for the last four years, it was not considered suitable in this case, on account of the emphysematous condition of the old patient's lungs, and the presence of some bronchitis. On the other hand, the method of "mixed narcosis" seemed to offer peculiar advantages, and was accordingly adopted and carried out in the following way.

A third of a grain of morphia in solution was introduced under the skin, and methylene bichloride then administered by means of a folded towel. The operation, etc., occupied nearly three-quarters of an hour, and during that time the patient remained apparently in a deep sleep, but without the evidences of heart-depression, in pulse or aspect, which are frequently present in cases in which chloroform or methylene is administered alone.

The antiseptic method in its entirety was adopted in this case, although it is not very popular in this hospital, on account of the large amount of space allotted to each patient, and the comparative youth and aseptic condition of the building.

The recovery, at such an advanced age, of so grave a case, was unusual, and was probably to some extent due to the effect of the elastic omentum, which partially filled the neck of the sac at the seat of the stricture, in preventing the nipping and destruction of the intestine.

ROYAL INFIRMARY, EDINBURGH.

COMPOUND COMMINUTED FRACTURE OF LEG.

(Under the care of Mr. SPENCE.)

FOR the following report we are indebted to T. F. Chavasse, M.B.

W. R., aged 40, railway carter, was admitted May 5th, 1877, having been kicked half an hour previously by a heavy draught horse.

On admission, the patient was slightly intoxicated. An examination revealed a compound comminuted fracture of the right leg, both bones being broken at their middle thirds; the wound communicating with the ends of the bones was situated over the interosseous space, and was large enough to admit the end of the little finger. No pulsation could be felt either in the anterior tibial or dorsalis pedis arteries. About three ounces of carbolic lotion (1 to 20) were used for washing out the wound, care being taken that all the injected fluid escaped; a pad of lint steeped in the same lotion was then applied, and a suitable splint adjusted to the limb. The case progressed satisfactorily for thirty-six hours, when, without any noticeable premonitory symptoms, the patient was found to be breathing stertorously and quite unconscious. The right buccinator muscle was weaker in its action than its fellow. The pupils were dilated, but contracting under the influence of light. The breath was somewhat fetid. He had heavy sweating. Temperature, 101.2; pulse, 100; respirations, 20. Examination of the chest revealed nothing abnormal. The urine that was drawn off contained no albumen and did not answer to the perchloride of iron test for carbolic acid. The patient remained in the same condition until May 12th, when he died. Life was maintained by means of nutrient enemata and occasionally feeding with a stomach tube. The temperature of the body averaged 101 deg. Fahr.; but six hours before death rose to 105 deg. Fahr. The wound in the leg remained perfectly healthy until the last day of life, when a slight fetid odour emanated from it; this, no doubt, was due to the low state of vitality generally.

POST MORTEM EXAMINATION.—This was made by Dr. Wyllie, Pathologist to the Infirmary. There was no trace of injury of the head. The brain was slightly congested, but the substance of the organ was otherwise healthy. There was a small amount of subarachnoid serous effusion, and the lateral ventricles contained each about three ounces of fluid. The vessels of the brain were normal, and there was no sign of embolon or thrombus. The spinal cord was slightly congested. The lungs were both much congested, the inferior lobes in both showing the commencement of a low form of pneumonia. The so-called

"fatty" embolon was carefully sought for, microscopically and otherwise, but with a negative result. The heart weighed twelve ounces, and contained an *ante mortem* clot in the right ventricle, extending up the pulmonary artery to a point just beyond its primary division. All the vessels of the affected limb were examined, but nothing was found. The spleen was very pulpy; the liver and kidneys were somewhat congested. There was no pus in any of the large joints.

REMARKS.—The case is one of interest from the fact that certain well marked symptoms, present during life for a period of six days, could be assigned to no cause after a carefully made and prolonged *post mortem* examination had been made. The diagnosis of "fatty embolon" was not borne out; although, from the patient having a fracture with the medullary cavities widely opened into, this seemed probable. In the well established cases that have succumbed in consequence of fatty embolon, the majority of those reported by Busch, Wagner, and other German authorities were the result of fractured bones; but Dr. Hamilton lately showed, at a meeting of the Medico-Chirurgical Society of Edinburgh, some microscopical specimens of this form of embolon, which had been taken from the pulmonary artery of a boy who had died comatose some hours after his liver, which was of a fatty nature, had been accidentally ruptured. Whether the injection of a solution of carbolic acid in cases of compound fractures hasten or retards the formation of a fatty embolon, is at present a matter for consideration; but at all events, care should be taken that the fluid injected into wounds of this nature should have a ready way of escape; or a complication, in the shape of carbolic acid poisoning, may arise.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

CARBOLATED CAMPHOR IN DIPHTHERIA.—M. Soulez employs carbolated camphor in the treatment of diphtheria; the false membrane seems to lose its inherent vitality, and no inflammatory effects follow. M. Soulez dissolves camphor in crystallised carbolic acid, which has itself been dissolved in a very small quantity of alcohol—nine *grammes* of carbolic acid to one *gramme* of alcohol. He uses it either alone, or mixed with an equal weight of oil of sweet almonds.

SUBCUTANEOUS INJECTION OF CHLOROFORM.—M. Ernest Besnier has used subcutaneous injections of chloroform, not only in cases of neuralgia, but in all varieties of pain. M. Besnier performs the injection in two stages, introducing the needle first, and then adjusting the syringe so as to be sure not to penetrate the vein. The injection should be made in the subcutaneous cellular tissue, so as to avoid local phlegmasia or persistent pain at the seat of the puncture. In reference to this practice, M. Hardy calls attention to the fact that chloroform soon becomes acid.

CITRATE AND BROMHYDRATE OF CAFFEINE.—At a recent meeting of the Société de Thérapentique in Paris, M. Gubler pointed out the diuretic properties of citrate and bromhydrate of caffeine, in doses of fifty *centigrammes* (seven grains and a half), in the form of hypodermic injection. The diuretic effect is almost immediately produced, whilst with digitalis it is delayed for two or three days. Caffeine may be given as a draught for the same purpose, in doses of thirty *centigrammes* (four grains and a half). Caffeine increases the vascular tension less than digitalis does. The maximum action of digitalis is reached on the fourth or fifth day; and, if the administration of digitalis be prolonged, an accumulation of action is produced—that is to say, an opposite result to that desired. M. Gubler generally prescribes the alcoholic tincture, in doses of twenty drops. If the kidneys do not yield to the action of this remedy, M. Gubler pronounces them to be incapacitated for use.

SURGERY.

FATAL PISTOL-SHOT WITHOUT PERFORATION OF THE SKIN.—Dr. Hofmann (*Lehrbuch der Gerichtl. Medicin*, 2 Band, Wien, 1878) relates the following remarkable case. A man, aged 40, fired a pistol-shot at himself in the region of the left breast. A skin-burn resulted of the size of the palm of the hand, but no rupture of continuity of the external skin. Beneath this, there was an effusion of blood; the costal cartilage was broken. In the pericardium lay a pound and a half of blood; and at the apex of the heart, on each side of the longitudinal sulcus, was a rent of the muscular fibres, extending into the cavities of the ventricles.

REVIEWS AND NOTICES.

ARMY MEDICAL DEPARTMENT REPORT FOR THE YEAR 1876, vol. xviii. London: Harrison and Sons. 1877.

THE eighteenth volume of the Statistical, Sanitary, and Medical Reports of the Army Medical Department have just been presented to Parliament. The various dates connected with this Blue Book are at first somewhat puzzling to the general reader. The contents principally refer to the health of the army during the year 1876; the introductory letter from the Director-General to the Secretary of State for War is dated November 1877; and the volume is only issued in February 1878, although it would appear from the title-page and cover that it was "presented to both Houses of Parliament by command of Her Majesty" in 1877. It may be readily understood that the mass of figures obtained from the many distant parts of the world comprehended in the report cannot be examined and tabulated, until some months have lapsed after the close of the year to which the figures refer; but the discrepancy between the apparent date of presentation to Parliament and that of issue is not so easily explained.

The contents of the present volume correspond in arrangement with those of the two preceding volumes. Statistical tables summarising the general state of health and the results of sickness among the whole of the white troops of the British army, whether serving at home or abroad, during the year 1876, are first given. We have then statistical reports on the health of the troops serving in the various military districts of the United Kingdom. Similar statistics follow respecting the troops serving in the Mediterranean, Canada, Bermuda, the West Indies, Western Africa, the Cape of Good Hope, Mauritius, Ceylon, China and the Straits Settlements, the Fiji Islands, and, lastly, in the three great Presidencies of India. A mere enumeration of the names of these stations, widely distributed as they are over the face of the globe, calls the attention very forcibly to the variety of physical conditions under which British soldiers have to serve. To complete the survey of the health of the army, it is necessary that the sickness and mortality among the troops proceeding on foreign service, returning to England, or passing from one station to another by sea, should also be taken into account. A separate section is, therefore, devoted to the health of troops on board-ship. The medical and sanitary reports received from the various stations where the troops have been quartered are printed immediately after the statistical details relating to them, and often serve to explain the figures in the tables. This is a more convenient and useful arrangement than the plan which was adopted in some former volumes, in which the statistical, medical, and sanitary reports were shown separately. An appendix, consisting of a series of reports by medical officers on various special subjects, closes the volume.

The average strength of the army serving in all parts in the year 1876—that is, of non-commissioned officers and privates (the number of commissioned officers is not shown)—is stated to have been 169,197. These figures are limited to white troops, and do not include the men of certain special corps, like the Malta Fencibles, which are recruited at foreign stations. But, after all, how small the number appears, if they be compared with the numbers on the rolls of the armies of the other powers of Europe, especially when it is remembered that the troops of these powers habitually serve almost exclusively in the countries to which they belong, while those of Great Britain are detached and scattered over all parts of the world! The number of admissions into hospital during the year was nearly equal to the total number of men above mentioned; viz., 166,319, or 98.3 per thousand; the number of deaths resulting from these admissions was 1,921, or 11.03 per thousand; while 3,769, or 21.63 per thousand, were discharged from the service as invalids. The mortality from sickness and injury bears a favourable comparison with that in the previous year 1875, during which, the total strength of the troops being almost exactly the same, the deaths amounted to 2,169, or 12.47 per thousand. But even this death-rate was a very favourable one, when compared with the ratios of most other European armies; armies, too, free from the risks of tropical service to which a large portion of the British army is constantly exposed. The fact that the death-rate among the soldiers of the British army has now been reduced to a small fraction over one in a hundred *per annum*, the men in all climates in which our troops are quartered being included in the estimate, and all causes of death, whether from disease, injury, or accident, being taken into account, is one well worthy of attention. It is all the more so when

it is remembered that close upon sixty thousand of the soldiers included in these statistics were serving during the year in a part of the world which, within the memory of many persons, was dreaded on account of its unhealthy attributes; viz., India. The reduction in the general death-rate certainly points to a meritorious discharge of the duties which devolve on the medical department of the army; for, unless the specific influences of the different regions in which the troops have been placed had been carefully studied, and the conditions necessary for the preservation of health under them well considered, the amount of mortality must have been much larger than that which has just been mentioned. There is reason for hoping that a further reduction in the death-rate may be shown in future reports. Many sanitary recommendations appear in the medical reports forwarded from foreign stations and are quoted in this Blue Book; and, as the difficulties in the way of carrying them into execution, on account of expense, or from other impediments, are gradually overcome, the sickness and mortality among the troops must proportionally, at the same time, be lessened.

Some curious facts are brought to notice when the amount of sickness and mortality in particular stations is examined. As a station, that of the West Indies has always been regarded as one to be avoided, on account of its deleterious climate. Taking the ten years preceding 1876, the year embraced by the present report, the average annual death-rate among the white troops quartered there was 16.47 per thousand of the mean strength. But, in the year 1876, the death-rate was only 3.68 per thousand: lower than it was in any other station, and far lower than it was among the troops quartered at home in the United Kingdom. It is true the number of troops now stationed in the West Indies is small, the average for the year amounting only to 1,086 men; but the slight amount of fatal illness among them is, nevertheless, a remarkable fact. The ratio of mortality among the black troops in the West Indies was far higher; viz., 18.62 per thousand. There has not been any very marked reduction, either in the amount of sickness or the proportion of deaths, as compared with previous years, among the troops quartered in the United Kingdom. Contrasting, as before, the ten years preceding 1876, the average annual number of admissions into hospital during this period was 823.0 for every thousand men, and the proportion of deaths among them 9.11 per thousand. During the year 1876, the corresponding numbers were 813.7 per thousand and 8.43 per thousand. A more favourable reduction, particularly as regards rate of mortality, is shown among the large body of troops quartered in our Indian possessions. The number of admissions into hospitals in India during the ten years preceding 1876 was, on the average, 1,421.7 annually for every thousand men in the country; the yearly number of deaths during the same period was at the rate of 22.45 per thousand. During 1876, the hospital admissions were reduced to 1,330.1 per thousand and the death-rate to 16.10 per thousand. By far the highest mortality-rate during 1876 occurred among the small party of Royal Engineers at Levuka, in the Fiji Islands, a station occupied for the first time by British troops in September 1875. Among the fifty-seven non-commissioned officers and men comprising the force, there were three deaths; the ratio being, therefore, 52.63 per thousand. Two of the deaths were caused by heat-apoplexy, while the third seems to have been as much due to excessive drinking as to solar exposure. The medical officer in charge mentions that the drink used by the men in this command is of a very deleterious kind. Whether the Fiji Islands, when better known, will be found to have any local sources of unhealthiness other than those which are common to all hot countries, remains to be seen; experience, so far as it has gone, does not point to any.

It would occupy too much space, were the facts brought out by the statistics before us in regard to each of the particular stations in which the troops were quartered, given in detail. But, as the subject of the relative prevalence of venereal disease among soldiers in the United Kingdom, in stations under the Contagious Diseases Acts, and of it among those in stations not under the Act, is one which has excited much controversy, it may be useful to quote the information which the statistics in the present report afford in this respect. The average annual strength of troops, and the number of admissions for primary venereal sores, at fourteen of the principal stations in Great Britain which are placed under the Act, are shown in a tabular form; and, in another table, the strength and number of admissions at fourteen large stations which are not under the Act. A comparison of these two tables shows that the ratio per thousand of hospital admissions for primary venereal sores was thirty-three in the stations under the Act, while the corresponding proportion in the stations not under the Act was eighty-two per thousand. The group of fourteen stations under the Act shows a reduction of two per thousand in 1876 as compared with 1875; the contrasted group of stations not under the Act

shows an increase of three per thousand in 1876 as compared with the previous year. The highest ratio of admissions for primary venereal sores in the stations under the Act during 1876 was in the camp at Aldershot; viz., forty-seven per thousand; the lowest in the Curragh camp, in Ireland; viz., eighteen per thousand. The highest ratio of admissions among the stations not under the Act occurred in London; viz., one hundred and forty-six per thousand; the lowest, among the few men stationed at Athlone, in Ireland; viz., eight per thousand. The ratios were very high at Sheffield and Manchester; viz., one hundred and nineteen and one hundred and thirteen per thousand respectively. If, instead of taking the admissions among the troops in the twenty-eight large stations included in the two tables just mentioned, the fourteen stations under the Contagious Diseases Act are placed in one group, and all other stations at which troops are quartered are contrasted with them, then the following results are obtained. The admissions for primary venereal sores among the 48,620 men quartered in the stations under the Act were 1,622, or, as before mentioned, thirty-three per thousand; the admissions among the 38,073 men at all other stations were 2,416, or sixty-three per thousand. We advisedly restrict ourselves to a bare enumeration of the facts as shown by the figures in the statistical returns before us.

The chief articles in the appendix are a "Report on the Progress of Hygiene for the year 1876 and part of 1877", by Dr. De Chaumont of Netley, on the same plan as the annual reviews of the same branch of science published by the late Dr. Parkes, F.R.S.; a "List of the Surgical Operations performed at the Royal Victoria Hospital, Netley, during 1876, with abstracts of the more important cases", by Surgeon-Major Porter, Assistant-Professor of Military Surgery; "A Contribution to the Etiology of Heart-Disease in the Army", by Surgeon Davy, A.M.D.; "Remarks on the Normal Temperature of the Body in the Tropics", by Surgeon-Major J. Johnston, M.D.; "The Medical History of the Laroot Field Force", by Surgeon-Major G. S. Davie; and a "Report on the March from Bhamo, in Upper Burmah, to Manywe, in Yunnan" (the scene of the murder of Lieutenant Margary, which attracted so much notice in the English press about two years ago), by Surgeon W. J. Charlton, A.M.D. These articles well deserve special remark, and we regret that the space at our disposal does not admit of their being more particularly referred to in the present review of the volume before us.

A notice appears at the end of the appendix that the next subject for the Alexander Gold Medal and Memorial Prize of £50 is "the influence of drinking-water in originating or propagating enteric fever, diarrhoea, dysentery, and cholera; to be illustrated, as far as possible, by instances which have come under the personal observation of the author of the essay".

LEÇONS SUR LES MALADIES DU FOIE, DES VOIES BILIAIRES, ET DES REINS. Par J. M. CHARCOT. Paris. 1877.

THIS is a reprint of lectures which have appeared in the pages of the *Progrès Médical*, and represents courses delivered by M. CHARCOT at the Collège de France. Nowhere can we find a more complete account of certain parts of the pathology of the liver and kidneys. Few lecturers are at such pains to make all they teach so clear, still fewer possess that remarkable versatility which enables M. Charcot to engage in many different lines of research with so much enthusiasm and so much skill. The arrangement of the matter is excellent; and the care with which the normal condition of the organs is displayed previously to considering the pathological deviations, shows how thoroughly M. Charcot is in earnest in his teaching. The book contains many woodcuts and some chromo-lithographs, which add still more to its value.

The first six lectures are taken up by a consideration of the normal histology of the elements of the liver, and the pathological changes to which they are liable. Lectures 7, 8, 9, 10, and 11 are devoted to the Physiology of the Liver in its several functions of bile-making, glycogenesis, and oxidation of protein. The next six discuss Biliary Calculi, their origin, nature, and the results of their presence in the bile-passages. M. Charcot regards the intermittent fever of biliary lithiasis as the result of the formation of some morbid poison in the pent-up bile.

The most original part of the book is the account of the various forms of cirrhosis. As our readers know, M. Charcot, in conjunction with M. Gombault, has made a large number of experiments upon guinea-pigs by ligaturing the ductus communis choledochus, the results of which, together with MM. Charcot and Gombault's views of their bearing upon the pathology of cirrhosis, were published in the *Archives de Physiologie* for 1876. These were in support of the thesis of M. Hanot, now well known, in which he maintains that there is a form of cirrhosis, clinically and anatomically distinct from the common cirrhosis or hob-nailed liver, differing by the early appearance and persist-

ence of jaundice, by the absence of ascites, and by the enlargement of the liver. Under the microscope, this form of cirrhosis presents a remarkable development of the biliary canaliculi in the portal canals and interlobular spaces and fissures, which are at the same time much enlarged from the growth of fibrous tissue. These numerous canaliculi he considered to be the result of a catarrhal inflammation of the larger ducts, which, by obstructing the outflow of bile, leads to dilatation and inflammation of these capillary ducts, which finally become lined with epithelium. MM. Charcot and Gombault found these conditions repeat themselves in the animals whose bile-ducts they had ligatured; and MM. Kelsch and Kiener shortly afterwards, in a contribution to the same journal, threw fresh light upon the circumstances under which these new canaliculi are formed. According to them, a hepatic trabecula transforms itself by hypertrophy into a gland-tubule, by atrophy into a bile-duct; and they draw attention to the fact, already signalled by Hanot and Charcot, that the tendency of the new material in hypertrophic cirrhosis is to invade the acini and surround single trabeculae, thus explaining the greater frequency of these appearances in this form of cirrhosis. From this tendency of the new growth to invade the acini, M. Charcot proposes to call it monolobular or intralobular, while the ordinary form he would call perilobular or interlobular. M. Charcot also believes that the new growth can be seen to start from around the bile-ducts, and he regards the starting-point of the affection as a catarrhal inflammation of the smaller bile-ducts leading to retention of bile, in which changes take place giving rise to irritating products with inflammatory results. This interesting subject is still *sub judice*; the microscopical details of the cases reported by Hayem (*Archives de Physiologie*, 1874) do not support the view that these are constant appearances, and our own experience does not incline us to accept these new views as quite proved at present.

The second part of the book gives a sufficiently clear account of the forms of Kidney-disease, usually classed by us as Bright's disease. The account of the morbid anatomy of granular kidney is remarkable for its omission of all but the slightest reference to the state of the small blood-vessels in the kidney, and of all to those of the pia mater, etc. M. Charcot also makes the mistake of asserting that the blood-vessels of the kidney have their lumina diminished, although, as has been proved by Thoma, this is altogether exceptional. In discussing the polyuria, M. Charcot seems unable to regard any of the current views as to its cause very sufficient; he does not appear to recognise that hypertrophy of the heart takes place in parenchymatous nephritis also. In speaking of dropsy, M. Charcot falls into the common error of ascribing it to the loss of albumen alone, instead of, as Bartels has so well shown, connecting it with the accumulation of water in the blood from the interference with the renal function.

We warmly commend the book to the profession; it is one more obligation which M. Charcot has laid upon it.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW EAR-SPECULUM.

IT would seem, considering the many eminent authorities who have given attention to the construction of ear-specula, to be impossible to make any addition to the ones required for ordinary purposes that could be considered as an undoubted improvement; and yet I am quite sure that the beak-shaped speculum, which has been constructed for me by Messrs. Stevens of Gower Street, possesses this manifest advantage, that it can be easily and effectually cleansed of cerumen or offensive discharges after each time of using: an advantage in which the Wilde's and Politzer's ear-specula are deficient. It is simply an ordinary Toynbee's speculum furnished with a door opening upon a hinge placed upon the side of the instrument half an inch from the broad end; this door being made to accurately fit the remaining portion of the speculum. The door, when the instrument is in use, is steadied by the pressure against the wall of the meatus; whilst it enables us, if we wish, to slightly dilate the speculum when introducing a plug of cotton-wool. Lastly, it possesses an advantage over that introduced by (I think) Mr. Laidlaw Purves, and which, consisting of two equal portions, is dilatable by springs at their broad end, that there are no springs to break, or mechanism that is at all likely to be disarranged; and its cost is but very little more than that of an ordinary Toynbee's speculum.

ROBERT T. COOPER, M.D.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 16TH, 1878.

THE VITAL AND PHYSICAL ASPECTS OF
VENTILATION.

THE subject of ventilation, its importance, the consequences of an imperfect supply of air either in quantity or in quality, are just beginning to dawn distinctly on the public mind. The erection of the new Law Courts gives a peculiar point to the subject at this moment; for, we may remark, the errors of ventilation, or rather of the want of it, seem to attain their highest perfection in the present arrangements of our courts of justice. How an educated body of men like judges and barristers can tolerate the existing state of affairs, is simply a matter of wonderment to those interested in hygiene; and it only becomes comprehensible on the hypothesis of the deep-seated conservatism which is attached to the law, and the respect manifested for what has existed in the past merely because it has been. Lawyers have an affectionate veneration for precedents, which apparently extends even to a regard for imperfect ventilating arrangements. The growing acquaintance with the fact that we require so much oxygen *per diem*, and therefore must have so many cubic feet of air from which we may obtain it, one would have thought might have reached the judicial bench, if stern facts did not contradict this supposition. Is it not on record that an eminent judge has ordered all the windows of his court to be closed, because he was cold, and thus business had to be conducted by persons in a state of partial carbonic acid poisoning? Why it is that an elderly judge comes to complain of loss of body-temperature when the juniors are warm will be apparent shortly, and a very significant fact it will be found.

Before proceeding to consider the physical aspects of ventilation, it may be well to review some of the consequences of an imperfect supply of oxygen to the body. This will give weight to considerations as to the practical attainment of proper ventilation. We may commence by saying that a proper and sufficient supply of oxygen is a most important matter for the removal of waste materials from the body. In the first place, waste and effete tissues are removed by oxidation, and, if not properly oxidised, remain in the system and work mischief there. Uric acid, which is really "gout-poison", is a waste form of nitrogenised material, which, if further oxidised, would be converted into the more soluble urea, and thus find its way out of the body by the watery excretion through the kidney. The irascibility and irritability which are the consequence of the disturbance of the cerebral cells created by blood supercharged with "gout-poison" are not only unpleasant to the individual himself, but are eminently calculated to make it unpleasant for those around him; and such physio-psychological conditions are not favourable to mental calm and the administration of impartial justice. The late Dr. Bence Jones denominated Bright's disease a disease of "suboxidation"; that is, it is, from one point of view, a disease whose ulterior consequences are linked with a defective oxidation of the waste material of the body.

Then there is the function of the liver. All those who have read Dr. Murchison's admirable lectures on *Functional Disturbances of the Liver*, are impressed with what he says about the function of the liver in breaking down and oxidising the albuminous matters which are not required for tissue-repair. The liver is the furnace in which effete

tissue-material, old red blood-corpuscles, and the surplusage of albuminoid food, are all burnt off by a process of oxidation. Biliousness is that condition which arises when the oxidation is imperfect, when, indeed, the waste material is in excess of the oxidising powers. It may arise either from too great indulgence in food beyond the functional powers of an active liver; or it may arise where a functionally feeble liver cannot cope successfully with an ordinary amount of food. The consequences are that the blood is loaded with waste material, the imperfectly oxidised products of nitrogenised material, as bile-acids or uric acid. Headache, irritability, and depression are the results of blood charged with bile-acids; and it seems not improbable that some of those acrimonious disputes which we see recorded in the newspapers as having occurred in this or that law-court, may take their origin in the action of bile-acids upon the brain-cells of the contented. All people are not fortunate enough to have active capable livers equal to their work under unfavourable circumstances; and, therefore, a free supply of oxygen is very desirable, to enable a feeble liver to proceed with its work of oxidation. A great deal of the biliousness and gout which come before the profession is due to the conditions under which such patients live; as the barrister in an insufficiently ventilated law-court, the merchant in a stifling den in the midst of his warehouse—and who that has visited a business man in his close chamber, or still worse, the glass box in which many spend hours with the accounts and the ledger, does not carry away with him a strong remembrance of the atmosphere, and of the relief felt on returning to the by no means too pure air of the sale-room? Many hours a day so spent, to be followed by a late dinner, for a great portion of the year by artificial light, and then the social requirements of a family, necessitating the staying at home and living amidst further artificial light and warmth, give the liver of the British paterfamilias little chance of fairly oxidising his spare and waste matters; while the billiard and the smoking rooms of most houses and clubs are exercising the same pernicious influences over the younger tissues of his sons. It is needless to say that the overheated rooms in which ladies spend their days at present are not beneficial to their oxidising processes. A fall of temperature, with the increased oxidation so brought about, is neutralised by free resort to artificial heat, and thus a summer temperature is always maintained. The profession is indebted to imperfect oxidation for a great deal of its most lucrative practice.

There is another consequence of suboxidation which is most grave, and that is the imperfect removal of waste tissue. When a tissue has become effete and worn out, it is removed by a process of oxidation, and new material laid down in its place. The removal of the old material is essentially necessary, and must precede the formation of new tissue in its place. The blood may be highly charged with the material for tissue-repair, but this all goes for nothing if the old effete matter be not first removed. Fatty degeneration of the heart goes on with a sufficient supply of proper and suitable food, because the fatty debris of the wearing out muscular tissue is not removed. Indeed, the richer the food and the more liberal the supply of it, the more the respired oxygen is taken up by the food and the less is left for the removal of decaying tissue. The conditions under which geese are placed in order to procure that large and fatty liver which furnishes the delicious *foie gras* are those of liberal supplies of food—indeed, by cramming the poor creatures when their appetite is sated, and by keeping them at an unnaturally high temperature around a fire. The feeder has found that, by an excess of food and a high surrounding temperature, those fatty and degenerative changes he seeks are most readily and certainly secured. This is a grim fact when seen in relation to the production of fatty degeneration in the tissues of man. Exactly the same process goes on where man is so placed as to take food in excess of the positive needs of the organism, and oxidation is insufficient. Even if the dietary be a restricted one, still a sufficiently defective oxidation will attain the same results. This is a very important matter for elderly persons. Dr. Michael Foster, in his well-known *Text-Book of Physiology*, makes this weighty statement, in speak-

ing of old age and its liability to calcareous and fatty degeneration. "Everywhere we see a disposition on the part of protoplasm to fall back upon the easier task of forming fat, rather than to carry on the more arduous duty of manufacturing new material like itself. Everywhere almost we see a tendency to the replacement of a structural matrix by a deposit of amorphous material." Thus we see that it is not merely the development of fat in and around the muscular fibrillæ—the conversion of an ordinary connective tissue-cell into a fat-cell; it is the structural decay of the muscular bundles themselves which is to be feared as life advances. The natural tendency to such degenerative change is fostered by a liberal dietary, a high temperature, and an imperfect supply of oxygen. It has been stated that a number of judges have died of fatty degeneration of the heart. One died instantly, while delivering his charge; and such a fact is readily comprehensible. It was stated last week that elderly judges like to be kept warm, and that they have been known to order every window of a court to be shut when other people felt suffocating for want of air; and that they require a higher temperature than the younger men around them. Now, why is this? It is due to the fact that the imperfect combustion going on within the older men is insufficient to maintain the normal body-temperature except under very favouring circumstances, and that they are thus susceptible to thermal changes. But this means that they are in a condition of suboxidation, with all the consequences thereof. In fact, they differ from the Strasburg goose but in degree; they are unwittingly placing themselves under those very conditions which have been found most favourable to the development of a fatty degenerative change. If the oxidation going on within them were as active and as complete as that of younger men, they would not require this high surrounding temperature; but their heat-production is small, and thus they chill under a temperature which other persons feel oppressive. In fact, for them and their tissue-needs, a more liberal supply of oxygen is desirable than is required for younger persons; but, instead of that, they insist upon a high surrounding temperature, involving an imperfect supply of the oxygen-bearing air, because their heat-production is defective. These old men have got into a vicious circle, which is only broken by death, sooner or later.

In addition to these grave consequences of imperfect oxidation, the question of "catching cold" is intimately linked with that of ventilation. Changes in the vascularity of the lining membrane of the air-passages are the means by which cold air is warmed before it reaches the ultimate air-vesicles, and disturbances in this lining membrane furnish the frequent condition of catarrh. The catarrh may be nasal or it may be bronchial; but the exciting cause is a disturbance in the vascularity of the respiratory tract. In full health and under ordinary circumstances, these changes of vascularity are brought about according to circumstances, and give no evidence of disturbance. At other times, the accommodation is not achieved without some remaining disturbance. Long continuance in a warm surrounding atmosphere produces a sort of paralysis of the vaso-motor fibres of the vessels of the lining membrane of the air-tubes; and then, when the individual emerges into the cool, or may be cold, air outside, these vessels dilate in a paralytic manner, and, this condition continuing, a catarrhal state is set up and is slowly recovered from as these blood-vessels regain their tone. Consequently, those who have spent hours in a stifling court, at a high temperature, are specially liable to suffer from catarrhs so produced. When, in addition to this local condition, there is a general loss of heat by the cutaneous vessels being also paralytically dilated, then a "cold" is felt and a febrile condition set up until the thermal equilibrium is restored. We know, however, that a cold may exist without a catarrh, and that a catarrh may be independent of a cold. It is not merely these thermal influences which are involved in the subject of efficient ventilation, but there is the further question of the effects of what the air may contain and carry with it. In a work on asthma by Dr. Berkart, who has kindly afforded us an opportunity of seeing his proof-sheets, the effects of mechanical irritants and che-

mically acting agents, as irritating gases, are considered at some length. This writer holds that these causes of disturbance in the vascular lining membrane of the air-tubes are not sufficiently appreciated; and that often they are in action when thermal influences are credited with the production of the morbid conditions induced. Be that as it may, such irritants of the air-tubes are truly potent for evil, and have a malign influence on delicate lungs and air-tubes. Especially is this the case when gas has to be burnt in the daytime, not for illuminating purposes, but in order to warm a badly heated court-house. It is certainly surprising that barristers should not be more careful of themselves, and much of the disease to which these persons are subject is not due to overwork and worry, but to bad hygienic arrangements which might be remedied.

Judges and Queen's Counsellors are elaborate productions, we are inclined to hold. Their brains must be of good quality, to begin with, and be very carefully cultivated before their owners attain their distinguished positions. Consequently, they ought to be worthy of every care that can be taken of them, and, amongst the rest, they ought to have their court-rooms properly as well as efficiently ventilated. What the arrangements made for the new Law Courts are, we do not know; but we know very decidedly what they ought to be. They should resemble, as closely as circumstances will permit, those of our Houses of Parliament, which leave little or nothing to be required. Where the national legislation is conducted, a system of ventilation is in action which is admirable; but how far provision of a like character is made for conduction of private litigation, we cannot say. If the arrangements of the Houses of Parliament are adopted, there will be no ground for complaint. These arrangements provide for all possible contingencies and emergencies. The air is taken from the quiet court-yards of the Houses; it is dried and warmed in cold weather by being passed over a large number of metal plates, which are not too highly heated, in order to avoid the fierceness of superheated air. In hot weather, it is cooled and washed by being subjected to a large number of minute sprays of water and driven over blocks of ice. In fogs, it is driven through layers of cotton-wool, which soon become black and foul by the multitudes of soot-particles, etc., arrested by them; so that repeated renewal is necessary. Machinery exists by which air can be driven in according to the requirements of those inside, and then the used air escapes by numerous orifices in the ceiling into tubes connected with a general exhaust-current in the lofty clock-tower, where there is a long chimney with a fire at its base. In order to prevent the air from becoming too dry, wet and dry bulb-thermometers are fixed up; and, if a difference of seven degrees exist betwixt them, then the air is moistened. The air of the House is changed six times every hour, if required, and, of course, this largely depends upon the number of members present and the amount of gas which is burnt. If there be a full house, the demand for air is large; when empty, the amount of air driven in is small, and according to the number in the house and temperature outside, so the air may require neither heating nor cooling. A vigilant watch is kept as to the filling and emptying of the house, and an ingenious mechanical application at the orifice where the air enters prevents the sudden draught which would otherwise be induced by the incoming or outgoing of a number of members at once. Such arrangements might be adapted to our Law Courts; but there is one difficulty to be encountered, and it is this. It will be impossible to provide in the Law Courts the large cubic space of air which the great size of the Commons' House permits to each member. Then comes the question of the renewal of the air so many times per hour; for the smaller the cubic space, so much oftener must the air be changed to secure the requisite number of cubic feet per hour. This is a great practical difficulty; for, if the air of an apartment be changed more than four times per hour, it is apt to be disagreeably chilly, except in warm weather. Consequently, some method of warming the incoming air should be adopted; for elderly judges, with a low body temperature, cannot tolerate currents of unwarmed air coming in by open windows

Neither should they be so exposed. Warmed air in a full sufficiency for their tissue-needs and proper oxidation should be furnished to them. By such means, they would be less injured than where they have to secure artificial heat at the expense of an insufficient supply of oxygen; and so, indeed, to cause further need for a high surrounding temperature, because of their own imperfect production of body-heat. It is a public question, the preservation of the health and the maintenance of life in our judges and senior counsel, not unworthy of national attention.

There can be no doubt to an impartial mind that the proper ventilation of our new Law Courts is a great and pressing matter. If, in the erection of these buildings, the ventilation, alike its mode and its efficiency, be properly attended to, the experience of judges and barristers therein will make them intolerant of the arrangements in vogue elsewhere and cause them to be improved. If the arrangements adopted be as efficient as those of the Houses of Parliament, an example will be set which will be productive of the most beneficial results. But, if the plan, or rather no plan, of our old Law Courts be followed, then it is certain that the health, and with it the lives, of our legal administrators will be needlessly imperilled; and they will be subjected to a series of injurious influences which certainly are not unavoidable, and which could readily be obviated.

IRISH LUNATIC ASYLUMS.

THE twenty-sixth Parliamentary report on the district criminal and private lunatic asylums in Ireland, by the inspectors, opens with a comparative statement showing the number of lunatics confined in those institutions, together with those in the gaols, poorhouses, and the Government Asylum for Idiots at Lucan, at the end of the years 1875 and 1876, from which we see that there was an increase of 346 of those under detention during the latter year; but we find this partly counterbalanced by a diminution of 241 in those reported to be insane, but at large; thus leaving the not very formidable total of 105 as the increase for the year 1876, which gives a proportion of 3.50 of those mentally afflicted per 1,000 of the general population. Concerning those not under special control, but returned to the inspectors by the constabulary as insane, they appear satisfied, from their mode of collection, with the comparative accuracy of the statistics; though we fail to see how a system which apparently places in the hands of inexperienced, and presumably in many cases, uneducated, laymen, the decision of insanity can be trustworthy.

The inspectors are, happily, able to announce a decline in the idiotic element of the community, a fact which they attribute to the increased accommodation for the care of the insane, and the consequent check to the propagation of the disease.

Referring to the admissions, viz., 2,344, to the district asylums during the year under consideration, the inspectors say that, of this number, only 232 were admitted by the legitimate modes, viz., by order of the Boards of Governors or of themselves, whilst the remainder were confined either as urgent by the medical superintendents, on warrant of the Lord Lieutenant, or as dangerous lunatics, having been committed by the magistrates as such. We think this complex system open to grave objection. Doubtless, in many cases, for the benefit of the patient, as regards not only his ultimate recovery, but also his own and the safety of others, urgency demands that his transfer to an asylum should not be postponed till an order from the central authority or the Board of Governors can be obtained; and convinced of the desirability, nay more almost the necessity, of early treatment in insanity, as in other diseases, we are glad to find the inspectors advocating prompt removal to an asylum on the first manifestation of the malady. The inspectors regard, evidently, with most favour the mode of admission through the Boards of Governors, from the information afforded as to past history and chargeability. We fully

appreciate the great help in the safe and successful treatment of the insane derived from a knowledge of their past habits and tendencies; information which, from our experience of the working of Irish asylums, is often very difficult to obtain, and in that country, all the more necessary from the inadequate medical staff in most of those institutions. But in England, these desiderata are almost always readily obtained, either from the friends or through the efficiency of the poor-law system, and we cannot see why an arrangement which works so admirably in this country, cannot be made applicable to Ireland. A large proportion of those admitted as urgent and as dangerous lunatics are escorted from the country by the local constabulary, in many instances, for many miles in open common carts, perhaps on a bed of straw, handcuffed and tied down by ropes; a proceeding which cannot fail to have the most injurious effect, both moral and social, on the insane themselves, whilst it would also tend to make the friends screen the affliction of their relative till he has become outrageous or committed some insane act whereby his presence in society can no longer be tolerated. Moreover, in the case of the latter class, this delay must be directly brought about by the manifest hardship which only entitles medical men to a fee for certifying a patient insane on a "dangerous form", which in turn must be postponed till he has actually committed an outrage on the person, as if insanity cannot be exhibited in numerous ways other than violence; while, for certifying on what is known as the "ordinary form", no fee is recoverable.

Touching this subject, we regret to have to comment on the lack of knowledge of insanity in many instances displayed by those filling in the medical certificates for admission: a state of things we can only hope to see remedied when the medical schools throughout the country, following the excellent example recently set by that of Cork, establish a systematic course of instruction in mental diseases as part of the students' curriculum. This has already been done in Great Britain by most of the schools of medicine with good results, the medical superintendent of an adjoining asylum being generally chosen as lecturer, and not only giving a regular course of lectures, but also clinical instruction in the wards of his asylum. For many obvious reasons, such opening up of the wards of the Irish asylums to students must have the most beneficial effects, both to themselves, and in this we include their inmates, as well as to those instructed therein. But to the effectual carrying out of such an arrangement, it would be necessary, by the appointment of assistant medical officers, to relieve the medical superintendents of those institutions of some of their present arduous and multifarious duties, many of which in this country are carried on by their subordinate officers. For the offices of visiting physician and apothecary, offices now almost extinct in the English pauper asylums, and in many cases, we fear, little more than a sinecure in those in Ireland, might very advantageously be substituted that of assistant resident physician. It would be out of place here to point out the advantages sure to accrue from such a change; this has already been done in these columns and elsewhere, and we regret to find the inspectors silent on such a worthy subject.

The recovery-rate shows the very gratifying result of 46 per cent. on the admissions, whilst the percentage of deaths calculated on those under treatment was 7.60, both ratios bearing very favourable comparison with the recovery and death-rates of the English asylums.

There were only four suicides during the year.

From an analysis of Table I, we find that, though many of the asylums at the end of last year were either almost full, or, in some instances, excessively overcrowded, yet, calculating the total available accommodation, there was still room for upwards of 220 patients; whilst such was already, or was being, provided for 500 additional. We also see that a considerable sum of money has been expended on enlargements, internal improvements, and the acquisition of additional

lands; whilst it is reassuring to notice the inspectors, alive to the necessity for the advance of these institutions in accordance with the more enlightened treatment of insanity, saying, in speaking of increased means of comfort, etc., that "as great public institutions, they are thereby rendered more creditable to the country, and in character with the best regulated elsewhere"; we would add, also, more conducive to the recovery of their inmates, and, consequently, less expensive to the State. It is the experience of the inspectors that the comparatively recent grant from the Treasury of the weekly rate-in-aid of four shillings for each lunatic in asylums, has a tendency to diminish the liberality of the Governors, we presume, by shifting from their shoulders the responsibility to provide for their insane poor, on the principle of the more you give us the more we expect of you. This seems to be a national trait. The inspectors' remarks on this subject are somewhat obscure, and we commend their careful perusal to those interested. The districts of Derry and Armagh are still without proper asylum accommodation, owing to the parsimony of the local authorities; but, as the remedy is in the hands of the Executive, we trust it will be speedily applied.

The average weekly cost per head for 1875 varies considerably in the different asylums, rising in one, that at Clonmel, to 16s. 7½d., whilst in that at Omagh it was so low as 6s. 10½d., the total average being about 9s. 5½d.

The rate of wages is, in many cases, ridiculously low; this is more especially manifest in the case of the attendants and nurses; and it must be at once apparent that a superior class of servants cannot be induced to accept such miserable remuneration for the most arduous and trying duties. The inspectors promise a revised scale of salaries for the clerks, and we trust this will lead to an increase in the salaries not only of these and other officers, but also of those who have to bear the brunt of the battle.

On the whole, the dietary scale in the different asylums seems fairly liberal and nutritious, especially when we consider the humble and coarse fare to which most of those forming the Irish asylum population are accustomed; but we think less complex dietary tables desirable, if only for the sake of comparison.

The report of Dr. Ashe, the Superintendent of the Central Criminal Asylum at Dundrum, puts prominently before the authorities the very unsatisfactory state of the water-supply, both as regards its quality and quantity; also the dampness of the building on account of the pervious nature of the stone of which it is built, and to this he attributes the large amount of rheumatic affections of his patients.

The inspectors again draw attention to the very large proportion of the single to the married and widowed element of their charges, pointing out that it is the reverse of that prevailing in this country, but offering no explanation.

The volume is of much general interest; but we think the reports of the inspectors on the different asylums, from time to time, might be very advantageously introduced in a condensed form; and we regret to find their excellent remarks curtailed to make room for tables of comparatively little interest, even to the statistician.

THE Select Committee of the House of Commons on Lunacy Law will meet again on the 19th instant, when they will consider their report.

At the ordinary meeting of the Statistical Society, on Tuesday, March 19th, a paper will be read by Mr. C. Walford, on "The Famines of the World".

THE next meeting of the Pathological Society of London (Tuesday, the 19th instant), will be devoted to the consideration of Diseases of the Lymphatic System. Specimens will be exhibited before the meeting.

In another column of the JOURNAL will be found the official Report of Proceedings of the Special General Meeting of the Committee of Council, which includes important resolutions relating to the question of Medical Women, the letters of Dr. Grigg, and the proposed Special General Meeting, which it was resolved to summon for Tuesday, April 2nd, at Birmingham.

THE Council of the Royal College of Surgeons England resolved, on the 14th instant, that the registration of medical students at the College be no longer required on and after this date.

THE report of the meeting of the Royal Medical and Chirurgical Society, which we publish this week, is remarkable as including a faithful report of the great English lithotritist in the largest series of cases as yet reported, we believe, by one surgeon; and these the result of the experience of a comparatively small number of years.

MR. H. SPENCER SMITH has retired from the office of Surgeon to St. Mary's Hospital, London, with which institution he has been connected from its foundation. Mr. Smith has devoted the best energies of a large part of his life to the maintenance of the interests and the development of the usefulness of this hospital and school. During all its earlier years, he spent hours daily in the school and hospital. He gave to the study of the administrative arrangements and scientific teaching the chief energies of a mind singularly well balanced, and a clear, honest, and elevated resolve. Aided by many earnest colleagues, amongst whom must be specially mentioned the regretted names of Sibson, Lane, and Gascoyen, he succeeded in at once securing for the school a recognised place amongst the most respectable of metropolitan medical schools; and this it has always retained. Mr. Spencer Smith has the satisfaction, in retiring from the hospital and school, of seeing the infant which he did so much to cherish flourishing in adult strength. Mr. Walton becomes senior surgeon in succession to Mr. Smith; and Mr. Arthur Norton is promoted to the office of surgeon, leaving a vacancy for an assistant-surgeon.

THE New York papers report a painful case of death, in a dentist's chair, of a patient from whom a number of teeth had been extracted under chloroform by a dentist of Staten Island. A coroner's inquest was held, at which, according to the evidence given, the patient had died from asphyxia, by the blood in the mouth trickling into the larynx. At the *post mortem* examination, the features were blue, the brain and lungs congested; and the *post mortem* appearances altogether appeared to have been those of asphyxia from the blood running into the trachea, and not those of an ordinary chloroform death.

THE CONJOINT EXAMINING BOARD FOR ENGLAND.

THE Committee of Reference have almost completed the regulations for the course of education and examination under the Conjoint Scheme. We anticipate that these regulations will meet with the entire approval of the profession, inasmuch as the Committee, in drawing them up, has evidently aimed at rendering the course of education proposed of a far more practical character than it is at present, and, further, at testing by the examination, which it is proposed to divide into three parts, how far the attainments are of a practical character. We think that in both objects they have largely succeeded.

SMALL POX AT HARWICH.

AN occasional case of small-pox still appears at Harwich. In the last week, two cases were admitted from the town into the temporary hospital, and one from a smack on the river; this patient had, no doubt, contracted the disease in Harwich. Of the last four admitted, two were unvaccinated. Two of the cases are as severe as any that have yet been treated; one is convalescent, and one is only in the early stage, having been admitted on Wednesday. This brings the number admitted since the opening of the hospital up to seventy, of whom fifteen died, forty-five were discharged cured, and ten remain

under treatment, of whom seven are convalescent. Twelve unvaccinated cases have been admitted. Of these, two died and two remain under treatment.

HOSPITAL SATURDAY IN LIVERPOOL.

LAST Saturday (the 9th) was observed in Liverpool as Hospital Saturday; previously to which a large number of boxes had been sent to the various workshops and other places, where a great number of working men are employed. The total results will not be known for another week; but up to Tuesday, the treasurer had received £1,020.

THE GOVERNMENT MEDICAL ACTS AMENDMENT BILL.

WE understand that the Duke of Richmond will bring forward his Medical Acts Amendment Bill in the House of Lords, so soon as the Cattle Diseases Bill has been a little further advanced, so as to be out of the way. The Executive Committee of the General Medical Council meet to-day, and probably Dr. Acland will be able to lay the draft before them; but it is understood that no further particulars than those which we gave last week will be allowed to transpire until after the Duke of Richmond has made his statement in the House of Lords.

SURGICAL AID SOCIETY.

FROM bad beginnings sometimes good conclusions flow. The man who applied last week to Sir Robert Carden, complaining that the Surgical Aid Society had sent him all over London to seek the thirteen letters to pay the expense of repairing his leg, which meantime they kept in pawn, was an impostor in various respects. Nevertheless, his case, so far as the Surgical Aid Society was concerned, was a perfectly valid one, and is only one among many brought forward during the last four years. The presiding alderman truly said that the aid given by this society could hardly be called charity at all, and the present constitution of the society is extremely reprehensible. This is not the first time that attention has been called to this subject. During a period extending over the last three years, the Charity Reform Society have been endeavouring to obtain an amendment in the mode of administering relief to applicants by the Surgical Aid Society. In the first instance, they addressed the Treasurer through Sir Charles Trevelyan, who entered into a long correspondence with him, and brought to his notice a number of cases of previous hardship. That ended in nothing, and they then drew up a memorial and presented it to the Committee of Management; and subsequently an address was drawn up and signed by the Duke of Northumberland as President, pointing out and fully explaining the causes of the grievous injustice inflicted upon the afflicted poor by their continuance of a system of relief which had been shown to be indefensible. An earnest hope was then expressed that the Committee of the Surgical Aid Society would be good enough to reconsider the question, with a view to remedy an abuse which marred the dispensation of their charity and prevented many benevolent persons from contributing to its funds. In the event of the society declining to make a complete change, the address proposed the alternative that the subscribers should retain the power of recommending cases; and that their recommendations should be made immediately effective by relief being given directly by the Committee, with the assistance of the surgeon. A copy of that address was sent to each subscriber. Two hundred and fifty expressed sympathy with the views of the Charity Voting Reform Association, and a wish for a change. No notice was taken of the address; and, at the last annual meeting of the Surgical Aid Society, Mr. Roger Eykyn moved, "That, in the opinion of this meeting, the system of administering relief in present use by the society is capable of amendment. The Committee, therefore, is respectfully requested to draw up a scheme which would both relieve the applicants from the burthensome task of collecting letters, and also provide that cases may, after due investigation, receive prompt relief on the recommendation of a subscriber." That motion was seconded by Dr. Chepmell, and supported by Mr. Jabez Hogg, who showed how easily the immediate relief which the

society professed to give might be afforded in all cases. The Treasurer gave an assurance that the managers would give the matter full consideration in Committee, to which Mr. Eykyn was invited; and, on the strength of that assurance, the motion was withdrawn. Since then, however, we are assured, nothing has been done to mitigate the evils complained of. The society, according to the last annual report, had an income of £3,331, of which £2,500 was spent in instruments and appliances, the rest in executive expenses. It has funded property of the value of £5,000. Another society—the Provident Surgical Appliance—in 1875, with an income of £1,247:16, supplied 2,436 surgical instruments, against 1,533 supplied by the Surgical Aid Society in the same year, with an income twice as great.

THE INDIAN FAMINE.

A WELL-INFORMED correspondent writes to us:—"I have been taking a hurried tour through the north-west of India, and have had to notice that famine is really bad in Agra, Oude, and Rohilkund. In Agra, I saw many thousands on relief-works; and at a poor-house, the people were being brought in dead or dying, all through the day. The Rajputana States have suffered very much, and the people flock into the big towns, as they did in Madras. Small-pox is universally present amongst the distressed districts, as it was over our own famine area. The authorities of the North-West are unwilling to admit the existence of famine. They have this excuse, that good crops are on the ground, and that prices are expected to fall in the course of the next two or three months; but meanwhile the poor are dying of starvation, and the organisation for their relief, to my thinking, is wholly inadequate."

THE RESULTS OF RIOTING.

It appears that, in connection with the gathering in Hyde Park on Sunday, nine persons in all presented themselves for treatment at St. George's Hospital, eight of whom were suffering from broken heads and one from a fractured arm. They belonged chiefly to the rough element, and after being attended to, made the best of their way homeward.

COUNTER-PRACTICE.

AN inquest was held at Lincoln on the 20th ult. on a servant who had died in one of the hotels in that city. The medical evidence showed that the girl died from small-pox. One gathers from the published report of the inquest that one of the children of the landlady arrived at Lincoln on February 2nd, and that, on February 4th, he had an eruption, which was pronounced to be chicken-pox by a chemist, who was practically the only medical attendant in this and other cases arising shortly afterwards. Within three weeks of this boy's returning to his home, no fewer than four other people in the house—two children and two servants—contracted the disease, and one of them (the subject of the inquest) was found lying dead on the floor of her room on February 19th. It is probable that all the sufferers really had small-pox, and that the disorder was imported from London with the boy. It would be interesting to know from what house, and why the boy went home at such an out-of-the-way time as February 2nd, and what before his departure from, and since his rearrival in, London, was the condition of the inmates of the house in which he resided. There is no evidence on this point, and it is only too probable that this is one of the many instances in which the inmates of a house, be they school-children or servants, are sent home the moment they fall ill. In the case of the infectious diseases, this contributes not a little to the spread of the disease about the country, and as a practice it cannot be too strongly deprecated. If the early sufferers from this so-called chicken-pox had been seen by a properly qualified medical man, it is probable that the disease would have been correctly diagnosed, and steps have been taken to prevent its spreading. Even when a medical man was called in, his opinion was not believed, and his orders that the patient was not to be left alone during the night were disobeyed, otherwise the girl would not have been found lying dead on the floor of her room when one of the maids of the house went to see her in

the morning. In any case of acute disease, one never knows at what hour delirium may set in; and it is a point, which cannot be too strongly insisted on, never to allow any patient suffering from acute disease to be left alone, no matter how quiet or rational they may seem to be. This inquiry illustrates also the results which may ensue from relying on the advice of chemists and druggists on matters of medical moment and affecting health.

HOW INQUESTS ARE HELD.

THE *Herts Observer* of March 2nd records an inquest held before Mr. C. C. Lewis, coroner, at Stansted. A man was found dead in a cart, and there was no evidence whatever as to how he came by his death, except that he was found hanging head foremost out of the cart, the horses walking, his head nearly touching their hind legs. There were no marks of injury on the body. Whereupon the coroner (addressing the son) said: "If the jury are satisfied your father died a natural death, will you be satisfied without having an examination made? I should not think it necessary, but if you are not satisfied we will have it done."—The son said he was quite satisfied.—The coroner said deceased had no doubt had some latent disease of the heart, or he might have had another fit. It transpired that the body had been left entirely neglected from the time of death, and the family declined to take the body or to bury it. It is perfectly obvious that such an inquiry as this is a mere farce, and that the jury had no means whatever of knowing whether their verdict was a true or a false one. In the absence of a *post mortem* examination, it was quite impossible to say how this man met his death. This is how coroners' inquests are largely held at the present time.

MR. GILBERT ON LONDON HOSPITALS.

A VIGOROUSLY written article, by Mr. William Gilbert, in the current number of the *Contemporary*, on the Abuse of Charity in the Administration of the five Royal Hospitals in London, will well repay perusal. Mr. Gilbert describes the first foundation of these hospitals, and the objects for which they were severally endowed, showing that they were, in fact, a model upon which the present system of Poor-law administration in the metropolis might have been formed, and that as such they did immense credit to the citizens of London, not only in the way of humane charitable feeling, but also in the shrewd common sense shown in their management. The value of their endowments originally and at the present time is next estimated, the latter, including the hospitals themselves and their sites, being reckoned as worth ten to eleven millions sterling; of which St. Bartholomew's and St. Thomas's stand for five millions. The reviewer next inquires what is the amount of benefit derived from this enormous capital, and to what extent the present application of the income is made according to the provisions of the hospital charters; and the answer is not very satisfactory. Condemning the administration of Bridewell and Christ's Hospital as injudicious and extravagant, and showing that if the average cost of patients at Bethlem were as low as that at Fisherton, £20,000 *per annum* would be saved which is now expended, Mr. Gilbert proceeds to deal with St. Bartholomew's and St. Thomas's; and this is, we venture to think, the weakest part of the whole article. It is quite right to point to the extravagant cost of the new St. Thomas's, and probably quite correct to say that an equally good hospital and site could have been obtained for one-eighth or one-tenth the money; but it is hard to see how it can justly be charged as a fault against the management of St. Bartholomew's that it is situated in the centre of what the writer admits was, in the commencement of the present century, a densely populated neighbourhood, though since that time, 120,000 of the working classes have been driven from the city. Nor can we well understand what the comparative merits of the professors of University College, St. Bartholomew's, and St. Thomas's, have to do with the question of the abuse of charity, or why the medical school attached to each of those hospitals should be spoken of as "a private speculation". The writer makes no allusion

whatever to the out-patient department, in which, unquestionably, the greatest abuses exist; and the article, though an extremely able one on the whole, shows how difficult it is for a non-medical writer to fully understand all the bearings of this complicated subject.

HOSPITAL FOR DISEASES OF THE THROAT AND CHEST.

MR. E. J. LUCK, the Chairman, writes to us:—"Your short notice of the special meeting of this hospital, held on the 2nd instant, contains such important omissions that, as a matter of justice to the hospital, I must ask you to permit me to state: 1. That the charges against the administration were read and answered *sciatim*; 2. That the following amendment was proposed by Mr. Gowland, and carried unanimously: 'That whilst declining to receive the report of a private inquiry altogether unsanctioned by subscribers, this meeting, after hearing the charges that have been made against the management and the explanation, desires to express its entire confidence in the administration of the hospital, both medical and general.' Sir Charles Legard did not withdraw with Mr. Thornton and Mr. Evans, but spoke after Mr. Gowland had moved his amendment; the Rev. Dr. Bell, the seconder of the amendment, waiving his right, as Sir Charles Legard stated that he had an important engagement elsewhere." There is nothing in this communication to affect the view that the report of a committee appointed by the President of the Hospital, the Marquis of Bute, at the request of the Patron, the Prince of Wales, and consisting of the Duke of Grafton, the Earl of Clarendon, the Earl of Dunmore, and Sir William Gull, ought to have been received and read. Any report from such a Committee so appointed was and is entitled to respectful consideration; and, in refusing to receive it, the meeting has elected to damage the hospital much more severely in public and professional estimation than by any other course which could have been devised. Such a report might be answered or refuted in any desirable manner; but not to receive it is, in our opinion, an unprecedented and improper course of proceeding.

SMALL-POX IN LONDON.

DURING recent weeks, small-pox has caused no death in any of the nineteen large provincial towns of England; but has continued to be fatal in London. The deaths caused by small-pox in the metropolis, which had been 39 and 54 in the two preceding weeks, declined to 34 last week; of which 22 occurred in the Metropolitan Asylum Hospitals, 2 in the Highgate Small-pox Hospital, and 10 in private dwelling-houses. Four of these deceased small-pox patients had resided in St. Pancras, 3 in Bethnal Green, 3 in Stepney, and 3 in Lambeth. Two deaths from small-pox occurred in private dwelling-houses in Mile End Old Town; and the cause of a death in Hope's Court, Walworth, was described as "probably small-pox", but was not certified by a registered medical practitioner. Of the 34 fatal cases of small-pox, 7 were certified as vaccinated, and 20 as unvaccinated; while in the remaining 7 cases the medical certificates did not give any information as to vaccination. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had declined to 137 at the beginning of October last, has since increased to 630, 651, and 667 at the end of the last three weeks; 153 new cases were admitted to these hospitals during last week, against 173 and 162 in the two previous weeks. The admissions, therefore, have shown a slight decline during the past three weeks. The Highgate Small-pox Hospital contained 61 patients on Saturday last, against 61 and 59 on the two preceding Saturdays.

METROPOLITAN WATER-SUPPLY.

FROM the weekly return of the Registrar-General, we learn that Dr. Frankland reports, as the result of his analyses of the waters supplied to the metropolis and some of its suburbs during February, that, taking unity to represent the average amount of organic impurity in a given volume of the Kent Company's water during the nine years ending December 1876, the proportional amount of such impurity in an equal volume of water supplied by each of the other companies, and by the

Tottenham Local Board, was: Tottenham 0.7, Colne Valley 1.0, Kent 1.1, New River 2.2, East London 3.1, Southwark 3.2, West Middlesex 3.2, Lambeth 3.3, Chelsea 3.7, and Grand Junction 3.9. The quality of the waters delivered by the five companies drawing their supply from the Thames showed an improvement upon that in the previous month, although containing, on an average, rather more than three times as much organic matter as the Kent Company's water; these waters were all efficiently filtered before delivery. The Lea water was also of much better quality than that delivered in the two previous months; this water was efficiently filtered before delivery, but contained more than twice as much organic matter as the Kent Company's water. The waters supplied by the Kent and Colne Valley Companies, and by the Tottenham Local Board, were of the usual excellent quality; they were clear, colourless, palatable, and wholesome.—Dr. Hill reports that the water supplied to Birmingham was "clear, and of greatly improved quality".—Dr. Mills reports that the Glasgow water, drawn from Loch Katrine, was "of a light brown colour, and contained muddy particles and numerous fibres".

THE MEDICAL SOCIETY OF LONDON.

THE 105th anniversary dinner of this Society took place on Friday, March 8th, at the Grosvenor Gallery; Dr. Buchanan, President, in the Chair. A large number of the Fellows and their friends were present. During the evening, the Fothergillian Gold Medal of the Society was presented to the successful competitor, Dr. J. Milner Fothergill, for his essay on the Antagonistic Action of Therapeutic Agents. Two silver medals were also awarded: one, to Dr. Julius Althaus, for his paper on Diseases of the Anterior Cornua of the Spinal Cord; the other, to Dr. Clement Godson, for valuable services rendered to the Society during his Secretaryship. Some excellent music, contributed by the Fellows, enlivened a most successful and pleasant evening. The following is a list of the officers and Council elected at the annual meeting on March 4th. *President:* Erasmus Wilson, Esq., F.R.S. *Vice-Presidents:* L. Sedgwick, M.D.; R. Davy, Esq., F.R.C.S.; Sir J. Fayer, K.C.S.I.; C. Godson, M.D. *Treasurer:* T. H. Hill, Esq. *Librarian:* C. Theodore Williams, M.D. *Secretaries in Ordinary:* J. A. Bloxam, Esq., F.R.C.S.; F. de Havilland Hall, M.D. *Secretary for Foreign Correspondence:* T. S. Dowse, M.D. *Council:* W. Adams, Esq.; H. Royes Bell, Esq.; Percy Boulton, M.D.; Woodhouse Braine, Esq.; J. Crichton Browne, M.D.; T. Lauder Brunton, M.D.; T. Bryant, Esq.; G. Buchanan, M.D.; A. Carpenter, M.D.; W. H. Corfield, M.D.; A. E. Durham, Esq.; D. H. Goodsall, Esq.; J. D. Heaton, M.D. (Leeds); J. Braxton Hicks, M.D.; C. Holman, M.D. (Reigate); R. J. Lee, M.D.; F. Mason, Esq.; J. C. Thorowgood, M.D.; A. Wiltshire, M.D.; J. C. Wordsworth, Esq.

SCOTLAND.

FEVER is rife in Airdrie; eighteen cases were removed to the hospital from one tenement.

TWENTY-FOUR cases of typhoid fever and 170 of measles were reported as having occurred in Leith during the month of February. Neither of the diseases has assumed a severe form.

THE Duke of Richmond and Gordon has resolved upon supplying the village of Fochabers with water at his own expense. The water will be taken from the burn of Fochabers, and will be collected in a large cistern above the town. The works have already been commenced.

AT the instance of Dr. Polson, the Board of Supervision has communicated with the local authority of Friedrickheim, and pressed upon it the necessity for introducing a regular and efficient system of drainage, and also a water-supply. A meeting of the townspeople has resolved to carry out a thorough system of surface-drainage.

THE epidemic of measles in Edinburgh continues to rage severely. Last week, 22 deaths from this disease were registered, as against 15 in the week before. Fortunately, with the exception of a slight outbreak of whooping-cough, the other zymotic diseases are almost entirely absent from the city.

AT a meeting of the Board of Directors of the Fife and Kinross Lunatic Asylum, held last week, Dr. J. J. Brown, Senior Assistant-Physician at the great Asylum, Morningside, was unanimously elected Medical Superintendent, at a salary of £350 for the first year. A report from the Commissioner, Dr. Arthur Mitchell, showed that there are 289 patients at present in the asylum.

EDINBURGH NEW TOWN DISPENSARY.

THE annual meeting of the subscribers and managers of the Edinburgh New Town Dispensary was held last week. The medical report showed that, during the past year, 11,437 persons were treated in connection with the dispensary; 2,023 of these patients had been attended at their own homes; 308 women had been attended in confinement. It was pointed out that such benefits as were thus derived by the sick poor were only in proportion to the amount of funds subscribed and placed at the disposal of the managers, and it was hoped that the public would be induced to provide increased support to an institution which was doing so much good work.

ROTHESAY WATER-SUPPLY.

THE Town Council of Rothesay have been for some time considering the propriety of acquiring the water-works of the Rothesay Water Company, and, at a recent conference with the directors, the latter agreed to accept £25,000, which was equal to £12 10s. per share; and also further agreed to recommend the shareholders to confirm the bargain, provided the Council made them the offer somewhat unanimously. The Council, at a recent meeting, agreed to take a *plébiscite* of the rate-payers; and they sent out circulars showing that, at £25,000, the works would yield a fair return at once, and a good profit in another year, as the rental of Rothesay was rapidly increasing. Out of 1,718 voting-papers issued, only 794 were returned; of these, 20 were blank and 24 spoiled. Of the 750 remaining, 417 were against the purchase and 333 in favour of it. The Council have not yet decided how to act in the matter.

THE SETTLEMENT OF LUNATICS.

A DECISION of considerable importance to parochial boards has recently been given in the Sheriff Court, Edinburgh. An action was brought by the Inspector of Poor for the parish of Dalkeith against the Inspector of Poor for the parish of Lasswade, for advances made on behalf of a child aged nine years, an idiot, daughter of a working man, who, with the sanction of the General Board of Lunacy, was boarded in her father's house. It was decided by the Sheriff-Substitute that the girl, being an idiot, was "a lunatic as defined by statute"; and that her father, being a working man and in weak health, had a good claim for parochial relief on her account; and that the defender, as representing the parish of her settlement, was liable to the pursuer for the advances made. Appeal was made to the Sheriff-in-chief, who confirmed the judgment, with additional expenses; the Sheriff, in a note, saying that the child, being a lunatic, would have been sent in the ordinary way to an asylum; and as the sanction of the proper authorities has been given for her remaining at home instead, the parish of her settlement is bound to provide what is necessary for her proper care and treatment, just as they would have had to do had she been sent to an asylum.

HEALTH OF SCOTLAND.

THE returns of the Registrar-General for Scotland, for the month of February, show that there were, in the eight principal towns, 3,406 births during the month; 261 of these, or about 7.5 per cent. of the whole, were illegitimate. The rate of illegitimacy varied in the principal towns, from 3.8 per cent. in Paisley to 10.3 per cent. in Aberdeen.

The marriages, 548 in number, were 84 below the average number for February, allowance being made for the increase of population. The deaths of 2,473 persons were registered during the month; allowing for the increase of population, this number is 368 under the average of February for the last ten years. The mortality varied from the rate of 17 per 1,000 persons in Perth to that of 34 per 1,000 in Paisley. Of the whole 2,473 deaths, 1,111, or 45 per cent., were of children under five years of age. The zymotic class of diseases proved fatal to 434 persons in the eight towns, constituting 17.5 per cent. of the whole mortality. The combined prevalence and fatality of scarlatina, whooping-cough, and fever in Aberdeen, and of measles in Edinburgh, caused this rate to be exceeded in each of these towns. Whooping-cough was the most fatal of all the epidemics.

VACCINATION.

THE period within which vaccination is compulsory in Scotland has been altered, as far as regards the parish of Durnish, in the county of Inverness, from six months to twelve months, on the application of the Parochial Board to the Board of Supervision. The reasons for this exemption from the ordinary terms of the Act are not given in the announcement of the alteration, published by the Board of Supervision.

IRELAND.

IT is purposed to hold a public meeting to protest against the abolition of the Wicklow County Infirmary, inasmuch as the question of closing that institution will come before the grand jury at the ensuing assizes.

MR. HENRY WALSH MAHON, late Surgeon in the Royal Navy, died at his residence near Dublin on the 9th instant, aged 69. The deceased was a Fellow of the Royal College of Surgeons, a Member of the Royal College of Physicians of London, and obtained Sir G. Blane's Gold Medal for his medical and surgical journal in 1845-6.

LIMERICK UNION.

Two additional cases of small-pox have occurred in the Limerick Workhouse, both patients being inmates of the hospital into which the first case had been admitted. The guardians have pointed out the desirability of isolating cases of this disease; but, in the present crowded condition of the hospital, the difficulties are considerable.

QUEEN'S COLLEGE, GALWAY.

DR. NICHOLAS W. COLAHAN has been appointed to the vacant Chair of Materia Medica in this College, lately held by Dr. Pye, now Professor of Anatomy. Dr. Colahan is a graduate in medicine, a Master in Surgery of the Queen's University in Ireland, and in 1870 was awarded First Senior Medical Scholarship.

EYRECOURT DISPENSARY DISTRICT.

AT a meeting of the Dispensary Committee held on the 1st instant, Dr. Henry O'Farrell was unanimously elected medical officer of the Eyrecourt Dispensary, in the vacancy caused by the death of Dr. Pelly. The emoluments of the post are £132: 10 per annum, exclusive of registration and vaccination fees.

SEWERAGE OF BANGOR.

BANGOR is a fashionable watering-place not far from Belfast, and its sanitary condition heretofore has not been of a very favourable kind. The Newtownards Board of Guardians, acting as the rural sanitary authority, prosecuted several parties for nuisances; but no penalties were inflicted, as it was proved that no sewers existed to convey away what was objectionable. A scheme was then suggested, at a cost of £5,000; but the inhabitants opposed it as extravagant; and at last a modified plan, the expense of which will be but trifling, has been

agreed upon, which, should circumstances require it, can be extended. In the scheme first proposed, it was intended to carry the sewerage a considerable distance out into the bay; but, in the plan which has been adopted, this will not be the case.

THE DUBLIN HOSPITALS.

SIR DOMINIC CORRIGAN, Bart., has resigned his seat on the Board of Superintendence of the Dublin Hospitals. The Board have acknowledged his eminent services by passing the following resolution: "That we receive with extreme regret the retirement of Sir Dominic Corrigan from this Board, of which he has been an active member since its formation in the year 1856. And, further, we desire to place on record our deep sense of the valuable services he has rendered by his constant attendance at its meetings, by his wise counsel in all its deliberations, and by his practical acquaintance with the organisation and management of the institutions under its superintendence."

DR. STEEVENS'S HOSPITAL.

AT a meeting of the Governors of this Hospital, held on Tuesday last, Dr. Richard Bookey was appointed Physician to the Hospital, *vice* Dr. Henry Freke, resigned. Dr. Bookey has been for many years connected with the Steevens's Hospital Medical College, and has won a high reputation as a pathologist, histologist, and medical teacher. Mr. R. Johnstone, the Resident-Surgeon of the Hospital, has been appointed to succeed Dr. Grimshaw, now Senior Physician to the Hospital and Lecturer on Practice of Physic, in the Lectureship on Materia Medica.

SMALL-POX EPIDEMIC IN DUBLIN.

THE epidemic still continues. There are at present nearly eighty patients in Cork Street Fever Hospital, besides several others in the Hardwicke, Steevens', and Meath Hospitals. With the view of providing for a probable increase in the number of cases requiring hospital treatment, the guardians of each of the Dublin unions have appointed a committee to inquire into the available hospital accommodation; and should this prove inadequate, to consider what arrangements should be made. A plan of relieving the hospitals by providing a convalescent hospital is suggested. By this means, a large number of convalescent cases could be promptly removed from the hospitals, and they would then be able to receive and treat a large number of fresh acute cases. The subject of providing temporary accommodation for persons in houses in which contagions had occurred, during the time that these houses were being disinfected, is also under consideration. To meet the emergency caused by the rapid increase in the epidemic, the Committee of Management of Cork Street Hospital have commenced the erection of a wooden shed in order to afford additional accommodation. The following analysis of admissions to Cork Street Hospital during seven months of the present epidemic and of that of 1871-2 was submitted to the last meeting of the Dublin Sanitary Association:

August, 1871	...	4	August, 1877	...	4
September, "	...	8	September, "	...	2
October, "	...	41	October, "	...	3
November, "	...	59	November, "	...	8
December, "	...	78	December, "	...	23
January 1872	...	81	January 1878	...	19
February, "	...	90	February, "	...	76

At the same meeting, attention was directed to the Registrar-General's weekly return, from which it appeared that the Dublin death-rate was 7.5 per 1,000 higher than that of London, 11.5 higher than Glasgow, and 6.5 higher than Edinburgh. The zymotic death-rate of Dublin was 2.6 per 1,000 higher than that of twenty large English towns.

BELFAST UNION HOSPITAL.

THE Local Government Board, in forwarding the periodical report of their inspector, Dr. Roughan, on this union, among other matters draw attention to the dormitories, which are described as being fully occupied and in some instances overcrowded. It appears also that there is no means of ventilating the sleeping apartments at night, and

no system of closets for the convenience of the inmates; so that the air must necessarily become contaminated. Dr. Roughan suggests that some simple and inexpensive process should be adopted for supplying a sufficient quantity of pure air to the occupants of the several wards, in which the minimum cubical space allowed for each inmate has been reached. In his supplementary report on the workhouse buildings, Dr. Roughan observes that the drainage and sewerage of the workhouse premises generally are still most defective, especially in connection with the hospitals.

SMALL-POX IN BELFAST.

VERY few additional cases of small-pox have occurred since last week, and the check to the disease has been attributed to the energetic action of the sanitary staff of the borough. At a meeting last week of the Belfast guardians, a report was received from Dr. Seaton Reid, who suggested that a building should be provided as a quarantine house, into which healthy members of a family could be moved after a sick member had been sent to hospital, and where they and their clothing could be cleaned. Many lives, he considered, would be saved by such an arrangement. He also recommended that a wash-house should be erected by the sanitary authorities, where clothing from families, whether poor or rich, could be washed and disinfected when contagious diseases had occurred. This clothing was at present washed secretly by washerwomen, and in this way scarlatina and other contagious diseases were liable to be introduced into private families.

CHARGE OF MANSLAUGHTER AGAINST A BONE-SETTER.

AN elderly man named Hymes was last week indicted at Kilkenny Assizes for the manslaughter of one Keys in July last. Keys, it appeared, fell off a cart and sustained a trivial injury to the right arm, and was attended by the bone-setter, who applied a plaster composed principally of pitch, and bandaged the limb so tightly as to cause mortification, the patient dying a few days afterwards. Baron Dowse, in charging the jury, expressed a hope that whatever might be the result of this case, it would deter people from having recourse to the untrained and unskilled country quacks, in place of the educated and properly qualified medical practitioners. For the poor, the Government had provided a staff, the members of which, though often miserably underpaid, brought the highest amount of skill and ability to bear upon every case committed to their treatment. Why these poor people could, then, still seek after those bone-setters, he could not tell. The jury having acquitted the prisoner, the judge hoped that for the rest of his life he would not again practise the art of medicine or surgery.

SCIENTIFIC LECTURES.

THE fifth lecture of this year's series of scientific lectures connected with medicine was delivered on Monday last by Dr. Grimshaw, being the first of two lectures on "The Present State of our Knowledge of the Intimate Pathology of Contagion, and its Relation to the Prevention and Cure of Zymotic Diseases". Dr. Grimshaw stated the causes which had led him to the special study of the subject of his lectures; referred to the great injury effected by contagion and infection; and, while disclaiming any title to be considered an original investigator of pathological questions, pointed out how it is the duty of every practical physician to study the observations of physiologists and pathologists, with a view of applying their precepts to practice. The lecturer then pointed out that four series of observations had been confounded by many, and inferences drawn which were not warranted by the relations which these bore to one another. These series of observations were—1. Into the nature of fermentation; 2. Into the question of spontaneous generation; 3. Into the nature of septic infection; 4. Into the nature of the contagium of specific diseases. These four series were arranged in two groups, the first two forming one group, not having any necessary connection with disease; the second group consisting of the two latter, both of which necessarily included the study

of diseases, and were essentially pathological in their nature. These different lines of inquiry were so closely connected that, although they had not any necessary connection, yet they so often interlaced that they could not be studied separately. The lecturer then proceeded to discuss the results arrived at from each series of observations. In the case of fermentation, it was shown that the relation which the study of fermentation bears to pathology is, that the septic fermentation furnished by the presence of bacteria is capable of producing the septic poison, just as vinous fermentation produces the alcoholic poison. The consideration of spontaneous generation led the lecturer to conclude that, up to the present, spontaneous generation is not proven; and that all experiments in its support have been disproved. It bears an important relation to the causes of disease; as, if spontaneous generation be possible, then we have not only to guard against the introduction of contagion from without, but also to prevent its origin within human beings. Septic infection was then considered, and the results of the introduction of the septic poison shown to depend upon the coagulation of the blood consequent on the disintegration of the blood-corpuscles by the action of the septic poison. It was shown that septic poison produced apart from any individual may cause the illness or death of that individual by direct introduction into the bloodstream, while to other cases the poison was elaborated in the wound by the growth of bacteria on the original soil provided by the discharges from the wound. This was illustrated by an account of illnesses from which the lecturer himself had suffered. The special character by which the septic poison was distinguished from the contagium of specific diseases was its incapacity for self-multiplication, and the effects produced being in direct proportion to the dose administered.

RATHDOWN HOSPITAL, MONKSTOWN.

THE annual meeting of the friends of this Institution was held last Monday. The report of the Managing Committee for the past year showed that there had been an increase in the annual subscriptions, principally due to the establishment of a dispensary at Kingstown, which had the effect of increasing the number of supporters and extending the usefulness of the charity. The Committee regretted to state that the County of Dublin Grand Jury had withdrawn the annual grant of £90, leaving the Institution now solely dependent upon the subscriptions of the charitable. During the year, 158 patients were admitted into hospital, whilst 1,418 were treated at Monkstown Dispensary, and at the Kingstown branch 961 cases were relieved and 112 visited at their own homes. It is proposed to erect a new wing, at a cost of £900, to provide accommodation for pay-patients, a ward for general cases, additional accommodation for nurses, and wards for isolating infectious cases. This wing will not be commenced until the entire cost has been obtained.

PORTUMNA UNION.

DR. COATES, medical officer of Portumna Dispensary District, at a meeting last week of the guardians of Portumna Union, submitted a list of one hundred and ninety-one names of occupiers of premises in his district which were in an unsanitary condition, being all devoid of proper accommodation, and some being unfit for human habitation. He suggested that all the parties be required to cleanse their premises, and provide privy accommodation, as well as to prepare receptacles for keeping manure-heaps at least thirty yards distant from each dwelling. These recommendations were ordered to be carried out. A report of an analysis of water obtained from a well in Abbey village showed that it was impure, containing an excessive amount of organic matter, and the Board ordered it to be closed up.

In future, medical officers are to be at liberty, in urgent cases, to attend the wives and children of soldiers married without leave, and to supply medicine for them from the public stock to a limited extent, at the discretion of the principal medical officer. In all such cases, the prescriptions are to be filed at the surgery for subsequent examination.

MEMORIAL TO CLAUDE BERNARD.

A SUBSCRIPTION list has been opened in France for the foundation of a memorial to this illustrious physiologist, whose services to science have been such, and whose reputation in this and in other continental countries is so great, that it is unnecessary that we should add a word to indicate the cosmopolitan character of such services, or emphasise the considerations which point out the propriety of making such a memorial to some extent as cosmopolitan as were the genius which it commemorates and the services to science and humanity which it records. M. Dumontpallier, General Secretary of the Society of Biology, of which Claude Bernard was the perpetual President, is Secretary to this memorial; and, in writing to Mr. Ernest Hart to suggest the initiation of subscriptions for this purpose in England, says: "Claude Bernard, by his genius and his science, belonged to all nations; and France would be grateful to foreign *savants* who would unite in our work of admiration and gratitude to the illustrious physiologist." A small subcommittee has been formed for the purpose, consisting of Sir James Paget, Dr. J. Burdon Sanderson, Professor Humphry, Dr. Michael Foster, Mr. Ernest Hart, Mr. J. G. Romanes, and Professor Gerald Yeo of King's College, to the latter of whom subscriptions may be sent.

We are authorised to add that the Physiological Society of Great Britain, which, it will be seen, has added its Honorary Secretaries to the Subcommittee, associates itself with this movement, and will officially communicate a letter of sympathy to the Société de Biologie in Paris.

THE MEDICAL DEPARTMENT OF THE CONVICT SERVICE.

AT the commencement of the financial year, the New Prisons Act will come into operation; it is, therefore, convenient that the claims of the Medical Department of the Convict Service should at this season be brought under the notice of our readers. Several letters have already appeared in the medical journals, pointing out the duties and responsibilities of the department and the total inadequacy of the remuneration. The small number of appointments, in comparison with that which is found in other branches of the Government service—for example, the Army, Navy, and Civil Service—is one great reason why the claims of the surgeons are not sufficiently recognised. The explanation given by the authorities, that "the supply equals the demand", is simply because the vacancies are not numerous; and when one does occur, a candidate is obtained, although often with difficulty, of a class of men who are willing, while young, to catch at an appointment which, being under Government, insures directly a certain, however inadequate, remuneration. But the shoe begins to pinch after several years' service, when the maximum salary allowed (£400 a year) is arrived at, and private practice is prohibited. The responsibility and arduous nature of the duties may to some extent be realised when it is remembered that, whenever a complaint is made by a prisoner or his friends, or a death occurs during imprisonment, the doctor is the one upon whom the onus rests. A prisoner is stated to have been unfit for the labour, or insufficiently fed, or his disease was not taken into consideration; the executive department shrug their shoulders, a committee of inquiry is forthwith appointed, the doctor is responsible, and before long his name figures in the debates in the House of Commons. In a Public Works Prison, containing over 1,500 prisoners, the annual number of complaining sick prescribed for amounts to 38,700; the number admitted to hospital exceeds 1,300. By these figures, it may be judged how difficult it is to discriminate between the real and the feigned; and those who are the most experienced in the practice of our art will know best how to make allowances for imperfections in this respect. There are no half measures. A prisoner states that he cannot work, and the medical officer has at once to say in writing whether he is fit or not. Not a single day's bread-and-water, or punishment of any kind, can be inflicted without the signature of the surgeon. If a decided course be not at once adopted, the number of prisoners shirking their work becomes overwhelming, and the machinery comes to a standstill. The fact that so few mistakes are made speaks a good deal for the efficiency of the medical staff of the service.

But, if the opinion of the surgeon be so necessary to the proper management and working of a convict prison, why is he not more

liberally paid? It is natural that every man, whatever his calling, should strive to attain a competency as his length of service increases, and it is unfair that no prize whatever should be within the reach of those who do their duty zealously. The maximum salary is arrived at after five years' service, and there the unfortunate doctor is doomed to remain; while his pension at the end, being a fraction of the small pay while on full duty, becomes a mere nothing. It is of the first importance to obtain candidates who are properly fitted for these appointments, and it is a mistake to be satisfied with young men from the hospitals, who are inexperienced in clinical work. If the Government wish to attract good men, they must offer adequate remuneration; and an improvement in the scale of pay, such as has been recently granted to the clerks in the Civil Service—especially a steady increment, however small, as a reward for efficient services—would go a long way to dispel the present dissatisfaction and loss of heart which pervade the whole department.

At Woking Invalid Prison, where the number of patients always in hospital is over 150, besides many other invalids, and about 100 certified lunatics, the surgeon has less pay than the governor, who has no responsibility whatever. At present, all the good appointments in the service are kept for the executive department, and the medical officers are completely left in the background. We trust, however, that, when the new Bill comes into force, more consideration will be shown to this deserving body of professional men, who spend their lifetime in ministering to the wants of such a thankless class of men as convicts.

HOSPITAL AND DISPENSARY MANAGEMENT.

SELF-SUPPORTING MEDICAL SOCIETY AT EDGBASTON.

AT the present time, when the provident system is attracting much attention at Birmingham, the following extract from the *Charity Organisation Reporter* of January 10th will be read with interest.

"The following is a statement we have lately had sent us of a medical society which has been self-supporting for twenty-one years. Mr. T. Britton, 101, Morville Street, Ladywood, is the acting manager:—'The necessity of a well conducted self-supporting medical society has long been an acknowledged want in Birmingham by thousands of families, in which they could have the benefit of medical attendance, with medicine, in the hour of sickness, by a small weekly contribution. This necessity has happily been supplied to the numerous families of Edgbaston and Ladywood by that well known and long established society the Edgbaston Medical Self-Supporting, which has given general satisfaction to all its members, by the prompt attention and skilful treatment of the gentlemen who are medical officers of the society. The manager has resolved, after twenty-one years of experience, by this prospectus to make it known to those families who have not already heard of its advantages, and to urge upon them the necessity of at once enrolling themselves as members. The payments being of so moderate a character—one penny weekly—brings it within the means of all. Persons in health taken from one to fifty years of age.'

"THE NATIONAL DISPENSARY."

THE *Kilburn Times* of December 28th contains the following advertisement.

"The National Dispensary, 14, Lismore Circus, Haverstock Hill, open daily from 11 to 1, and 6 to 9 P.M., and on Sundays from 6 to 9 P.M. only. Conducted by Dr. E. A. Lewis and qualified assistants. For qualifications, *vide Medical Register*. The dispensary has for its object the treatment, by legally qualified medical men, of all diseases, acute or chronic, medical or surgical, at so moderate a cost as to be within the reach of all. Experience has shown that one-half the severest cases in our hospitals would never have had occasion to be received there, had the patients in the first instance sought skilled advice; and especially in cases of *babies and young children*, thousands of lives can be saved annually by timely treatment. Diseases of women and children are made a special feature here. Accouchements attended—fee, from 10s. 6d., payable in advance. Private consultations, operations, etc., as per arrangement. Yearly subscriptions, £1 1s."

This advertisement reminds us of a class of institutions which are not much in favour with the profession. What is the nature of this "National Dispensary"? It is like, and yet unlike, the many spurious self-supporting dispensaries which have sprung out of the provident movement. We are all familiar with "shilling dispensaries", but this is a "guinea dispensary". As the dispensary is intended for the class who frequent hospitals, we may ask how is the guinea to be paid—all at once, or by instalments? Perhaps these are to be the same as at the regular provident dispensaries of the neighbourhood, and with which, by the way, Kilburn and Haverstock Hill are particularly well supplied. But the midwifery fee is so low (10s. 6d.), that the "National Dispensary" would seem to underbid both the provident dispensaries and the medical men of the district. A national institution should not do anything so ungenerous; on the other hand, the time which Dr. E. A. Lewis proposes to give to his dispensary is lavish beyond all precedent. We are afraid that if they have many patients, Dr. E. A. Lewis and the "legally qualified medical men" who assist him will be harassed to death, and quite unable to carry on the branch dispensaries at Holloway and Kilburn which they propose to open shortly.

ASSOCIATION INTELLIGENCE.

NOTICE OF EXTRAORDINARY GENERAL MEETING.

NOTICE is hereby given, that an Extraordinary General Meeting will be held at the Queen's Hotel, Birmingham, on Tuesday, the 2nd day of April next, at three o'clock in the afternoon :

1. To consider requisition received from members of the Metropolitan Counties Branch, of which the following is a copy.

To the President and Committee of the Council of the British Medical Association.

Gentlemen,—We hereby request you to make arrangements for submitting the following resolutions to an early special general meeting of the British Medical Association.

- "1. That this meeting is of opinion that the Reports of the Proceedings of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted.
- "2. That this meeting desires to express its opinion that in the selection of a house for the Association, it is desirable that the Council, Committee, and consulting rooms should be separate from the printing and publishing offices."
2. To consider the privileges of lady-members.

By order of the Committee of Council.

FRANCIS FOWKE, *General Secretary.*

London, March 13th, 1878.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

THE next meeting is appointed to be held at St. Bartholomew's Hospital, Rochester, on Tuesday, March 19th, at 4.30 P.M. : Dr. BURNS, R.N., in the Chair.

Dinner will be provided at the Bull Hotel, Rochester, at 6.15 P.M.

Papers have been promised by A. W. Nankivell, Esq., on Acute Necrosis; and by J. Thoresby Jones, Esq., on a Case of Displacement of the Sacrum.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary.*

Rochester, March 5th, 1878.

SOUTHERN BRANCH.

AN ordinary meeting of the above Branch will be held at the George Hotel, Portsmouth, on Wednesday, March 20th, 1878, at 4.15 P.M.

The following papers are expected.

1. Mr. Parson: Large Cystic Sarcoma of Testicle.
 2. Dr. Knott: Notes on a Case of Pleurisy.
 3. W. E. Saunders, Esq., A.M.D.: The Treatment of Intermittent Fever by Nitrite of Amyl.
- Dinner will be provided at 6.30 P.M. Charge, 6s., exclusive of wine.

Members intending to be present at the dinner are requested to send in their names on or before Monday, March 18th.

J. WARD COUSINS, *Honorary Secretary.*

Southsea, March 12th, 1878.

YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Infirmary, Rotherham, on Wednesday, March 27th, at 3 P.M.

Members wishing to read papers or bring forward cases are requested at once to communicate with the Secretary.

After the meeting, the members will dine together at the Ship Hotel at 5 P.M. Tickets (exclusive of wine) 6s. 6d. each.

W. PROCTER, M.D., *Honorary Secretary.*

York, February 26th, 1878.

METROPOLITAN COUNTIES BRANCH.

A GENERAL meeting of this Branch will be held at 11, Chandos Street, Cavendish Square, on Wednesday, March 27th, at 8 P.M., when the discussion of Mr. Holmes's paper on Provident Dispensaries will be resumed.

ALEXANDER HENRY, M.D. }
W. CHAPMAN GRIGG, M.D. } *Honorary Secretaries.*

London, March 13th, 1878.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT MEETINGS.

The next meeting of the above District will be held at the Surrey County Hospital, Guildford, on Thursday, March 21st, at 3.45 P.M. : HENRY TAYLOR, Esq., in the Chair.

The following papers have been promised.

1. Mr. Henry Smith: On Surgical Interference in Malignant Growths.
2. Mr. Thomas Butler: A Case of interest in the Hospital.
3. Mr. A. A. Napper: A Case of Complete Separation of the Gall-Bladder from the Liver.
4. Mr. Charles Sells: A Case of Ovariectomy.
5. Mr. Henry Taylor will show a Tumour of the Ovary, and a Tumour of the Pituitary Body.

Dinner will be provided at the White Lion Hotel, at 6 P.M. precisely. Charge, 7s., exclusive of wine.

A. ARTHUR NAPPER, *Honorary Secretary.*

Cranleigh, March 7th, 1878.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next meeting will be held in the Council Chamber of the Town Hall, Dover (not at the Harp, as announced in last week's JOURNAL), on Thursday, March 21st, at 3 o'clock. Dr. ROBINSON will preside.

Dinner will be provided at the Harp Hotel, at 5 o'clock precisely.

Notices have been received of the following communications to be read to the meeting.

1. Mr. Clement Walter: Hydrophobia.
2. Mr. Teevan: On the Importance of an Early Diagnosis of Stone in the Bladder.
3. Mr. Wachter: Case of Foreign Body in the Female Bladder.
4. Mr. Coke: Case of Compound Displacement of Shaft of Tibia from its Lower Epiphysis: Reduction, with Successful Result.

Gentlemen who intend to be present at the dinner are requested to inform the Honorary Secretary on or before Tuesday, the 19th instant.

WM. KNIGHT TREVES, *Honorary Secretary.*

Margate, March 11th, 1878.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE first meeting of the above District for the present year will be held at the New Kentish Hotel, Tunbridge Wells, on Friday, March 29th, at 3 P.M. : F. MANSEY, Esq., of Tunbridge Wells, in the Chair.

Dinner at 5 o'clock. Charge, 6s., exclusive of wine.

Members intending to read papers, or offer communications, are requested to forward notice of the same, not later than Thursday, the 21st instant, to the Honorary Secretary, in order that they may be inserted in the circular convening the meeting.

The following have been promised.

1. Dr. Fairlie Clarke: Case of Diffused Melanotic Cancer.
2. Cases by the Chairman: a. Spindle-celled Sarcoma; b. Long-standing Hydrocele cured by Injections of Port-wine and Spirits of Wine.

THOMAS TROLLOPE, M.D., *Honorary Secretary.*

9, Maze Hill, St. Leonard's-on-Sea, March 12th, 1878.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE next meeting of this Branch will be held at Carmarthen, on Thursday, April 4th.

Members desiring to read papers, etc., are requested to forward the titles to Dr. Sheen, Cardiff, before the 28th instant.

ANDREW DAVIES, M.D. }
ALFRED SHEEN, M.D. } *Honorary Secretaries.*

March 11th, 1878.

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at Hexham, on Thursday, April 25th.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to signify their intention to the Secretary at their earliest convenience.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, March 12th, 1878.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

At a meeting of the Committee of Council, held at the Freemasons' Tavern, Great Queen Street, London, on Wednesday, the 13th day of March, 1878, specially convened to consider the correspondence in the JOURNAL, relative to the published Proceedings of the Committee of Council, and also the question of female members: Present, Dr. R. W. FALCONER (President of Council), in the Chair, Dr. Eason Wilkinson (President), Mr. W. D. Husband (Treasurer), Dr. T. Clifford Allbutt, Mr. Alfred Baker, Dr. M. De Bartolomé, Dr. L. Borchardt, Dr. Alfred Carpenter, Dr. C. Chadwick, Dr. J. W. Cousins, Dr. A. Davies, Dr. Eastwood, Mr. W. A. Elliston, Dr. B. Foster, Dr. W. C. Grigg, Dr. C. Holman, Mr. J. R. Humphreys, Mr. A. Jackson, Dr. D. J. Leech, Dr. E. Lund, Dr. F. E. Manby, Dr. E. Morris, Mr. R. H. B. Nicholson, Dr. C. Parsons, Dr. R. C. Shettle, Dr. E. H. Sieveking, Dr. A. P. Stewart, Dr. W. F. Wade, Dr. E. Waters, and Mr. C. G. Wheelhouse.

Read letters of apology from Mr. Wright Baker of Derby, Mr. Calender, F.R.S., Dr. Paget of Cambridge, Dr. Duffey of Dublin, and Mr. Mason of Bath.

Dr. Grigg handed in his protest against the meeting, of which the following is a copy:

"That, inasmuch as the present special meeting is not convened in accordance with the conditions specified in By-law 27 of the Association, page 19, this meeting is therefore illegal, and cannot proceed to business.
(Signed) "W. C. GRIGG, M.D.,
Hon. Sec. Metropolitan Counties Branch.

"6, Curzon Street, Mayfair, March 13th, 1878."

Moved by Dr. DE BARTOLOMÉ, seconded by Mr. HUMPHREYS, and

Resolved: That this meeting be considered as called legally, and that the Committee of Council do now proceed to the next business.

The PRESIDENT of the Council then called upon Dr. Grigg to state his reasons for holding that, in the selection of the house for the Association, it is desirable that the Council, Committee, and consulting rooms should be separate from the printing and publishing offices.

Dr. GRIGG then gave his reasons, whereupon it was moved by Dr. WADE, seconded by Dr. ALLBUTT, and

Resolved unanimously: That the following statement be published in the JOURNAL.

"The increasing business of the Association has long required more commodious and more central offices, and, in order to meet this want, the Committee of Council have taken the premises in the Strand. The new offices will enable the whole of the ordinary work of the Association to be conducted under one roof: an arrangement which, in the experience of the Committee of Council, will be more than ever necessary in view of the extended operations of the Association; and the locality of the offices, it is thought, will contribute to the success of the JOURNAL as an advertising medium, and thus add to the revenue of the Association. The desirability of the Association undertaking what printers call the composition of the JOURNAL has been pressed upon the Committee of Council in special reports by the editor and by the business manager of the Association, and, after an exhaustive inquiry, the pecuniary advantage of the course has been so conclusively proved, that the Committee of Council feel sure it will receive the cordial support of the Association when fully submitted to the members, as it will be in the annual report."

Moved by Dr. GRIGG, and (seconded by Mr. R. H. B. Nicholson *pro forma*):

1. That (a) an amended Report of the Proceedings of the Committee of Council of January the 9th be published, including a copy of the amendment moved by Mr. Husband and seconded by Dr. Eastwood in reference to Dr. Wilson Fox's letter; (b) a copy of the Report of the Committee on Habitual Drunkards; and (c) the regulations for the better management of annual meetings.

2. That, in view of the resolution of the Metropolitan Counties Branch and of similar resolutions included in the requisition for a special general meeting, signed by upwards of two hundred and thirty members of the Metropolitan Counties Branch, the Subcommittee upon the new premises be instructed to stay any further proceedings or expenditure until after the special general meeting has expressed an opinion on those resolutions.

The resolution having been put from the chair, the same was declared to be lost, no vote being recorded in its favour.

Moved by Mr. HUSBAND, seconded by Mr. HUMPHREYS, and Resolved unanimously: That the Committee of Council, having considered the statements of Dr. Grigg respecting the publication of the Proceedings of the Committee of Council, fully approve of the conduct of the President of Council.

Read, requisition from the members of the Metropolitan Counties Branch, of which the following is a copy.

To the President and Committee of the Council of the British Medical Association.

Gentlemen,—We hereby request you to make arrangements for submitting the following resolutions to an early special general meeting of the British Medical Association.

"1. That this meeting is of opinion that the Reports of the Proceedings of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted.

"2. That this meeting desires to express its opinion that in the selection of a house for the Association, it is desirable that the Council, Committee and consulting rooms should be separate from the printing and publishing offices."

Moved by Mr. HUSBAND, seconded by Dr. BORCHARDT, and

Resolved unanimously: That, in compliance with the requisition received, a Special General Meeting be held at Birmingham on April 2nd, at three o'clock.

Read letters from Dr. Wilson Fox and Sir William Jenner, stating their intention of resigning in consequence of lady-members being permitted to attend the meetings of the Association.

Moved by Dr. EASTWOOD, seconded by Dr. GRIGG, and resolved unanimously:

"That the Committee of Council is of opinion that women should not be admitted as members of the Association, and that a by-law be submitted to that effect to the annual meeting."

Moved by Dr. STEWART, and

Resolved: That the consideration of the privileges of lady-members be referred to the special meeting of the Association, to be held at Birmingham.

METROPOLITAN COUNTIES BRANCH: GENERAL MEETING.

A GENERAL meeting of the Metropolitan Counties Branch was held at 11, Chandos Street, Cavendish Square, on Wednesday, February 27th, at 8 P.M.; SEPTIMUS W. SIBLEY, Esq., President, in the Chair.

Treasurership of the Branch.—The PRESIDENT announced that, since the last meeting of the Branch, the Treasurer, Robert Dunn, Esq., had died. The Council had unanimously passed a resolution, expressing regret at the loss they had sustained, and had forwarded it to the family of the late Mr. Dunn. They had also appointed Dr. Walter Dickson to act as Treasurer of the Branch until the next annual meeting.

PROVIDENT DISPENSARIES.

Mr. T. HOLMES read a paper on Provident Dispensaries, which is published at page 355.

Mr. R. PARAMORE said that the subject was full of importance and interest to the general practitioners of medicine. He had heard it stated that the provident system should take hold on the upper stratum of the artisan class. But this class supplied most of the patients of many of the medical men in London, and contributed many thousands of pounds to the profession. If this source of income were taken from the medical men, many of them would suffer; and the provident system would do much harm if it were made to include the class to which he had referred. The club system had been much increased; but he thought that club-practice was, as a rule, degrading, and that it was impossible to conduct it with satisfaction when the payments were so low as four shillings a year. The hospital out-patient system was indeed defective; but he feared that, if any sweeping change were made, the evil might be increased. The provident system would no doubt do good; but it was also liable to do harm. Some practitioners might get the appointments, while others would be excluded.

Mr. NELSON HARDY said that, agreeing in the main with Mr. Holmes, he thought that, with regard to one point to which he had referred, in his (Mr. Hardy's) opinion, it was desirable to look at the matter not altogether from a hospital physician's or surgeon's point of view, but more broadly as it affected the whole profession, and especially the general practitioners. The question brought before the meeting by Mr. Holmes was part of a very large one; but Mr. Hardy would restrict himself almost entirely to stating some facts with reference to the remuneration of medical officers, just glancing, if possible, at the question, how far the system of provident dispensaries had been successful in remedying the acknowledged evils of the out-patient system in London. In a conversation he had last August, at the meeting of the British Medical Association, with one who had been working and writing on this subject longer probably than any one else in this Branch, or indeed in the profession, Dr. A. P. Stewart, he mentioned to Mr. Hardy that Dr. William Farr had expressed an opinion that, at some future time, it might possibly be arranged that a large part of the

community might be provided with medical attendance on the plan of health-assurance, which, with mutual combination, is the essential principle of provident dispensaries. The idea struck Mr. Hardy at the time as being a very good one, and he had lately communicated with Dr. Farr on the subject; and he had, in reply, sent a copy of his letter prefixed to the *Supplement to the Thirty-Fifth Annual Report of the Registrar-General*, containing his views, at the same time expressing his deep interest in the question. These were some of Dr. Farr's figures. In England, in 1871, the deaths were 514,879. This implied that 1,029,758 persons were constantly ill from diseases of some severity; or, in other words, that there were annually 12,357,096 patients ill, on an average, for a month each. These figures were already large; but, when it was considered that for each one of a number of persons ill for a month, on an average, there was at least another ill for but a few days, it would be found that there were about 24,000,000 patients, or cases of illness, where medical attendance had to be provided for. There were three principal ways in which such medical attendance might be provided, namely: 1. Private practice, in which fees proportionate to the means of the patient and the reputation of the practitioner were paid; 2. Friendly societies and clubs, in which, for a fixed sum per member per year, the doctor undertakes to supply medical attendance and medicines; 3. The Poor-law medical department, which paid, often very inadequately, medical men for attending on those who could not pay for themselves. (Mr. Hardy purposely omitted reference to the gratuitous out-patient system, beyond saying that it was not, in his opinion, a mode in which any large portion of the population ought to receive medical advice.) In discussing the question, whether the payments to medical officers under the present provident dispensary system were adequate or not, it would be well not to take too high a standard. It would be manifestly unfair to compare the receipts from this source with those from private practice; and he was quite content to take the best clubs and Poor-law medical officers' salaries, such as they were in London, as the standard of comparison. He did not suppose that any member of the profession would wish to set up clubs at 2s. 6d. a head *per annum*, or Poor-law districts where the salary was so small as £15 a year, as models that should be imitated by provident dispensaries. At the present time, in the metropolitan district, thanks to the exertions of Dr. Joseph Rogers, Mr. Ernest Hart, and others, the average salary of a Poor-law medical officer was, he believed, not less than £100 a year. For this he had to attend at certain hours in the day at the dispensary provided, and to visit the sick poor who required it, but he had nothing to do with the drugs or their dispensing. But, on examining the statistics of provident dispensaries, it would be found that in London, according to the statistical table prepared by Dr. Ford Anderson, and published as an appendix to Sir C. Trevelyan's paper already referred to by Mr. Holmes, that there were, in April 1877, twenty-seven provident dispensaries; and of these, in thirteen the statistics, with regard to salaries, midwifery fees, and number of medical men, were given with sufficient fulness to enable the following facts to be stated. In but one of these thirteen dispensaries (and but three of the whole twenty-seven) did the amount divided between the medical officers average £100 a year each (excluding, of course, midwifery fees, mostly at 10s. each). In one it was as low as £15. Taking the total amount paid to medical men in these thirteen dispensaries, and distributing it equally amongst the forty-four medical officers, it would give but £45 *per annum* to each of them; and this not for the most part in newly-established institutions, but including some of the oldest and best provident dispensaries in London, such as Camberwell, Paddington, and St. John's Wood. Dr. Rogers, speaking in 1873 of the salaries of Poor-law medical officers, justly complained that there was no uniformity in them; that the rate of payment varied in different places from an average of 8d. per case of illness to 7s. per case. In the table of provident dispensaries already quoted, after deducting midwifery fees of 10s. each, the matter stood as follows. At Paddington, 7,146 cases of illness were treated, and £200 was paid to the medical men, being not quite 7d. per case. At St. John's Wood, 3,294 cases were treated and £154 paid, being 11d. per case. At Hampstead, for 960 cases £79 16s. was paid, or 1s. 8d. per case. At Camberwell, 11,190 cases were treated and £590 paid, or 1s. per case. In short, at five provident dispensaries, of which full statistics were given, nearly 25,000 cases of illness were treated by qualified medical men for rather less than 1s. a case. In making these calculations, he had not selected particular dispensaries, but had taken all of which full particulars were given in Dr. Ford Anderson's table. He would take another standard of comparison. The friendly societies, under the various names of Oddfellows, Foresters, and other clubs, were organised on a self-supporting basis, and the best of them paid 4s. or 5s. a head per year to their medical officers, for which, it was true, medicine had to be provided; but, as they only admitted adult males, the proportion

of cases of illness was very much less than where women and children were taken. Dr. Farr alluded to this system of contract as follows. "It is already the custom of the proprietors of mines, and of other great works, to engage medical men to attend their workpeople by the year. This practice is laudable and deserves extension. The friendly societies contract for medical attendance, the only fault being that the terms are too low to insure the utmost efficiency." (*Supplement to the Thirty-Fifth Annual Report of the Registrar-General*, page lxxxi.) Dr. Farr was probably alluding to those clubs to which Mr. Hardy had referred as paying so low as 2s. 6d. per head *per annum*; but what would he have said if he had learned that, in the most successful provident dispensary in London—namely, that at Camberwell—the contract price for medical attendance, or at least the sum actually paid for such attendance, exclusive of midwifery fees, was at the rate of 1s. 4½d. per head *per annum*; while at the next largest (that at Battersea), which, however, it is but fair to add, had only been "converted" in 1876, it was very much lower? He would only further direct attention to a statement made in the column of remarks in Dr. Ford Anderson's table with reference to the dispensary at Heath Street, Hammersmith, that "a local chemist dispenses at 1s. 6d. per head *per annum*, including medicine". Here was another standard of comparison, which surely was low enough; and if any one were content with such a standard, he need not dwell upon the trifling difference between 1s. 6d. and 1s. 4½d. in favour of the chemist. The question which he wished to bring before this Branch was: Ought we, as members of an honourable profession, to be content with such payments as these? Does 7d. per case of illness, and 1s. 4½d. per member *per annum* remunerate a medical man properly for attendance on a provident patient, and if so, how can we ask more for attending club patients or paupers? Is £15 a year a sufficient recompense for attending two or three times a week at a dispensary at stated hours and being liable to be called to cases of illness at any hour of the day or night? Would any business man undertake to attend, or even let one of his clerks attend to the most routine work on such terms? The answer which he thought should be given to such questions could be easily guessed—but it might be as well to state it explicitly—he did not consider that the salary of any provident dispensary doctor should be less than £100 a year; or, if less, he would have him paid at the rate of 5s. per member or 2s. 6d. per case of illness, at the least. If the provident system could not yield such payments, he would consider it unworthy of adoption; but his belief was that if the present out-patient system were modified as Mr. Holmes proposed, there would be room for provident dispensaries on a scale of which there was now little idea. It was not to the provident principle that he objected, but to people being taught providence at the expense of our profession, as they used to be and are still taught to consider it a charity for medical men to give away their services in the most improvident manner. He had no time to refer to the question how far the system of provident dispensaries had become successful in remedying the evils of the out-patient system. It seemed to him that the number of patients at our large hospitals went on continually increasing, in spite of the fact that since 1870 the number of struggling, semi-charitable, semi-provident dispensaries in London have now doubled. He hoped that before the Branch pronounced any opinion in favour of a further increase, it would make sure that some of the worst features of poor-law and club medical practice would not be reproduced in these institutions.

Dr. JOSEPH ROGERS said that it was difficult to work out such a scheme as was propounded in Mr. Holmes's paper. He was present some years ago at a meeting in the rooms of the Royal Medical and Chirurgical Society, where the question of the out-patient department of hospitals was considered. When the facts were stated, great disgust was expressed, and a committee was appointed; but very few of the members afterwards met; and it was only through the energy of Sir Charles Trevelyan, Mr. Holmes, and others, that the subject was kept in sight at all. Mr. Holmes had said that well-to-do persons were probably deterred from attending the out-door departments; but he (Dr. Rogers) knew that ladies would put on their servants' dresses and risk the inconvenience of the waiting-room, in order to obtain gratuitous attendance. It was not possible, by the provident dispensary system, to touch the special hospitals, which did a great deal of damage to the general practitioner, and took in persons above the artisan class. About two months ago, he attempted to originate a provident dispensary (not as a source of emolument to himself), and had a promise of assistance from the Charity Organisation Society. On asking the assistance of a large employer of labour, he was informed by this gentleman that he could not aid him, as he was connected with a general dispensary. It was these gratuitous dispensaries that prevented the provident system from being carried out in the metropolitan dis-

trict. Since the establishment of the poor-law dispensaries, he had watched them with interest; and he had found that in all cases in which the poor-law dispensaries came into contact with the out-patient departments of hospitals, there were no patients but those who required articles of food or other extra matters; while on the out districts, where there were no hospitals, the poor-law medical officers at the dispensaries were overwhelmed with work.

The Reverend Mr. KEMP said he would have been glad if Dr. Rogers had not only spoken of the evils of free dispensaries, but had shown how they were to be suppressed. He concurred with the general principles laid down by Mr. Holmes as to the management of provident dispensaries; but two or three considerations had been overlooked. In the establishment of provident dispensaries, something approaching to legislative compulsion would, he thought, have to be adopted. It was not possible to deal with all localities where the sick poor required attendance. He would ask whether, if the free dispensary were got rid of in any district, the poor could contribute to a provident dispensary? It must be remembered that they were very migratory, and unless some plan could be arranged for returning their money (which would be very difficult), he did not think they would subscribe with the risk of losing the benefits of membership on removing to a district where there was probably no provident dispensary. It was very difficult to excite habits of providence under any circumstances, and still more in the conditions of which he had spoken. The establishment of provident dispensaries would be attended with the formation of a class of patients between the members of these dispensaries and the proper subjects of poor-law relief. What was to become of that numerous class which, though not paupers, could not afford to pay for medical attendance? They would be driven to the workhouse dispensaries. It was quite true that a man was not legally pauperised by merely going to a workhouse dispensary; but the independent spirit of the working-men would lead them to shrink from this, because they would thereby be morally, though not legally, pauperised. He believed that most persons, in making an estimate of their yearly expenditure, did not take the doctor's bill into account; and could it be expected that working men would be able to lay by sufficient out of their earnings to pay for medical attendance? He would be glad to have advice as to the best plan to be followed in the rearrangement of the dispensary in King Street, and how a sufficient number of poor could be got to join a provident dispensary.

Dr. SQUIRE advocated the extension of the provident system, and the adoption of it by the old free dispensaries, where possible. The Leicester experience showed this to be a good way of commencement. The St. George's Provident Dispensary, to which he was attached as physician, was becoming a great success; at first, it suffered from the proximity of the old St. George's and St. James's Dispensary; their limits were strictly defined, and no resident out of the St. George's district was admitted to the benefits of the new system; yet, in three years, the number of members had increased from two thousand six hundred and sixty-four to three thousand eight hundred and thirty-nine, and their payments from £110 to £183; the number of members visited at their own homes had more than doubled. The annual payment from the members had always met the cost of drugs and appliances; but, as more regular subscribers were added, it would become self-supporting. The benefits of provident dispensaries should be spread, and the crowding of out-patients in the hospitals checked; and, though the two ends, when gained, would help to maintain each other, they were totally distinct and must be reached by different ways and means. Provident dispensaries must not be joined or affiliated to large hospitals. Cases would be sent from them to the hospitals, just as they were from every department of medical practice; but one great object of the dispensary must be to make its medical aid as perfect as possible. Provident dispensaries should not be founded merely to relieve the out-patient department at hospitals; this may be one of their indirect results, but should not be considered a chief object. The foremost consideration in forming provident dispensaries was that of promoting a great medical charity; of helping those who helped themselves. It was important to enlist aid from without in support of this object just as it was given in support of education. He agreed with Mr. Holmes, that out-patients at hospitals should be restricted by the recommendations of doctors as well as of subscribers. But this department was of more use in showing students the ordinary run of cases than in making it a consultative department for the practitioners of the district.

Dr. WALKER said that the present system of medical charity did not tend to elevate, but rather to pauperise. There ought to be a central committee for forming provident dispensaries throughout London, with local committees of medical men and others. He believed that if they were established the profession would receive the money which

it ought to. The dispensaries should be so managed as to gain the sympathy of all the medical men in the respective districts, each of whom should be allowed to have his share of duty in his turn. He agreed with Mr. Holmes that the provident dispensaries should be the outposts of hospitals. In cases of consultation, there should be a fee paid to a general fund, which the physicians and surgeons should divide at the end of the year.

Mr. WILLIAM SEDGWICK had been for many years connected with a provident dispensary. The difficulty as to the intermediate class had been met by placing in the hands of subscribers the privilege of nominating patients in cases of necessity.

Dr. E. T. WATKINS said that, in a provident dispensary with which he was connected, subscribers had formerly the privilege of nominating patients. The result was that the institution was swamped with old and incurable cases, and no one received a penny from it. He had procured the making of regulations that candidates for admission should be examined as to the state of their health, and that the privilege of subscribers to nominate patients should be limited. The provident dispensary had thus been enabled to keep on in a locality where there were two general hospitals, besides free dispensaries.

Mr. J. HOGG hoped that Mr. Kemp would convert his dispensary into a provident dispensary. Many persons would rather join provident dispensaries than attend the out-patient department of hospitals. This was the opinion of the supporters of the Hospital Saturday Fund, who had devoted a portion of the fund to provident dispensaries. He would remind Mr. Holmes that many of Messrs. Spottiswoode's workmen had also given evidence in favour of the provident dispensary system.

A VISITOR remarked that one objection against provident dispensaries was, that good cases were required in hospitals for the purposes of instruction; and the medical officers of the dispensaries would be anxious to retain such cases and treat them themselves. If this were so, it was a great difficulty.

Mr. W. RIDGEN said that the out-patient departments of hospitals might at once be suppressed where there were no medical schools; where there were schools, the severe cases were taken into the hospital as in-patients. He thought that the out-patient departments might be converted into provident dispensaries under the control of the physicians, physicians' assistants, etc.; and that many of the patients might be visited at their homes by the students, in the same way as was done in the midwifery departments of the hospitals. He had lately endeavoured to form a provident dispensary in Brompton, and had applied to the authorities of St. George's Hospital to ascertain if they would take in-patients sent from the dispensary: but they had declined to do so.

After some remarks from Dr. GRIGG, the discussion was adjourned to Wednesday, March 27th.

LANCASHIRE AND CHESHIRE BRANCH: INTER-MEDIATE MEETING.

THE first intermediate meeting of the Lancashire and Cheshire Branch was held at the Town Hall, Oldham, on Tuesday, March 5th. In the absence of the President (Dr. Steele), Dr. ROGERS, one of the Vice-Presidents, occupied the chair. Eighty-five members were present.

Address.—Dr. BROADBENT (London) gave an address on the Mechanism of Speech and Thought as illustrated by Pathology.

Communications.—The following communications were made.

1. Dr. J. G. ROBERTSON read the history of a case of Multiple Mammary Tumours.

2. Dr. LLOYD ROBERTS showed specimens of Distorted Pelves.

3. Dr. SINCLAIR showed an Infant suffering from Bell's Palsy.

4. Dr. PATTERSON exhibited Injected Microscopic Sections of the Liver, Kidney, and Spleen from a recent case of Amyloid Disease.

5. Dr. HUMPHRIES read a paper on Scarlatinal Nephritis, and showed specimens illustrating its pathology.

6. Dr. LEECH and Mr. CULLINGWORTH showed three cases of Pseudo-hypertrophic Paralysis.

7. Mr. JONES showed a specimen of Necrosis of the Femur following Suppurative Periostitis.

8. Dr. DRESCHFELD and Dr. ROSS exhibited, by means of the Oxy-hydrogen light, Microscopic Sections illustrative of Diseases of the Spinal Cord.

Exhibitions.—Some of the newer forms of instruments used in medicine and surgery were exhibited by Messrs. Wood, Holderness, Arnold and Sons, and Salt; Messrs. Harvey and Reynolds, Ferris, and Wooley showed new drugs and pharmaceutical preparations; Messrs. Mottershead and Co. showed their batteries and electrical appliances.

Dinner.—After the meeting, forty of the members dined together at the Angel Hotel.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 12TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

AN ACCOUNT OF FIVE HUNDRED CASES OF OPERATION FOR STONE IN THE BLADDER OF THE MALE ADULT, WITH REMARKS ON THE MOST IMPORTANT INCIDENTS WHICH HAVE OCCURRED IN CONNECTION WITH THEM.

BY SIR HENRY THOMPSON, F.R.C.S.

THE 500 cases were in adult males, that is, of twenty years old and upwards, the great majority being from fifty to seventy years. The mean age was sixty-one years and a-half. They comprised Sir H. Thompson's entire and unselected work from the first case up to January 1877. The published experience of Cheselden, Martineau, Brodie, and Ferguson was recorded. The sum of similar cases treated by them was 422. Of these 422, 69 were fatal, or 16½ per cent., *i.e.*, 1 in rather more than 6 cases. Of the 500 in question, 422 were by lithotrity, and 78 by lithotomy. The number of individuals operated upon was 420. Several of the lithotrity patients being operated upon twice, a few three times. In all cases, a considerable interval and evidence of fresh formation, mostly a newly descended uric acid calculus, had existed. Small phosphatic concretions, although removed by lithotrity, were not reckoned as stone in the bladder. The chemical constitution of the calculi was as follows: uric acid, 313; phosphatic, 99; mixed, 81; cystic oxide, 1; pure phosphate and carbonate of lime, 2; phosphatic calculi formed on foreign bodies, 4. The mortality, accepting almost any death occurring within six weeks of the operation, was as follows: in 422 cases of lithotrity, 32 deaths, or 1 in 13 cases; in 78 cases of lithotomy, 29 deaths, or 1 in 2¾ cases; in the total 500, 61 deaths, or 1 death in 8½ cases. The causes of death which were given in each case were tabulated, compared, and contrasted in the two operations, with inferences thereupon. Accidents met with in operating by each mode were detailed, and the manner in which they were dealt with. The general inference was arrived at that it is unwise to apply, as a rule, lithotrity to any stones above moderate size; and, if any calculus be sufficiently large to require what is known as the fenestrated instrument, it is better to employ lithotomy. The author had not employed such an instrument during the last ten years. Finally, remarks were made on the after-history of patients who had been operated on by lithotrity.

THE PRESIDENT, in returning the thanks of the Society to Sir Henry Thompson for his paper, complimented him on the clearness with which he had expressed his views.

MR. CADGE said that the paper was important in more than one respect. That one surgeon should have operated on 500 cases of stone in twenty years showed the growth and development of specialties and division of labour in the profession. It also showed the successful results obtained. The object was not to discuss the methods of proceeding, but rather to examine statistics and determine the relative value of lithotomy and lithotrity. He admitted that statistics were liable to fallacy; but still an endeavour might be made to ascertain the rate of mortality after the operations. Sir H. Thompson had had 422 cases of lithotrity, with 32, or including three doubtful cases, 35 deaths—a mortality of about 8 per cent. But, on putting together the statistics of Sir W. Fergusson, Sir H. Thompson, Mr. Liston, Dr. Keith, and himself, he found 892 cases, with 74 deaths; still showing a death-rate of about 8 per cent. As to lithotomy, he would like to know the mortality in the patients above fifty years of age. Taking the cases operated on by Crosse of Norwich, before the introduction of lithotrity, he found that the average age was sixty years and the mortality 41 per cent. If, then, the death-rate after lithotomy above fifty years was 30 per cent., and if that of lithotrity was 8 per cent., this indicated the great superiority of lithotrity over lithotomy as regarded immediate danger to life. But this statement was subject to the qualification that the size and weight of the stone must be taken into account; and these were greater in lithotomy than in lithotrity. His own experience in Norwich had been very similar in many particulars to that of Sir H. Thompson. He hesitated to compare it with the practice described in the paper, as it amounted to but 220 cases; *viz.*, 134 of lithotomy and 86 of lithotrity. Of the lithotomy cases, 104 were in adults. An important point was the after-history of the cases, as to the recurrence of stone. In Crosse's tables of 700 cases of lithotomy, there were only 12 of recurrence; and in most of these the return was due to fragments of stone having been left in the bladder. He had himself seen but few

cases of recurrence. After lithotrity, recurrence was not uncommon, and the fact must be accepted as a drawback on the operation. Another point to be borne in mind with regard to lithotrity, was the liability to cystitis and phosphatic deposit after the operation. This, which had been alluded to by Sir H. Thompson as one of the penalties which must be paid for lithotrity, had been ascribed partly to the irritation of sharp fragments of stone and partly to retention of urine. He admitted these causes; but he thought that a more frequent one was sacculation of the bladder, depending on enlargement of the prostate and impediment to the outflow of urine. In a large proportion of cases of chronic enlargement of the prostate, the bladder was more or less honeycombed or sacculated. Supposing that in such a case a calculus in the bladder were crushed, some of the fragments might readily be deposited in the sacculi, and either set up acute inflammation, or lead to chronic cystitis, with phosphatic deposit. This was no doubt the explanation of many cases of cystitis, with phosphatic deposit, in old persons. He believed that, in most of the cases of recurrence after lithotrity, the stone was formed in the bladder on the fragments which had been left; and this was not to be wondered at when the difficulty of removing the fragments was considered. He thought that the greater liability to return of calculus after lithotrity went far to balance the advantages of the operation. He would, however, say that every year's additional experience proved that lithotrity, when judiciously applied, was capable of saving many lives, and was an enormous boon to suffering humanity.

MR. W. D. NAPIER called attention to the importance of detecting the existence of stone in the bladder soon after its descent from the kidney.

MR. J. F. WEST said that the surgeons in Birmingham and the neighbourhood saw a good deal of stone. He had collected the statistics of cases in and near Birmingham, amounting to 108 cases in three years, most of them being in children. In 81 operations for lithotomy, of which the results were known, there were 71 cures and 7 deaths. More cases of stone were met with in the hospital at Wolverhampton than in any other in the district. From December 1859 to 1876, there were 134 cases of lithotomy, with a mortality of 1 in 12.18. In patients under forty years of age, the death-rate was 1 in 16.81; in those above forty, it was 1 in 5. He thought that the greater proportion of cases of lithotomy among children, in the Midland district, was to be accounted for by the fact that a large number of the adults went to London in order to be operated on. In the Midland district, many surgeons preferred the median operation, having been led to practise it by Mr. Allarton. Mr. West thought it suitable for children, but not for adults, nor for cases where the stone was large.

MR. MACNAMARA had passed much time in the North-Western Provinces of India, where stone was very common, and very large calculi were met with. He would not enter on statistics, as the circumstances of the cases in India were very different from those in England. He had almost always treated his cases by lithotomy, and was glad to hear that Sir H. Thompson was disposed to go back to that operation in many cases. At first, he had followed the precept of Sir W. Fergusson and other surgeons, that the incision should be small; but he afterwards found that success depended to a great extent on making a free incision. Much mischief was done by the tearing of the parts; and, in cases of large calculus, he had obviated this by first breaking up the stone, and then removing the fragments by lithotomy. Another important point was the preparation of the patients for operation, which, he thought, was not sufficiently attended to. It was impossible to do lithotomy successfully without two or three weeks' careful preparation.

SIR JOSEPH FAYRER called attention to a work by a native hospital surgeon (Baboo Ram Narain Dass), who had had 248 cases of lithotomy in the North-Western Provinces, with 17 deaths. The operation there was much more successful than in Bengal. He was glad to hear Sir H. Thompson's remarks about reverting to the old operation.

SIR JAMES PAGET said that such papers as that of Sir Henry Thompson were calculated to make one look on surgery as a very happy profession, as it was capable of relieving so much misery. The present, however, might be a fair time for reconsidering the question of the comparative advantages of lithotomy and lithotrity. His own experience had been less than that of Sir H. Thompson, but he must confess to a growing preference for lithotomy. He thought that Sir Henry Thompson's experience showed that the best attainable results of lithotrity had been arrived at, at least for some time to come. But much improvement in the method of treating patients after lithotomy might be expected. Even without the adoption of the antiseptic treatment—which obviously was not applicable—there was great improvement in the results of the operation. Peritonitis and urinary infiltration were now rare; and greater care was taken than formerly not to operate on patients who were in an unfit condition. He believed that, if a fresh

start were taken in lithotomy, the mortality would be nearly as low after it as after lithotripsy.

Mr. TEEVAN believed that the condition of the patient after lithotripsy was a most important matter. He had performed lithotripsy forty-two times in eighty-seven cases of calculus. Lithotripsy would sometimes fail most lamentably; but this was no bar to the operation. He had seen five cases in which there had been a recurrence of calculus after lithotomy after intervals of several years. What was to be done with the cases of lithotripsy which were neither killed nor cured? In a case of chronic cystitis following lithotripsy, he had followed the plan recommended by Dr. Gouley of New York, and had performed the urethral section; the patient recovered, and continued well.

Mr. LUND had given much attention to the antiseptic treatment of wounds. The rare occurrence of septicity after lithotomy was a very good example of the results of irrigation. The lithotomy wound was irrigated by a peculiar fluid, the urine; which consisted not only of water, but contained saline matters in solution. The urine flowing over the wound constantly removed the morbid products, and sloughing was very rare.

Mr. HOLMES suggested that the urine which flowed over the wound contained bacteria. He thought that the success was to be explained by the constant drainage.

Dr. BROADBENT thought that an accumulation of morbid material was almost impossible in lithotomy wounds.

Mr. SPENCER WELLS said that in Sir H. Thompson's cases there was apparently a large number of cases of cystitis. This was probably to a great extent due to the decomposition of the urine by the introduction of germs or elements of septicity with the lithotrite or catheter. This should be prevented by the use of carbolic acid or thymol or something of the kind. It had been stated by Sir H. Thompson that wound of bladder could scarcely occur. He remembered a case in which the late Mr. Tyrrell, at St. Bartholomew's Hospital, wounded the back part of the bladder in performing lithotomy; and Mr. Tyrrell hence recommended that the knife used should be short.

Mr. WALTER COULSON referred to some accidents attending lithotripsy. He had seen a case where the instrument could not be withdrawn, and it was necessary to make an incision in the perinaeum. In another case, the screw had broken down, and the male blade of the instrument had cut into the urethra, being released with difficulty only by a series of sharp concussions. In another case, the withdrawal of the instrument was impeded by the lodgment of a fragment of stone between the blades.

Mr. T. SMITH said that, if the lithotrite became clogged with a stone, it could be freed by means of the finger introduced into the rectum.

Mr. MAUNDER congratulated the author of the paper; but doubted whether it was advantageous, as regarded the education of the profession, that so large a proportion of cases of operation for stone should go into the hands of one surgeon.

Sir HENRY THOMPSON thanked the meeting for the manner in which his paper had been received; and especially those members who had come from a distance to take part in the discussion. He thought that lithotomy and lithotripsy were often contrasted from a wrong point of view. They were not at all antagonistic, but rather complementary of each other. In but few cases could there be a dispute as to which should be done. He thought all surgeons agreed—a lithotripsy which could remove the stone at two sittings was the best operation; and many calculi came into the category. In reply to Mr. Napier, he said that stone in the bladder could be detected at an early stage by any intelligent medical man. The profession was not altogether to blame for the failure to detect stone in the early stage; the explanation lay, to a great extent, in the reluctance of many patients to believe that they had stone. As to the cases of diseased bladder met with after lithotripsy, he would say that, if such cases were more rare after lithotomy, it was because they died after the operation. He was not reverting to lithotomy; but he would, perhaps, do it now in some of the cases in which he formerly performed lithotripsy. The accidents attending lithotripsy were generally due to attempts to crush too large a stone. He agreed with Mr. Spencer Wells as to the value of disinfection of the instruments by antiseptic solutions.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 21st, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Unilateral Atrophy, with Muscular Spasm (Athetosis?).—Dr. F. TAYLOR exhibited a woman aged 22, a needlewoman, who had been for some years affected with violent tonic spasms of the muscles of the left arm and leg. The exact date of the commencement of the disease

was uncertain; but it was probably in the later period of childhood. She then had some kind of febrile disorder, and during convalescence first noticed twitchings in the left biceps muscle. She suffered no inconvenience for some little time, but it gradually developed to its present condition. The muscles of the arm and shoulder on the left side were greatly hypertrophied, but the limb itself was shorter than its fellow, while the left side of the chest was also smaller than the right side. Sitting or standing, she commonly held the left arm firmly to the side, the left fingers often grasping the other hand tightly. Any attempt to move the hand or arm was accompanied by violent contractions of the muscles of the whole arm, but of the extensors chiefly, so that the arm was fixed in a straight position; but the fingers were partly flexed, partly straightened. This extension was not brought about suddenly, but quite slowly and deliberately. The spasm continued as long as the arm remained extended. If, however, she attempted to flex the arm, the extensor muscles shortly relaxed, she brought the elbow to a right angle, and all the contractions subsided. The toes were drawn down towards the sole of the foot by a similar condition of the muscles of the posterior tibial region; and walking was in consequence very painful to her. The contractions themselves caused her much pain, constantly recurring, apparently spontaneously, and frequently woke her during the night. The muscles of the affected side responded to galvanism and faradisation, but required somewhat stronger currents than the healthy muscles. There was no anaesthesia. She had obtained some relief from the spasms under bromide of potassium and the application of the continuous current. Dr. Taylor said there was no doubt unilateral atrophy, which was probably due to a cerebral lesion, in early life, interfering with function, and so retarding growth. The more interesting question was as to the nature and connections of the spasmodic movements. Comparing them with those noticed by Dr. Hammond in his cases of athetosis, Dr. Taylor observed that the spontaneous irregular movements of the fingers described in Dr. Hammond's first case were not present here; but that between the second case of athetosis and the present one there was a sufficiently close resemblance. If not admissible as a case of athetosis, it would have to be included under the wider head of spastic contracture.

The PRESIDENT asked if the spasm was *bond fide*.—Dr. TAYLOR thought so, especially having in mind a reference to a similar condition seen in young children, of which a case was recorded by Dr. Gowers.—Mr. BARWELL questioned whether the left side was atrophied, for, if there were hypertrophy, this might give rise to shortening. It was rare to see spasm and hypertrophy associated in young persons; generally there was wasting.—Mr. HULKE objected to the use of the word "contracture" as employed by Mr. Barwell. He thought it should be applied to permanent contraction without the possibility of extension.—Mr. BARWELL explained that it was in this sense he employed it.

Large Aneurism of the Left Subclavian and Axillary Artery treated by Rest and a very restricted Diet.—Mr. HULKE read the notes of this case. A French-polisher, aged 36, but much older in appearance, addicted to drink, after suffering from pains in the left shoulder and arm, supposed to be rheumatic, during two months, became aware of a swelling at the root of his neck on the left side, for which he went into King's College Hospital. Dissatisfied with what was there done for him, he left this hospital; and five months after the beginning of his illness entered the Middlesex Hospital, 28th March, 1877. At this time, he had a large aneurismal tumour filling the axilla, and implicating also the third, second, and presumably, to some extent, also the first part of the left subclavian artery; and he suffered great pain down the arm and over the shoulder-blade. He was kept in bed, and enjoined to keep perfectly still—not even to sit up or to move off the bed for any purpose—and he was put on a very limited non-stimulating diet. This was followed by rapid mitigation of the pain, by decrease of the aneurism, and its obstruction by clot. He was discharged for disorderly conduct in June, at which time the axillary portion of the sac had shrunk to the size of an acorn, and was quite impervious; and the cervical part was very small, and it felt very firm. It was thought that a slight pulsation of this part might be communicated. He afterwards entered Charing Cross Hospital, where, Mr. Hulke learned, doubts were entertained of the nature of the affection. This Mr. Hulke took to be confirmatory of the permanence of the consolidation and occurrence of a cure. The encouragement the case afforded for the trial of a modified Valsalva's method in aneurism, where the ordinary direct surgical methods were not applicable, induced Mr. Hulke to submit the case to the consideration of the Society.

The PRESIDENT said the great difficulty in these cases was to get the patient to submit to the treatment for a long enough period, and referred to the case of a woman who had been under his care, but who, after receiving a certain measure of relief, refused to submit any longer, and left the hospital. Still, he thought the plan a very good one. It

had been tried in popliteal aneurism, but he had never employed it himself. He had, however, found other methods useful, inasmuch that he had only once tied an artery for aneurism.—Mr. BARWELL said the case referred to was under the nominal care of his colleague Mr. Canton; and, when in Charing Cross Hospital, there was a solid doughy tumour rising above the clavicle, uneven on the surface, and not pulsating except in transverse lines in the direction of certain superficial vessels. The patient left the hospital; after a time, he returned, the tumour being then decidedly larger; finally, he had to be got rid of, and was lost sight of. He thought the tumour glandular or malignant, though there may have been an aneurism beneath it at one time.—Mr. GANT mentioned a case of subclavian aneurism which had been treated in various ways: by restricted diet, by bandaging, and by distal compression; but nothing did good. Finally, the vessel was tied on the cardiac side; but death resulted from secondary hæmorrhage.—Dr. SILVER said he had seen the case referred to in Mr. Hulke's paper whilst the patient was in Charing Cross Hospital. At the time when he saw it, and without the history subsequently obtained, it could not have been called an aneurism. It was quite solid, and did not pulsate except in a transverse line, as indicated by Mr. Barwell. There was, however, deep-seated dulness in the upper part of the chest, extending downwards to about the level of the third rib in front, and reaching to the back of the chest. He thought that the case referred to by the President had also been at one time under his care. At all events, a woman having an aneurism similar to that described had been treated in the way mentioned by the President. After improving, she refused to submit any longer to the treatment, and subsequently became an inmate of St. Bartholomew's Hospital, stating that she had been dismissed as incurable, whereas she left of her own accord, being of that class of patients who will not submit to treatment after a measure of relief is obtained.—Mr. WARRINGTON HAWARD mentioned a case of carotid aneurism, where, for various reasons, operation was undesirable, treated by restricted diet. There was no great difficulty in getting the patient to keep to a limited diet, though some persons could not stand it. There was no solidification, but the tumour did not pulsate so much. As soon, however, as ordinary diet and habits were resumed, there was a tendency for the pulsation to increase. He referred also to the case of a medical man, who carried out the treatment carefully. His greatest difficulty was the want of fluid. The pulsation of the aneurism diminished, but apparently no clot formed. The improvement seemed to depend on the rest alone; it soon disappeared on motion. Ultimately, death ensued.—Dr. POWELL asked whether any sphygmographic tracings had been obtained; they would have been useful in the diagnosis. He remarked on Mr. Hulke's plan of limiting the food but not the fluid; he thought it much more important to limit the fluid. The food, too, should be nitrogenous, as we must look for a permanent cure, and not to the mere formation of a clot. The deposit should be distinctly stratified. He had now under his care a case of aneurism of the aorta, which he was treating with a free animal diet, but restricted fluid.—Mr. MAUNDER said it was somewhat venturesome for anyone who had not seen the patient whose case had just been related, to express an opinion on the nature of the swelling. Personally, he accepted Mr. Hulke's view—that it was aneurismal—and did not deem it necessary to think, with Mr. Barwell, that, while there had been possibly an aneurism, the existing tumour was malignant, simply because, while the growth persisted, there was an absence of pulsation and of *bruit*. He had two cases in his mind's eye of very large swellings of the popliteal region, in which (the history being unreliable) it was impossible to determine between aneurism and malignant disease. Amputation disclosed ruptured aneurism, the explanation being extravasation and coagulation of blood, which, being no longer circumscribed by the sac, ceased to pulsate.—Dr. MAHOMED did not think the sphygmographic tracings would be of much use in such a case. The plan of getting a simultaneous tracing of the heart and of the pulse, as invented by Dr. Burdon-Sanderson, might be useful.—Dr. BARCLAY referred to a case of aneurism completely cured. The condition was supposed to be malignant at St. Bartholomew's. Ultimately, the man died of phthisis in St. George's Hospital. Almost the whole of the right side of the chest was filled with an old clot. The other lung was riddled with vomicae. In another case, he had tried full diet, but restricted the amount of fluid. The patient did well, but had difficulty in digesting his food.—Dr. IRYNE asked what benefits had been seen from the use of iodide of potassium. He had seen much benefit, and referred to the case of a carpenter who was doing fairly well under its use, though continuing his trade. He had now been under notice for twelve months, and the iodide never failed to relieve any bad attack. He had seen marked advantage, too, in other cases.—Mr. MORRANT BAKER had seen a case where, as in this, there might have been a gradual leakage, and a gradually increasing clot which did not pulsate. The patient in

this case died from rupture into the pleura.—Dr. ANDREWS believed Tufnell's to be the best plan of treating these internal aneurisms. All had seen cases improving or stationary, but, except by this method, we never saw a complete cure. He had seen several. This was not so in all cases; in some there was even some risk in its use. Especially mental strength and vigour were required in the patients. He had seen two die: one from rupture, one (an old man) from an insidious pneumonia. The food should be scanty, but nutritious; the fluid limited. Patients submitted to it best if put on it at once.—Mr. HULKE was well pleased with the individual experience his paper had elicited, and the subsequent history was valuable. As to the diagnosis, he was quite certain of it. Sphygmographic tracings had been taken, but they could not be found. He did not limit the water from experience, but rather adopted Todd's plan. The remarks of both Mr. Maunder and Mr. Baker were apposite. The idea had crossed his own mind, but he was not certain. There was, however, no ecchymosis, and he had seen that in all cases of aneurism pulsation may continue after rupture. The iodide was not satisfactory.—The PRESIDENT suggested the benefit of freezing a portion of the water allowed as food.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 5TH, 1878.

CHARLES MURCHISON, M.D., D.C.L., F.R.S., President, in the Chair.

ON taking the chair, the PRESIDENT reminded the members of the Society that the next meeting would be devoted to specimens connected with Diseases of the Lymphatic System.

Dilatation of Heart and Aorta from old Spinal Disease.—Dr. GOODHART exhibited such a specimen from a girl aged 7, who had old-standing disease in the lower dorsal vertebrae. The abscess was opened, but the child sank. At the *post mortem* examination, the heart was found globular and full of *ante mortem* coagula. The left ventricle was dilated. The aorta was folded up at the seat of the vertebral disease, in such a manner as must have greatly obstructed the flow of blood. There was amyloid disease of the other viscera, and advanced renal disease. In a similar case, even acute endocarditis had been found. The folds projected into the canal of the aorta.—In answer to a question put by Dr. DOUGLAS POWELL, Dr. GOODHART said there was no atheroma—the aorta was somewhat thickened; and to a question by the PRESIDENT, he said that there was no evidence of anything wrong with the heart in life.

Lymph-Scrotum.—Mr. G. C. COLES stated that this condition of the scrotum was due to a varicose condition of the scrotal lymphatics. It was apt to occur after ague. The glands enlarged, even to the size of hen's eggs. The skin became corrugated, and, if pricked, a milky fluid flowed out. Then an elephantoid state was established. Filariae were found in the blood. They did not adhere to the blood-corpuscles. They were from an hundredth of an inch in length to one-three-thousandth in thickness.—Mr. MORRANT BAKER inquired as to the colour of the fluid which exuded.—Mr. COLES replied that it was milky.—Sir JOSEPH FAYRER said that this condition was first described by Dr. Vandyke Carter in 1861; and that, not knowing this, he described it in 1865 as *naevoid elephantiasis*, stating that it was due to nematoid worms. He believed that other forms of malarial and cachectic disease found in the tropics would be found to be due to such entozoa. As to the fluid which exuded at first, it was pale and white, with a specific gravity of 1020, coagulating firmly. Then it became of a pink shade, or even might assume a blood-like hue. In answer to a question put by the President as to the presence of filariae in non-naevoid conditions, he said that, so far as he knew, they had not yet been found.—Dr. SPENCER COBBOLD referred to the larval condition of the worm. He then gave an interesting account of the discovery of these worms. Bancroft first found the sexually immature forms of the worm, and could diagnose certain forms of disease due to filariae in passing through a hospital-ward. Mosquitoes get filariae when sucking human blood. Dr. Manson of Amoy had observed all forms up to the sexually perfect. He found no fewer than one hundred and twenty filariae in the stomach of a mosquito who had fed on a man affected with filariae, who had been deliberately placed in a room for the purpose of giving these filariae to the mosquitoes in it. The female mosquito, when gorged with blood, goes to the water to deposit her eggs, and thus the filariae find their way into water, and so back again to man.—The PRESIDENT said he thought the lymph-scrotum should be submitted to the Morbid Growths Committee.—Dr. CROCKER said the blood of a patient with elephantiasis of the leg had been examined, and no filariae were found. The patient had never been out of England.—Mr. COLES said a low power only must be used to find the filariae.

Worms in Heart and Oesophagus of a Dog.—Mr. COLES exhibited these worms. Such entozoa were very common in China; and it was estimated that fifteen per cent. of the natives of Amoy were possessed of them. Five different species had been found in dogs, both *tenia* and *filariæ*. Any unusual exertion on the part of dogs was apt to prove fatal. On *post mortem* examination, worms were found in the heart and vessels, each worm being surrounded with a dark mass consisting of its young. The males were smaller than the females; some of the worms were five inches in length. These worms were *filariæ*, and the mass might press upon and obstruct the oesophagus. In one case, a tuft of them burst into the pleura, setting up pleurisy. In one case, paralysis of the hind legs was due to plugging of the spinal capillaries. Their ova were found in the intestines and viscera.—Dr. COBBOLD said those worms were first observed in Paris in 1812. They were always found on the right side of the heart. They were not so harmless as they seemed. Dogs died in great suffering from the *filaria immitis*.

A Rare Form of Psoriasis.—Mr. BALMANNO SQUIRE exhibited a drawing of a rare form of psoriasis. It occurred as a congenital port-wine mark in a man aged 42, and the psoriasis had existed nine years. Psoriasis, he said, rarely attacked the forehead. In this case, the scales extended into the hair, and also down to the eyebrows; while the eyelashes were affected. On the forehead, the scales of more recent growth were seen to be very white. When the skin was stretched, fissures formed.

Nervus complicated with Molluscum.—Mr. BALMANNO SQUIRE sent round a drawing illustrating this complication.

Disease of the Spinal Cord in Diabetes.—Dr. SILVER gave an account of the clinical history of a case of diabetes. The patient was a man aged 19, who had been ill for some time with diabetes. He was emaciated; his skin was harsh and dry; and his tongue dry and furred. He suffered from thirst and great voraciousness. The amount of sugar in the urine was not remarkable. The temperature-chart was very interesting. It took a sudden rise from 97 deg., and then fell to 95 deg. This occurred several times. Then the temperature rose to 104 deg., and the youth died. There were no indications in life of the changes found after death. These changes had a bearing on the origin of diabetes, and corroborated the nervous theory. He then described the fibres known to pass down from the vertebral arteries into the lower cervical ganglion, and thence down the ganglia of the sympathetic, and onwards by the splanchnics ultimately to the liver (the fibres described by Cyon and Aladoff). He said other fibres took another route issuing further down at the first or second dorsal vertebra, and thence getting to the sympathetic ganglia. A large cavity was found in the apex of a lung, which was not true pulmonary phthisis, but a necrotic cavity. There was no odour produced thereby. There was nothing to be found in the floor of the fourth ventricle. No examination with the ophthalmoscope had been made in life.—Dr. PEARSON IRVINE described the *post mortem* appearances met with in Dr. Silver's case. The necropsy was made thirty-six hours after death, and the body was found rigid. The spinal cord was first examined, and the tissues outside the sheath were generally hyperæmic. Opposite the third, fourth, and fifth dorsal vertebra on the left side was a clot undergoing some change, about three inches long, quite outside the sheath of the cord. In the lumbar region were found along the whole length peculiar jelly-like masses of bright pink colour, which, on examination, was found to be connective tissue infiltrated with bloody serum, which had coagulated within it. On slitting open the sheath, distinct extensive softening of the substance of the cord was found opposite the fourth and fifth cervical and the first, second, and third dorsal vertebra, where the cord was almost diffused, all parts below being firm in consistence. Exactly opposite where the clot mentioned was found, there was a beautiful pink injection of the vessels of the pia mater. The vessels formed an exceedingly fine network. Three inches of the cord from the last dorsal vertebra down to where the cord begins to split up presented exactly similar appearances. Considerable quantities of serum escaped when the lumbar region was opened. There was no change in the medulla oblongata; the floor of the fourth ventricle was healthy. The brain, especially on the left side, was hyperæmic, and the left island of Reil was partly softened, the softened parts cracking away, and being distinctly pathological. On the pericardium was a mass of tissue like that at the lower end of the spinal canal, and like masses were found round the base of the heart and surrounding the kidneys. The heart was small, but otherwise healthy. The upper lobe of the right lung was converted into a cavity, the walls of which were rugged, and indicated a rapidly destructive process. The cavity was filled with grumous reddish fluid and solid contents—the debris of lung-tissue and disintegrated blood. The middle lobe was solid, and in an advanced stage of pneumonia. The apex of the left lung contained caseous nodules, and other parts of both lungs were emphysematous. The liver was

large for the size of the body, and was hard, firm, and of an uniform dark red colour. The kidneys were hypertrophied, and the pancreas very small and hard, as if from contraction.

Hypertrophic Lupus.—Mr. SANGSTER described a case which occurred in a man aged 24, who was healthy looking. He had had this sore since fourteen years of age. When first noticed, it was of the size of a florin. It did not occasion much pain. It was situated in the tuberosity of the right ischium. It was about four inches in diameter, and extended to the fold of the buttock. It was hard to the touch, and its surface was polished with some scarring. At its margin was a fringe of livid red tubercles, mostly where the left buttock overlapped it. On the hypothesis that it might be of specific origin, it was treated accordingly, without effect. It was then excised, and found to be attached to the fascia of the glutei muscles. The case did well. One section showed the first stage of cells around the vessels; a second, the tubercles where the Malpighian layer was hypertrophied; and in a third, from the cicatrising part, fibrous tissues were found around lymphoid cells; a fourth section showed a giant-cell.

Renal Calculus containing Indigo.—Dr. ORD described a calculus containing indigo. Indigo was sometimes found in normal urine; indican existed in all urine. No indigo had ever hitherto been discovered in a calculus. This stone contained a large quantity of indigo blue. He had the calculus and the kidneys sent him. The calculus was a mass like a lozenge in the pelvis of the right kidney. The kidneys were diseased, and the right one was suppurating. The calculus was brown in the interior, crusted over with blue-black material. When a portion was burnt on platinum-foil, it gave out a sooty smoke like burning indigo. It burnt nearly completely, the ash being chiefly phosphate of lime. Under the microscope, the brown part was seen to be a crystalline mass of a blue colour, which was not blood-pigment. When dissolved in hydrochloric acid, there was a black residue, with blue characters. Was this indigo? If a small part were put dry into a test-tube and heated to a degree below redness, a bulky vapour was produced like iodine vapour; and, when the heat was removed, this crystallised in six-sided tablets like indigo. When looked at through the spectroscope, the spectrum agreed with that of indigo; the yellow band being hid by a darker band. The question was, how was it formed? There was nothing in the diet or in the medicine, though creasote had been given freely to check the vomiting. Dr. ORD then spoke of indogen and of indol. Indigo in the urine might be connected with anything binding the passage of fæces down the small intestines. It was also found in the urine of cholera patients. It was found, too, in chronic suppurating, especially when connected with the urinary tracts. He thought the indigo colouring matter was deposited on a nucleus in the suppurating kidney.—The PRESIDENT said that the calculus certainly contained indigo.—Dr. THUDICHUM said it was a remarkable discovery. The material crystallised and vapourised like indigo; it behaved chemically like indigo; and gave an identical spectrum with indigo.

CORRESPONDENCE.

THE REPORT OF PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

SIR,—The letters of Dr. Falconer and Dr. Stewart make certain statements before my fellow-members which render it necessary that I should reply to them.

As regards my former communications, I think it requisite to point out that my observations apply in part only to the nature of the Proceedings of the Committee of Council, and in part to the nature of the official document published in the JOURNAL, purporting to be a "Report of the Proceedings of the Committee of Council". My object has been to call attention to the fact, that what was officially furnished to the JOURNAL for the information of members a month after the meeting, as a "Report of the Proceedings" at the meeting of the Committee of Council of January 9th, was neither an intelligible document nor an adequate account even of those parts of the proceedings which it intended to report; that, in respect to subjects which it noticed, it left out some parts, highly interesting to the members of the Association, of the proceedings on their behalf of their representatives on the Committee of Council; besides omitting others, by their nature and by their operation essentially interesting to the members, and affecting the general interests of the Association. Thus, for example, while it was stated that a house was leased in the Strand at a rent of £320 a year, there was no notice that a sum of £1000 was to be spent on repairs, etc., and that further large sums would be required for fittings and printers' plant. Again, the resolution in reply to Dr. Wilson Fox's

letter was mentioned, whilst an amendment duly moved and seconded was omitted. Finally, whereas a series of important regulations were adopted, including one which regulates the practice hitherto prevailing and the privileges of members in proposing resolutions at the Annual Meeting, no mention whatever was made of such regulations in the published report.

My objection to this report as published is, that it is not drawn up so as to afford an intelligible or adequate account of the proceedings of which it is described by its heading as being a report. It seems to me that the object of such official reports, if they are to be of any service, is to give to the members as full an account as is consistent with the conduct of business, in order that they may, in the intervals of the annual meetings, be conversant with the more important proceedings of their executive representatives, especially with regard to such matters as are intended to be brought before the Annual Meeting, and on which legislation is to be proposed, so that they may be able to exchange and develop opinions, and take mutual counsel on the subject in the JOURNAL or in the Branches. The several subjects discussed at the late meeting of the Committee of Council included some on which it seemed to me that opportunity should be afforded for common counsel and leisurely suggestion; notably as to—1. The present position of the Association in respect to women actually being or proposing to become members of the Association; 2. The decision to lease and fit up, at a large expense, premises intended to combine and locate in a costly business thoroughfare the central committee-room and offices of the Association over a printing and publishing office and shop; and the intention to undertake the business of printers; 3. The proposals for the improved and altered conduct of the annual meetings. The sooner important resolutions adopted are made known to the members, the better their chance of discussing them and of making known their views in relation to such proposals before they become accomplished facts.

Dr. Falconer states "that no secret whatever has been made of the intentions of the Committee of Council to acquire premises for the publication of the JOURNAL". In the Report of Proceedings of the meeting on October 10th, 1877, published in the JOURNAL of November 24th, there is no reference to the acquisition of premises. In the report of the meeting of January 9th, the acquisition of premises is published as an accomplished fact. I have only to add, on the subject of secrecy—1. That the minutes of the Committee of Council are forwarded with the mark "Strictly Private and Confidential". This seal of secrecy is never taken off. 2. That the members of the Committee of Council are prohibited (as I have been) from communicating the minutes even to the Councils of the Branches of which they may happen to be the official delegates. 3. That although the most important business is included in the minutes of subcommittees brought up and adopted, these are wholly omitted in the published reports.

Dr. Falconer and Dr. A. P. Stewart reproach me with having been absent from a meeting of the Committee of Council on the 10th of October, when the premises were discussed and viewed. I have only to say, that the General Secretary failed to send me a summons to attend any such meeting of the Committee, and I was quite unaware of the meeting or its objects. In fact, it was not until about the end of October, owing to this failure of the Secretary, that I discovered I had a seat in the Committee of Council. The published report, as I have said, does not even mention the subject of premises.

Dr. Stewart's remark that I now tantalise the Association with the mention of a wonderful bargain, which I ought to have brought under their notice earlier, is groundless. I only became aware of the proposed expenditure on premises in the Strand after the January meeting. I went into the Strand and looked at them, and saw, at the same time, the cheaper premises requiring no capital outlay, to which I refer. I proposed at once to bring the subject under the notice of the Council of the Branch which I represent on the Committee of Council; but Mr. Fowke, to whom I communicated that intention, immediately wrote to state that the minutes of the Committee of Council are "strictly private and confidential", and that I therefore had no power to communicate them to the Branch. I waited a month for the appearance of the report in the JOURNAL; when at last it appeared, it omitted, as it seemed to me, the most important points. It was then that I wrote to the JOURNAL, asking that further information as to the facts and a more adequate account of the actual proceedings might be given to the members of the Association and of the Branches, in order that they might review and consider them.

Had a more adequate Report of the Proceedings of Committee of Council in October last been issued, these objects would have been achieved, and the members of the Association could have discussed the proposals of the Committee before the seal of the Association was affixed to the lease. When I asked that a fuller report of the January proceedings might be forthwith published, I supposed that no objec-

tion would be made, as I thought that the outlay of so large a sum was a matter that the Committee of Council would be only too anxious that the members at large should be acquainted with. I regarded its omission as a mere oversight, which would at once be rectified.

I understand that I have been interpreted as throwing some doubt on the explanation of the President of Council, that the delay in publishing the report of the January meeting was accidental. I had no such meaning, and I should much regret to be supposed to have made any such imputation, which was entirely foreign to my thoughts.

I have the honour to be, sir, your obedient servant,

W. C. GRIGG, M.D.,

Honorary Secretary of the Metropolitan Counties Branch.
6, Curzon Street, Mayfair, W., March 8th, 1878.

THE LOST MEDICAL SCHOOL.

SIR,—The letter of Mr. Savory on the "Teaching of Natural Science in Medical Schools", published in your JOURNAL of March 2nd, though it contains no direct reference to the Universities of Oxford and Cambridge, is possibly intended, and has been interpreted, as a plea for the separation of the preliminary and the professional portions of medical study, so far as the old Universities are concerned. Mr. Savory has, in fact, been understood to advocate the view that, whilst it is desirable, even in the case of large London institutions like St. Bartholomew's Hospital, that only one of the two portions of medical study, namely, the professional, be attempted, and that London should have a distinct central college for the teaching of the preliminary (sometimes called the scientific or theoretic) subjects of medical education, it is similarly desirable, conversely, that Oxford, because it has a series of institutions for teaching those preliminary subjects, should not have an institution and arrangements for teaching the professional subjects such as are taught in hospitals.

I will not do Mr. Savory the injustice to suppose that he would himself argue in this manner; and clearly enough, as a matter of fact, he has not done so in his published letter. But, in view of the fact that such an interpretation has been put upon his letter, and that such an argument has been advanced by eminent London practitioners, I should wish to say a few words, in order to expose what appears to me to be a fallacy, seductive and symmetrical in form, but likely to be injurious to the great cause of University education.

That a hospital is not the proper place for the study of chemistry, physics, botany, physiology, and anatomy will probably be conceded by all who desire a complete medical curriculum to be established at Oxford and at Cambridge. It would be a great service to students and teachers alike were these subjects taught in London, under the auspices of a central University institution, to all the students now scattered in the various London hospitals, and were the physicians and surgeons of these institutions to abandon work which does not lie within their province, and to hand it over, through the agency of a central institution or university, to the most competent teachers. There is, however, no real parallel between such action on the part of a London hospital and the total abandonment of professional medical study by the University of Oxford. The former would be a retirement from an utterly inappropriate task; the latter would be a renunciation of a most weighty duty and privilege. In the one case, an institution would be beneficially restricted to its special functions; in the other, a far more important organ of the national life would be robbed of its most legitimate source of power and vitality. The University of Oxford is not a mere block of brickwork, with a few thousands a year and a secretary; were it so, the proposal that it should confine its connection with medical studies to the "preliminary subjects which can be so admirably studied in a country town" would be reasonable. Strange though it sometimes appears, the University of Oxford is, like the other great universities of Europe, a corporation solemnly charged from the most ancient times with the duties and the privileges of upholding the study and the teaching of three great departments of learning connected with the three great professions: the clerical, the legal, and the medical. For these purposes, she has at her disposal pecuniary resources which are practically boundless. To whatever extent her activities may now have been perverted and her resources misapplied, so long as Oxford retains her privileges she simply cannot renounce her duties to medicine. There is ample room for a distinct school of the professional portion of medical study in the city of Oxford by the side of the other institutions belonging to the University, and, when once the Radcliffe Infirmary is used under her auspices for clinical instruction by some hundred students, she will very probably proceed to annex, for the further use of her Medical Faculty, a London hospital or two.

—I am, sir, yours faithfully, E. RAY LANKESTER, M.A., F.R.S.
Exeter College, Oxford, March 1878.

MANAGEMENT OF CONVICT PRISONS.

SIR,—A laborious and exhaustive inquiry into the management of our convict prisons is in progress by a Royal Commission. An investigation of this kind, conducted by such men as Lord Kimberley, Sir Henry Holland, Dr. Greenhow, and others, cannot fail to elicit the truth that there is scarcely a question within the scope of the inquiry which does not reveal the great extent of the medical officer's responsibility.

The machinery of such prisons as Millbank, Pentonville, Chatham, etc., would not work smoothly if experience, tact, and professional skill were wanting in the surgeons, whose decisions and opinions are in hourly request; and it is a reasonable ground of complaint that their services are most inadequately required. They had a right to expect that, in the recent appointments of commissioners and inspectors under the new Prisons Act, some of their number would have been nominated. They have a right, when the salaries of other officials in the department are augmented on the plea of increased work, to claim equal consideration on the same plea; and they have a fervent hope that on Dr. Greenhow, one of the Royal Commissioners, they may rely for a powerful representation of their important work, and for its more substantial recognition.—Your obedient servant, A CLAIMANT.

March 11th, 1878.

HARVEY TERCENTENARY MEMORIAL FUND.

SIR,—I am commissioned by the London Executive Committee of the abovenamed Fund to ask that you will be so good as to advocate in the columns of your influential journal the object for which this Memorial Fund has been established; and that you will also consent to receive at the office of the BRITISH MEDICAL JOURNAL the subscriptions of persons willing to contribute to the Fund.

About half the money (£1,600) required for the erection of a suitable statue of Harvey has been already subscribed; it is most desirable that the remainder should be forthcoming at once, as the three-hundredth anniversary of Harvey's birth will occur on the 1st of April in this present year.

I inclose a statement of the object of the Fund, and a list of subscribers up to the present date; and I beg to remain, sir, your obedient servant, GEORGE EASTES, Honorary Secretary.
69, Connaught Street, W., March 13th, 1878.

** We shall have pleasure in receiving subscriptions and handing them to the Treasurer of the Fund.

"REGISTERED QUACKS."

SIR,—There is, I regret to say, an increasing class of legally qualified medical men who may simply be called "registered quacks", and who, as far as I can see, differ from the lowest and worst type of quacks in two particulars only: first, that they may be presumed to have had a fair professional education, and are, therefore, the more dangerous; and, secondly, that, since their names appear in due form on the official Register published under the direction of the General Medical Council, they are legally entitled to recover their charges from the victims who have fallen into their clutches.

I enclose for your edification the advertisements of two such persons, the one taken from a country newspaper (their favourite medium), the other from a high-class London weekly, in which, however, I am happy to say I have been able effectually to prevent its appearance for the future. Comment on these I leave to your discretion, and will confine myself to the remark, that the advertisements and pamphlets of these duly qualified and registered practitioners are couched in the usual terms of the "nervous debility" quacks.

Now, such things are probably well known to yourself, if not to the majority of your readers, and I draw attention to them only because I see no reason to hope that such abuses of an honourable profession are likely to be dealt with by the impending Bill for the amendment of the Medical Acts.

To those who think that a remedy exists I may state that, two years ago, I had, with regard to one of these persons, a long and futile correspondence. I gave proof of his proceedings, in the first instance, to the deans of the several Faculties whose diploma he holds. One at once informed me that they were powerless to act, and referred me to the Medical Council; another was doubtful, but thought that Section 29 of the Act might apply; the third "hoped that this charlatan's name might soon be erased from the roll". In the end, however, it was found that nothing could be done. I then wrote to the General Medical Council. From an official of that august body I got a curtly

polite answer, to the effect that no steps could be taken. Yet no one could, I think, accuse that officer of any want of energy and activity; for, by the same letter, he begged to inform me that, under Section 14, I was myself liable to have my name erased from the Register. I had, as it happened, dated my communication from an address other than that registered. Perfectly satisfied with this proof of the careful watch kept by the Council over professional interests, I let the matter drop. Nothing, however, appears to have been done or suggested, and I am now induced, in the interests of the profession, to draw attention to this evil in your columns, feeling sure that, if any steps for its eradication be feasible, your powerful aid will not be wanting.—I am, sir, your obedient servant, A. H. D.

March 11th, 1878.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ONE of the relieving officers of the St. George's Union has been recently suspended by the guardians, on grounds which have been inquired into by the Inspector of the Local Government Board. As to the merits of the case against this official it is not our purpose to refer; we only comment upon the subject because the counsel for the official referred to thought fit to exceed the limits ordinarily accorded to the gentlemen of the long robe by a wanton, and, as it appears to us after reading the evidence, an absolutely unwarrantable, attack upon the *bona fides* and professional reputation of one of the witnesses subpoenaed by the Local Government Board. The learned counsel, by his attack upon Mr. Fenton, the Medical Officer of St. George's Union, has given another proof of the truth of the dictum, "If you have no case, abuse the principal witness". Mr. Fenton will survive this, as he has already survived other matters in the St. George's Union.

THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION,
THE LOCAL GOVERNMENT BOARD, THE SAFFRON
WALDEN BOARD OF GUARDIANS, AND
MR. BUCK.

WE have received the following letter for publication.

"3, Bolt Court, Fleet Street, March 1878.

"My Lords and Gentlemen,—I am directed by the Council of the Poor-law Medical Officers' Association to bring under your notice the following case, as in the judgment of the Council it appears to be so unjust as to merit at your hands careful consideration.

"It would appear that, in April last, Mr. Buck of Newport, Essex, the medical officer of No. 3 District of the Saffron Walden Union, was required, by order of the relieving officer, to attend two children of a labouring man named J. Wright, residing at Rickling, Essex, and who had seven children under fifteen years of age, six of whom were dependent on him, the average earnings from all sources amounting to about sixteen shillings a week, out of which he has to clothe and feed his wife and children. In the harvest time he earns some twenty-five to thirty shillings a week for about six to eight weeks, which additional earnings enable him to pay his rent. There can, therefore, be no doubt whatever that this man was fairly entitled to receive parochial medical assistance. This, it would appear, was rendered by Mr. Buck, and the names of the children were duly entered on his medical relief book. Virtually, therefore, the Board of Guardians sanctioned the order of the relieving officer.

"In the month of December last, Mr. Buck was suddenly called to attend one of this man's children, who had fractured his leg. He went, as any medical officer of proper feeling would do, immediately to the child's assistance; and, having put up the fracture, directed the father to apply to the relieving officer for an order, which this official refused to give, but referred him to the Board. The father, thereupon, applied to the Guardians, who declined to grant him one, solely (as the Council believe) because the Guardians were indisposed to pay the fee which Mr. Buck would have been entitled to under the general orders of your Board. What adds to the injustice of this decision, is the fact that the Guardians of this Union direct Mr. Buck's attendance on the families of other labouring persons, in some instances earning more money and having fewer children to maintain. This statement can be substantiated on inquiry; but to resume.

"The Council is aware that your Board has decided that an order for medical relief only lasts so long as the illness of the person for whom it is given; but the Council would respectfully submit that, as the Guardians had recognised this man's impecuniosity in April, and had ordered medical relief, which cost them nothing, that this Board was morally, and, the Council think, legally, bound to grant an order in December, notably as the pecuniary position of Wright had not in the interval changed.

"It is true that it might be alleged that Mr. Buck should have waited for an order ere he attended to the necessities of this child; but the Council would submit that if such rule were to be generally acted on, it would tell very frequently with disastrous effects on the interests of the sick poor; and, indeed, the Council believe, and not without good grounds, that your Board would hold a medical officer censurable if he insisted on following a hard-and-fast line, and if death resulted from his refusal to attend without an order—notably, too, in a case where, as in this instance, an order had been given for his attendance a few months before.

"Nor is this all. The Council would respectfully submit that Mr. Buck was elected under the distinct intimation that he would be entitled, as an addition to his annual stipend, to all those extra fees laid down in your general orders, and the amount of which is more or less easily calculable to a given locality. The Council feel that if a Board of Guardians advertise that extra fees will be allowed, and then meanly refuses to grant them, and that, too, on account of a person whose pauperism has been admitted, that a very serious blow will be struck at the efficiency of the Poor-law medical relief system throughout the country.

"The Council trusts that your honourable Board will see fit to direct that the Saffron Walden Board of Guardians should pay the fee for the attendance of Mr. Buck on Wright's child.—We are, my lords and gentlemen, yours obediently,
JOSEPH ROGERS, Chairman.
"J. W. BARNES, Hon. Secretary.

"The Hon. the Local Government Board."

ELECTION OF MEDICAL OFFICERS.

AN appointment has just been made in a country union, to which, in the interests of the sick poor and also in that of the Poor-law medical service, we feel it our duty to direct attention. In our advertising columns of the 2nd instant, we published an announcement that the guardians of this union desired to appoint a medical officer for a district of the union, the area being 5,869 acres, the population 1,853. Four candidates applied for the vacancy, one of whom lived in the district; disregarding this, the guardians elected a gentleman who already holds the second district, with an area of 22,159 acres and a population of 3,500, and the Workhouse; he also holds a district of another union, whose area and population, doubtless from prudential motives, are not given. The nearest point to the district to which the gentleman in question, in defiance of the regulations of the Local Government Board, has been thus appointed is five miles, the most distant is ten miles. What is contemplated by the Board of Guardians is evident. By law they are compelled to appoint a medical officer; but, by their selection, it is made manifest that the well doing of the sick poor confided to their guard has never entered into consideration. We are pleased, however, to record that the Vice-chairman protested against the appointment, assigning as his sole objection his sympathy for the well-doing of the sick. We heartily agree with him, and only hope that, as the Local Government Board can veto this appointment, it will exercise its authority and annul this election.

VACCINATION.—Dr. W. J. Treutler has received a Government grant of £9 : 8 for successful vaccination in the Maresfield District of the Uckfield Union.

POOR-LAW MEDICAL APPOINTMENTS.

CLARKE, Thomas, L.R.C.P., appointed Medical Officer to the Third District of the Pewsey Union, *vice* F. H. Carter, M.R.C.S.Eng.

MILITARY AND NAVAL MEDICAL SERVICES.

THE principal army veterinary surgeon reports that nineteen vacancies exist at the present time in his department; and that, with the present terms offered to the profession, it is impossible for him to find candidates of the proper social status to fill them.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS—Monday, March 11th, 1878.

Cattle-Disease at Alford.—In answer to Sir W. Lawson, Lord SANDON said: I am glad to say that we are assured that no further death has occurred from this disease. No claim for compensation has been made upon the Government; and as the disease does not come within the provisions of the Contagious Diseases (Animals) Act, 1869, no such claim could be made. I am informed that some of the food which had been partaken of by the cattle prior to the outbreak was analysed, and that no poisonous agent was detected in it. I ought to mention the cause to which the most experienced Inspectors of the Privy Council are inclined to attribute the disease; but I almost fear to shock the honourable baronet too much by doing so. However, I think I ought to inform the House that they think it probable that this very serious disease was induced by drinking-water.

Vivisection.—In reply to Mr. Pease, Mr. CROSS said that twenty additional licences had been granted beyond what appeared in the half-year's return. He had had many interviews with a most able inspector, who had assured him that there was not the slightest ground for believing that there had been any abuse.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 7th, 1878.

Hope, William More, Piccadilly
Nickolds, William Stephen, Shepherd's Bush
Ross, Richard Alexander, Brighton
Stuart, Henry Ogilvy, Woolwich

The following gentlemen also on the same day passed their primary professional examination.

Fenton, Frederick Enos, St. Mary's Hospital
Hall, Thomas Lambert, Birmingham
Oswald, Robert James William, Charing Cross Hospital

UNIVERSITY OF DUBLIN: SCHOOL OF PHYSIC IN IRELAND.—At the Hilary Term Examination for the Degree of Bachelor of Medicine, held on Monday and Tuesday, February 18th and 19th, 1878, the successful candidates passed in the following order of merit.

Neville, William C.	Daly, Ulick
Cowen, Edward J.	Malley, Abraham
Wilkinson, William C.	Tench, Charles H.
Young, Alexander G.	Smith, Thomas O.
Pentland, Alexander	Crofts, James G. W.
Egan, Constantine R.	Day, James D.
Inman, Arthur	

At the examination for the Degree of Bachelor in Surgery, the following was the order of merit in which the candidates passed.

White, Edward W. W.	Daly, Ulick
Mallins, Clement	Taylor, Rogers W. G.
Young, Alexander G.	Fogarty, Thomas F. W.

MEDICAL VACANCIES.

THE following vacancies are announced:—

BRISTOL GENERAL HOSPITAL. Physician's Assistant. Salary, £50 per annum. Applications on or before April 19th.

CERNE UNION.—Medical Officer of Health. Salary, £60 per annum. Applications on or before the 25th instant.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY.—House-Surgeon. Salary, £50 per annum, with board, lodging, and washing. Applications on or before the 22nd instant.

DUNFANAGHY UNION, Donegal.—Medical Officer of Gweedore Dispensary District. Salary, £100 per annum, with £10 as Sanitary Officer, exclusive of Registration and Vaccination Fees. There are also two Police Stations and a Coast Guard Station in the district, which are usually placed in charge of the Medical Officer. Applications to the 17th instant. Election takes place on the 22nd instant.

LINCOLN GENERAL DISPENSARY.—Resident Medical Officer. Salary, £150 per annum, with furnished apartments, fire, and gas. Applications on or before the 16th instant.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer. Salary, £150 per annum, with board and residence. Applications on or before the 31st instant.

MILLSTREET UNION, Cork.—Medical Officer of Workhouse, at a salary of £70 per annum. Applications, with Testimonials, to the 21st instant.

NARBERTH UNION.—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

STAFFORDSHIRE GENERAL DISPENSARY.—House-Surgeon and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications on or before the 26th instant.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before the 30th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BLOMFIELD, A. G., M.R.C.S.Eng., appointed House-Surgeon and Secretary to the West Norfolk and Lynn Hospital.

LITTLE, William, M.D., appointed Honorary Surgeon to the Royal Southern Hospital, Liverpool, *vice* John Nottingham, F.R.C.S., Senior Surgeon, resigned.

RANSFORD, T. D., F.R.C.S., appointed Honorary Surgeon to the Royal Southern Hospital, Liverpool, *vice* T. G. Wollaston, M.D., resigned.

*ROBINSON, C. H., F.R.C.S.I., appointed Medical Referee to the Great Britain Mutual Life Assurance Company.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

DAVIES.—On March 1st, at Preswylfa, Colwyn Bay, North Wales, the wife of Thomas Davies, L.R.C.P. Edin. & M.R.C.S. Eng., of a son.

*JAY.—On March 12th, at Chippenham, Wilts, the wife of Henry Mason Jay M.B., F.R.C.S., of a daughter.

PARSONS-SMITH.—On March 8th, at St. John's Lodge, Addiscombe, Croydon, the wife of *S. Parsons-Smith, L.R.C.P., of a son.

DEATH.

*DOBIE, James, M.D., F.F.P.S., of 2, Great Kelvin Terrace, Glasgow, at Morton Villa, Dumfries (the residence of his mother), on February 26th.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—London, 3 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Erompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2.15 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Squire, "Two Cases of Flat Vascular Nævus successfully treated by repeated Lineæ Scarifications"; Dr. Sullivan, "On the peculiar Function of the Spleen, and the influence of Malaria upon it".

TUESDAY.—Pathological Society of London, 8.30 P.M. Meeting for the Exhibition of Specimens illustrating Diseases of the Lymphatic System, including Lymphadenoma and Leukæmia. Specimens will be shown by Dr. Wilks, Dr. Gowers, Dr. Greenfield, Dr. Goodhart, Mr. Nunn, Dr. R. Jones, Dr. Whipple, and others.—Statistical Society, 7.45. Mr. C. Walford, "On the Famines of the World".

WEDNESDAY.—Association of Surgeons Practising Dental Surgery, 8.30 P.M. Ordinary Meeting.

THURSDAY.—Harveian Society of London, 8 P.M. Dr. Edis, "Cases illustrating the Diagnosis of Abdominal Tumours"; Dr. Ashburton Thompson, "Cases of alleged Maternal Impressions".

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Hutchinson, "Retinitis Hæmorrhagica: its connection with Gout, and probable dependence upon Thrombosis of the Vein". Dr. Broadbent, 1. "Unusually rapid Effusion of Bloody Fluid into the Pleural Cavity at the age of 76: Paracentesis: Recovery"; 2. "Pleuritic Effusion: Sudden Death without Paracentesis". Mr. Nunn, 1. "Electrolytic Treatment of Epulis"; 2. "Plantar Bunion"—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Ordinary Meeting.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

SEVERE VOMITING.

SIR,—Can any of your readers, from experience in similar cases, suggest further remedies in a case of chronic vomiting, lasting over five years, with every now and then attacks of great prostration and vomiting of a greenish membranous substance, and great pain over the stomach? The patient cannot retain anything; and even a teaspoonful of champagne is returned, and causes great distress. For months I have given pills of two and three grains of opium (crude), or a quarter of a grain of morphia, but now even these cause vomiting. Enemata are not retained, and the slightest movement brings on the attack. Blisters will not take effect, to allow absorption of morphia. Hypodermic injections cause large abscesses. I have tried pills of extract of meat, but with no better result. Oxalate of cerium, kousmis, lead and opium, poultices with opium, chlorodyne, carbolic acid, etc., have been used, but nothing can be retained. The only thing that can be retained, and that only for a short time, is ice and lemon. The attack has been on some weeks, and necessarily there is great exhaustion.—Truly yours,

M.R.C.S.

MR. WALTER L. RANKIN will receive the necessary form of application for membership.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a Post Office.

PICTURES FOR LOCK HOSPITALS.

A CORRESPONDENT writes:—The desirability of making the wards of our hospitals as cheerful as possible is now generally admitted. As a very general rule, their walls are now decorated with pictures, illuminated texts, mottoes, and other means for relieving the bare appearance they would otherwise present, and with which we were formerly too familiar. The liberality of the public has been well illustrated in providing the necessary funds, and more especially in the case of hospitals and infirmaries for children; indeed, it may be said that pictures for such hospitals have only to be asked for, to be obtained at once and in abundance. There is, however, one class of hospitals which, for obvious reasons, are not likely to be equally favoured, except by a strong and special appeal. We refer to lock hospitals. These cannot be open to the public, nor can appeals to the public be made on behalf of their inmates with the same confidence as for the patients of any other medical charity. Some time ago, the proprietors of the *Graphic* issued a notice offering to send engravings and back numbers to any hospital or infirmary on a request being made from the managers of such institution. Seeing this, Mr. F. W. Lowndes, surgeon to the Liverpool Lock Hospital, applied on behalf of that institution, the walls of which at that time presented a rather bare appearance, and in due course a large parcel arrived at the hospital, which was found to contain a number of very handsome engravings of various sizes, both plain and coloured, together with many back numbers. With the assistance of a few influential subscribers, Mr. Lowndes succeeded in raising a sum sufficient to place the engravings in neat oak and glass frames of the "Oxford" pattern. The improvement in the appearance of the wards was very marked; and it affords us sincere pleasure to record so generous and pleasing an act on the part of our pictorial contemporary. It is on all accounts most desirable that the wards of lock hospitals, especially those of a voluntary character, should be made as cheerful and attractive as possible.

SUCKING THE TONGUE.

SIR,—Can any member give me an idea as to how to prevent a child of three years of age from sucking its tongue? I have looked at the usual standard works, but I see no mention of it there. The habit, of course, will be given up as time goes on; but I should be glad of any hint on the subject from any of the readers of the *JOURNAL*.—Yours faithfully,

A MEMBER.

A VOICE FROM JAPAN.

SIR,—As a contribution towards the formation of a sounder public opinion upon the pedestrian feats which seem to be becoming more fashionable, will you allow me, as a reader of the *BRITISH MEDICAL JOURNAL*, to enter my protest against medical men lending any countenance to these exploits, which seem to serve no other purpose than to gratify the vulgar vanity of the performers and their admirers? If any physiological problem were to be solved, or any other good purpose served, it would be the duty of the medical attendant to place the performer in the most favourable circumstances for performing the experiment, and there would attach to the experimenter the heroism of self-sacrifice for the good of humanity. In such a case, also, one experiment, carefully conducted, would suffice; but it appears that there is no more worthy object than for one pedestrian to outdo another in reducing himself to a walking machine. Under these circumstances, it appears to me to be the duty of any medical man who may be summoned to attend the pedestrian, absolutely to forbid his "patient" to expose himself to the risk which is involved in the performance of such a feat as "walking four thousand quarters of a mile in four thousand consecutive ten minutes". Supposing the feat accomplished, every sensible man will think the pedestrian a great fool for his pains, and every right feeling man will pity him that he cannot find some more worthy cause to which to exercise his powers of physical endurance. And surely if the feat be attended by any evil consequences, the medical man who has promoted it must be held responsible. It seems to me to be the duty of the medical profession to frown down these contemptible exhibitions, and not to pretend that they are done in the cause of science, or in any way to throw around them the halo which attaches to an act of sacrifice in the sacred cause of scientific investigation.

These remarks are suggested by a report of the pedestrian feat of William Gale, recorded in the *BRITISH MEDICAL JOURNAL* of November 10th, 1877, in which it represented that certain physiological elements are demonstrated. I doubt whether any new physiological fact is demonstrated; and, granting even that it is, I hold that "the game is not worth the candle". I should like to see the influence of the *BRITISH MEDICAL JOURNAL* directed against these proceedings, which are, in my opinion, essentially vulgar, contemptible, and demoralising.—Yours truly,

Niigata, Japan, Jan. 23rd, 1878.

THEOBALD A. PALMER, M.A., M.B.

* * * The observations made by Austin Flint, Pavy, Mahomed, and others on those occasions have been of great scientific value.—Ed. B. M. J.

WILL Dr. Curney kindly inform us, in reference to the communication which he forwards this week, what is the composition of the substance which in his report he describes as phosphodia, and where Dr. Klein recommended it for the treatment of cancer?

MEDICAL TITLES AND THE NEW MEDICAL ACT.

SIR,—*A propos* of the Duke of Richmond's contemplated Medical Amendment Act, will you permit me to suggest that any such measure will be very incomplete which does not conclusively deal with that incessant bone of contention among general practitioners—medical titles. Either that all qualified medical men should, as in France, be dubbed "Doctor", or, on the other hand, that the Licentiates of Colleges of Physicians should be decisively prevented from encroaching on the very barren and often hard-won honours of the medical graduates, is a solution of the difficulty devoutly desired, I believe, by many others beside your obedient servant, March 10th, 1878.

M.D. Lond.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

LADY-MEMBERS OF THE ASSOCIATION.

SIR,—When Dr. W. O. Markham wrote his apologetic letter, he might have taken the trouble to refer to the by-laws of the Association. I am surprised that so many write letters, and cull from imagination alone. Mrs. Anderson and Mrs. Hoggan were admitted members contrary to the rules; and unless Dr. Markham can find a loophole in the by-laws, they are not entitled to membership now, and never were. If a female become "*he*" after obtaining a medical qualification, then I confess we must submit to the admission of "*ladies medical*" as members; but according to the existing laws, only *he's* are eligible, not *she's* at all. As many members may not possess a copy of the Articles of Association and By-laws, and in order to show that no motion or resolution is required for the expulsion of Mrs. Anderson and Mrs. Hoggan, I shall give the three paragraphs bearing upon the election of members from page 15 of said articles, etc.

"Election of Members.—1. Any qualified medical practitioner not disqualified by any by-law of the Association who shall be recommended as eligible by any three members, may (subject as hereinafter mentioned) be elected a member by the Committee of Council, or by any recognised Branch Council.

"2. No person shall be elected a member unless *he* has the votes of not less than three-fourths of the members present at the meeting of the Committee of Council or Branch Council at which *he* is proposed for election, and has agreed in writing to become a member, and to pay *his* subscription for the current year.

"3. Any member may be expelled from the Association by a resolution of the Committee of Council if carried by three-fourths of the members present, subject to confirmation by the next annual meeting; and *he* shall thereupon cease to be a member, and shall not be eligible for re-election. One month's notice of the intention to propose such resolution shall be given to any member affected thereby."

I have put *he* in italics, to show nothing can be more plain than the wording of these by-laws. Dr. Markham says: "All, therefore, required is, that proper steps be taken to frame a law, which shall meet the wishes of the majority of the Association." The law is already framed, and the Committee of Council have simply to let Mrs. Garrett-Anderson and Mrs. Hoggan know that their election was a mistake, and that females are not eligible as members of the British Medical Association. Let this be done at once, seeing the two ladies are unwilling to resign, and save the Association from unseemly bitterness and ignoble squabbles over this job, which should never have seen its present development had the Committee of Council acted according to the by-laws of the Association. Dr. Markham is altogether wrong when he says: "These ladies were admitted in accordance with the laws of the Association; and, until better informed, I conclude that they cannot be legally ejected from the Association." The by-laws above quoted will surely convince Dr. Markham that "these ladies" have no right to membership; and No. 3 gives power to expel even Dr. Markham, myself, or any other member, according to "club law", and we have no power of appeal but to the annual meeting. In No. 2, above quoted, the word *he* occurs twice, and *his* once; the ambiguous term "person" not at all referring to *she's*, but *he's*.

No new law is required to decide "that ladies shall not be admitted in future", for, according to the by-laws, they have no claim, and are "out of court". By all means return them their subscriptions. If they do not retire, and the Committee of Council fail to carry out the laws of the Association, I shall give notice and have the question brought before the next annual meeting, and demand from Dr. Falconer and his *confères* an account of their stewardship in this matter. We have line upon line bearing upon this point, yet nobody has troubled himself to look into the by-laws concerning this question. I have written to Dr. Falconer, calling his attention to the subject, and I hope at the next meeting of Committee of Council the "lady question" will have some consideration, and, ere long, the retirement of Mrs. Anderson and Mrs. Hoggan will be announced.

I should indeed be sorry to wound the feelings of Mrs. Anderson or Mrs. Hoggan; but so long as dissatisfaction prevails, and seeing they have no right to membership according to the by-laws, I must, as a member, insist upon either their retirement or expulsion from the British Medical Association, and it will then be open to Dr. Markham and others to bring in a resolution in order to admit ladies, if they think fit, and for the welfare of medicine and the Association, desirable.—I remain, yours very truly,

HENRY BROWN.

Northallerton, March 9th, 1878.

M.D. BRUSSELS.—Will any of your readers who has obtained the degree of "M.D. Brussels" kindly inform me what books are the best to take up on each subject of examination?

IFAN.

THE following communications have been handed to the General Manager:—Mr. Charles Rogers, Retford (with enclosure); Dr. J. Christie, Glasgow (with enclosure); Mr. W. Moorman, St. Colomb, Cornwall; Mr. E. McGrath, Kierke, Bombay; Mr. Henry Fox, Bristol; Dr. H. M. Jay, Chippenham (with enclosure); The Secretary of the Mochra Coffee Company; Mr. Walter L. Rankin, Strathblane; Dr. R. H. Allnatt, Frant.

GLAUCOMA.

SIR,—I should like to lay before those who are best able to judge the following propositions, apologising for the somewhat bald manner of putting them. 1. Is glaucoma simply a hydrocele of the aqueous chamber of the eye? 2. Is iridectomy curative, accidentally as it were, by means of iritis, just as inflammation excited in the secreting membranes of other hydroceles is curative?—I am, etc.,

S. WILSON HOPE.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

AN APPEAL.

SIR,—May I venture to ask you to insert my appeal in the next issue of the JOURNAL on behalf of a medical man now lying helpless from accident and disease? The facts are shortly as follows. Mr. W. H. Barber, L.R.C.P. Lond., of this town, has for the last three years been unable to follow the active duties of his profession in consequence of an accident, whereby he lost the entire use of his right arm. For some months past he has been under my care, suffering from partial loss of power in the lower extremities, and has been during the whole of this period confined to his bed. He is now, I find, without adequate means for his support, having been unable (like too many of us) to make provision for a rainy day out of a slender and laborious country practice. I propose making an appeal on his behalf to the profession, hoping by so doing to secure for him that amount of comparative ease and comfort during the remaining portion of his life which I would earnestly desire for myself or for others who might be so unfortunately placed.

The merits of the case for which I plead are well known to, and can be attested by, the Rev. Boscawen Somerset, M.A., Rector of Crickhowell, and the Rev. George Howell, R.D., Rector of Llangattock.

Any contributions will be thankfully received by me, and, with your permission, acknowledged in the JOURNAL.—I am, sir, your obedient servant,

PHILIP E. HILL, M.R.C.S. Eng., Surgeon to the Crickhowell Dispensary, etc.

Crickhowell, March 9th, 1878.

SIR,—Can you advise a member of the British Medical Association whether he would be justified in admitting a man aged 27 to a small benefit club? The man has been deaf and dumb from birth; in other respects healthy; both parents alive; no other member similarly affected. The man by occupation is a gilder.—I am, sir, faithfully yours,

B. J. A.

PHYSICIANS' FEES.

SIR,—I have waited in hopes that some other correspondent would have adverted to the one point which, more than any other, affects the general question of medical fees—the value we ourselves put upon our own services. The discussion began with a complaint that well-to-do patients were apt, whenever possible, to diminish or evade physicians' fees. Doubtless these "well-to-do" people reason in this way: "I find I have no money to spare; the expenses of life have doubled during the last twenty years, and the necessities of luxury have increased. I can ill afford to spend unnecessary money; and why should I pay high fees for as little, or less, skill and attention as thousands of persons no worse off in their place in life than I am in mine can have for nothing?" Of course, they ought not to reason thus: they ought to feel that their high payments barely compensate the physician for the hours a day he devotes to the poor and needy. But theirs is the reasoning of the world; it begins and ends at home. The fact is, the world takes us much at the value we place upon ourselves; and the time, attention, and skill given gratuitously at the hospitals not only lessen the amount of physicians' fees, but have their ulterior effects in depreciating the services of our brethren in every town and village, and wherever a general practitioner has fairly worked; but to die in harness and leave his family without provision, some portion of the blame is shared by every surgeon and physician who systematically gives away day by day, on a large scale, what is the equivalent of bread and meat, clothing and lodging. This is not the place to discuss the well known evils of promiscuous medical charity; they are generally recognised. But I would pass on to ask, Does Christian philanthropy require from us this systematic sacrifice of our time and strength? No. The good Samaritans of the present day build and endow hospitals, and then say to the doctors, "Now, you come and attend to the people for nothing." The good Samaritan of Scripture took his sick man to an inn, but did not say to the host, "You attend to him for nothing"; but he paid him at the time, and pledged his credit to him for the future. Or, to alter the comparison, and find a parallel to the acts of the good Samaritan in our own gratuitous professional attendance on the poor, the good Samaritan is not put forward as an example of anything, but the meritorious conduct of a man who casually met and relieved the wants of another. We systematically work for nothing; and the practical effect is simply to enable people to do half their charity vicariously, at another's cost and not their own. We are often told that our profession is a noble one, although its nobility has never yet led to a peerage. It is a noble one, and its work would not be less noble if it were better paid. This much is certain, that as time goes on, and the value of money continues to lessen, the necessity for a revision of medical fees will become more and more apparent. The way to revision lies through the hospitals, and, this road once clear, the power will be in the hands of the heads of the profession, who will be able to put in force, within certain reasonable limits, any scale of fees they choose; and in proportion to the monetary value put upon their services by the leading physicians and surgeons will be the remuneration right through the profession down to the holder of the smallest union appointment and the poorest club.—I am, etc.,

March 1878.

ME QUOQUE.

SIR,—I am a practitioner of medicine, surgery, and midwifery to the general public in a small town in the North of Scotland, and I am of opinion that the general public aforesaid avoid paying me my lawful and reasonable fees whenever they have a chance of so doing. I will, therefore, thank any gentleman conducting a practice of this nature who will give me some idea as to how he obtains payment for the following: 1. Consultations with other medical men; 2. Midwifery—natural and instrumental, or complicated; 3. Visits in town; 4. Visits to the country; 5. Minor operations; 6. Major operations; 7. Advice at his own house. I also wish to know how he treats those who year after year neglect to pay their bills. I likewise desire information as to the difference in fees between, say, a large farmer and his farm-servants. In the event of any one replying, I will publish, in return, my present charges.—I am, yours, etc.,

PILGALLIC.

SIR,—In your paper of the 2nd March, you publish a letter on the above subject from "A Junior", who, whatever be the merits of the remainder of his communication, expresses sentiments in the second paragraph respecting gratuitous attendance on one doctor by another, which, I trust, are not those of any but a small minority of the profession. He says, "Why should I treat another medical man gratuitously?" and goes on to argue that, because clergymen and lawyers charge one another for professional work, we should do the same. The fact of clergymen and lawyers displaying niggardliness towards each other is no reason why we should do so too; and if all that can be said against one profession as compared with the two others be, that we are more charitable than they, we may be content to rest under the imputation. When a medical man, perhaps considerably my senior, does me the honour to consult me, he confers at least as much obligation on me as I do on him by giving him my services; and most of us would view with much regret any departure from the custom. "A Junior" says that he and his wife

were badly attended by medical brethren until they got advice *incognito* and paid for it, and that after that "the improvement in attentiveness was most marked". It is not worth while to elaborately refute the unjust charge against an honourable profession which is implied in this remark; and, indeed, to do so, it would be necessary to accept the position that the inattentive brethren whom "A Junior" first consulted were a fair type of the members of the medical profession—a position which is of course untenable.—I am, etc.,
F.R.C.S.

ATTENDANCE ON THE FAMILIES OF MEMBERS OF THE PROFESSION.

SIR,—Allow me to ask the opinion of the profession under the following circumstances. I must premise by stating I am L.R.C.P. and M.R.C.S. of twenty-one years' standing, during the whole of which time I have been in active practice, when it has often been my lot (and I consider duty and pleasure) to render professional aid to my professional brethren and their families without fee or expected reward; although, as a rule, I was paid in some form. Nor have I been less indebted to our noble profession in their kindness and attention to my wife and family, especially during a long residence abroad, as also to myself during two severe illnesses, consequently I have always given and accepted such aid as a matter of course; but I have lived to be enlightened on the subject by a junior practitioner, and do not feel inclined to pay without eliciting an expression of opinion. Many of my medical friends think the bill a mistake, and advise me to treat it as such. The simple facts are as follows. My daughter, aged 15, goes to school at some distance from me. Last summer, she had an attack described by her attendant as "hysterical." I received with the school account an enclosure at midsummer for £3 10s. 6d. for medical attendance (about a week). When I enclosed the check for schooling, I wrote the mistress that it was an error, doubtless made by the firm's clerk, and I took no notice of it. The other day I received another one through the same source, and await advice how to act, as I would not like to form a precedent for a less fortunate brother practitioner.—I am, sir, yours truly,
March 1878.

MEMBER.

REMOVAL OF FOREIGN BODIES FROM THE AUDITORY CANAL.

SIR,—I have to thank Dr. Cassells for the name of the inventor of the "agglutinative" method: and as I have not claimed any originality for the plan adopted by me, or priority in the use of it, I should not further notice his letter were it not that Dr. Cassells, in saying he "described" the method in the *JOURNAL* of December 26th, 1874, contradicts one of my statements. I think, therefore, it best to let your readers know what Dr. Cassells has said on that occasion, and let them judge whether he has described the method or not. In his lecture, as reported in the *JOURNAL*, all I can find on the subject is contained in the following sentence. "I cannot allow this opportunity to pass without commending the excellent agglutinative method recently proposed by Löwenberg, the distinguished Parisian otologist, as one that offers a fair prospect of success when the simple means presently to be mentioned have failed to effect the purpose of the surgeon. In his (Löwenberg's) hands, in one case, it sufficed to accomplish the removal of a foreign body irremovable by every other means." Dr. Cassells then gives ten cases, in not one of which he used this method for removal of the foreign body.

My objects in sending the communication to you were, to recommend to the notice of the profession a simple and safe method of treatment for what are very often embarrassing cases, and to point out the superiority of a quick-setting cement over glue or wax, which can be used in the same way. I thought the knowledge of it might be useful to many busy men who, like myself, have not the opportunity of consulting *Monatsschrift* or *Arch. für Ohrenheilk.*, and who do not enjoy the friendship of Löwenberg, and who may not consider that Dr. Cassells has given a very full or lucid description of the agglutinative method.—I am, yours truly,
Castlewellan, co. Down, Feb. 25th, 1878.
GEO. GRAY, M.D.

THE LATE SIR W. STIRLING MAXWELL.

SIR,—In answer to the letter of Dr. W. T. Black, which appeared in the number of January 26th of your *JOURNAL*, I can say that Sir W. Stirling Maxwell, Bart., did not contract "a fever in some of the canal-girt palaces of the old city"; but that when he arrived in Venice from Florence, on the 6th January, he had not been well for some days, and suffered from diarrhoea. His doctor, M. Levi, did not see him until three days later, when he presented high fever, pulmonary oedema, and enormous tympany. Dr. Levi was told that, although very much worse on the 7th and 8th, Sir W. Stirling Maxwell was out for the greater part of the day in an open gondola, and ate almost like a healthy man, which contributed a great deal to make worse his intestinal condition. Dr. Levi has written a detailed report of this malady for the friends of Sir W. Stirling Maxwell. I only know that he prescribed at first some mild aperient, a light tonic diet; and that later, it was necessary to have recourse to calomel, local cold baths, and turpentine injections. Sir W. Stirling Maxwell grew worse on the 13th and 14th, and died on the 15th. He was only sixty years old, but he looked as if he were seventy.

Now, I am rather surprised to see that Dr. Black thinks that the prevailing prejudice "against the professional ability of the Italian medical practitioner" will be rather increased by the death of our beloved King Victor Emmanuel, and by that of Sir Stirling Maxwell. I think that no English medical man can draw from these data such an inference against the ability of the Italian practitioner. If it were so, we should think, with more reason, that this is quite in opposition to the British calm and gravity.—Faithfully yours,
Padua, Febr. 26th, 1878.
C. RUATA, M.D.

REMOVAL OF CHRYSOPHANIC ACID STAINS FROM LINEN.

SIR,—I have been very frequently asked, and the question has been put to me more than once in the columns of this *JOURNAL*, What will remove the apparently indelible brown-purple stains which disfigure the linen of patients who have been treated with chrysophanic acid ointment? This is the one drawback that now remains to the employment of this most serviceable remedy in psoriasis. All the other drawbacks to its use are, as I have recently endeavoured with some detail to show, obviated by the exercise of some little care (*On the Treatment of Psoriasis by an Ointment of Chrysophanic Acid*, pp. 99: London, 1878); but this particular disadvantage I have been obliged hitherto unreservedly to admit. I applied a short time since to the able chemist (Dr. Attfield) who first discovered that chrysophanic acid was the chief constituent of "erarola" or "Goa" powder, and he suggested to me acetic acid, or even vinegar. I accordingly tried acetic acid on a very representative towel, which, having been recently in use at the British Hospital for Diseases of the Skin, had undergone a considerable discoloration by chrysophanic acid. To a part of this towel I applied strong acetic acid very thoroughly; this produced no effect. To another part of this same brown-purple towel I applied aqua fortis diluted with twelve parts of water. This only varied the hue to a brighter brown colour, without diminishing notably the intensity of the colouration. These results I communicated to my friend, who replied that chrysophanic acid of potash was discoloured in the test-tube by acetic acid, and that he could

only therefore conclude that in the fabric of the linen it became a true "fast dye". Thrown by this rejoinder on my own resources, I next tried the aqua chlori, *P.B.* (chlorine water). This reagent at once removed the colour. I accordingly procured some common bleaching powder of the nearest oil-man. I determined to push the action of the agent without regard to the integrity of the towel. I accordingly made a strong mixture of the bleaching powder with very hot water, and immersed the towel in the liquid at ten o'clock this morning. After I had finished my morning's work I proceeded to examine the result, and at three o'clock this afternoon fished my towel out of the water on the end of a stick; but the stick, a blunt one, went through the towel, which would scarcely hang together as I lifted it out of the water. The towel was thoroughly rotted, but it had become perfectly bleached. No trace of the brown purple stains remained on the now perfectly white towel. I knew by the strength of which I employed the bleaching solution that I should rot the towel very completely, but I was not quite sure that I could so thoroughly bleach it. I have no doubt whatever that a more temperate employment of the bleaching solution—employed, for example, of such strength as washerwomen commonly use it—would bleach as effectually without rotting the linen. My reply, therefore, now to my numerous inquirers as to how to remove the stains of chrysophanic acid on the linen is, that they should have the linen properly—that is to say, moderately—bleached, by means of a dilute solution of bleaching powder in the usual way.—I am, etc.,
March 1st, 1878.
BALMAMNO SQUIRE, M.B.

IS LIFE WORTH HAVING?

SIR,—My conscience has been much troubled by the remarks in an editorial of the *Spectator* of the 16th February on the decision of the High Court of Justice in a case of "cruelty to animals", deciding that it was cruelty to keep a mare alive for the sake of an expected foal when suffering from a hopeless injury to the leg, causing her great torture when she moved about, and stating that it would not be justifiable even to keep her alive in a stall, for that the suffering, though alleviated, would still be great. The editorial concludes:—"If the statute does not contemplate as cruelty the case of purposely keeping alive, for gain, a creature whose life is torture, surely the statute ought to be amended." Now, I am afraid I and many of my *confères* have been guilty of keeping not only a creature, but a human creature, alive—if not for gain, at any rate to our gain—where life is torture. Will some experienced casuist kindly give me his advice as to whether we are justified in so doing, or whether we ought to shoot them at once?—I am, etc.,
M.D.

DR. H. QUILL will perhaps kindly quote the suggestion of Dr. Cleland for the removal of foreign bodies from the ear.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Courant; The Middlesex County Times; The Liverpool Evening Albion; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. T. Holmes, London; Dr. Bradbury, Cambridge; Dr. C. Theodore Williams, London; Mr. A. H. Benson, Dublin; Mr. Sydney Haynes, Stansted Montfichet; Dr. Simpson, Manchester; Mr. C. Rogers, Retford; Dr. J. Crawford Renton, Glasgow; Dr. F. A. Mahomed, London; Mr. J. Stuart Nairne, Glasgow; Dr. Edis, Grimshaw, Dublin; Dr. W. C. Grigg, London; A. J. A., Farnham; Dr. J. Christie, Glasgow; Mr. G. Eastes, London; Mr. Macnamara, Dublin; Dr. J. Milner Fothergill, London; The Secretary of the Hospital Saturday Fund; Mr. T. T. Frankland, Ripon; Dr. Thin, London; The Secretary of Apothecaries' Hall; Mr. Richard Davy, London; The Secretary of the Medical Society of London; M.; Dr. Joseph Rogers, London; The Registrar-General of Ireland; M.D.; Dr. Farquharson, London; Dr. W. Fairlie Clarke, Southborough; The Registrar-General of England; Dr. T. Spencer Cobbold, London; Dr. John Duncan, Edinburgh; Dr. L. W. Sedgwick, London; Mr. H. R. Hatherly, Radford; Mr. C. M. Jessop, Clifton; Dr. Aitkin, Rome; Dr. A. Magir, Antwerp; Mr. Nelson Hardy, London; Dr. T. Gurney, London; Mr. A. Napper, Cranleigh; Mr. P. E. Hill, Crickhowell; Dr. Bond, Gloucester; The Secretary of the Clinical Society; Dr. Herbert L. Snow, London; Mr. J. D. Mann, Manchester; Dr. James Cumming, Edinburgh; "Perick" Gwalior; Dr. W. McCormish, Calcutta; Mr. E. McGrath, Kierkee; Dr. R. Shingleton Smith, Clifton; Mr. W. Moorman, St. Columb; Mr. J. H. Craige, London; Mr. C. E. Davis, Boston, U.S.; Dr. Cavafy, London; Dr. T. M. Lownds, Egham Hill; Dr. Huxley, Maidstone; Dr. Sawyer, Birmingham; Mr. Henry Fox, Bristol; Dr. V. C. Clarke, Pentonville; Mr. T. Spencer Wells, London L.R.C.P.; Our Edinburgh Correspondent; A. H. D.; Mr. E. J. Luck, London; Mr. Henry Brown, Northallerton; Our Dublin Correspondent; Dr. E. Wakes, London; Mr. Ray Lankester, Oxford; Dr. H. M. Jay, Chippenham; Mr. Robinson, Dublin; Dr. Stephen Mackenzie, London; Mr. L. Armstrong, Newton Abbot; Dr. A. Sheen, Cardiff; M.D.; Mr. F. W. Lownds, Liverpool; Dr. Trollope, St. Leonard's-on-Sea; Dr. T. W. McDowall, Morpeth; Dr. J. Smith, Dumfries; Dr. Jamieson, Edinburgh; Dr. A. McCook Weir, Leicester; The Secretary of the Quakett Microscopical Club; Mr. S. M. Bradley, Manchester; Mr. Little, Liverpool; The Secretary of the Statistical Society; Dr. A. J. Bannister, London; Mr. J. Simon, London; Sir Henry Thompson, London; Dr. Hudson, Dublin; Dr. Philipson, Newcastle-on-Tyne; Sir James Paget, London; Dr. Humphry, Cambridge; Right Hon. Lyon Playfair, M.P., London; Dr. Cameron, M.P., London; Surgeon-Major, Woolwich; A. M. D., Reading; Medical Officer, Shoreham; Mr. Chiene, Edinburgh; Dr. Althaus, London; Mr. H. Sewill, London; Dr. Stowers, London; Dr. Edmund, Edinburgh; Mr. T. M. Stone, London; Mr. C. Kemp, London; Dr. Cholmeley, London; Mr. C. Atkinson, Leeds; etc.

THE GOULSTONIAN LECTURES ON THE LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.,

Professor of Forensic Medicine in King's College; Assistant-Physician to King's College Hospital; etc.

LECTURE I.—*March 15th.*

MR. PRESIDENT AND GENTLEMEN,—In these lectures, I propose to discuss a question which is at present attracting considerable attention in the world of physiology and medicine; viz., whether different regions of the cerebral hemispheres have different functions, and whether, therefore, the symptoms of cerebral disease vary with the locality of the lesion.

Assuredly, if the problem before us had been an easy one, it would have been definitively solved long ere now, when we consider the frequency of cerebral diseases and the large amount of attention they have received, not only from physicians and physiologists, but from all who interest themselves in the relations between body and mind. But, notwithstanding all the laborious researches and speculations which have been directed towards the elucidation of this subject, we do not seem even yet to have arrived at any general agreement, except on a very few propositions; some of these even now contested: a position contrasting strongly and unfavourably with the state of our knowledge respecting almost every other organ and function in the body.

It is not very difficult to discover many causes of this obscurity and confusion. Two of these only I will mention as being specially worthy of note.

1. It may be asserted without fear of contradiction that, as regards the nervous system more particularly, morbid anatomy is far from being co-extensive with pathology. We know, and are every day confronted with the fact, that the most widely abnormal deviations from healthy functional activity of the nerve-centres may be manifested, which leave no trace discoverable by ordinary dissection, or even by any of our most advanced methods of investigation. For the sake of mental satisfaction, we are constrained to speculate on the intimate molecular changes in the nerve-tissues which lie at the root of neuralgia, convulsions, and various other forms of functional nervous disorder; but they are at present matters only of speculation, and lie beyond the sphere of verification.

2. The organisation and conditions of activity of the brain are such that we are naturally inclined to believe that interference at any one point must necessarily tend to general functional disturbance. The loosening of a pin in a chronometer, it has been said, will derange the whole timekeeping mechanism; but we should not on that account ascribe timekeeping functions to the one part exclusively. So, in all cases of cerebral disease, there is a continual source of doubt as to whether the effects are the direct consequences of the lesion, or merely the expression of general functional derangement.

And, when we examine the actual facts and records of cerebral disease, we find, in apparently similar conditions, so much diversity, that it seems almost impossible, from a clinical point of view, to separate accidental from essential; to distinguish between direct and indirect consequences; or to determine whether phenomena are related by causation or are mere cases of juxtaposition or coexistence. Nor do the facts of experimental physiology seem so consistent with themselves, or with the undoubted facts of clinical research, as to inspire us with unhesitating confidence as to their accuracy, or as to their applicability to human pathology.

It is not to be wondered at, therefore, that many should still doubt, and reserve their opinion on this question of the localisation of cerebral function and cerebral disease.

Before proceeding to consider the facts bearing on this question, I think it advisable, in view of certain arguments which have been advanced by Dr. Brown-Séquard and others, to state some of the principles which must guide our researches and determine our conclusions. There can be no doubt that the inductive method of agreement, on which we have mainly to rely in eliminating cause and effect in clinical medicine, is one which does not always succeed in distinguishing between causation and co-existence, and is liable to be frustrated by plurality of causes. Though, therefore, we should have much positive

evidence in favour of the localisation of a certain function in a certain region of the cerebral hemispheres, one clear case in which destruction of this region had caused no cessation or disorder of that function would be sufficient to overturn our conclusion.

But, on the other hand, we are not called upon, in the present state of pathology, to show organic alteration in the parts in which we localise certain functions in all cases in which these functions are deranged. When such organic change has been demonstrated in the case of disordered function everywhere else in the body, it may fairly be demanded in the case of the nerve-centres; but we are at present far from having reached that point. We do not always discover organic disease in the heart when the circulation ceases, but we do not on that account doubt that stoppage of the heart was the proximate cause of this effect.

The doctrine of cerebral localisation does not assume, as Brown-Séquard would seem to imply, that the symptoms observed in connection with a cerebral lesion are necessarily the result of derangement of function in the part immediately affected. Every one admits direct and indirect results in cerebral disease. We have no right even to assume any causal relation at all, direct or indirect, between the phenomena, unless the lesion in question is constantly, or more frequently than chance would account for, associated with the same symptoms.

We should think it in the highest degree absurd if anyone were to describe a case of sudden death, in which the only discoverable morbid appearance was a boil on the neck, as a case of sudden death "seemingly caused" by a boil on the neck; and for the obvious reason that such a lesion is not usually followed by a fatal result. So, if we have abundant evidence to show that a certain part of the brain may be diseased without causing any motor paralysis whatever, it would be no less absurd to describe a case of facial paralysis, in which some lesion of this region was the only discoverable anatomical change, as a case of facial paralysis "seemingly caused" by this lesion. Causation must not be invoked where the facts do not warrant anything beyond co-existence or fortuitous collocation. It is, however, undoubtedly true that, if we admit, as we must do, that function may be disordered without discoverable organic change in the organ in which we localise this function, our difficulties as regards diagnosis are greatly multiplied. In medicine, thanks greatly to the aid of experimental physiology, the transition from cause to effect is comparatively easy; but from effect to cause, from symptoms to disease, taxes all our skill, and too often baffles all our efforts.

We may have doubts as to our diagnosis of the nature and locality of a cerebral lesion, though we may have none as to the localisation of function. The two things are quite distinct; and we must not make our imperfections in the one a measure of the other, or imagine that the facts are equally confused with our notions respecting them.

In estimating the value of evidence, we regard as incredible any statement which is opposed to sound inductions. Our inductions having been once established, we attach comparatively little importance to individual instances which harmonise with them; for, not being necessary to establish our generalisation, they derive a dignity mainly from the fact that they are examples of a general law. But a statement which contradicts our uniform experience we are bound to regard with suspicion and refuse to accept, unless it can successfully stand a stringent cross-examination and satisfy all the requirements of scientific evidence. The slightest doubt is absolute failure. If, however, any clear and in every way satisfactory evidence be forthcoming opposed to our generally accepted beliefs or traditions, we are, nevertheless, bound to accept it, and be prepared to convert what we have been accustomed to regard as absolute rules into approximate generalisations, or abandon them altogether if they are clearly shown to be untenable.

Even though the new hypothesis which may be set up in place of our old one may not be more satisfactory, yet the value of the facts will remain, and we must modify our views in accordance with them.

In discussing the localisation of brain-function, it is essential to bear in mind that the functions and diseases of the brain manifest themselves under two aspects—the psychological and the physiological: phenomena which appeal to two distinct methods of investigation—the subjective and the objective. There is no doubt that the state of our knowledge respecting the conditions affecting the one is vastly in advance of that of the other.

That the brain is the organ of the mind, no one doubts; and that, when mental aberrations, of whatever nature, are manifested, the brain is diseased organically or functionally, we take as an axiom. That the brain is also necessary to sensory perception and voluntary motion, is also universally admitted; and that the physiological and psychological are but different aspects of the same anatomical substrata, is the conclusion to which all modern research tends. Nevertheless, it appears, as

far as our present methods of investigation have gone, that diseases of the brain do not affect these functions equally. Diseases which produce very obvious affections of motility and sensibility cause no obvious mental disorder; and diseases capable of producing the most profound mental disturbances do not necessarily affect the powers of motion and sensation. Beyond the great fact that the brain is the organ which is directly or indirectly diseased in insanity, we are yet in the most profound state of ignorance regarding the intimate pathology of this condition. *Post mortem* examination reveals morbid conditions of vascularity, or various forms of degeneration, in the vessels, nerve-cells, neuroglia, etc.; but, with the exception, perhaps, of general paralysis of the insane, we have yet to find out whether there are any morbid appearances specially characteristic of special forms of mental derangement, or whether there is a definite relation between the locality of the lesion and the symptoms observed. We cannot even be sure whether many of the changes discovered are the cause or the result of the disease, or whether the two are the conjoint results of a common cause.

It is no disparagement of the many valuable researches which have been made into the pathology of insanity, to say that we are only beginning to learn its rudiments. Until the various morbid appearances discoverable in the brains of the insane are translatable into their subjective signification, the morbid anatomy and pathology of insanity run in parallel lines, which never meet. A concrete or incorporate mental pathology distinct from mere speculation will only be furnished when we can give the subjective equivalents of morbid appearances, or, conversely, the anatomical substrata of subjective states. It will not, I think, be denied that we are yet a long way from having reached this desirable consummation of our researches.

From the fact that large tracts of the brain-cortex may be disorganised without causing any very evident mental disturbance, and from the further fact that any *one* part of the brain may be so destroyed with a like negative result, the conclusion has been drawn by Flourens and others, that there is no localisation or differentiation of function, but that each part of the encephalon is a microcephalon, capable of itself of performing all the functions pertaining to the whole. Supposing the conclusions at all justifiable *quâ* mind, it would be altogether unwarrantable to extend this, as has been done frequently, to physiological function.

If we look at this matter a little more closely, we shall find that not merely extensive lesions in one hemisphere may be latent as regards mental symptoms, but even a whole hemisphere may be disorganised with a like negative result. If, however, *both* sides of the brain be disorganised, the annihilation of mind is complete. The logical deduction from these facts therefore is, not that there is no special localisation of function, but that, as far as the fundamental powers of mind are concerned—sensation, emotion, volition, and intellect—one hemisphere is sufficient.

To show that there is no localisation of mental function, it is necessary to demonstrate that the *same* parts may be destroyed in *both* hemispheres without producing mental disturbance. But has this ever been shown? I cannot find the faintest approach to evidence which would justify such a conclusion. That mental symptoms or mental deficiencies have not been recorded in cases of bilateral cerebral lesions, is a negative statement of very little value. Unless a man becomes so demented as to neglect the ordinary wants of nature, or so furious, maniacal, or irrational as to require restraint, there are few engaged in the practice of medicine who think of inquiring narrowly into a patient's mental state; and, even if more attention were directed towards this subject, are we in possession of any means of accurately gauging the mental condition of an individual, so as to be certain that it has altogether escaped damage notwithstanding the presence of a cerebral lesion? I see little to justify and much to contradict such an assumption. A man may not be incapacitated for the ordinary duties of life; but that his mental powers are altogether unscathed even by an unilateral lesion, I venture to question.

And, if it is difficult to test the mental condition in a human being, how much more difficult must it be in the case of the lower animals? And yet, from the way in which some have treated this question, one would be led to believe that nothing was more simple. Flourens' conclusions are, I think, answerable for many erroneous notions which have long dominated cerebral physiology and pathology. One great fallacy has been the assumption that the results of experiments on frogs, pigeons, and other animals low in the scale, are at once capable of application to man without qualification: an assumption which vitiates the conclusions of numerous physiologists of the present day. The very fact that there exist such patent differences between the effects of destruction of the cerebral hemispheres in different orders of animals ought, one would think, to inspire caution in the application to man of results obtained only by experiments on the brains of animals low down in the scale. Physiology should take a more comprehensive

view, and in particular not neglect the facts of clinical medicine and human pathology. To do so in the case of the functions of the brain would, indeed, be the play of *Hamlet* with the Prince of Denmark left out.

These remarks are, I think, specially applicable to a statement made by Schiff at the International Medical Congress at Geneva, to the effect that, as regards cerebral localisation, there was a great difference of opinion between physiologists and physicians; the former being opposed to it; the latter, with an implied sneer at the *practischer Arzt*, being its only supporters. While it is to be hoped that all physicians are physiologists, it is not the less desirable that physiologists should take the facts of clinical medicine and pathology into consideration. Frog and pigeon physiology has too often been the bane of clinical medicine, and tended to bring discredit on a method of investigation which, used properly, we must regard as the sheet-anchor of accurate biological and therapeutical research.

It has been taught since the time of Aretæus, and accepted almost as an axiom by physiologists and physicians that, when paralysis results from lesion of the cerebral hemispheres, it occurs on the side opposite the lesion. This law has recently* been contested by Brown-Séquard, and a few words are necessary on this point.

Brown-Séquard disputes the validity of the law of cross action of the cerebral hemispheres, on the authority of two hundred cases of paralysis occurring with disease on the same side of the brain. Accepting for the time the accuracy of every one of these cases, what conclusion do they justify? If we compare the relative frequency of cross and direct paralysis, it would be a very low estimate to say that, for every case of direct paralysis, we might cite nine hundred and ninety-nine cases of cross paralysis. Are we, then, on the strength of one contradictory instance, to say that the nine hundred and ninety-nine cases carry no weight? This is what Brown-Séquard would seem to imply; but the logical deduction appears to me to be that, if it had been asserted that the paralysis *invariably* occurred on the side opposite the lesion, then the law is shown, by this one exception, not to be an universal law, but a law admitting of exceptions; an approximate generalisation, instead of an absolute rule; but an approximate generalisation, the validity of which, in any particular instance, would have nine hundred and ninety-nine chances to one in its favour. Certainly the conversion of an absolute rule into an approximate generalisation lowers its practical value; for approximate generalisations are applicable only to numbers and not to individual instances. Hence, in a given case, in which it might be of extreme importance to ascertain whether it was in accordance with the rule or an exception, we might be liable to error, if we had no other means of determining this.

But what would be the practical effect of this, say as regards surgical treatment? Supposing it were a question of trephining (a question which may arise more frequently at no distant date), according to the calculus of probabilities, there would be nine hundred and ninety-nine chances to one in favour of the rule in any given case. Even on this very low estimate, would it be a very hazardous thing to operate, granting the advisability of the operation? I question much if there are many surgical operations undertaken for the relief of internal disease which have better chances of being successful. In life and in medical practice, we have to act on probabilities more than on certainties; and if the measure of our belief be our readiness to act, I think few would refuse to perform an operation with nine hundred and ninety-nine chances to one in favour of its being successful, so far at least as exposure of the disease is concerned.

The practical depreciation of the rule would, therefore, be almost infinitesimal; and, if the new (Broca's, Lombard's) observations on cerebral thermometry are correct, this may be even further reduced. But what of the theoretical aspect of the question?

In man, the cross action of the cerebrum, in reference to motion, is true, with the exception of two hundred cases collected from the remotest antiquity down to the present date. Cerebral paralysis is seen every day; and if cases of direct paralysis were occurring at the present time, we should be certain to hear of them. In the lower animals, every physiologist who has seen paralysis produced by cerebral lesion, has seen it on the opposite side, with the single exception, I believe, of Brown-Séquard.

Such being the experience of physicians and physiologists, it is surely more natural to suspect sources of fallacy, or to conclude that there is something very abnormal, than attempt to overthrow a law which has such a preponderance of evidence in its favour. That direct paralysis may occur I am prepared to admit, not only on the evidence of recorded facts, but on anatomical grounds. To overthrow the absoluteness of the rule of the cross action of the cerebral hemispheres, one well

* *Lancet*, January 1876.

authenticated case, in which the paralysis occurred on the same side, is sufficient. But we require clear evidence, not merely of the existence of a lesion in the hemisphere of the same side (for, as we shall see, lesions of a very extensive nature may exist in certain regions without causing paralysis), but of the existence of a lesion in what we recognise as a motor region. A solution of continuity of the fibres of the internal capsule, or a complete separation of the corpus striatum from its hemispherical connections, we should look upon as a necessary cause of paralysis, and we should look for it on the opposite side.

If such a lesion could be shown to have existed with paralysis on the same side, I should regard that as a satisfactory proof of direct paralysis. And such seems to have been established by Morgagni. In a case which he had carefully observed, and examined *post mortem*, he was astonished to find paralysis apparently on the same side as the lesion; but, distrusting his recollection and the accuracy of his records, he asked of his students on which side the paralysis had existed. "All in general and each one in particular answered without hesitation that it was the right side [the side of the disease, which was separation of the corpus striatum from the cortex]; and for this reason", said he, "it is clear to me that sometimes the paralysis occurs on the same side as the lesion."*

I do not here intend to enter on the question whether some apparent cases of direct paralysis may not be capable of explanation in accordance with the usual rule;† but, admitting the possibility of direct paralysis, I would offer a few observations on its mode of causation. In this relation, the recent researches of Pierret and of Flechsig have an important bearing. Flechsig, in his elaborate work, *Die Leitungsbahnen im Gehirn und Rückenmark*, 1876, has investigated the course and relations of the several tracts of the brain and spinal cord, with special reference to their respective periods of development in the human foetus, and to the course and limits of the secondary degeneration which occurs in consequence of cerebral and spinal lesions, according to the researches of Waller and Türck. This is a method which must be regarded as infinitely superior to mere anatomical or histological investigation of the healthy and completely developed cord.

Flechsig shows that the pyramids or pyramidal strands are developed always subsequently to the hemispheres, and from them, and are wanting in anencephalous foetuses. Their connections can be traced above into the cortical regions bounding the fissure of Rolando, and below with the postero-lateral, and partly with the internal aspect of the anterior columns of the spinal cord. These pyramidal strands are subject to very considerable variations, in respect to their decussation at the anterior inferior part of the medulla oblongata, and as to the relative proportion of fibres which proceed down the postero-lateral and antero-internal columns respectively. As a rule, the most of the fibres of the pyramid descend in the postero-lateral column of the end on the opposite side; the rest on the antero-internal of the same side. But occasionally, the rule is reversed; and in one case there was no decussation at all. A similar case has recently been described by Pierret.‡

The strands which are subject to this variation are those which, as we shall see, degenerate in consequence of lesion of the motor centres, and the evidence is of the most satisfactory kind that they are the paths of *voluntary motor* impulses. This being so, we must regard paralysis on the same side as the cerebral lesion as a possible occurrence. How often it has actually happened is another question, which, however, I shall not here attempt to answer.

Various attempts have been made at different times to establish constant relations between lesions of certain cerebral regions and certain symptoms, bodily or mental. Thus Sancerotte, Delaye, Foville, and Pinel-Grandchamp, considered that the grey matter of the hemispheres was specially related to mental functions, and that the medullary fibres and basal ganglia were specially concerned in locomotion. They further adduced cases to prove that disease of the corpus striatum and adjoining medullary fibres and anterior parts of the brain generally, caused paralysis limited to the leg; and that similar lesions of the optic thalamus and posterior parts of the brain, caused paralysis limited to the arm; and that, when the arm and leg were both affected, the lesion existed in the basal ganglia, more in the corpus striatum if the leg were specially affected, and more in the optic thalamus if the paralysis was greater in the arm. Influenced by the imaginary localisation of the sensory tracts in the posterior columns, and by Bell's demonstration of the respective functions of the anterior and posterior roots of the spinal nerves, they regarded the cerebellum, to which they traced the posterior columns, as the seat of sensation. This opinion

was supported by Lapeyronie, Petit-Namur, and others. Bouillaud, from his experiments on animals, and from the facts of clinical research, arrived at the conclusion that lesions of the anterior lobes more particularly caused loss of speech, and in a certain measure gave his adhesion to the doctrines of Sancerotte, etc., respecting the centres of movement of the arm and leg, though he admitted that these were not altogether satisfactory. But he arrived at one other important conclusion which is worthy of special mention. "Even," said he, "though we should admit that certain errors had been made as to the localisation of the seat of the lesions causing paralysis, yet it remains an established fact that there exist in the cerebrum several motor centres. The plurality of motor centres is, in fact, proved by the occurrence of limited paralysis, corresponding to a local alteration in the brain; for it is evident, that if this organ did not contain different centres or conductors of motor impulses, it would be impossible to conceive how a limited lesion could produce a limited paralysis, leaving all other movements intact.

"I am well aware that the preceding propositions appear at variance with the results of experiments on animals. It is certain that after the ablation of the cerebral hemispheres, an animal may walk, run, move its jaws, eyes, eyelids, etc.; and it is not less certain that an alteration of the cerebral hemisphere in man gives rise to a paralysis more or less complete of voluntary motion on the opposite side of the body. Can we refute the one set of facts by the other? No, certainly not. For facts equally positive are not susceptible of refutation. A time will come when new light will dispel the apparent contradiction which exists between them."*

Profound and philosophical remarks which to day are amply justified!

The investigations of succeeding years provided many cases so absolutely at variance with the localisation of the motor centres of the arm and leg that Andral, who also admitted that there must be distinct motor centres, "since each limb may be separately convulsed or paralysed", earnestly deprecated premature and hasty generalisations as being highly prejudicial to "la belle doctrine" of the localisation of cerebral functions.†

The doctrine of cerebral localisation has in recent years assumed quite a new aspect, and differs so much from older speculations in the kind of evidence on which it rests, as to be essentially a new growth. Hughlings Jackson made the first decided steps in this direction.

Hughlings Jackson has repeatedly directed the attention of the profession to the study of convulsions of cerebral origin, and adduced many cases and arguments to show that they are dependent on irritation or discharging lesions of certain convolutions near, and functionally related to, the corpus striatum. As regards the exact localisation of these motor convolutions, he did not, however, underestimate the difficulties and uncertainties necessarily attaching to the rude experiments of disease. "The damage by disease is often coarse, ill-defined, and widespread."‡ But to Hughlings Jackson belongs the credit of having first indicated the motor functions of certain regions and given a rational explanation of the phenomena of unilateral cerebral convulsions. For though, as Charcot shows, Bravais, in 1827,§ described with great accuracy the phenomena of hemiplegic epilepsy, he did not see their true significance or pathology, in which, after all, the discovery lay, and in the light of which the value of his observations mainly consists.

Similar facts have also been noticed and commented on by Bright and Wilks. Indeed, Bright had formed very clear notions as to the pathology of unilateral convulsions, so far at least as their primary causation was concerned, and their relation to lesions of the opposite cerebral hemisphere. "My reason, then, for supposing that the epileptic attacks in this case depended rather on a local affection than on a more general state of cerebral circulation or excitement, was the degree of consciousness which was observed to be retained during the fits; for although we meet with great variety in this respect, yet in two cases which have occurred to me, the fact of the patient generally remaining conscious has been a remarkable feature, while in each the injury on which the fits depended was of a local rather than a constitutional or a general character."||

Wilks, agreeing with these observations, remarks: "For in these cases, the causes being definite and local, an irritation is set up in the corresponding ganglia beneath, and thus the occurrence of convulsions without loss of consciousness is explained."¶

Hughlings Jackson, however, instead of trying to account for the

* Quoted from Bayle, *Maladies du Cerveau*, page 321.

† This question has been ably discussed by Dr. E. H. Dickinson, "On the Phenomena of so-called Direct Paralysis". *Liverpool and Manchester Medical and Surgical Reports*, 1878.

‡ *Société de Biologie*, January 5th, 1878.

* Bouillaud, *Traité de l'Encéphalite*, p. 279.

† Andral, *Clinique Médicale*, tome v. p. 562.

‡ *Clinical and Physical Researches on the Nervous System*, 1. 6.

§ *Recherches sur les Symptômes et le Traitement de l'Épilepsie Hémiplegique*.

|| *Guy's Hospital Reports*, Series i., vol. i., p. 39.

¶ *Guy's Hospital Reports*, 1866, p. 79.

phenomena by transmission of some influence to distant motor regions, regarded certain convulsions as themselves motor, and capable of motor discharge by irritation. But certainly, except in the facts so explained, no other evidence could be adduced in support of the direct excitability of the grey matter of the cortex: for the facts of experimental physiology, taking them at their value, were opposed to the doctrine, inasmuch as it had been apparently conclusively demonstrated that none of the usual stimuli of nerves and nerve-centres, electricity included, were capable of exciting movements when applied directly to the surface of the brain.

This dogma was refuted in 1870 by the important experiments of Fritsch and Hitzig, who showed that, though electricity might be applied to *certain* regions of the cortex without producing movements, there were others excitation of which invariably produced movements of the opposite side; and that certain movements could uniformly be caused by excitation of certain definite regions. These facts have now been extended and verified by many experimenters on many animals, and even on man himself.

In discussing the signification of these facts, I wish to restrict my observations to those movements which result from excitation of a certain region of the brain—the region which we term motor—in order to avoid discussion at this stage of certain other movements which I regard as the indications of sensation.

It is not unreasonable to suppose that, on applying irritation to that which is the centre of centres—to which, in fact, all the rest of the body must be considered as peripheral—irritation of the grey matter, even though the irritation might not be confined to it, at least entered as one factor into the causation of the resulting phenomena. Every conceivable hypothesis has, however, been invented to degrade the grey matter of the hemispheres, and to exclude it absolutely from all share in the results; and every attempt has been made to discover somewhere else some organ or organs possessed of all those varied and complex forms of activity which we see excited by our stimulation.

One of the latest of the hypotheses which have been invented to account for the phenomena is, that the movements which result from the application of electrical stimulation to the cortex are due to the irritation of delicate vaso-motor nerves, which penetrate the brain-substance and descend with the vessels from the pia mater.

The functions ascribed to the brain-cells are these: "Besides their power of receiving, transforming, and conveying impressions, it is not unphilosophical to imagine that, having been impressed by a certain irritation, in a certain way, for producing a certain effect, their dynamic state, through nutrition, is shaped into a definite channel for the circumstance; hence the ability of a certain group of cells to produce a definite effect, always constant, under definite stimulation of whatever nature!"*

As my main object, however, is to discuss cerebral localisation from a pathological point of view, I will not enter at length into the purely physiological side of the question, which I have elsewhere discussed (*Functions of the Brain*). I would, however, call your attention to some recent researches which seem to me to have effectually disposed of the main objections to the view that the phenomena are the result of excitation of the functional activity of the grey matter of the hemispheres. One objection is founded on the impossibility of localising the action of the electric current to the parts immediately in relation with the electrodes; and it is argued that the effects are in reality due to mere physical conduction to some underlying region or regions, which, however, those who employ this argument either will not or cannot exactly specify.

Similar objections were made to Duchenne's theory of localised muscular electrification, and yet we know as a fact that we can by this method throw individual muscles into contraction with the greatest precision and certainty, notwithstanding the extrapolar conduction which pertains to all animal tissues. And it is the great characteristic of the reactions which ensue on the application of the electrodes to the cortex, that the results are uniform, definite, and predictable, when the electrodes are on one region, while there is a sudden transition to another movement equally definite, equally constant, and equally predictable when the electrodes are shifted to a region in immediate proximity to the former. This is a remarkable fact, no longer disputed, which no mere physical conduction can account for, unless we admit a localisation of numerous distinct physical paths, which is but another aspect of localisation after all.

On the conduction theory, we should naturally expect that the nearer we go to the underlying ganglia and tracts, the more readily the effects should be called forth if it were a question of mere resistance of currents. But we find that electrification of the island of Reil, which is nearest the basal ganglia, is absolutely negative; while electrification of

the more distant postero-parietal lobule by the same stimulus produces an immediate and definite movement. Conduction would seem to be put out of court by such facts. And we find, as Carville and Duret have shown, that the intervention of a fluid cyst between the cortex and the basal ganglia is quite sufficient to interpose a fatal obstacle to the propagation of functional stimulation, though not of electrical currents, just as a ligature round a nerve will stop neurility but not electricity.

But the fact on which most reliance is placed as proof of mere physical conduction is that, after removal of the grey matter of the cortex (stimulation of which is the supposed cause of the movements), the application of the electrodes to the cut medullary fasciculi produces exactly the same movement as before.

What, it is triumphantly asked, could more conclusively dispose of the view that the cortex is concerned in the results, seeing it may be removed without prejudice to them? Apparently, those who argue in this manner forget that there is such a thing as a plurality of causes or conditions. By parity of reasoning, we might disprove in succession the motor functions of the corpus striatum, cras cerebri, spinal cord, motor nerves, inasmuch as we can produce all the effects attributed to their activity by direct stimulation of the muscles themselves. But we do not say, when we faradise the distal end of a divided motor nerve, that the resulting muscular contraction is due to electrical conduction to the muscle, and not to neurility or excitation of the functional activity of the nerve. And it is surely not unreasonable to suppose that, after removal of the cortex, the results following application of the electrodes to the medullary fibres are due to the functional excitation of these fibres; and that our electrical stimulation is merely an artificial substitute for that which normally proceeds from the grey matter of the cortex. It is on this point that we have new experiments which, in my opinion, settle the question definitely.

[To be continued.]

CLINICAL MEMORANDA.

ACCIDENTAL POISONING WITH THE NITRATE OF POTASH.

EXCEPT in the case of articles of diet in common use, such as shell-fish and mushrooms, or of the substitution of some well-known poisonous herb for one ordinarily employed in cooking, cases of domestic poisoning by accident are generally puzzling at first. The following accurately noted case was forwarded to me by the sufferer, a retired surgeon; and, as the accident occurred through an error in cooking committed with the best intention, and therefore not unlikely to occur again, I have obtained his permission to communicate it to the members of the Association.

In order to make some soup more "strengthening" for the especial advantage of the patient, some liquor, in which a pig's face had been cooked on a previous occasion, was boiled down to a jelly, and added to it. This soup was taken at 2 P.M., and it was noticed to be a good deal too salt. No symptom was observed for three hours, when nausea and griping set in; these continued to increase to the eleventh hour, when some whiskey and nutmeg which had been taken was vomited. There was no bile or anything unpleasant in the evacuation. At the twelfth hour, violent watery purging in large quantity set in and continued for an hour, and the pain ceased. No further symptom occurred, but the patient stayed in bed upon fluid diet the next day. Not until the morning of the third day did he feel a good deal of lumbar aching, which he attributed to the confinement. In the course of the morning, the bowels acted naturally, and he went out of doors. At midday, he took two ounces of Hollands in cold water. An hour afterwards, he passed water, which was coffee-coloured from admixture of blood; there was (and had been) no dysuria, or any other fresh symptom. He returned to bed, and the urine having, in the course of a few hours, regained its normal appearance, it was tested, and ascertained to be perfectly free from albumen. He now diagnosed the cause of illness. He stayed in bed upon low diet for three more days; the lumbar aching continued, but the urine remained free from albumen. On the fourth day, he got up, and with one meal took an ounce and a half of Hollands with cold water. This was again followed, within an hour, by hæmaturia, which passed off as before within a few hours, leaving the urine quite free from albumen. From this time, he abstained from spirits entirely, and the lumbar pain gradually disappeared, leaving him in his usual state of health. It is worth noting that the patient observed this lumbar aching to be quite different from the pain caused by lumbago—a disease with which he is also personally acquainted.

J. ASHEURTON THOMPSON, M.D., Islington.

* Dupuy, *Physiology of the Brain*. New York, 1877, p. 13.

CLINICAL LECTURES ON THE VARIETIES OF PHTHISIS.

*Delivered at the Hospital for Consumption and Diseases
of the Chest, Brompton.*

By C. THEODORE WILLIAMS, M.A., M.D., F.R.C.P.,
Physician to the Hospital.

LECTURE III.—CATARRHAL PHTHISIS.

By catarrhal phthisis I designate a class of cases which may be clearly traced to catarrh of the bronchi induced by cold or damp, creeping down into the alveoli, and thus originating catarrhal pneumonia, followed by implication of the alveolar wall. It is the catarrhal pneumonic phthisis variety of many authors, and a large number of the in-patients and out-patients of this hospital are included under it. Out of one thousand private cases whose origin was investigated by Dr. C. J. B. Williams and myself, no fewer than one hundred and eighteen (nearly twelve per cent.) could be traced to this cause. Family predisposition was present in a few instances, but in a large number it was entirely absent; and, as the patients belonged to a class for the most part exempt from the depressing influences of bad air or scanty or improper food, they may be taken as a proof of the undoubtedly catarrhal origin of a considerable number of cases of phthisis.

Two principal modes of onset are to be noted in this form of the disease. The first is as follows. A patient has an attack of pneumonia, generally one-sided, and not necessarily accompanied by great pyrexia, and for the most part limited to one portion of the lung. He recovers from the attack; but the dulness persists, and there is also some bronchophony and absence of vesicular murmur. He regains his general health, but does not lose his cough or expectoration, the latter becoming purulent; and sometimes the breathing is slightly impaired: though the existence of this last symptom of course depends on the number of alveoli blocked and the amount of surface impaired. The cough and expectoration continue, and are followed shortly by loss of appetite, night-sweats, and wasting. There may also be rise of temperature and pulse; but this is not necessary. The chest is examined, and over the consolidation are detected signs of active disintegration; coarse *râles*, and soon cavernous sounds are audible. In a word, excavation has taken place in the old spot of catarrhal pneumonia. And here let me draw your attention to the rule, that the tendency of pneumonic consolidations to resolve seems to be in the inverse ratio of the fever and constitutional disturbance which accompanied their formation. After an attack of double pneumonia accompanied by high temperature, involving the whole surface of both lungs and threatening the patient with fatal results, resolution is for the most part speedy and complete; whereas a slight and limited pneumonia, involving only the lower lobe of one lung, and hardly giving rise to any constitutional disturbance, is slow to disappear, and sometimes does not disappear at all, but remains a dull spot, the nucleus of future mischief—perhaps to undergo disintegration and excavation. The subjoined is a good illustration of this first form of catarrhal phthisis.

Mary N., aged 39, married, with no children, was admitted under my care into the Hospital for Consumption on July 18th, 1871. Her brother had died of some form of chest-disease. Six years ago, she had pneumonia of the right lung, and was laid up for some weeks, and since that period has had cough. Four months ago, she stated, she caught a fresh cold; and since that date the cough had been much worse, the expectoration muco-purulent, and, for the last two months, streaked with blood. There had also been night-sweats, emaciation, and loss of colour. On admission, her cough was troublesome, with abundant expectoration. The patient complained of pain in the left chest, most marked in the interscapular region. The appetite was moderate; the tongue clean; the bowels relaxed; the catamenia irregular; pulse 92; respirations 40; afternoon temperature 98.7 deg. Fahr.; weight 7 st. 13½ lbs. The physical signs were, dulness over the whole of the right side of the chest, front and back, with bronchophony; some flattening and deficient expansion visible over the upper third of the right front; cavernous gurgle, heard below the clavicle; and coarse crepitation from the third rib downwards to the base, the sounds being more liquid in the upper than in the lower portions. Over the posterior surface, the crepitation was heard everywhere; but it was somewhat finer in character. With the exception of some sonorous rhonchus in the mammary region, the left lung was quite free.

This patient was treated with cod-liver oil, alkaline gentian mixture,

and effervescing ammonia draughts at night, and a generous dietary; and, after three months in the hospital, was discharged "improved", having gained seven pounds and a quarter. The cough and expectoration were less. The crepitation had diminished in extent and intensity; but cavernous sounds were audible over a large surface of the right lung.

This case exemplifies well the catarrhal pneumonic form of phthisis. The inflammatory origin was clearly proved—(1) by the extent of the dulness and bronchophony; (2) by the unilateral character of the lesion; (3) by the history. The absence of any considerable amount of shrinking of the side distinguished it from phthisis originating from interstitial pneumonia, of which we shall speak hereafter.

A second form of attack is the following. The patient, generally middle-aged, has been subject for several years to winter-cough and expectoration; and in many cases there is present a certain amount of pulmonary emphysema. In the summer months, the patient is, as a rule, quite free: but some one winter, owing to being exposed to more unfavourable circumstances than usual, he suffers a more severe attack of bronchitis, involving a larger surface. After the severity of the symptoms has subsided, the cough remains; the expectoration becomes more purulent and abundant; the pulse is quick; and not uncommonly there is a rise of temperature in the evening. The patient loses a certain amount of flesh. The physical signs are at first those of bronchitis: sonorous and sibilant rhonchus scattered over the whole surface of the lungs, succeeded at a later date by bubbling sounds, the percussion being resonant or super-resonant. These signs disappear from the greater part of the lungs, and remain fixed in one portion, either over a whole lobe, or under the clavicle, or at the angle of the scapula, or below or above the scapula. The localising of the physical signs of bronchitis is always suspicious, and more especially so if any degree of crepitus accompany the expiration, thus distinguishing it from the pneumonic subcrepitan rhonchus. Next comes slight dulness on percussion, chiefly to be detected by comparison with the note of the opposite side; or a whiffing sound in situations overlying the principal bronchi, below the clavicle, in the suprascapular, interscapular, and scapular regions, showing that the bronchial sounds are conducted to the ear by some solid medium. Flattening of the chest-wall follows. The next step is increase of crepitation; then the ominous croaking rhonchus; then gurgling, and often the cracked-pot sound. A cavity has formed, and these latter degrees of the destructive process are easily proved by careful examination of the sputum. All these signs may be traced in selected cases; but they are not always present, and even if present, are not always detected; for, on account of the emphysema present, many of them are masked, and consequently overlooked. We often find ourselves listening to gurgle and cavernous breath-sounds where a few days before we heard only sonorous rhonchi and mucous *râles*. The great point in watching the physical signs is to observe whether or no they become localised; for, if they do, we may know full well that the hour of tuberculosis is come.

Let us now take a good instance of this second form of catarrhal phthisis.

Janet S., aged 46, married, a dressmaker, was admitted into the hospital on December 2nd, 1873, with the following history. No consumption could be traced in her family. She had small-pox many years ago, and whooping-cough seven years ago, but recovered without a permanent cough. For the last four winters, she had had a cough, persistent also in summer for three years. During this time, she had lost weight. Night-sweats had come on lately; and at present she had cough in the morning, with yellow expectoration; and complained of pain under both clavicles, felt most on the right side. Tongue clean; appetite good; bowels confined; pulse 70; weight 6 st. 6½ lbs. The physical signs were, slight dulness and crepitation detected in the upper third of the right lung, front and back; crepitation audible over the whole of the left lung anteriorly, and over the upper third posteriorly. The temperature was taken five times a day for a week, from the 14th to the 20th of January, with the following result: Averages at 8 A.M., 97.7 deg. Fahr.; at 11 A.M., 97.9 deg. Fahr.; at 2 P.M., 98 deg. Fahr.; at 5 P.M., 98.3 deg. Fahr.; at 8 P.M., 98.6 deg. Fahr. The course from 8 A.M. to 8 P.M. was, as a rule, subnormal, the average being 97.7 deg. Fahr. The treatment was oil with acid gentian mixture twice a day, an ounce of effervescing ammonia mixture, and five minims of antimonial wine night and morning. She had profuse sweats for a few nights, and hæmoptysis to the amount of half an ounce on February 2nd, but otherwise improved; and on February 26th, shortly before her discharge, she had gained six pounds and a half in weight. The cough was less severe; the crepitation had greatly diminished in the upper part of the left lung, and was less audible in the right lung.

This patient was readmitted on March 14th, 1876, after an interval of two years since her discharge. It appears that she had improved

during the first year, and continued to gain weight; but in the second year she had been attacked with rheumatism, followed by what she called bronchitis. Hæmoptysis to the amount of four ounces came on six months previous to admission. The cough had been worse, and the expectoration largely increased. The appetite was good. The temperature and pulse were about normal. The catamenia were irregular, and leucorrhœa was present. The patient had lost eleven pounds since her discharge. Night-sweats were profuse. On examination, scattered crepitation was heard in the upper right lung; and similar sounds were heard on the left side, but to a less extent than when she was in the hospital before. The same treatment was pursued, and she improved until the beginning of April, gaining four pounds. Shortly after this, the cough increased; the expectoration became more abundant; and, on examination of it, lung tissue was clearly detected. On May 22nd, the crepitation was very coarse in the right lung, the patient losing weight; and this was noted again on the 29th. On June 12th, these signs had diminished; the cough and expectoration were less; and the patient had regained three pounds and a half. Her weight was 6 st. 6½ lbs.

Here, then, was a chronic bronchitis extending over many years. On this catarrhal pneumonia supervened, the formation of tubercle being masked by the emphysema; and in time lung disintegration and excavation took place, the date of the latter being after her second admission into the hospital.

It is curious to note, in this variety of phthisis, how little the pulse and temperature are affected; and it is by no means rare to find lung-disintegration proceeding rapidly over a limited space without raising either pulse or temperature.

The pathology is tolerably simple, though, curious to state, much opposition was at first raised to the catarrhal origin of phthisis; and even now some eminent authorities are much opposed to this mode of causation. A catarrh creeps down the bronchial mucous membrane, and eventually reaches some of the alveoli. Here rapid proliferation of the epithelium takes place, which is the more irritated and prone to multiply, owing to the inhalation of some of the bronchial secretion. The alveoli become choked and stuffed with epithelium; and the vessels may be emptied through pressure; ulceration may follow, and the whole mass may liquefy, caseate, and be expectorated. More commonly, however, caseation of the epithelium takes place, followed by absorption of the necrobiotic material by the lymphatics. Thus the alveolar wall, with the perivascular lymphatics, becomes involved, and adenoid hyperplasia (*i. e.*, the tubercle) is the result.

In many of the instances under my notice, there have never been physical signs of extensive consolidation during life; but breaking down of the lung has occurred very rapidly, and cavities have formed in one or more portions; and though the physical examination may teach us much, the only way to be sure of ascertaining that this process is going on is to examine the sputum frequently and carefully.

Most cases of catarrhal phthisis gradually become one of chronic tubercular phthisis, and consequently the *post mortem* appearances do not differ materially from those of the latter variety. In early instances, however, as Rindfleisch shows, where only certain lobules are invaded by catarrhal pneumonia, centres of caseation may be traced in the track of these lobules; and surrounding these, or following the line of the peribronchial lymphatics, are groups of miliary tubercles—thus proving their infective origin.

The principal features of catarrhal phthisis are the tendency to excavation and the comparative absence of fibrosis; and to these are due its less favourable course and more limited duration, compared with that of other chronic varieties, and especially the fibroid. Patients may remain with their lungs in a tolerably quiescent state for years; but when, from some fresh exciting cause, more tuberculation or excavation is induced, there seems to be no limiting power, the lungs become rapidly disorganised, and the patient sinks.

Treatment.—This resolves itself into (1) treatment of the catarrh and (2) treatment of the after-lesions. During the catarrhal stage, the great point is to promote expectoration, and thus prevent aggregation of the epithelium in the alveoli and smaller bronchi; but here we are often met with a difficulty in the form of the badly developed chests and weak expiratory muscles of many of these patients, which renders expectoration difficult. The treatment should be that of bronchitis in a badly developed and ill-nourished patient: expectorants of various kinds, administered in a manner not likely to nauseate the stomach and interfere with the appetite, combined with friction of the thoracic walls by stimulating liniments. Some authorities go as far as to recommend emetics; but, unless there was risk of death from asphyxia, I should not recommend them, as they are only of temporary use, and would be pretty certain to derange the appetite. Carbonate of ammonia, senega, compound tincture of benzoin, all do good; but

what I have found most useful has been an effervescing potash draught with five grains of carbonate of ammonia, taken every four hours; because, while it promotes free expectoration and action from the kidneys, it does not upset the appetite. Stimulant inhalations, such as benzoin or iodine or the *pinus sylvestris*, are reported to do some good; and I have seen fair results from the use of ipecacuanha wine in the spray-apparatus, as advocated by Drs. Ringer and Murrell. Friction of the chest-wall with compound camphor liniment, or with linimentum terebinthinæ aceticum, have also appeared to me to promote expectoration by stimulating the expiratory muscles. If, however, we entertain no doubt that consolidations have formed, we must trust more to general than local treatment, though attention must be paid to both. A generous dietary, including meat three times a day; abundance of milk, which, if taken warm, promotes expectoration; cod-liver oil, with dilute phosphoric acid and bitters; the local application of iodine over the affected side,—are the means most likely to prove effectual.

The climate most suited for these patients has been a matter of my most serious consideration; but a comparison of the results of the various climates in these cases has pointed to the conclusion that a warm moist air answers best. My statistics, as published in my recent Lettsomian Lectures (*Influence of Climate in Pulmonary Consumption*), show that at Madeira catarrhal phthisis fared better than on the Riviera, or in Egypt, or on sea-voyages; and it is probable that this is owing to the air of Madeira containing, combined with warmth, sufficient moisture to render expectoration easy.

ON CURRENT-MEASUREMENT IN ELECTROTHERAPEUTICS, AND IN THE ELECTROLYSIS OF BLOOD.*

By J. DIXON MANN, L.K.Q.C.P.I., Manchester.

THE purport of this paper is to advocate a more definite method than the one usually adopted of estimating the dose of electricity administered to a patient. The dosage of electricity is generally recorded by a statement of the kind of battery and number of cells used; as I have elsewhere had occasion to point out, this method is necessarily fallacious. Different batteries have different electro-motive force; and the same battery, from variation in its resistance and from other causes, will evolve more current at one time than at another. A still more formidable obstacle to the estimation of the current-strength by the number of cells used is the variation in conductivity of the patient's skin; not only do different individuals offer different resistances, but the same individual may, on two occasions, vary in resistance to the extent of several thousand Ohms. This variation is principally due to the action of the sudoriparous glands; the drier the skin, the higher the resistance. Up to a certain point, the resistance of the skin diminishes during an application when the electrodes are stationary, the stimulating effects of the current promoting increased action of the sweat-glands.

The amount of electricity administered to a patient is the product of two factors—the electro-motive force of the battery and the total resistance; the formula, as expressed in Ohm's well-known law, is $C = \frac{E}{R}$. Now, even supposing the electro-motive force and internal resistance to be constant in all batteries, and of known value, the enormously varying and unknown external resistance would prevent any accurate estimate of the strength of the current being deduced from this formula. By including a galvanometer in the circuit, the difficulty is overcome, the needle being deflected proportionately to the strength of the current; and if the galvanometer be graduated in fractions of the unit of current, the indications will be of absolute current-value. Along with Mr. J. T. Sprague, who possesses the patent right in this country for the graduation of galvanometers in degrees of current and resistance, I have devised an instrument which indicates, in ten-thousandths of a Weber (the British Association unit of current), the dose of electricity administered to a patient. The graduations of this galvanometer, representing actual current-values, are constant for all instruments similarly constructed, enabling the operator to record the dose administered, not relatively, but absolutely; thereby conveying a definite idea of the strength of the current, and placing it within the power of any one using such an instrument to administer an equivalent dose. This instrument possesses, I believe, an advantage peculiar to itself;

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the divisions, instead of following the law of tangents and becoming rapidly closer after the first ten or fifteen, by a peculiar arrangement of the coil and needle, are spread out in the portion of the scale most frequently used, adding considerably both to the ease and to the delicacy of observation.

It is obvious that current-measurement is necessary to develop the therapeutic use of electricity, the action of any remedy being only ascertained by accurate estimation of the dose administered. When the chemical action of the current is solely utilised, as in the treatment of aneurism by electrolysis, current-measurement becomes imperative. The want of definite knowledge on this subject induced me to investigate experimentally the formation of blood-clots by the voltaic current. The experiments were made with human blood and with that of the lower animals, to which various chemical reagents were added to retard or prevent natural coagulation. A few observations were taken with horses' blood, which retains its fluidity sufficiently long for experiments to be made without the addition of preventives to coagulation.

An apparatus was constructed so that two or more platinum or steel wires of equal diameter, placed at equal distance apart, could be immersed into the blood to a known depth. The current, measured by one of my galvanometers, was allowed to pass for a definite time, observations of the current-strength being taken every minute: the resistance ranged from 750 to 2260 Ohms. At the conclusion of each experiment, the clot formed on the anode was thoroughly drained on filtering-paper and accurately weighed. The observations of the current-strength, together with the weight of clot, were then reduced to a common mean, giving the weight of clot formed per minute by a current-strength equal to the one-hundredth of a Weber. The deposit round the cathode, being from more than coagulum, was not estimated. In some experiments, another apparatus was employed. A portion of the aorta of a cow, immediately after the death of the animal, was filled with blood and a needle connected to the anode inserted into it, the cathode being attached to a piece of tinfoil placed on the external surface of the artery.

The difference in the clots formed by relatively large and small currents was ascertained—(1) by taking the specific gravity of the clots in oil, and reducing the result to the usual standard—distilled water; (2) by re-weighing the clots when they were thoroughly dried; (3) by microscopic examination of the texture of the clots after washing them free from corpuscles; (4) by general observations of their consistence and tenacity.

In order to ascertain the effects of variations in the density of the current—that is, the proportion the current bears to the area of the electrodes—two depositing cells containing blood were set up "in series". In one cell, two wires were immersed five-tenths of an inch; in the other, similar wires were immersed only one-tenth of an inch; the current-strength passing through each cell being necessarily the same. The experiment was varied by substituting for the larger wires slips of platinum foil exposing an area of three-tenths of a square inch. The clots obtained were examined after the former manner.

Table showing the Mean Weight and Specific Gravity of Clot deposited per Minute by a Current-Strength equal to the one-hundredth of a Weber. Mean Temperature 69.5 deg. Fahr.

Metal forming Electrodes.	Weight of clot in grains.		Loss per cent. on drying.	Specific gravity.
	Recent.	Dry.		
Platinum.....	.1397	.0333	76.163	1.025
Steel.....	.1062	.0408	62.683	1.140

The conclusions drawn from a number of experiments conducted after the methods above indicated may be briefly epitomised. *The rate of clot-formation is in direct proportion to the current-strength.* With a complex fluid like blood, there is great difficulty in ascertaining this proportion with precision. Without great care, the means taken to keep the fibrin in solution introduce errors seriously affecting the results. *The specific gravity of electrolytic clots is inversely proportional to the strength and to the density of the current.* There is, however, practically little difference in the general character of the clot produced within the limits of current-strength usually employed in the treatment of aneurism.

Clots formed on platinum wires were found to be more bulky and of greater weight, but of less specific gravity, than those formed under like conditions on steel wires. The increase in bulk is due to porosity of the clot produced by the presence of free oxygen. When steel wires are used, the nascent oxygen combines with the iron. On reference to the table, it will be seen that clots deposited on steel needles after desiccation exceed in weight those deposited on platinum. The excess in weight is produced by oxidation of the anode, and by the consequent presence of oxide of iron in the clot.

With a weak or medium current, clots formed on steel wires are more friable than those formed on platinum. When the current-strength is great (.05 Weber), the deposit on steel wires is pasty. Platinum clots, when moist, bear a considerable amount of pressure without disintegration; steel clots, on the contrary, break up under moderate pressure; this difference exists in clots produced by medium currents. With the use of steel needles, the current-strength rapidly diminishes, owing to the oxide of iron formed on the anode setting up a counter electro-motive force, which opposes the battery-current; with platinum or thickly gilt steel needles, the polarisation is comparatively slight.

Clots deposited from blood at 60 deg. Fahr. are not so dense as those deposited at the normal temperature (98.4 deg. Fahr.), the rate of deposition being the same.

The practical conclusions to be deduced from these investigations, as regards the treatment of aneurism, are as follows. The current-strength should not exceed .015 Weber. A current-strength equal to .01 Weber produces a firm clot, and may be theoretically taken as the standard. Currents of lesser magnitude deposit equally good clots, but necessarily require longer time to produce a given result. It is advisable to introduce two or more needles, and to connect them alternately with the anode. With gilt needles, this alternation gives time for absorption of the nascent oxygen by the circulation; if ungilt steel needles be used, the polarisation is allowed to subside, and this otherwise seriously interferes with the action of the battery.

The insulation of the needles, so far as the portion outside the aneurism is concerned, should be as perfect as possible, not only to avoid the action of the current on the extra-aneurismal structures, but also to concentrate the current on the portion of the needle within the sac.

The propriety of introducing the cathode within the aneurismal sac, or of completing the circuit by a moistened electrode applied externally, resolves itself entirely into a question of resistance; for the deposition round the cathodal needle cannot be regarded as a clot, or as in any way aiding in the consolidation of the aneurism. If a sufficient current-strength can be obtained by the use of an external cathode, it is of no advantage to introduce it within the sac. At the same time, there is no objection to the use of an internal cathode, provided the shaft is well insulated; for it must be remembered that the caustic action of the current is chiefly confined to the cathode. The hydrogen liberated by an internal cathode has been proved by experience to be productive of no evil results.

The duration of an application must depend upon the current-strength, half an hour to an hour being usually sufficient. When not contra-indicated, it is well to allow the anodal needles to remain *in situ* half an hour after detachment of the battery, in order to permit of consolidation of the clots. The needles, especially those connected with the anode, should have a rotary motion imparted to them previously to withdrawal, in order as far as possible to avoid disturbance of the clots.

My investigations upon this subject not yet being complete, I hope on a future occasion to make known the results of further experiments.

A CASE OF ABDOMINAL ANEURISM BECOMING DIFFUSED AFTER DISTAL COMPRESSION.*

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THE patient from whom the specimens before you were obtained was a married man, aged 31, admitted into the Bristol General Hospital on November 2nd of last year. He was a clerk, a native of Bristol; had never indulged in any kind of violent exertion; never had gonorrhœa; careful inquiry elicited no suspicion of syphilis. Four years ago, he was ill for six weeks with rheumatic fever; he had suffered from no dyspnoea until lately. The present illness began about seven months before admission, with pain over the liver and tenderness on pressure. Soon afterwards, the patient had pain about the epigastrium, and a stoppage of the bowels for seven days occurred, which yielded to purgatives: the pain was then relieved. Similar pain then began to come occasionally on each side, about the umbilicus, or in the back, gnawing in character: two or three times, there were shooting pains down the right thigh. For the last fortnight especially, the epigastric pain had been worse after food, coming on almost directly after a meal,

* Read before the Bristol Medico-Chirurgical Society.

and sometimes lasting for hours, slightly relieved by pressure. He had no nausea nor vomiting; his bowels were sometimes constipated, sometimes loose. The patient said he had lost two stone and a half in weight since his illness began. His breath had become rather short on exertion.

On admission, his abdomen was flat; the muscles were tense; pulsation was visible at the epigastrium. The aorta could be felt beating somewhat forcibly from the tip of the ensiform cartilage as far as the bifurcation, but most distinctly two inches below the tip of the cartilage; here there was a little tenderness on deep pressure. No abnormal lateral expansion could be defined. At the tender spot just mentioned, there was a slight prominence for about an inch from above down, where apparently some solid body about half an inch thick lay on the aorta; this body slipped up when the fingers were brought down. A *bruit* was heard along the aorta from half an inch below the ensiform cartilage down to four inches from the tip, most marked two inches and a half from the tip, where it was rough and rasping; much intensified by the least pressure; inaudible in the back. The iliac arteries pulsated in a similar way to the aorta, and a *bruit* was produced in them by very light pressure. The heart's impulse was weak; the sounds normal.

As the history of this case extends over nearly three months, I will merely give an outline of its more important features.

A fortnight after admission, the pain had become much more severe—occurring in violent paroxysms—chiefly in the right hip and thigh and right loin, lasting for a few minutes or for several hours. A thrill could now be felt in the epigastrium, two inches below the ensiform cartilage, where some expansive enlargement of the aorta could be detected. The *bruit* was much more distinct, and could be faintly heard in the back, opposite the first lumbar vertebra.

During the next month, there is little to note except the increased frequency and violence of the pain, which was rapidly wearing the patient out. At the same time, the tumour had become larger and more distinct, and the thrill was well marked. As the aneurism was making rapid progress, I resolved to try to cause coagulation in the sac by compressing the aorta *below* the aneurism, the situation of which made proximal pressure impossible. At the same time, I fully recognised that the prospect of success was not great, and that there would be considerable risk owing to the increased pressure that would be produced in the sac. Accordingly, on December 12th, I had the benefit of a consultation with my colleagues, who agreed that the method of treatment I proposed was the only one that would give the patient a chance of life, small though that might be.

Next day, December 13th, the bowels having been freely opened, the patient was put under the influence of ether, and at 10.50 A.M., Lister's abdominal tourniquet was adjusted, and the pad was slowly screwed down till pulsation ceased in the femorals, the middle of the pad being about an inch and a quarter above the umbilicus and two inches below the lowest part of the tumour that could be felt. The pulsation in the aneurism at once became much more forcible, and I slackened the tourniquet till the pulse could be felt in the femorals. Pulse 104, regular. In ten minutes, the pad was again down so as to stop pulsation in the femorals. At 11.26, the pulse was 108, weak and small; the tumour was rather less distinct, and no thrill could be felt, but the *bruit* was unchanged. At 11.40, a distinct thrill was again felt. At 12.40, no thrill was to be detected. At 1.10, there was a slight intermittent thrill, and the pulsation of the tumour was decidedly less marked. At 2.30, the general condition seemed as before; but on putting the hand on the lower part of the thorax on the right side, there was to be felt distinct pulsation, forcibly expansile, extending from the tenth right interspace to two inches above the iliac crest, backwards to the edge of the quadratus, and outwards as far as the posterior axillary line, corresponding to a distinct rounded bulging of the surface. The tourniquet was removed, and pulsation in the femorals was at once fully restored. The patient had been kept quietly under ether for four hours, without any difficulty; and there were no signs of disturbance from the compression, except that the urine passed soon after contained a trace of albumen.

Next day, the epigastric pulsation was less distinct, but wider; the tumour in the right loin was beating forcibly, over a rather larger area, and a faint *bruit* was heard over it, apparently conducted from the aorta.

During the next three weeks, the pain became frequent and most intense, so that the patient took daily about ten grains of morphia hypodermically. By the end of this time, the local condition was as follows. On the right side posteriorly, there was an egg-shaped pulsating swelling between the ribs and the iliac crest, about three inches long by two wide, visible on the surface, tender. On the left side, in a similar position, a pulsating tumour was now felt, bounded

above by the line of the last rib, below by the iliac crest, and reaching outwards for three inches from the spine; tender at its outer part. A *bruit* was heard over the tumour on both sides. If the hands were placed, one on each side of the body, over these prominences, they were distinctly separated at each beat of the heart.

From this time, the patient gradually sank; the pain continued; emaciation became extreme; slight oedema appeared over the swelling on the right side; and he died on January 29th, nearly seven weeks after the compression of the aorta and the diffusion of the aneurism.

POST MORTEM EXAMINATION.—On opening the abdomen, the peritoneum was found to be pushed over to the left as far as a line one inch inside the anterior superior iliac spine by a tumour lying behind it; and the viscera were consequently displaced to the left. On removing the stomach and intestines, the aneurism was exposed. It lay behind the whole abdominal cavity and beneath the psoas and iliacus muscles. It might be described as composed of two large, thick, conical masses, with their bases upwards, united at their sides for two-thirds of their length, while their free ends passed downwards to each thigh along the brim of the pelvis. The right mass was the larger, being about four or five inches thick, and reaching up to the liver; its right border was uncovered by peritoneum, and filled the whole space between the abdominal wall in front and the abdominal wall behind. The tumour consisted of a large quantity of soft dark clot and dark fluid blood shut in simply by the muscular layers of the abdominal walls strengthened by fibrin deposited amongst them. The posterior wall of the aneurism was formed of the eroded spine in the middle line, and at the sides the muscles and other tissues bounding the body behind. On the left side, a conical cavity full of clot passed down beneath Poupart's ligament along the psoas into Scarpa's triangle, and then downwards and backwards for three inches towards the perineum. The aneurism had sprung from the back of the aorta just below the diaphragm; its mouth was a smooth rounded opening three-quarters of an inch across. The limits of the primary sac could not be made out. The spine was deeply eroded at the last dorsal and first two lumbar vertebrae. The aorta was atheromatous, the arch slightly dilated. The heart was healthy.

REMARKS.—There are four chief ways in which aneurism of the abdominal aorta may be treated: by rest and diet simply; by drugs; by galvano-puncture; and by mechanically more or less preventing the flow of blood through the sac. It was not found practicable to diet my patient strictly; he always felt much worse when taking iodide of potassium; galvano-puncture was not admissible, as the aneurism had nowhere shown signs of approaching the surface; as, therefore, the patient was growing rapidly worse, there remained no choice, but either to let him die or to try the effect of compressing the aorta beyond the aneurism. The distal treatment of aneurism that we are most familiar with is that where a permanent ligature is put round a vessel or vessels beyond the sac; this, as is well known, has been done for aneurism at the root of the neck, when the carotid has been tied for aneurism arising close to its origin; or where the carotid, subclavian, or both vessels, have been ligatured for aneurism of the aorta or the innominate. But if proximal compression has been substituted to a great extent for the old Hunterian operation, there is no apparent reason why compression beyond the aneurism should not be used in suitable cases instead of ligature. Where the aneurism is high up on the abdominal aorta, we are limited to temporary compression of the vessel below, with the object of producing rapid coagulation in the tumour.

What chance of success has this distal compression of the abdominal aorta? One of the earliest cases in which this method was tried was Bryant's, when Lister's abdominal tourniquet was applied for twelve hours, removed for twelve hours, and again applied for four; at the end of that time, alarming symptoms set in, and the patient died in eleven hours. *Post mortem*, it was found that the intestine had been bruised by the pad, and had set up fatal peritonitis; but that the aneurism, involving the coeliac axis and the superior mesenteric, was consolidated. In the few other cases on record, no such result followed; but this one instance is enough to justify the proceeding, and to allow hopes of success, although, theoretically, the chance of consolidation is small; because in such a case, the great probability is that free circulation will be kept up in the aneurism owing to the origin of large vessels either from the sac itself or between it and the point of compression.

What are the dangers of distal compression? The only one not shared by the proximal operation is the risk of rupture of the aneurism, owing to the increased pressure on its inner surface caused by the arrest of the flow through the aorta beyond. This accident happened in the case I have related; and another instance is recorded in the BRITISH MEDICAL JOURNAL of April 21st, 1877, where the abdominal aorta

was being compressed by Heath of Manchester for aneurism of the common femoral, when death resulted from rupture of an unrecognised abdominal aneurism above the point of compression. In my case, the rupture took place into the retroperitoneal tissue; and, therefore, death did not at once result, but a false aneurism was formed, which attained an enormous size. It is worthy of note, however, that in cases of distal ligation at the root of the neck, there has often not been increased pulsation in the sac, but, on the contrary, a speedy diminution in both the impulse and the size of the aneurism. Thus, while fully recognising the risks accompanying distal compression of the aorta, we are justified in adopting this treatment with some hope of success; and more especially because we have to do with a disease that is almost invariably fatal—it may be very speedily—if left to itself. I do not consider that my patient's life was materially shortened by the result of the treatment, seeing that he lived seven weeks after it, and that, when it was adopted, the aneurism was making rapid progress and the patient was apparently fast dying from exhaustion.

A CASE OF DIVIDED UTERUS AND VAGINA.*

By JAMES MURPHY, B.A., M.D.,

Lecturer on Botany at the University of Durham College of Medicine,
Newcastle-upon-Tyne.

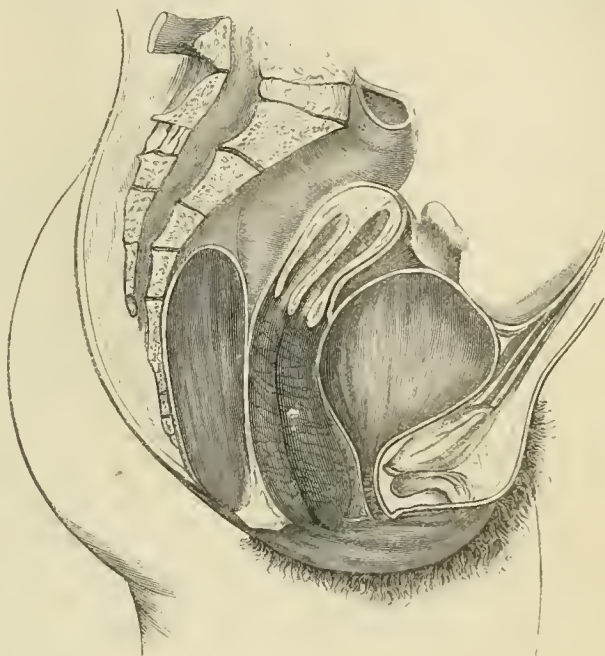
As cases of divided uterus and vagina (a condition normal in the marsupialia) are not very common, and as they possess a certain amount of interest from an embryological point of view, I am anxious to place on record a case that has recently been under my care, in which both these conditions were very well marked.

But, first, I may say a few words on the etiology of this malformation. The whole female genital canal, from the vulva to the fimbriated extremities of the Fallopian tubes, is formed out of two (originally separate) tubes, called, from their discoverer, "Müller's ducts". Now, while the upper portions of these ducts, which go to form the Fallopian tubes, remain separate, under ordinary circumstances the lower portions, which go to form the uterus and vagina, become as it were fused together at the eighth week of embryonic life; and it is when they fail to coalesce that we have developed those conditions which are known as uterus septus and vagina septa.

Mrs. T., aged 32, married for seven years, never pregnant, consulted me a little time ago about a cyst in her right labium; and, on examination, I also found the following conditions present. A septum, springing from each labium minor, a little anterior to the fourchette, extended to the uterus, completely dividing the vagina into two portions: an anterior and larger canal and a posterior and smaller one. This septum, which was at its commencement about a tenth of an inch in thickness, but gradually became thinner as it approached the womb, was composed of a strong dense tissue covered with squamous epithelium, composed of those large cells peculiar to the vagina, with the mucous membrane of which it was continuous. The anterior canal was slightly smaller than a normal vagina, and the posterior one something smaller than its fellow, but the two combined were not much larger than an ordinary vagina; for, when one canal was dilated it encroached on the other, as the septum could be stretched to a considerable extent. The vulva was normal, and the carunculae myrtiformes were well developed round the commencement of each vagina, so that it is probable a double hymen existed. In the anterior canal was a cervix, quite normal as to situation and form, but the size a little less than usual. Through the os a sound could be passed to the extent of about two inches, but there was a slight amount of stenosis present. In the posterior canal, a small short cervix could be felt, crowded up to the anterior superior corner of the canal, and through the os a small sound could with difficulty be passed for about an inch and a half. To determine if the uterus were divided, I passed a sound through each os, and endeavoured to touch one sound with the other; and as I failed to do this, after several patient and careful trials, I think I may fairly assume that the septum exists in the uterus also. By placing two fingers in the anterior canal against the anterior portion of the womb, and pressing the fingers of the other hand on the abdomen, well down behind the uterus—i. e., by the conjoined method of examination—I could make out the fundus, which appeared quite normal, and, as well as I could determine, there was but one ovary on each side, as would be expected. By changing the hand on the abdomen to the anterior surface of the uterus, and introducing a finger into the posterior canal, the double cervix seemed once and a half as large as usual. Being anxious to determine whether she menstruated from both wombs, I requested her to come back during

a monthly period; and, on examination with a speculum, I found the catamenial fluid flowing copiously from the anterior os, and very slowly, but still distinctly, from the posterior one.

The patient was not aware of anything being amiss, except the cyst, and that she had suffered from dysmenorrhœa for the last year, which



was owing to the stenosis existing in each os. I purposely dilated the anterior one first, without interfering with the other, when the dysmenorrhœa was much relieved, but still existed to a slight degree. I then dilated the second os; and she has been quite free from pain during the four periods that have since elapsed.

The accompanying drawing, which is fairly accurate, will convey a better idea of the case than I have been able to do by words.

BATH THERMAL MINERAL WATERS: THEIR USES AND ABUSES.

By A. B. BRABAZON, M.D.,

Physician to the Bath Mineral Water Hospital.

III.

Diseases of Skin.—The types of cutaneous affections which commonly are presented for treatment in the Bath Mineral Water Hospital belong to the pustular, papular, vesicular, and squamous classes. I have also seen one or two examples of the class bullæ. Under the head of pustular, I find acne, impetigo, or impetiginous forms of eruption, affecting various parts of the body. Of the vesicular class, eczema contributes the most numerous examples; of the squamous class, lepra and psoriasis are most abundant; lichen generally represents the papular form; and the class bullæ is occasionally represented by cases of pemphigus, though the occurrence is unfrequent.

I regret that a large number of cases are discharged under the simple head of "Skin-disease", but as to more determinate classification are "anonymous". I think I may confidently say that these cases may be considered as coming collectively under the classes above named, although I am unable to place them in a more decided classification. Of pemphigus, I have had under my own care two most decided cases, in both of which, rather contrary to my expectation, the eruption rapidly disappeared under treatment. Of the pustular class, I find cases of acne discharged cured, but whether acne simplex or acne indurata is not mentioned. I should, from the pathology of the disease, expect such a result. I find also cases of impetigo, or impetiginous eruptions, discharged cured or much better; and my personal experience

* Read before the Northumberland and Durham Medical Society.

fully corroborates the truth of these recorded results in this treatment of such diseases. With regard to eczema, the number of cases discharged is, I think, sufficient whereon to form practical conclusions; in fact, my personal experience fully corroborates the facts, and I think my testimony may be accepted as unprejudiced, when I state that my anticipations led me to expect a totally different result. I hardly expected that any case of eczema would be benefited by a course of treatment apparently so opposed to that approved of by Mr. Erasmus Wilson, whose advice I have frequently followed with success. I am happy to say that there is nothing in the present instance to cause me to underrate that advice or to alter my usual treatment.

I have had under my own care in the hospital some most troublesome cases of this most troublesome disease; and I have found these cases most decidedly improved by: 1. the internal administration of the waters; 2. deferring their external application until the more acute local symptoms had entirely subsided; 3. following out Mr. Wilson's expressed advice, viz., to keep the surface as dry as possible and unwashed. I have found the constant application of a powder composed of equal parts of finely powdered oxide of zinc and starch most useful in protecting the skin.

I find that twenty-one cases marked "eczema", consisting of twelve males and nine females, were discharged during the year ending May 1877. Taking the males first, five were discharged under twenty, of which number two were "cured" and three "much better"; giving a percentage of 40 per cent. "cured" and 60 per cent. "much better". As only one female was discharged under twenty, we will pass on to the double decade between twenty and forty. Two females were admitted at this period of life, both cured. Between forty and sixty, on the male side, three out of four were discharged "much better", equivalent to a percentage of 75. On the female side, at the same age, one out of four was discharged "much better", being equivalent to 25 per cent. Passing by the term "better" as of equivocal value, let us inspect the quantities under the more important term, "no better". Among males, there was only one discharged under this head, aged between forty and sixty; being one out of four admitted at the same age, equivalent to 25 per cent. "no better", against 75 per cent. "much better". Females appear less fortunate, as at ages between forty and sixty two out of four were discharged "no better", equivalent to 50 per cent. In other words, the chances of improvement in males compared with females, both being aged between forty and sixty, are as two to one in favour of males. Looking to the sum total of results and finding the proportions, males and females, taken collectively, to be 12.5 per cent. discharged "cured", against 4.2 per cent. discharged "no better", I think I am entitled to the verdict of an impartial jury in favour of the proper use in eczema of the Bath Mineral Waters, for which I can assure my readers I am no special pleader.

Under what I have termed "anonymous" skin-diseases, thirty-five were discharged, twenty-one males and fourteen females. As I have already said, these were most probably, indeed I might say almost certainly, composed of those forms of cutaneous disease, which I have mentioned as usually submitted to treatment in this hospital. I believe we may take the numbers relatively to accord with the numbers admitted of the subjoined classes of disease.

Lepra.—Males, 1; females, 4; total, 5.

Psoriasis.—Males, 2; females, 5; total, 7.

Eczema.—Males, 12; females, 9; total, 21.

Diseases not named.—Males, 21; females, 14; total, 35.

All diseases of skin included make a total of 68; to which lepra contributed 7.3 per cent.; psoriasis, 10.2 per cent.; eczema, 30.8 per cent.

I need not occupy the time of my readers unnecessarily by entering into details of this unclassified group of skin-diseases. I shall only point out, for their consideration, the percentage of cured and no better, and leave it to them to draw their own conclusions. Percentage of cured, total of both sexes, 48.5; no better, 0.

As to the benefit derived in cases of lepra and psoriasis, even when of an aggravated form, there is no possible doubt, at least in my mind.*

Diseases of Specific Origin.—I have now arrived at the consideration of the diseases which I have termed as arising from specific causes, such as poisoning from lead, mercury, arsenic, etc. We may also, for the sake of convenience, include cases of syphilitic poisoning. Cases of lead-poisoning, in point of number, stand by far first on the list; in fact, as a rule, the hospital is seldom without several specimens presenting different forms and complications. Thus we find paralytic or semiparalytic conditions, varying from comparative to complete loss of

muscular power, as in wrist-drop, when, in some instances, the patient has not power to hold a pen.* We also find, occasionally, lead-colic. As to complications, we find lead-poisoning very frequently associated with gout and rheumatism; so frequently, that I am disposed to think that it may sometimes act as the specific cause. The well known condition of gums, diagnostic of lead-poison, is rarely absent. I have even found it where no special symptoms had presented themselves, and where the patient had been admitted as suffering from gouty or rheumatic pains in the joints or limbs. It is occasionally very difficult to arrive at the source from which the poison was procured; nor is it to be supposed that the effects of the poison are confined to painters, or those whose daily occupation brings them into absolute contact with the metal; we frequently find them in agricultural labourers, who can give no clue to the real history of the case. I presume that in such cases the metal is introduced into the system in the way of food or drink. During two years, ending May 1877, forty cases of lead-poisoning were treated in and discharged from the hospital: thirty-seven males and three females. There were no cases under twenty. The largest number discharged was between the ages of forty and sixty, being males; and the averages per cent. in proportion to numbers discharged, at this age, were 10.8 "cured" and 75.6 "much better". There were none discharged "no better". The total average per cent. of cured males and females collectively, is 12.5. As might be expected, the number of females treated in the hospital for lead-poisoning is too small to attract any special attention or to form a basis for any definite conclusions.

Cases of mercurial or arsenical poisoning are rarely admitted. I can find but one mentioned of mercurial (quicksilver) poisoning, and this patient was speedily discharged, having shown symptoms of suicidal mania. In speaking of arsenical poisoning, I only allude to arsenical poisoning from wall-paper, of which, during the year, there has been no case recorded.

I shall conclude with a few observations on syphilitic cases. Cases of syphilis, *per se*, are not usually admissible to the hospital, but we find many cases in which, to say the least, a strong suspicion of syphilis underlies the apparent symptoms, which are usually of the rheumatic type. Patients are very reticent indeed on the subject; and it is only by careful examination and cross-questioning of the patient, that one can arrive at the truth. The cases of this kind which have come under my notice, have certainly derived benefit from mineral water treatment. In private practice, I have met with two or three cases of aggravated tertiary symptoms, such as nodes, diseased bone, rupia, emaciation, nocturnal pains, etc. As a rule, in these cases, the warm baths were most efficacious, particularly in relieving the nocturnal pains; but great care is necessary in their administration, as, if taken too frequently or at too high temperature, they will certainly increase the severity of the hectic fever usually present in such cases, and cause greater emaciation and consequent debility.

I have now finished the task which I set before me, viz., that of attempting to establish, by statistics, some rule for guidance in selecting or advising patients as to the propriety of submitting themselves to treatment by the Bath Mineral Waters. I hope I have so far fulfilled my mission as to place before my readers these statistics in such a form that, given disease, with age and sex, a glance at the table annexed (Table I) may enable them to arrive at a fair conclusion as to the possibilities or probabilities of relief or permanent improvement on the one hand, or as to the inutilty and waste of time in seeking cure or relief under the circumstances, which rendered the realisation of such an expectation improbable, if not impossible.

As regards the *modus operandi* of the Bath Mineral Waters, I wish I could throw any scientific light on the subject, but at present, at least, I have not the data sufficient to work on. These necessary data will require very close observation, and, above all, careful quantitative analysis of the urine. I hope at some future time I may be able to add my mite of information on the subject. There can be no doubt that the therapeutic action of the waters, used internally, is largely due to the action on the kidneys and renal secretion, and also on the gastrointestinal mucous membrane; in other words, the action is one of elimination through these channels; and in addition to these effects are to be considered the antacid or tonic effects of alkaline-chalybeate waters. The effect of the baths, or external application of the waters, is also that of elimination by the skin, as well as producing softening and absorption of effused material when it can be absorbed. There is one peculiar effect of these waters when first used, and not wholly an agreeable one to the patient, namely, an aggravation of the local symptoms, increased pain, and often increased swelling in cases of gout or rheumatism. This fact would appear to favour the theory of

* Since writing the above, I have had admitted under my care a case of congenital "ichthyosis". Three other members of the family are similarly afflicted.

* Since writing the above, I have had admitted under my care a well marked case of paralysis of the extensor brevis digitorum pedis from lead-poisoning.

TABLE I.—*Bath Mineral Water Hospital.*—Statistical Results of Treatment of Disease, with Percentages.

	Result.	A.—Numbers Discharged at the several Ages.								B.—Percentage of Results of Treatment according to Age, for Males and Females separately.								C.—Percentages in proportion to discharges for Males and Females separately and collectively.			Number of Cases Discharged.
		Males.				Females.				Males.				Females.				M.	F.	Total.	
		Under 20.	20 to 40.	40 to 60.	Over 60.	Under 20.	20 to 40.	40 to 60.	Over 60.	Under 20.	20 to 40.	40 to 60.	Over 60.	Under 20.	20 to 40.	40 to 60.	Over 60.	Per cent.	Per cent.	Per cent.	
		20.	40.	60.	60.	20.	40.	60.	60.	20.	40.	60.	60.	20.	40.	60.	60.	Per cent.	Per cent.	Per cent.	
ECZEMA.	Cured	2	1	2	..	1	40	100	100	..	50	16.6	44.4	28.4	Males ..12 Females.. 9
	Much better.	3	1	3	1	..	..	1	1	60	100	75	100	..	..	25	50	75	22.2	52.3
	Better .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	25	..	..	11.1	4.7
	No better...	..	..	1	..	..	..	2	..	..	..	25	..	..	..	50	..	8.3	22.2	14.2
	Total	5	2	4	1	1	2	4	2	Total ..21
SKIN-DISEASES (not named).	Cured	2	4	3	2	4	1	1	..	66.6	57.1	42.8	..	50	44.4	33.3	50	52.3	42.8	48.5	Males ..21 Females..14
	Much better.	1	3	5	2	4	2	1	..	33.3	42.8	42.8	50	44.4	66.6	50	..	42.8	50	45.7	
	Better .....	..	..	1	..	1	..	..	..	..	..	14.3	..	11.1	..	..	..	4.7	7.1	5.7
	No better...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	3	7	7	4	9	3	2	Total ..35
LEAD-POISONING.....	Cured	2	2	1	13.3	9.1	33.6	10.8	33.3	12.5	Males ..37 Females.. 3
	Much better.	..	11	17	..	..	2	..	..	..	73.3	77.2	..	..	66.6	..	..	75.6	66.6	75
	Better .....	..	2	3	..	..	..	..	..	..	13.3	13.6	..	..	..	..	..	13.5	..	12.5
	No better ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	15	22	3	Total ..40

TABLE II.—*Condition of the Urine in Twelve Cases.*

Sex and Age.	Occupation.	Disease.	Duration.	Result.	On Admission.			After Admission.								
					Quantity.	Quality.	Sp. gr.	First Week.			Second Week.			Sixth Week.		
								Quantity.	Quality.	Sp. gr.	Quantity.	Quality.	Sp. gr.	Quantity.	Quality.	Sp. gr.
M., 36	Carter	Rheumatism	10 mths.	Much better	2 pints	Acid	1.15	2½ pints	Acid.	1.20	3½ pints.	Acid	1.20	4 pints	Acid	1.20
M., 21	Footman	Rheumatism	7 years	Cured	1½ pts.	..	1.28	3	..	1.21	4	..	1.10	4	..	1.12
M., 58	Gardener	Rheumatism	3 years	Much better	2 pints	..	1.24	3	..	1.12	5	..	1.13	3	..	1.14
M., 49	Mason	Gout	4 years	Much better	2 pints	..	1.12	2	..	1.10	3	..	1.14	2½	..	1.11
M., 26	Quarryman	Rheumatism	4 months	Cured	1 quart	..	1.20	2 quarts	..	1.12	4½	..	1.18	4½	..	1.17
F., 28	Lady's-maid	Coxalgia (Rheumatic)	6 months	Much better	1 quart	..	1.18	3½ pints	..	1.21	4	..	1.10	5	..	1.10
M., 24	Engine-driver	Rheumatism	15 mths.	Better	1 1-8th pt.	..	1.20	2½	..	1.13	3	..	1.11	6	..	1.12
F., 27	Housemaid	Rheumatism	6 months	Much better	1 quart	Neutral	1.21	3	Faintly acid	1.20	2 qts.	Faintly acid	1.20	2 qts.	..	1.18
* M., 35	Clerk	Rheumatism (after injury)	3 years	Much better	3 pints	Acid	1.18	3	Acid	1.12	1	Acid	1.12	6 pints	..	1.12
† F., 19	Servant	Rheumatism	2 years	Much better	1½ pints	..	1.12	3	..	1.13	4 pints	..	1.13	5	..	1.10
M., 22	Printer	Rheumatism	10 mths.	Cured	2 pints	..	1.26	3	..	1.11	2 quart	..	1.15	2 qts.	..	1.12
‡ F., 30	Governess	Rheumatism	12 mths.	Much better	1½ pints	Neutral	1.12	3	..	1.14	3 pints	..	1.12	4 pints	..	1.11

* Complicated with nervous debility and anæmia.

† Complicated with amenorrhœa.

‡ Complicated with anæmia.

TABLE III.—*Bath Mineral Waters.*

CONSTITUENT PARTS IN 100,000.							Merck and Galloway.		Mackay Heriot, F.G.S. (Captain Royal Marine Light Infantry).					
							King's Bath.		King's Bath.		Het. Pump.		Cross Bath.	
Calcium	..	..	..	..	..	..	386.7	..	377	..	401	..	388	..
Magnesium	..	..	..	..	..	..	53.0	..	47.4	..	52.2	..	46.8	..
Potassium	..	..	..	..	..	..	29.8	..	39.5	..	31	..	37.5	..
Sodium	..	..	..	..	..	..	160	..	129	..	137	..	140	..
Lithium	..	..	..	..	..	..	..	..	Traces	..	Traces	..	Traces	..
Iron..	..	..	..	..	..	..	7.4	..	6.1	..	6.7	..	4.5	..
Sulphuric acid	..	..	..	..	..	..	1029.5	..	869	..	884	..	895	..
Carbonic acid (combined)	..	..	..	..	..	..	86.9	..	86	..	89	..	83.5	..
Chlorine	..	..	..	..	..	..	265.3	..	280	..	275	..	280	..
Silica	..	..	..	..	..	..	42.6	..	30	..	39	..	38	..
Strontium	..	..	..	..	..	..	..	..	Traces	..	Traces	..	Traces	..
Alkaline sulphides	..	..	..	..	..	..	..	..	Traces	..	Traces	..	Traces	..
Carbonic acid gas at normal temperature and pressure (cubic centimetres per litre)	..	..	..	..	..	..	..	..	65.3	..	80.4	..	51.5	..
Total solid contents in 100,000	..	..	..	..	..	..	2062.1	..	1864.0	..	1911.9	..	1913.3	..
Specific gravity..	..	..	..	..	..	..	..	..	1.0015	..	1.002	..	1.002	..

Temperature.—King's Bath, 117 deg. Fahrenheit; Hot Bath, 120 deg. Fahrenheit; Cross Bath, 104 deg. Fahrenheit. The nitrogen daily evolved from the springs amounts to about 250 cubic feet.

Dr. Bence Jones as to the cause of this pain and swelling, which he attributes to increased oxidation, and which he looks upon as a natural therapeutic effort to eliminate the effects of suboxidation. Undoubtedly, most of the cases in which the symptoms are at first somewhat aggravated are in the end those in which the waters will be found most efficacious.

Mr. Coppinger, the resident medical officer to the Mineral Water Hospital, has kindly made some investigations as to the effect produced on the chemical reaction and quantity of the urine by the in-

ternal use of the waters. He has tabulated these conditions as found existing on the patient's admission into the hospital; also at intervals during their sojourn there. I need not explain the difficulties in the way of pursuing such investigations in the hospital; but I have every reason to trust to Mr. Coppinger's diligence and watchfulness in conducting these observations. I append twelve cases in the form in which he has reported them, in order that my readers may try to deduce some practical inferences as to the effects of the mineral waters as regards the renal secretion (Table II). For purposes of general in-

formation, I will also append the latest analysis of the Bath Mineral Waters by Captain Heriot, Royal Marines. (Table III.)

In concluding the foregoing remarks and observations, I may be pardoned if I repeat that which I have already wished to convey to my readers, namely, that it is with no intention of dictating to them, least of all with any assumption of superior knowledge. I have ventured to say that which many others would have said much better had they the same opportunity or desire to do so, but "Non cuivis homini contingit adire Corinthum", which in the present instance, if freely translated, means, "It is not every professional brother who visits Bath"; though I trust that by the end of this year the number of non-visitants in the profession will be but very small indeed.

To those of my readers who are already well acquainted with the uses as well as the abuses of the Bath Mineral Waters, I will address the following quotation, with which I will now conclude.

"Si quid novisti rectius istis,
Candidus imperti; si non, his utere mecum."—*Horatii Epistol. v, Liber i.*

SURGICAL MEMORANDA.

CATGUT LIGATURE.

ON November 17th of last year, I tied the hind part of the right subclavian artery in the Manchester Royal Infirmary with a catgut ligature. The patient died of cardiac disease on the eighth day following; and, on examination, it was found that the ligature had, with the exception of a short interval of about one line in length, completely cut its way through all the coats of the vessel. There was no occlusion whatever of the artery, nor even any coagulum; so that doubtless the hæmorrhage would have been fierce and uncontrollable had the man survived longer. I make a note of this, because I think it goes far towards establishing the correctness of the opinion that catgut is an unfit agent for securing arteries in their continuity. It is true that catgut is efficient and safe in deligating the vessels severed in amputations; and I think, for the reason that, the limb being removed, less blood is sent down the divided arteries, and so but little stress comes upon the encircling ligature (it is otherwise when a ligature is applied for the cure of aneurism); and, as a consequence of this, it yields, and so, permitting the re-establishment of the stream, prevents the formation of a coagulum.

S. MESSENGER BRADLEY, Manchester.

CATGUT DRAINAGE.

I BEG to thank Mr. Messenger Bradley for his prompt reply to my request for his reasons why Chiene's method of catgut drainage is "most inefficient". He gives these reasons under three heads.

1. *Catgut drainage is inefficient, because it does not act by capillarity.* This is no argument for or against its efficiency or inefficiency. My explanation of the mode of action of a skein of gut may or may not be true. That question is altogether apart from the question at issue. I therefore do not enter upon it.

2. *Catgut is inefficient, because, as Mr. Bradley has seen it applied, it only drains the superficial parts of a wound.* In my original paper (*Edin. Med. Journal*, September 1876), it is distinctly stated that the drain is to be stitched to the bottom of the wound. A surface-drain in a wet meadow will only remove surface-water; a hank of gut placed superficially in a wound cannot be expected to drain away the discharge from the deeper parts of the wound.

3. *Catgut is inefficient, because it does not last long enough.* A skein of the finest gut of four threads is absorbed, as a rule, within a week; a skein of twelve threads, in from ten to twelve days. In this time, the wound, if it is to heal by first intention, will be beyond the necessity of drainage. It is stated in the original paper that I do not allude to the use of catgut in suppurating wounds. I feared that catgut would not remove pus. Further experience has shown this to be true. When suppuration occurs, a drainage-tube must be inserted. As long as suppuration is the exception, not the rule, we are justified in using catgut in those cases in which our aim is union by the first intention. This is one of the advantages claimed for the catgut over the drainage-tube.

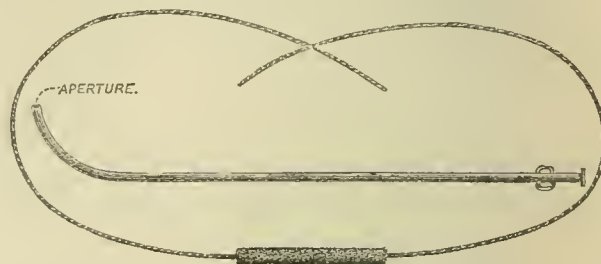
I trust that I have answered Mr. Bradley's objections. Mr. Bradley should have read with care the original paper, and should have tried the method of application there recommended, before making such a sweeping accusation. Until he has tried it in the way recommended by me, he has no right to say, and he cannot expect me to accept his assertion, that "Chiene's method of catgut drainage is most inefficient". Perhaps I may be allowed to add that I have used catgut

as a drain in every available case in hospital and private practice since September 1876, and that I still feel justified in recommending it to the notice of the profession.

JOHN CHIENE, Edinburgh.

NEW METHOD OF CLEANING CATHETERS.

I HAVE always thought that the thorough cleaning of catheters by washing them out and blowing through them is impossible and distasteful. The oil-stain is persistent, and the cone at the tip of the instrument is a nidus for successive deposits of impurity; and I protest personally against soiling my lips with a machine that, a few minutes previously, was an urine-duct. To remedy these inconveniences, I have been accustomed to use catheters with through communication and a bristle brush with double handle. Catheters pervious from tip to handle are more easy to introduce, and give less pain on withdrawal than eye-sided instruments, because they are smoother, and the spasm of urethral muscles has no grip on the side excavation. If the catheter be not introduced too far, the bladder-wall cannot occlude the hole at the tip. The bristle brush is shown in the diagram; it can



easily thread the catheter, and may be passed to and fro as often as desired in a weak solution of soda and water.

Breech-loading barrels, from a pure point of view, are preferable to the old muzzle-loading; and, as a sportsman considers his barrels foul if only soaked in warm water and blown through, so also should a surgeon condemn his catheter as unclean if only treated in a similar way. The catheters and brush are manufactured by Messrs. Wright and Co., 108, New Bond Street, W.

RICHARD DAVY, M.B., F.R.C.S., Surgeon to the Westminster Hospital.

THERAPEUTIC MEMORANDA.

TURPENTINE IN ENTERIC FEVER.

I HAVE read with great interest the remarks in the BRITISH MEDICAL JOURNAL of December 15th, 1877, on the use of turpentine in enteric fever, by Mr. R. P. White; and I have employed it in the treatment of this disease with the most marked success. We are indebted to Surgeon-Major Moffitt, 15th Regiment, for having brought this mode of treatment under the notice of the profession in India; and I am informed by him that it was from his uncle, Dr. Moffitt of Sydney (who has been in the habit of using it for the last fifteen or twenty years), he first learnt its value in these cases. About two years ago, Surgeon-General Stewart called for reports on this mode of treatment, and I have no doubt they will be published in the next departmental blue-book. I was at that time quartered at a station (Ahmedabad) where, if a case of enteric fever did occur, it was almost always fatal; but after the adoption of the turpentine treatment I never lost a case. As to its *modus operandi* I can scarcely speak; but it appears to me, from what I have seen of it, as much a specific for enteric fever as is quinine for ague or ipecacuanha for dysentery. I may add that the mode of administration I have found most useful is, as recommended by Dr. Moffitt, half-drachm doses four times daily, made up with mucilage or yolk of egg.

E. J. McGRATH, Surgeon-Major Royal Artillery.

RHAMNUS FRANGULA.

As the profession appears returning to the use of the "rhamnus frangula or black alder", the following account of it may interest the readers of the JOURNAL.

Dr. Quincy, in the twelfth edition of his work entitled *Pharmacopœia Officialis et Extemporanea, or a Complete English Dispensatory*, printed in the year 1742, under section Cathartics, remarks:—"Ainus nigra,

the black alder, called also *frangula*; the *arbor fetida*, or stinking tree, of some writers, is the same; and the *alnus nigra baccifera*, the black-berry-bearing alder of *C. Bauhine*, is the sort referred to by our official prescriptions, though, indeed, it is but seldom met with in them. It is a very strong cathartic, and used, therefore, to be given in dropsies and where a great load of humours is to be purged away. The ancients accustomed themselves to correct it with cinnamon, ginger, and the carminative seeds; but it is now very little in use."

LUCIUS HOLLAND, M.D.

A READY MODE OF CARRYING AND ADMINISTERING CROTON-OIL.

WHEN croton-oil is required for internal use, the case is an urgent one, usually either apoplexy or cerebral hæmorrhage, and time is all-important. It has heretofore been prescribed in powdered sugar, or is carried made into small pills. The latter have various disadvantages; they dry and become hard, or, from our patient's unconscious state, cannot be swallowed. When formerly engaged in country practice, I had several times occasion to wish that some portable and efficient mode of carrying the pure oil were devised, and at length hit upon a plan which seems adapted for other medicines besides croton-oil. This consists in making use of the little lead tubes which are employed for artists' oil-colours. There was some difficulty in obtaining them small enough; but Mr. Mackay, of Messrs. Duncan, Flockhart and Co., took the matter up and worked it out for me. Each tube contains ten or twelve drops of oil, kept secure by a little lead cap fitted with a cock, which screws on. On removing the cap, a very small aperture is exposed, from which a drop of any size can be squeezed either on to a small piece of sugar or on to the handle of a spoon, and thence conveyed to the back of the patient's tongue. The tube fits into one of the divisions of the pocket pill-case made of tin sold by Duncan and Flockhart, and thus is always at hand and ready for use.

It appears to me that the same mode might be applied to the preservation of a sufficient quantity of nitrite of amyl for use in cases of emergency, a tube containing a slightly large quantity being employed.

W. ALLAN JAMIESON, M.D., F.R.C.P., Lecturer on Diseases of the Skin, Edinburgh School of Medicine.

TWO CASES OF INFANTILE OPIUM-POISONING TREATED WITH ATROPINE.

CASE I. September 29th, 1875.—The infant boy, fourteen days old, of Mr. A., having had looseness of the bowels for some days, got what was said to be half a drop of laudanum: I have, however, reason to believe it was more. The dose was administered about 10 A.M. At 2 P.M., the child was in a deeply somnolent condition; brisk rubbing and slapping made it cry, although its eyelids remained closely shut; it occasionally moaned and breathed deeply, but mostly lay limp and passive; the lips were livid; the pupils of the eyes strongly contracted; the face was pinched and drawn; the cheeks were bloodless, and round the eyelids there was a dusky hue. The ordinary methods of treatment were tried, with varying success, till 8.30 P.M., when I commenced to moisten his lips with solution of atropine (four grains to the fluid ounce), and to keep them moist. By this time, the pulse at the wrist was imperceptible, and there was only a thrill over the region of the heart. At 9.30 P.M., there was a distinct change on the pupil; it was dilating; the breathing shortly became hurried and gasping; the pulse appeared at the wrist; the cold skin became hot and fiery. At 10 P.M., there was twitching of the fingers and hands and muscles of the face, and general slight convulsions, especially on touching the head or feet. From this time, there was a great variety of struggles: evidently the results of the administration of the atropine as well as of the opium. Injections of warm water were frequently given, and a little milk with a few drops of whiskey. At 8 A.M. on October 1st, the breathing was still oppressed; the eyes were clear; the pupils movable but sluggish. He had passed a fair night, and had motion from his bowels; the scrotum was œdematous. At 1 P.M., the effects of both opium and atropine seemed to have passed away; there was slight dullness on percussion on the left lung, in the region of the nipple; the belly was hard and tympanitic. On October 2nd, matters were improved, and from this time all went well.

CASE II.—An infant girl nine days old, on November 23rd, 1877, at 5.40 A.M., got at least four drops of liquor opii sedativus (Battley's) to quiet its crying. In about ten minutes, it fell into a deep sleep; began to look livid in the face and to breathe gaspingly. Between 6 and 7.30 A.M., she had several general convulsions, which nearly carried her off. At 7.45 A.M., the lips were moistened with solution of

atropine (one grain to the fluid ounce). As often as the lips dried, they were moistened again. There was one severe convulsion only after beginning the treatment and several other mitigated ones. At 8.40 A.M., the general appearance of the child was very bad; she had livid ring-like marks round the mouth and brow; the brow was wrinkled and contracted; the mouth partially open and slightly paralysed; the tongue thick, white, and furred; the lips dark, hard, and dry; the skin hot and dry; the pupils extremely contracted and quite immovable; the eyeballs varying every moment, with converging and diverging squint; the breathing occasionally totally suspended and then resumed with a gasp. She had not been at the breast since one this morning. At 11 A.M., the breathing was still more disturbed; the pupils only about the size of a pin-point; the squinting frightful; pulse almost imperceptible; the brow contracted in crescents; the body felt warm. At 1 P.M., she died without further change.

REMARKS.—In the first case, I have no doubt the child got rather more than enough atropine; in the second case, rather less. The first recovered and the second died. I am convinced the quantity of opium given in both cases was very similar; but, in the latter case, I believe the quick superintention of the convulsions would have rendered any amount of antidote useless, as the vital energy was already pretty nearly exhausted.

J. STUART NAIRNE, Surgeon, Glasgow.

ON THYMOL AND ITS ALLIES.

As the therapeutic uses of thymol are at present exciting some attention, especially in regard to its application for surgical purposes, it may not be out of place to point out that cymene, the essential basis of this body, exists in various other organic products, from one of which it may be obtained much more cheaply than it can be from thymol. The most available source of cymene is terebene, a body which I introduced to the notice of the profession, a few years ago, as an efficient disinfecting agent, and which is now largely used for surgical purposes. Cymene may be obtained from terebene in an approximately pure condition by fractional distillation, or in a still purer state by other processes. Another source of cymene is cymol, the terpene of oil of cammin, as thymol is of oil of thyme. If alcoholic solutions of rectified terebene, cymol, and thymol are compared with one another, they will be found so nearly identical as to be with difficulty distinguishable. It is the presence of cymene in terebene which probably explains, not only its powerful disinfectant action, but also its antiseptic and healing influence on suppurating wounds.

FRANCIS T. BOND, M.D., Gloucester.

OBSTETRIC MEMORANDA.

TURPENTINE IN POST PARTUM HÆMORRHAGE.

I AM glad that it is in my power to give Mr. Pollard the results of some cases of *ante* and *post partum* hæmorrhage which I have treated with the oil of turpentine, a plan of treatment the efficacy of which I have proved, the drug having been given in sufficiently large doses. Fashion in medicine has caused many to cease the prescribing of turpentine: a fact manifest by its entire absence as an internal agent from nearly all of our modern obstetrical text-books. Should its use be revived, I am convinced that it would be of great value as a hæmostatic, and would do away with some of the strong objections to ergot.

CASE I.—Mrs. H., aged 33, a strong countrywoman, was in her seventh pregnancy, at the full period. On expulsion of the placenta, severe flooding ensued. Cold water injections, pressure, etc., had no effect. I gave a draught containing half an ounce of turpentine, and about three minutes afterwards felt the uterus contract. The hæmorrhage stopped.

CASE II.—Mrs. P., aged 22, a healthy town woman, was in her first pregnancy, at the seventh month. On being sent for suddenly, I found her pallid, almost pulseless, and losing a great quantity of blood. I gave half an ounce of turpentine beaten up with the yolk of an egg, and introduced ice into the vagina. The hæmorrhage stopped, and she came to her full time.

CASE III.—Mrs. T., aged 28, an anæmic-looking woman, was in the fifth month of her third pregnancy. She had fallen down three steps of stairs. Pains came on, with violent flooding. I gave half an ounce of turpentine in draught. A fœtus was expelled: the hæmorrhage stopped.

CASE IV.—Mrs. K., aged 21, a half-starved-looking factory girl, was in the seventh month of her second pregnancy. Having been kicked by her husband, pains and flooding succeeded. I gave half an

ounce of turpentine with egg. The flooding was severe. I repeated turpentine in three hours. The hæmorrhage stopped. She had premature delivery.

Turpentine may be given in milk, whiskey, beaten up with the yolk of an egg, or, as I prefer most, in a draught composed as follows: R Olei terebinthinæ ʒss; liquoris potassæ ℥xxx; pulveris tragacanthæ q. s.; aquæ menthæ piperitæ ad ʒij. M. Fiat haustus. When given in this form, I have never found nausea produced.

WILLIAM CLIBBORN, M.B., Birmingham.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

DR. ANDREW'S WARDS.

Diffused Thromboses.—A stout heavily built man, thirty-three years of age, was admitted to the hospital after fourteen days' illness, suffering from painful swellings in various parts of his body. He had been previously healthy; there was no history of gout or of exposure to infection or any poisonous influence; there were no wounds, injuries, or other probable source of purulent infection. His illness began by the onset of pain in both feet, without rigors or any other symptom than pain; subsequently, painful swellings formed in the legs and thighs. There was no general œdema, and no definite sign of joint affection. The heart and other organs appeared normal, and the urine was healthy, with an abundant deposit of lithates. When seen, the principal swellings were situated in the thighs, the recti muscles of the abdomen, and on both sides of the neck. The left arm had been attacked while under observation; a swelling formed near the elbow, and spread upwards and downwards, with great pain; it is now subsiding; the skin over it appears wrinkled. In none of the swellings has there been any sign of suppuration; there has never been any sign of erysipelas, nor any reason to suspect pyæmia. During the three weeks of illness, several of the swellings have subsided, though some are still increasing. There is no sign of disease of the lymphatic glands.

Dr. Andrew considered the nature of the disease extremely doubtful. It could not be described by any general name. The swellings appeared to be due to numerous local thrombi, but the exact pathological cause of the thrombosis was not apparent. The temperature has never been above 100 deg. Fahr., and there has never been any vesication of the skin; but in the right axilla there has been some excoriation, owing to local friction of the surfaces. When the pain was severe, hypodermic injections of morphia were used. The patient has been placed on a generous diet, with lemons, and a mixture containing nitrate of potash and carbonate of ammonia has been given.

Arterial Sclerosis.—A cellarman, thirty-two years of age, was admitted as an in-patient on account of slight paralytic symptoms. The patient has suffered from gout, the last attack having come on two months previous to admission. A fortnight before admission, his manner was noticed as "strange"; and the next day he was found in the cellar where he worked acting as if warming himself before a fire; his manner was stupid; and he appears to have been in a "condition of reduction", probably sequent to an epileptic fit. He was taken home and kept his bed for a week; his manner was stupid, and he frequently made inarticulate sounds, but was not delirious. When admitted to the wards, he was able to walk well. His intelligence was fair, and there was no loss of sensation; but there was drooping of the right side of the face, and some loss of power in the right arm. His arteries appeared thickened and the arterial tension was very high, so that strong pressure was required to obliterate the pulse. The pulses of three other subjects of the same age as the patient were compared, and the hardness of the pulse was thus demonstrated. The ophthalmoscope showed double optic neuritis, specially developed in the left eye. The urine had a specific gravity of 1012, but was free from albumen.

Dr. Andrew considered the patient the subject of arterial sclerosis, due to his intemperate habits; the paralytic symptoms, following an epileptiform attack, due to his general vascular degeneration.

Cirrhosis of the Liver, with Ascites.—The patient, an elderly and ill-nourished man, had enjoyed fairly good health till 1872, when he was laid up for three months with pleurisy of the left side; since then, he has frequently been troubled with cough, especially during each winter. For six months before admission, he had been getting thinner

and weaker, and six weeks ago he had a violent attack of hæmatemesis; a fortnight after this, he was obliged to leave his work on account of failing strength, and his abdomen began gradually to enlarge. When admitted, there was copious ascites, and the superficial abdominal veins were enlarged; the abdominal distension prevented the liver being felt at that time. There were also some signs of consolidation at the apex of the right lung. Diuretics and vapour-baths were employed, but failed to lessen the ascites; paracentesis was then performed, and twenty-five pints of fluid were removed. After the tapping, the liver was found to be large, and the spleen could also be felt enlarged out of all proportion to the increased size of the liver.

The patient has been tapped five times in all within four months; the fluid now remains very moderate in quantity, and there appears to be less tendency to the return of peritoneal effusion.

Salicylate of Soda in Acute Rheumatism.—Dr. Andrew has used salicylate of soda largely in the treatment of acute rheumatism; and his experience gives grounds for the belief, that not only does this drug relieve the pain and lower the temperature, but also that it cures the rheumatism, and lessens the tendency to heart complication and other secondary inflammations. Generally the drug is given in twenty-grain doses every two hours for half a day; then the same dose is given every four hours; while later on, the dose is given but four times a day. By this method of using the drug, very satisfactory results have been obtained, and relapses have for the most part been avoided. The value of this drug in cases of osteo-arthritis appears more doubtful. In the employment of this drug, toxic symptoms have but seldom been met with; on their first appearance, the dose of salicylate is lessened, or the frequency of its administration is diminished.

Hydatid Tumour of the Liver.—A young man of healthy appearance complained of a swelling below the right ribs, which caused him some inconvenience. Four years previously, he had felt some discomfort in this situation, and, seven months before admission to the hospital, he had discovered the tumour for which he is now under treatment. According to the patient's statement, it had increased in size since then. On examination, a distinct, prominent, and rounded swelling was found to the right of the epigastric region; it appeared to be connected with the liver, but the liver itself was not enlarged. There was no pulsation felt, and no fremitus was obtained over the tumour; there was no tenderness and no jaundice. His general health was good; there were no signs of visceral or constitutional disease.

The case was diagnosed as one of hydatid of the liver, and the tumour was aspirated; nothing, however, was drawn off except an ounce and a half of blood. This was probably due to the trocar failing to reach the cyst. No disturbance or apparent alteration of any sort followed the operation, and it is proposed to repeat the aspiration.

DR. GEE'S WARDS.

Acute Alcoholic Poisoning.—A young man was admitted to the hospital in a feverish state, the cause of which was not apparent. A fortnight previously, he drank off a quart of gin, and this draught was followed by complete coma for some hours. Vomiting occurred on recovering consciousness; he felt ill, and was unable to walk. He had since been much troubled with frequent vomiting, but without pain or hæmatemesis; the bowels became costive. On examination, the chest appeared healthy, and the urine was normal; the abdomen was not tender, but it was distended. By means of percussion, the stomach could be mapped out distinct from the bowels; it appeared greatly distended. To further prove the distension of the stomach by gas, the method of "coin-percussion" was used: a shilling was laid flat on the abdomen, at the point most resonant over the stomach; this was then struck with another shilling, while the auscultator placed his stethoscope over a distant point of the stomach; a distinct metallic echo was thus heard, indicating gaseous distension of the viscus.

The case appeared to be one of acute gastritis, probably dependent on the irritation produced by the large dose of alcohol; but the diagnosis could not be made with much certainty, as such cases are not often seen in clinical practice.

SAMARITAN FREE HOSPITAL.

CONSULTATIONS.

MARCH 15TH.—*Ovarian Tumour complicated with Pregnancy.*—E. P., aged 32, had been pregnant a little over six months, and was also suffering from the presence of an abdominal tumour. The morbid growth was present during her first pregnancy three and a half years ago, and led to abortion at the fourth month of a second pregnancy in March 1877. Mr. Knowsley Thornton saw her a fortnight ago at her own home, and while recognising the doubtful nature of her case, was inclined to regard the abdominal tumour as ovarian, rather closely

connected with the uterus. A nodular mass felt in the pelvis to the right of and behind the uterus, he thought was probably the other ovary diseased. An adherent nodule, separate from the other pelvic tumour, has been discovered since, at the bottom of the pouch of Douglas. He advised her removal to the Samaritan Hospital, in order that he might see for himself the amount of suffering, and judge whether interference was necessary. During the fortnight she had been under his observation, increase in the size of the abdomen had been disproportionate to the enlargement of the uterus. She was markedly emaciated, especially about the face and chest, and was in constant suffering, only procuring partial relief and short sleeps with frequent opiates. Mr. Thornton now wished for the opinion of the staff as to the best course to pursue. He was himself decidedly in favour of making a small exploratory incision with careful antiseptic precautions, proceeding either to the removal of the tumour or to the mere raising of the pelvic portion, according to circumstances. He advocated this course as affording the best means of obtaining a perfect diagnosis, with the chance of complete relief and but little risk to the patient. The alternative course—induction of premature labour—would, if found necessary, still be available after the small exploratory incision had healed. The success which had attended ovariectomy during pregnancy, in the practice of Mr. Spencer Wells, rendered the course clear in any ordinary case as to the alternative of removal of the tumour or the induction of premature labour; but in this instance, there were peculiar difficulties.—Dr. GREENHALGH was in favour of an exploratory incision, with removal of the tumour if then found practicable. This was preferable to the induction of premature labour, to which he saw grave objections.—Mr. SPENCER WELLS admitted that this case was of more interest than ordinary cases of ovarian disease coexistent with pregnancy. He had himself removed ovarian tumours from pregnant women, with perfect ease and excellent results. But in this patient, from the character of the growth and the morbid conditions detected in Douglas's space, the operation would anyhow be difficult, and pregnancy much increased the risk. On the other hand, the patient was in a miserable condition, and some interference was imperative. The tumour was too solid for tapping, so as to give the patient temporary relief during pregnancy. The wisest course was to induce premature labour and to remove the tumour after the patient's recovery.—Dr. DAY, taking into consideration the nervous susceptibilities and the extreme discomfort from which the patient was suffering, considered it best that an exploratory incision should be made and the tumour at once removed, if possible. The great liberties which might safely be taken with the abdominal viscera under antiseptic precautions contrasted favourably with the admitted dangers of the induction of premature labour.—Dr. BANTOCK considered the case unfavourable both for operation and for the induction of premature labour, but had no objection to an exploratory incision under antiseptic spray. But if, on making that incision, it were found that the tumour could not be removed, considerable delay would be involved. On the whole, he was in favour of induction of premature labour.—Dr. CHAMPNEYS considered it advisable to wait for about a month and then induce premature labour; for both that course and ovariectomy were very hazardous at the present stage of the patient's illness; but at the seventh month, delivery would be attended with much less risk and would remove the main complication.—Mr. DORAN was of opinion that the sum of the dangers from induced premature labour followed by ovariectomy was rather greater than the total amount of risk involved in ovariectomy during the patient's present condition followed by natural labour.—Mr. THORNTON determined on abiding by his original decision, after duly explaining the patient's condition to herself and her husband, and speaking to them on the proposed alternative of induction of premature labour.

LINCOLN COUNTY HOSPITAL.

CASE OF VESICO-PROSTATIC CALCULI OF PECULIAR SHAPE, WITH PERFORATIONS FOR URINE.

(Under the care of Mr. T. SYMPSON.)

THE following case resembles, in some of its features, one well described by Mr. Rushton Parker in the JOURNAL for January 19th, and is in other respects extremely interesting.

An agricultural labourer, aged 44, was admitted into the Lincoln County Hospital, under my care, on March 7th, 1864, suffering from severe pain in the region of the bladder, incontinence of urine, and frequent desire to pass his urine, of which not more than an ounce could be retained in his bladder. By a sound passed *per urethram*, a stone was detected in the prostatic portion of the urethra; and, on rectal examination, a very irregular mass was felt, occupying the region of the prostate and neck of the bladder. About fourteen years pre-

viously, he had an attack of severe pain in his back, which lasted a few days and was accompanied by the appearance of blood in his urine. Since that time, he had suffered from all the symptoms of stone, had been in two or three infirmaries, and had been sounded, but without a stone having been detected until he became an inmate of this hospital in 1863, when he refused to submit to the performance of lithotomy, and went home. He had taken the "constitution water" with no other effect than that of relieving his pocket. The urine was neutral, specific gravity 1015, slightly albuminous.

A consultation was held on March 10th, at 11 A.M.; and after the patient had been anæsthetised by chloroform, lateral lithotomy was performed, and one large and two smaller calculi of very peculiar shape were extracted. At 2 P.M., some hæmorrhage had occurred, which was arrested by the application of cold water and the introduction of a *canule à chemise*. On the 12th, a little urine passed through the penis; on the 13th, the tube was removed; by the 18th, urine had been passed occasionally through the urethra; and by the 24th, the urine was passed in a stream through the urethra.

On April 5th, he complained of difficulty and pain in defæcation; and on the 11th, an escape of air was noticed through the wound of the operation, which had nearly healed. On digital examination, a communication was felt between the rectum and the incision. The fistula was laid open and stuffed with lint.

On June 5th, he still passed his urine frequently; but no stone could be detected on sounding.

On August 22nd, he was discharged cured, though he was still suffering from frequent desire to micturate.

He was readmitted into the hospital, under the care of one of my former colleagues, on January 9th, 1865, when he complained of inability to retain his urine for any length of time. The urine was alkaline and deposited mucopurulent matter. He was put upon quinine, meat-diet, and beer. On the 30th, he was made an out-patient at his own desire, having improved in general health, but his vesical symptoms remaining the same. The state of the bladder was not ascertained by sounding.

REMARKS.—The calculi I extracted were placed in the museum of the Lincoln County Hospital. Upon an examination of them recently, I found them to consist of two, which, when placed in apposition, in form resemble a Spanish chestnut, and are adapted one to the other by smooth concavo-convex surfaces. From each of the calculi project two long processes or spurs, one from the left side being broken off short. Near the upper surface of the left calculus runs a short canal, in size barely large enough to admit a No. 2 catheter (Engl.), continuous with a groove along the upper aspect of the right one. The lower part of the right calculus is also perforated by a canal, equal in size to a No. 1 catheter. In their natural position, the calculi measure two inches across from the tip of one spur to that of the other. Two of the spurs are five-eighths of an inch in length, one half an inch, and the broken-off one three-eighths of an inch. The calculi are almost white, with here and there patches of fawn-colour. According to the note in the museum catalogue, the right calculus weighs 108.5 grains, the left 94.5, and the broken-off spur 3.5; together, 206.5 grains.

From the history of the case, it seems probable that, some years prior to the admission of the poor fellow into the hospital, one or more renal calculi had descended into the bladder, and had then become wedged in the prostatic portion of the urethra; in which situation they increased in size by deposition of phosphates, whereby casts of the dilated ducts of the gland were formed—casts which now appear as those curious projections with which the calculi are studded. It is, however, somewhat difficult to understand how it happened that the presence of calculus should have so long been overlooked.

By the long-continued pressure of the points of the calculi, the tissues between the prostate and the rectum had become extremely attenuated; hence there is nothing surprising in the fact of these having become ulcerated some weeks after the operation, the wonder being rather that they did not give way sooner.

The continuation of the frequent desire to pass his urine, which was noted when he was last in the hospital, is probably to be accounted for by thickening and contraction of the bladder; it is, however, matter for regret that the presence or absence of stone was not then ascertained by employment of the sound.

DR. RAVOTH, a *privat-docent* in the University of Berlin, died on March 2nd, in his sixty-second year, of perforation by gall-stones. He was the author of several valuable contributions to surgery, especially with regard to intestinal hernia.—Dr. Orth, first assistant in the Pathological Institute of the University of Berlin, has been appointed Professor of Pathology in the University of Göttingen.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 6TH, 1878.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

Cancer of Uterus.—Dr. MATTHEWS DUNCAN showed a specimen of general cancerous hypertrophy of the body of the uterus, the cervix remaining apparently unaffected. The patient, an old woman, died of acute suppurative peritonitis, the cause of which was not discovered. Her case was during life supposed to be one of uterine fibroid. She began to suffer only three months before her death; and her complaints were occasional pain in the hypogastrium, and occasional loss of blood *per vaginam*. Three weeks before her death, examination discovered a hard mobile tumour in the brim of the pelvis, about the size of the adult foetal head. After death, cancerous nodules were found in both lungs and in the liver. The uterus weighed about four pounds and a half; it measured eight inches in length, and six inches and a half in breadth. The length of the uterine cavity was six inches. The walls of the body were hypertrophied, fully an inch thick. Section generally presented the appearance of a section of scirrhus mamma. The lining membrane of the uterine body was thick and villous; at some parts destroyed. There was cancerous degeneration of the ovaries and of parts of the vagina. In the cervix uteri, the microscope discovered cancerous degeneration. The remarkable point in the case was the diffuse hypertrophy of the uterus, with very little change of shape, the whole body being uniformly affected with cancer of a hard scirrhus-like character; while the cervix was, on superficial examination, unaffected.

Cancer of Uterus.—Dr. ROBERT BARNES showed a specimen of cancer of the body of the uterus, from a patient who had lately died in St. George's Hospital. She had suffered for a considerable time from continued hæmorrhage, with, during the intervals, a fetid watery discharge. Suddenly, perforation occurred, and death from peritonitis. At the *post mortem* examination, the parts were found all adherent to the uterus. This organ was occupied by a mass of broken down cancerous tissues, probably of the epithelial kind. There were two perforations, one into the rectum, and one into the peritoneum. The cervix was unaffected.

Epithelial Cancer of Uterus.—Dr. CLEMENT GODSON showed a specimen of epithelial cancer of the uterus not affecting the cervical portion, but confined almost entirely to the mucous membrane of the cavity, only slightly invading the deeper structures. This history of the case was remarkable. The patient, aged 52, a well-nourished healthy-looking woman, of very florid complexion, had come under his care in St. Bartholomew's Hospital in December 1876. Her chief complaint was of intense pain in the region of the uterus, occurring almost regularly at ten o'clock every morning, and continuing for two, three, or four hours. The severity of the pain caused her to sit up in bed compressing her abdominal walls, while rocking herself to and fro, and frequently her cries were pitiable. Large doses of quinine, chloride of ammonium, and croton-chloral failed to give any relief, and the pain was only bearable when the patient was fully under the influence of morphia, which was administered hypodermically. On examination, the uterus appeared to be perfectly normal to the touch, and the appearance of the cervix uteri was quite healthy. The sound passed in to the extent of two inches and a half into a freely movable uterus, followed by a slight discharge of bright blood. There was occasional intermenstrual discharge of blood. The patient did not improve. She left the hospital in February; and died at home six months afterwards. The condition had remained much the same, except that during the last fortnight of her life a slight fetid watery discharge had been present. The *post mortem* examination disclosed nothing abnormal except a thickened shaggy condition of the mucous membrane. The microscope showed this clearly to be caused by epithelial cancer. Dr. Godson was of opinion that the woman had died worn out with the constant and irremediable pain.—Dr. ROGERS mentioned a case as bearing upon the subject under discussion. He was recently called in consultation to a lady supposed to be suffering from ileus. He found a large irregular uterine tumour pressing on and occluding the bowel. No complaint was made of any discharge from the vagina; the cervix appeared healthy. Colotomy was subsequently performed. The woman did not long survive; and, at the necropsy, the body of the uterus was found to be cancerous, while the cervix was apparently unaffected.—Dr. HEYWOOD SMITH mentioned that one of the specimens he exhibited at the last meeting of the Society was similar to those just shown, of cancer of the body only of the uterus. In his case, the cervix was not affected; there was not much pain; and there were also per-

foration at the fundus and an abscess connected with the bowel.—Dr. MURRAY remarked that the point of interest in the first two cases related was the absence of pain. He described a case now under his care where there was pain more or less severe. He advocated the use of the sponge-tent to clear up the difficulty of diagnosis in these cases; and he had used with benefit the perchloride of iron as a local application.—Dr. BARNES said that pain was often an early symptom in cancer of the body of the uterus. In cancer of the cervix, pain was frequently very late in appearing.—Dr. CHAMBERS referred to a case of cancer of the fundus uteri which he had brought forward at the Birmingham meeting of the British Medical Association in 1872. He had now a patient under his care in all essential points resembling it. He considered the pain, which in this case nothing but the hypodermic injection of morphia would relieve, specially characteristic of this form of disease.—Dr. EDIS mentioned a case he had lately seen in consultation similar to that brought forward by Dr. Matthews Duncan. On examination, the cervix uteri was found to be normal, the fundus greatly enlarged, and fixed in the pelvis. There was no offensive discharge, but there had been profuse hæmorrhage every month. The emaciation, the severe pain, and the sudden setting up of peritonitis, seemed to point to the case being one of cancer and not of fibroid.—Dr. HAYES observed that the greatest caution was necessary in the introduction of sponge-tents with a view to diagnosis. The tissues might be so thinned and softened as to be easily lacerated by dilatation. He remembered one case in which it had been arranged to introduce a tent, but fatal perforation occurred before this was done.—Dr. MURRAY said that the tent must be very long to injure the fundus. It ought to be short, and only used to dilate the os and cervix.—Dr. ROUTH was of opinion that Dr. Godson's case might have been benefited, if not cured, by more decided measures. From the *post mortem* examination, it was evident the disease was limited, and only affected the lining membrane; and he thought that, if a sea-tangle or sponge-tent covered with cotton and dipped in a strong solution of bromine had been used, the disease might have been destroyed, and a cure possibly effected. This was the plan usually carried out at the Samaritan Hospital. It did not seem to produce any bad symptoms, and was frequently very successful.—The PRESIDENT thought it would be very profitable if some Fellow of the Society would make carcinoma of the body of the uterus his special study, in order to provide a better guide towards diagnosis and treatment than was at present possessed. In concluding the discussion on this subject, he would add that he could not but regret that so few papers on the diseases of children and of women had been brought forward during the past year, for he was very reluctant to see the Society narrowing its scope and confining its attention merely to obstetrical subjects.

Tumour connected with the Uterus.—Dr. THOS. CHAMBERS showed a large tumour in connection with the uterus, which he had removed at the Chelsea Hospital for Women that afternoon. The patient was aged 36, and for the last five or six years had been suffering from many of the conditions supposed to be associated with fibroid uterus, especially hæmorrhage. She had been an in-patient in many hospitals, and had been subjected to various forms of treatment; and she ultimately came under his care at the Chelsea Hospital for Women in 1876. She was then at her monthly periods losing blood for fourteen or sixteen days; the periods were attended with great pain, and were followed for some days by leucorrhœa. On examination, the pelvis was found quite empty, the uterus occupying chiefly the right iliac region. The sound passed for six inches upwards, and to the right side; she was treated four months with hypodermic injections of ergotine, with the effect of reducing the monthly hæmorrhage from fifteen to six or seven days, and considerably relieving the pain. She was at the same time kept at rest, and fed upon a nutritious diet, and without stimulants. She left the hospital apparently better; but returned again a month ago, much increased in size, and suffering very considerably from hæmorrhage. On examination, it was found that the tumour on the right side had become associated with a companion on the left side. From the continued discharge, the character of the tumour and the size of the uterus as ascertained by the sound, it was argued that it was a case of fibroid uterus; but it was difficult to say why it had grown so very rapidly. The patient was examined by many medical men, who held different opinions as to the nature of the tumour, but all of whom thought it justifiable to make an exploratory incision with a view to its removal. This had been done that day, and the result was that the cavity of the uterus was found occupied by a growth of gelatinous consistency, and a huge mass of similar substance was connected with the left ovary and broad ligament. This had probably grown from the lower part of the left side of the uterus, with which it had a distinct fibroid connection. Though there were no adhesions, he had some difficulty in getting the growth out, and very great difficulty in securing the stump. He first transfixed and tied it with whipcord, both on the

right and left side. But, though the whipcord was very strong and had been tied very tightly, after the tumour was cut away the ligatures became perfectly loose. He, therefore, surrounded the whole stump with a single large ligature, which he tied as tight as possible, bringing out the ends at the bottom of the wound to serve for drainage purposes. He had seen the patient that evening, and she had then recovered from the effects of the chloroform, was free from sickness, and had a pulse of 84. In conclusion, he hoped that the tumour might be referred to a select committee, in order that it might be subjected to a thorough microscopical examination.—Dr. Galabin and Dr. Herman were then appointed to examine the tumour removed by Dr. Chambers.

Inversion of Intestine through Umbilicus.—Dr. ROPER showed a specimen of small intestine taken from an infant. The case occurred in the practice of Mr. William Toulmin of Upper Clapton. Some days after birth, the tissues round the umbilicus became inflamed. The funis did not separate until the fifteenth day, and with it came away a slough of the abdominal integument of the size of a shilling, leaving a deep ulcer. This was dressed with carbolic paste, covered by a pad of linen, and secured by a strapping. On the twenty-first day, a portion of intestine two inches and a half long protruded through the umbilical opening. At the same time, faeces passed from an opening in the bowel. The external protrusion was covered with mucous membrane. The case was, therefore, one where, after an artificial anus had been formed, the intestine became everted to the extent described, and thus protruded through the umbilical opening made by ulceration.

Report of University Lying-in Hospital, Montreal.—This report, communicated by Dr. MAC CULLAM, gave statistics and other information with regard to the cases of childbirth which had been treated in the University Lying-in Hospital, Montreal, between October 1st, 1867, and October 1st, 1875. The hospital consists of two wards, each with four beds; there is also a separate room for private patients; about 120 women were confined there every year. The patients were of much the same class as those received into maternity hospitals in other parts of the world. During the eight years mentioned, 995 women were confined in the hospital; of whom 987 made good recoveries, and eight died, seven of the deaths being due to puerperal fever, which prevailed in epidemic form in February 1871 and April 1872. Of the children, 948 were born alive, viz., 483 males and 465 females; and 47 were stillborn, viz., 35 males and 12 females. The average length of the male children was twenty inches; of the female, nineteen inches and a half; the average weight: males, seven pounds thirteen ounces; females, seven pounds eleven ounces. Instrumental interference was required in twenty cases, the forceps being used in nineteen, and the perforator in one. Of the cases in which the forceps were used, thirteen were primiparae. In the forceps operations, all the mothers recovered, and sixteen of the children were saved. In the one case in which the perforator was used, it was to diminish the size of a hydrocephalic head. Puerperal convulsions occurred in seven cases; all the mothers recovered, and five of the children were born alive. There was albuminuria in all the cases but one. Venesection was employed with the best results in two cases, and the only reason why it was not employed in other cases was that most of the patients admitted into the hospital were not in such condition as to bear depletion.—Dr. GODSON called attention to the average weight of the children recorded in the above paper. That of the males was seven pounds thirteen ounces: of the females, seven pounds eleven ounces. He had recently weighed a number of children delivered at the City of London Lying-in Hospital, and found the weight of the males averaged six pounds thirteen ounces, and of the females six pounds ten ounces; that was in each case a pound less than the figures given by Dr. Mac Cullam.—Dr. MURRAY said that, in the cases which he had noticed, where a small portion of membrane had been retained some days and then expelled, he had not seen the hæmorrhage described by the author of the paper. The membranes not being attached to the placental site, it was, he thought, difficult to understand how bleeding could result from their retention.—Dr. EDIS called attention to the fact that, in the above statistics, the stillbirths amounted to 5 per cent. of the children born—a very considerable proportion. It would be interesting to have some information as to the duration of labour in these cases. He also noted that instrumental assistance was limited to twenty cases; and he could not but think that, bearing in mind the size of the children, the large proportion of stillbirths might have been lessened had the forceps been more freely employed. He was convinced that the lives of numbers of children were sacrificed through hesitation to use the forceps.—Dr. ROPER said that the statistics of the Royal Maternity Charity did not countenance Dr. Edis's conviction; for, out of 2,409 confinements last year, forceps were applied in only seventeen cases, and the infant mortality was under 3 per cent. from all causes. He would call attention to the large proportion of cases of puerperal eclampsia and puerperal

mania in the Canadian statistics. The latter complication occurred three times in less than a thousand cases. But, out of 10,000 labours, he himself had only seen one case of puerperal mania. Again, seven cases of eclampsia had occurred in Dr. MacCullam's 995 cases, whereas in the eastern division of the Royal Maternity Charity, out of 2,409 women delivered in 1877, this disease only once made its appearance.

—Dr. J. WILLIAMS thought that sclerotic acid—an active principle recently obtained from ergot—would probably be attended with even greater success than ergotine. He had not as yet made trial of it in *post partum* hæmorrhage, but he had used it in a case of large fibroid tumour with the result of arresting the bleeding, which was continuous, and diminishing the size of the growth; he found that it produced less irritation than ergotine. One grain of sclerotic acid would dissolve in six drops of water, and the dose was half-a-grain.—Mr. BROWN (Ealing) said that he would not think it right to allow a patient to remain without help for two hours after the os was fully dilated; he thought there could be no doubt as to the correctness of the practice recommended by Dr. Edis.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 21ST, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Hydramnios.—Dr. DE GORREQUER GRIFFITH gave an account of a case of hydramnios. It occurred in a multipara, who was pale and thin, and complained of pain in her back and stomach, which was worst at nights. She passed very little urine. She observed that she increased in bulk more rapidly than previously. The uterine tumour reached up to the ensiform cartilage. The waters burst, and pains followed. She was delivered of twins, both females. One was in an advanced condition of decomposition. Dr. Griffith reviewed the different theories of hydramnios, and especially its association with twin pregnancies.—This subject was taken up in the discussion which followed, and in which the PRESIDENT, Dr. ARTHUR EDIS, and Dr. CLEMENT GODSON took part; and Dr. GRIFFITH replied.

Unsuccessful Ovariectomy.—Mr. KNOWSLEY THORNTON read a paper on unsuccessful ovariectomy. He said he had learnt more from his ten unsuccessful cases than from his more numerous successful ones. Septicæmia was the great cause of mortality to be dreaded; and the adoption of the antiseptic treatment had improved the chances of life. Of the ten unsuccessful cases, seven occurred in his first twenty operations; two in the second twenty; and one in his third twenty cases. He had only had one death in his last thirty-three cases. He then gave an account of these ten cases. In one, there was fulness of the remaining vascular area, from the ovarian tumour becoming bloodless previously to its removal. The same thing was seen, but to a less extent, after tapping. In these cases, venesection full and free was often most effective. In another case, the adhesions to the liver and spleen caused injuries to these viscera, but the hæmorrhage ceased when the abdomen was closed; and, on *post mortem* examination, the injuries were found glazed over with lymph. In another case, there was hæmorrhage which might have been avoided. The pedicle was broad and spread out; and, when transfixed and ligatured, such pedicles are apt to slip, and bleeding to result. His last case had died of acute pleurisy. His conclusions were as follows. 1. Avoid tapping if possible, as it clouds the prognosis. 2. Operate early. 3. Examine every organ as thoroughly as the one to be operated upon. 4. Never operate without perfect antiseptic precautions—perfect in Mr. Lister's sense. Every student ought to be compelled to study the antiseptic treatment.—In the discussion which followed, the PRESIDENT, Dr. CLEMENT GODSON, Dr. HEYWOOD SMITH, and Mr. THORNTON took part.—In his reply, Mr. THORNTON said that Mr. Spencer Wells was prepared to adopt the antiseptic method of performing ovariectomy, if an improvement of only one per cent. could thereby be attained.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

WEDNESDAY, FEBRUARY 20TH, 1878.

S. J. A. SALTER, M.B., F.R.S., President, in the Chair.

Benign Tumour of the Lower Jaw.—Mr. MAUNDER showed a benign tumour of the lower jaw, of the size of an orange, involving rather more than one-half of this bone. The operation was performed within the mouth: a method introduced and practised by Mr. Maunder on several occasions, so as to avoid section of important vessels and nerves. In this way, no external scar resulted, a great desideratum in the female.

Observations on the Treatment of Compound Fractures of the Lower Jaw, with Notes of Cases.—Mr. LYONS read a paper on the above subject. After remarking that the principal objects to study in the treatment of fractures in general were: 1. That union should take place between the fragments; 2. That the fragments should be placed in apposition to each other; 3. The avoidance of deformity; the author proceeded to allude to the various interdental splints, upon two only of which he would make any lengthened remarks. There were two great maxims needed in these splints, viz., that they should be simple in construction, and easy of adaptation. 1. The first splint on which he commented was Mr. Hammond's, consisting of a single iron wire, so formed as to fit round all the teeth, and a thin one passed through, entwining both teeth and outer wire; a pair of ordinary pliers being the principal tool required in its manufacture. Its adaptation is easy, and very effective in cases of single fracture. 2. The other apparatus was Mr. Gruning's, which was also very ingenious, although much more elaborate, and specially adapted for those cases where there were double and triple compound fractures, with great displacement. A full account of this splint was given in Mr. Christopher Heath's works on *Diseases of the Jaw*. The author then proceeded to relate eight cases of fracture, four of which he had treated with Hammond's splints with the best results. These splints had these advantages: there was complete immovability of the fragments; they were small in bulk; the mouth could be opened, permitting cleanliness (a most important element in the treatment of these cases); soft food could be masticated; and the patient could attend to his usual employment, if necessary.—The PRESIDENT, Mr. MAUNDER, Mr. BRYANT, Mr. COLEMAN, Mr. MOON, and Mr. RANGER spoke; after which Mr. LYONS replied.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, FEBRUARY 6TH, 1878.

FRANCIS OGSTON, M.D., President, in the Chair.

Treatment of the Third Stage of Labour.—Dr. JAMIESON (Peterhead) read a paper on this subject. He began by saying that the three stages into which normal parturition had been divided might be described as three births, viz.: that of the os—its complete dilatation; that of the child—its entire expulsion; and that of the placenta—the extrusion from the contracting uterus of the entire secundines. These three stages were sometimes inverted in order, the third becoming the first, as in placenta prævia. Sometimes the third stage began before the second was completed; some abnormality existing in the presentation, which permitted the uterine contractions to detach the placenta before the fetus itself was dislodged from the uterus. The author gave a case illustrative of this, in which the premature dislodgment of the placenta was produced from the head being in the third position, with a foot in front of it and on the same plane. Immediate delivery of the child by the feet was required, and the placenta was found lying in the middle zone unattached, and presenting on extraction a blanched appearance. The third stage was a very important one, and should be provided for at an early period of the labour. The loss of blood during previous stages should be diminished, so that when the third stage arrived we might not be driven in desperation to styptics and oxytocics; and the resources of the uterus should be husbanded. A case was mentioned where a patient had been in labour, with fair pains, for twelve hours, but the head remained at the brim, even after rupture of the membranes; and the pains became weaker and the woman fatigued. The case would, if left to nature, have gone on for hours with scarcely perceptible progress, certain exhaustion, and unnecessary suffering; but, under chloroform, the long forceps completed the second stage with a very moderate degree of traction; and, vigour of uterine contraction having been secured, the third stage of labour was rendered safe. In the case noted, the hand was introduced into the uterus up to the fundus on the birth of the child, the placenta was seized at its distal extremities and extracted with the membranes attached without any hæmorrhage, the uterus contracting well. The author joined in the condemnation of the practice of dragging at the umbilical cord. Much mischief was often done by it; as, if the internal os had begun to contract while the placenta remained adherent to the fundus, traction on the cord would more than likely sever the connection between cord and placenta. He mentioned a case in which he found three-fourths of the placenta in the vagina, and the remaining fourth in the grasp of the internal os; and the insertion of the cord was at the distal end of the placenta in the uterine cavity. Pulling at the cord in such a case would have had the effect of stimulating the os to maintain its hold. Until the placenta was expelled and the uterus hard and firm beneath the hand, the attendant's vigilance should not be relaxed; and even then a sudden relaxation of the uterus might take place, or some portion of the placenta or mem-

brane might have been left *in utero*, the germ of future septicæmia. It was essential that the third stage should be rendered complete and thorough. There were many accidents which prevented this, or knowing we had accomplished it, without a manual examination of the interior of the womb. The placenta might be in detached cotyledons, and one might be missed; or the membranes might be so ragged and torn as to allow part to remain without any suspicion of the fact. The uterus did not contract as a regular sphere, but first at the internal os; and thus it was easy to see how any portion of the secundines detached or but slightly adherent to the main mass might be intercepted. Portions of the membranes were frequently grasped while the placenta was being extruded. The longer the placenta remained in the uterus, the greater was the amount of blood issuing from the sinuses; as, until the placenta was removed, the uterus could not complete its contraction. The old doctrine of the whole uterus being denuded of mucous membrane must be given up, the only part left bare after parturition being that to which the placenta was attached; and this was the only part specially liable to septic influences. There was nothing very daring, then, in the mode of treatment he proposed, which was, in every case of labour, after the second stage was complete, the cord tied, and the child removed, to pass the hand up to the fundus of the uterus cautiously, pressing gently against the internal os if impeded by it, and sweeping entirely the interior of the organ, so that nothing could be left of an injurious character, and inducing natural action if the contractions are feeble or irregular, the other hand being at the same time placed externally on the fundus. If the placenta were found lying in the vagina, it was unnecessary to carry the hand into the uterus; but the hand in such a case should be carried up to the internal os to make sure none of the membranes were imprisoned by it, and, if they were, the os was to be gently pressed and the fingers closed on the membranes, so as to "slide" them free. When the placenta was found half within and half outside the os, the sooner release was effected the better, for the part inside, being detached from the uterine wall, was preventing the contraction of the uterus, and so allowing avoidable hæmorrhage to go on. In such a case, gentle pressure on the os readily permitted the entrance of the hand, which, reaching the distal portion of the placenta, swept it away along with the rapidly forming clots. The kind of placenta in this position was usually that consisting of straggling cotyledons. It was necessary to introduce the hand early, as the os internum began to contract very soon after the expulsion of the child, and imprisoned the secundines either wholly or partially. If the hand were introduced at once, little blood was lost; and this was in striking contrast with cases in which the placenta had to be removed some time after the birth of the child. Again, in cases of early removal of the maternal face of the placenta, the membranes contained scarcely any blood; while, on the other hand, after delay, they invariably contained coagula of more or less size. The membranes were sometimes an obstruction to the investigating hand, which should be insinuated and turned in such a way as to avoid them. When the os internum was obstinately obstructive, the fingers were to be rested against it cone-shaped till it yielded, which it did gradually; and then the hand was to be insinuated gently, the other hand grasping the fundus externally. After everything had been removed, a tightly rolled-up petticoat, made into the form of a cylinder, was to be placed against the dependent side of the abdomen, the woman being cautioned to keep close to it. The author alleged of his method: 1. That it preserved the life-blood of the woman; 2. That it obviated the chance of inversion; 3. That it defeated the possibility of those terrible occurrences which produced septicæmia, and too often ended in death. He allowed that pain was produced by his method, but maintained that this was but another pang of the second stage, which was soon over, except in those cases where it must have been had recourse to at a later stage, when the pain would have been increased tenfold and the difficulty much greater. The single pang gave an immunity from dangers dreaded by experienced practitioners more than any of the pains of childbed.—Dr. JACKSON thought Dr. Jamieson dreaded a little rest after the second stage too much. He would never thrust his hand into the uterus at once. The fibres required a little time to rest before contracting firmly. He had never seen any harm from waiting, and thought the chance of hæmorrhage less by doing so. He generally did a little shampooing and pressed gently, and waited till the nurse washed the child, when, on examination, the placenta would probably be found in the vagina, in which case all that was required was to withdraw it, the finger being introduced far enough up to see that all the placenta was free. If the placenta were still in the uterus, he introduced his hand without hesitation, but had found this attended with some difficulty, and requiring time and care. He had never seen any injury from plucking away the adherent placenta in so far as septicæmia was concerned, and did not think the risk of that was an objection to

Dr. Jamieson's plan; but he thought there might be danger from hæmorrhage.—Dr. COWAN held by the old rule in uncomplicated cases, to wait twenty minutes, and to use gentle traction on the cord. He considered the binder good, if properly put on, and most patients experienced great comfort from it.—Dr. ALEXANDER OGSTON thought that, though at first sight it seemed repulsive to introduce the hand, yet that proceeding cleared away everything. Could Dr. Jamieson say how long he had tried this plan, and his mortality as compared with former experience? He himself had within the last year seen two cases with excessive after-pains, and in which the uterus was very much larger than usual. He had squeezed the uterus in these cases and given it a backward direction, and had found the organ take up a new position, with instant relief to the pains and without the discharge of any clots. The bandage he thought useful. He knew it was so in surgical cases.—Dr. STEPHENSON said that all were not prepared for the startling innovation proposed. All were agreed on the importance of the third stage, and on the importance of the effect of the first and second on the third. One rule Dr. Jamieson did not mention, which he (Dr. Stephenson) thought of great importance, viz., to have the hand firmly on the uterus, and to follow it down and not relax till the organ was fully contracted. If this were done, the placenta would generally be found in the vagina. A long first stage was specially apt to cause difficulty with the placenta. The uterus did not begin to contract at the internal orifice, for then the placenta could not be expelled. The rule was that the fundus first began to contract. In rare instances, the os contracted first, but this was from exhaustion or some other abnormality. He denied that hæmorrhage was usually, or, as a rule, continuing till the placenta was expelled. The placenta might be in the uterus for hours without hæmorrhage. If the position of Dr. Jamieson on this point were correct, it followed that the blood must either pass or the uterus be distended, but neither of these occurred. He considered the best method was the shampooing, *i.e.*, holding the hand over the uterus with gentle pressure without rubbing. As soon as we could feel the edge of the placenta by the forefinger introduced into the uterus, then we might with safety gently withdraw it by pulling on the cord in a proper direction. The introduction of the hand was dangerous and unnecessary. There was the risk of introducing new septic matter and also air. The only advantage was thorough clearing of the uterus of clots, etc.; but, within half-an-hour of this being done, more or less blood would have oozed out again, so that the uterus could not be kept clear. In regard to Dr. Alexander Ogston's surprise that the uterus was so large as he had found it and half or entirely up to the umbilicus, he (Dr. Stephenson) had to point out that this was the natural condition on the second day after delivery. Severe after-pains bringing peritonitis he had not seen, but peritonitis was often really present when after-pains only were supposed to be so. He could not account for the relief in Dr. Ogston's cases, but removal of pressure was the probable cause of cure. He earnestly hoped the author's recommendation would never be followed. He thought the binder very useful, and the comfort of the patient increased by it.—Dr. F. OGSTON, junior, thought there was no danger in admitting fresh air. In one case, he regretted he had not adopted Dr. Jamieson's suggestion. He had twice delivered the same patient, and had, owing to severe after-pains, introduced the hand, removed the clots, and relieved the patient; but on the third occasion this procedure had not been adopted, and the patient died.—Dr. SMITH-SHAND had long been in the habit of waiting twenty minutes or half-an-hour, and had often had difficulty in removing the placenta, but of late he had had recourse to the method advocated by Dr. Stephenson, and since then he had seldom had any trouble. He should not be inclined to introduce the hand as proposed. He could not agree with Dr. Jamieson that the binder was useless. Everything depended on how it was put on.—Dr. F. MOIR said he had attended one of those who had formerly been treated by Dr. Jamieson without a bandage, and she had expressed a decided preference for the bandage.—The PRESIDENT would not introduce the hand without good reason. The binder he considered valuable. He did not think moderate after-pains injurious.—Dr. JAMIESON, in reply, said he did not expect to find his procedure accepted. Dr. Stephenson had asked if patients objected, but he had not found this to be the case. He kept the patient at rest, and supported the abdomen against his roller, and thought that that was better than the bandage, and more natural. The lower animals did not need a binder. He could not see the analogy between surgical and obstetrical cases as far as the binder was concerned, as in the former there was a distinct solution of continuity of the wall. He had adopted his present plan three years ago, and had had no death since, and the recovery had not been less favourable than before; the lochial discharge had been less, and the patients had been able to sit up for necessary purposes on the second day, which he always advised. He had had to congratulate himself

on his new plan, but never to regret it. No doubt, if they waited for half-an-hour or more, then introduction was more difficult, but there was no difficulty if done within five minutes or so. He never meant to say that the os internum contracted first, but merely that this was the most obstructive and dependent part, and was felt more readily. After the hand was passed through the contracting os, there is plenty of room, even though the fundus and walls were contracting. He thought the large tumour, as discovered by Dr. Ogston, was slight anteversion pressing on the bladder or some sensitive part, and the movement might have relieved flexion or pressure. Hæmorrhage need not flow on steadily, but by early extraction there was better contraction and less loss of blood, as he had seen by experience. He thought he saved six ounces of blood to every woman. He thought his patients preferred being without the binder.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 9TH, 1878.

J. W. MOORE, M.D., and subsequently JOLLIFFE TUFNELL, F.R.C.S.I., Vice-President, in the Chair.

Diaphragmatic Hernia.—Dr. T. E. LITTLE presented a specimen of this lesion from the body of an elderly female (sixty or seventy years of age), of whose case there was no clinical history. There was marked angular curvature of the spine in the lumbar region. On raising the sternum, a tumour as large as a small closed fist was found occupying the lower part of the anterior mediastinum. It was composed of a sac of peritoneum containing a portion of intestine and of omentum. An opening, almost circular, and with well-defined, sharp, yet somewhat thick edges, existed in the diaphragm, behind and to the left side of the xiphoid cartilage. The hernia was composed of fifteen inches of the transverse and descending colon. There were no adhesions connected with the gut, but its surface was marked by two constrictions indicating the points where the intestine became involved in the hernia. Dr. Little observed that diaphragmatic ruptures had three modes of origin, namely, (1) congenital, (2) traumatic, and (3) acquired, from yielding of some weak point in the muscular structure of the diaphragm. The traumatic origin of the hernia in the present case was inadmissible. Very few congenital herniæ were found at such an age. Hence the case was one where a hernia developed at a point at which there was naturally a deficiency of muscular fibre in the diaphragm, namely, between its muscular attachment to the ensiform cartilage and the last true rib.—A very interesting question arose as to the influence of the angular curvature of the spine in causing the hernia by upward pressure of the contents of the abdomen. It was also noteworthy that the hernial sac was in close proximity to three serous membranes—the pericardium, the pleura, and the peritoneum.

After a brief discussion, the SECRETARY (Dr. E. H. BENNETT) read a communication from Dr. WILLIAMS of Liverpool on a remarkable case of Venous Occlusion.—The Society then adjourned.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, FEBRUARY 1ST, 1878.

ROBERT McDONNELL, M.D., F.R.S., President, in the Chair.

Excision of the Knee-joint.—Mr. TYRRELL made some remarks on this subject. He confined himself chiefly to speaking of the after-treatment. He had been most successful with all the cases he had operated on; and, therefore, he wished to bring the method adopted by him under the notice of the Society. Mr. Tyrrell had been in the habit of performing Heron's operation up to the year 1874, when he adopted the new method. He used a splint, which consisted of two pieces of wood, grooved in the shape of the parts, joined together by a crank of iron. The wooden portions were not made in the same plane. The chief credit of this splint was due to Mr. Hayes of the Mater Misericordiæ Hospital. Mr. Tyrrell preferred making his incision in a straight line below the patella. A small saw with a movable back he considered to be better than any other kind for this operation. He considered that the chief item in the after-treatment consisted in the perfect immobility of the limb. Having applied the splint before referred to, he put on a double layer of flannel bandage from the toe up to immediately below the seat of operation, and another double layer from the thigh down to above the seat of incision. Instead of muslin, Mr. Tyrrell used stout flannel well starched, as he considered the muslin far too easily torn. The flannel should be put on with great force, so that it might fit close to the limb. A small piece of tubing or horse-hair was placed across the wound, and muslin and tow being placed over it, the operation was completed. Twenty-one cases had been treated by this method in the Mater Misericordiæ Hospital, and none of them had proved fatal; in fact, with one or two exceptions, the success was com-

plete.—The PRESIDENT had been so much impressed with Mr. Tyrrell's after-treatment of excision of the knee-joint that he had tried it with slight modification, and the result was all that could be desired.—Mr. O'GRADY had tried Mr. Tyrrell's plan of treatment. Having previously applied an Esmarch's bandage to the limb, he found that when reactionary hæmorrhage came on (as was often the case after Esmarch's bandage had been applied) it was most tedious to undo the dressings, as the starched bandages became fixed and difficult to be opened.—Mr. TYRRELL had used Esmarch's bandage since the method became known, and never had experienced any difficulty about hæmorrhage. He considered that, if the operation were performed very slowly and the dressing not put on for some time, all the difficulty in the matter would disappear.

Some of the Ways in which Fevers begin, with some Remarks on the Treatment of Fevers in the present day.—Dr. HENRY KENNEDY read a paper on these subjects. He said that it was most interesting to study the various and unaccountable ways in which he had known fevers to begin. His attention had been drawn specially to this subject by some cases which had lately come under his care, in which the patients had merely complained of neuralgic pains and had been treated for such. Bronchitis was also a way in which he had known fevers to begin; acute rheumatism another. Dr. Kennedy did not approve of the practice of leaving fevers to themselves, merely supporting the strength. He thought that it was the duty of a physician who knew that certain inflammatory changes were going on, to combat those changes. Dr. Kennedy thought it would be useful to reduce the quantity of stimulants and milk in fevers, as he believed that these were very often given in excess, and proved injurious instead of beneficial.—Mr. F. T. PORTER, Dr. BIGGAR, Mr. WHEELER, and the PRESIDENT made some remarks on the subject of Dr. Kennedy's paper; and the proceedings then terminated.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 6TH, 1878.

FREDERICK A. HEATH, M.R.C.S., President, in the Chair.

Plica Polonica.—Dr. SIMON showed a specimen of plica Polonica removed from the head of a Polish woman resident in Manchester. The plica dated its origin from an illness whilst in Poland ten years ago, during which the patient's hair had been neglected, and subsequently to which, from superstitious credulity, the tangled mass of hair had been allowed, and even encouraged, to remain. The plica was nine inches in length, and consisted of an axial mass of *débris*, sparsely encircled by normal curling hairs, and covered by nits. There was no evidence to support a theory of parasitic origin, nor was separation of the plica attended by pain or oozing of bloody or other fluids, as was believed to be the case by some English dermatologists. Similar plicæ had been removed two or three years ago from various parts of the scalp, but in other respects the patient was cleanly, and her hair well kept. She acknowledged a belief in the "safety-valve" action of the plica, and parted with it most reluctantly.

Gastrostomy for Stricture of the Oesophagus.—Mr. BRADLEY related a case of gastrostomy in a boy aged 15, who had inadvertently swallowed some caustic soda four months before. The resulting oesophageal stricture was so tight that it was found impossible to pass any instrument into the stomach. Gastrostomy was accordingly performed on November 17th, 1877; and on the second day the boy was fed through the gastric opening. He suffered very little inconvenience from the operation, which was not followed by peritonitis or any other untoward symptom; but it was found impossible to administer sufficient food to nourish him, though the stomach-feeding was supplemented by three nutritive enemata daily. He sank on the twenty-eighth day following the operation, clearly dying of inanition, and in a state of the most extreme emaciation. The stomach was found to measure five inches by two after death, and at the pyloric end was studded with small ulcers.

Localisation of Cerebral Disease.—Dr. DRESCHFELD brought forward three cases of brain-disease, where the affection was situated in the anterior lobes of the brain, and where the symptoms during life presented such uniformity that a correct diagnosis as to the localisation of the lesion could be made *intra vitam*. Generalising from these cases and from an analysis of other cases published, Dr. Dreschfeld drew attention to the following points as important aids to a correct diagnosis. 1. Convulsions are often present, and show certain peculiarities; they are ushered in at once by loss of consciousness without a preceding aura; the convulsive stage is very short, while a prolonged stage of insensibility follows the fit. 2. Motor and sensory paralyses are absent, unless the disease extends into or affects the motor sphere (bounded on the surface of the brain by the ascending frontal and ascending parietal and supramarginal convolutions, and in the in-

terior of the brain by the corpus striatum, the thalamus optici, internal capsule, and radiating fibres of the corona). 3. Headache is constantly present. 4. Certain psychic symptoms are always present, such as mental apathy, torpor, somnolence, and dementia; violent delirium or maniacal excitement, on the other hand, has only rarely been observed in lesion of the anterior lobes. 5. Vomiting is much oftener absent than present; and the same is the case with optic neuritis. Lesions involving the inferior frontal convolutions of the left side produce, besides the above symptoms, also aphasia.

Removal of the Tongue.—Mr. LUND showed a patient, whose tongue he had removed with a scissors. The particulars of this case have already appeared in the JOURNAL of February 9th.

Cerebral Tumour with Aphasia.—Dr. ROSS read a case of cerebral tumour with aphasia. The subject was a boy, aged 4, who entered the Southern Hospital four months ago, suffering from right hemiparesis, aphasia, and double optic neuritis. He also suffered from unilateral convulsions, of which he had had twenty attacks in ten days. The nurse reported that the convulsions were confined to the left (healthy) side; that they were ushered in with a scream; that, during an attack, the body was drawn so that the left side of the face almost touched the left ankle (pleurostotonos); that the duration of the attack was only a few seconds; and that there was no loss of consciousness and no subsequent drowsiness. The further symptoms which developed during the progress of the case were nystagmus, amaurosis, progressing from right to left, temporary conjugate deviation of the eyes, and rotation of head to the left side. The right hemiparesis passed on gradually to complete hemiplegia, with contractions of the muscles of the arm and leg during waking hours. Dr. Ross pointed out that the contractions of the right leg and arm, and the accompanying hemiplegia, showed that the fibres which connect the vertex of the brain and the grey matter of the anterior horns were interrupted in their course. They were probably interrupted by a tubercular tumour situated in the white substance of the left hemisphere above the lenticular nucleus, so as to interrupt also the fibres of the corpus callosum which connect the left and right third frontal convolutions. A tumour situated in this situation would account for the aphasia and paralytic symptoms; but, in order to account for the remaining symptoms, it was necessary to assume the presence of a second tumour situated in the left lobe of the cerebellum. Dr. Ross said that the case was still *sub judice*, but probably some day an opportunity might be afforded of verifying the diagnosis.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

FEBRUARY 15TH, 1878.

J. MORTON, M.D., in the Chair.

Obstruction of the Bowels.—Mr. J. S. NAIRNE read notes of a case of obstruction of the bowels, with extraordinary flatulent distension.—Dr. HUGH THOMSON said the absence of symptoms of previous constipation in the case related was of interest. He would have been inclined to recommend earlier operative interference than had been adopted.—Dr. W. L. REID mentioned a case in which he had twice penetrated the colon on account of great flatulence, with decided relief to the symptoms.

Hydatids.—Dr. J. L. MILLER (Tasmania) read a paper on hydatids, in the course of which he mentioned four cases which had come under his observation, in three of which tapping the cysts by means of a long trocar had been followed by the best result. One of these was of considerable rarity. A gentleman complained of increasing difficulty in micturition, and each time the catheter was passed a smaller size was required, until finally the urethra became occluded, and puncture of the distended bladder was determined on. This was done, and, instead of ammoniacal urine flowing from the cannula, a large quantity of clear pellucid fluid escaped, and immediately the urine was passed by the natural channel. The fluid proved to be from a hydatid cyst which had been pressing on, and probably growing in, the bladder.—Dr. SCOTT ORR stated that he had treated three cases of hydatids of the liver. He recommended puncturing and drawing off the fluid; in one of his cases, he had to repeat the operation, and the fluid at the second tapping was tinged with bile.—Dr. CHARTERIS asked Dr. Miller as to his theory of the entrance of the parasite into the system, as also as to the rate of growth of the tumour.—Dr. WHITTAKER asked whether the fluid had been examined to ascertain the presence of echinococci. He had examined the brain of a sheep which died of "shindy", and found vesicles in the left ventricle.—Dr. MILLER stated that Dr. Bird's theory as to the infection of the lungs was the inhalation of the dust of the street. In Australia, the water-supply is limited, and men and dogs drink at the same stream. The time required for development of the tumour was uncertain; and, as regarded the echinococci, he had found them in some cases, but the character of the fluid was sufficient to establish the diagnosis.

BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 23RD, 1878.

THE GOVERNMENT MEDICAL ACT AMENDMENT BILL.

WE reproduce in another column *in extenso* the Medical Acts Amendment Bill, introduced into the House of Lords by the Duke of Richmond on Tuesday evening, from an early copy with which we have been favoured. We publish also a *verbatim* report, taken specially for this JOURNAL, of the Duke's speech in explanation of the Bill in introducing it. With these ample elements for forming an opinion before them, our readers will not require much further comment or explanation at present. The Bill will, no doubt, immediately come under the cognisance of the Medical Reform Committee, who have probably put themselves in communication with the Government during the course of the preliminary proceedings, which have resulted in the introduction of this Bill.

It will be seen, however, that this Bill as introduced differs very seriously, as we had some reason to fear, and as we intimated might be the case, from the draft submitted to and approved by the members of the Executive Committee of the General Medical Council, who were consulted semi-officially and in their individual rather than in their official capacity. It is understood that the alterations that have been introduced are of a kind which will not meet their views, and they are, we imagine, likely to encounter the serious opposition of the profession at large. So far as our Association is concerned, three important principles of reform have been affirmed at general meetings: the first, uniformity of examination and reciprocity of practice, on the principle mainly contended for by Sir Charles Hastings in influencing the framing of the first Medical Act; second, the principle of the direct representation of the profession in the General Medical Council—specially contended for by the Association when Lord Ripon framed his Medical Act Amendment Bill of 1870; and third, the amendment of the penal clause, with a view to protect the public and the profession from the extensive inroads and dangerous practices of unregistered quacks—a principle included in Lord Ripon's Bill, and strenuously reaffirmed at the last annual meeting of the Association. As the Bill was first framed and approved by the Executive Committee of the General Medical Council, and in the draft condition of which we spoke of it before it had been officially revised in the Cabinet, the present Bill included a complete scheme for conjoint examinations in the three kingdoms, thereby securing a complete adoption of the principle of uniformity of minimum examinations, and also the third principle. The second, that of a direct representation of the profession in the Council, has not, we believe, at any stage been included in the draft of this Bill.

It will be seen that, in the Bill actually presented to Parliament on the authority of the Government by the President of the Privy Council, the machinery for enforcing conjoint examinations in the three kingdoms is abandoned, and the reason is probably pithily summed up in the words used by the Duke, "There is a difficulty in Scotland". It will be remembered that that difficulty has repeatedly been put forward by the representatives of the Scotch bodies in the General Medical Council, and was very forcibly and fully expressed by Sir Robert Christison, the then President of the British Medical Association, in his address to the Association at its Edinburgh meeting. In place of the Conjoint Board scheme, which is favoured only by permissive language, this Bill presents a scheme for enforcing uniform examinations by each body, by rules to be laid down by the General Medical Council, having a more peremptory authority than any of the regulations

that body has at present power to frame in respect to the authorities. Thus, it is held out, an adequate degree of uniformity will be procured and competition downwards will be stopped. Such machinery, however, is obviously open to so many difficulties and complications, and likely to be so much impeded and resisted in its action, as to be of very doubtful value. A valuable supplemental provision requires that every person asking to be registered shall have both a medical and a surgical qualification. The Duke spoke with warm approval of the conjoint scheme of examination for England, which certainly merits high approval; on the other hand, the right which the Bill proposes to give to women to claim examination at the Conjoint Board, and in virtue of such examination to claim a registrable title from each of the bodies participating in such conjoint examination, is likely to create a fresh obstacle to the fulfilment of his wish that the conjoint scheme may come into speedy operation. The College of Physicians, by a vote on Monday last, indicated its intention to resist any such bestowal of any of its registrable titles; and it is probable that the College of Surgeons may take the same course. At any rate, this provision of the Bill will impede rather than favour the formation of a Conjoint Board in the only country in the United Kingdom in which the medical authorities seem at present disposed to form such Conjoint Board.

The clauses amending the fortieth clause are, we consider, satisfactory, and will afford a long and urgently needed protection, as desirable in the interests of the public as of the profession, and most urgently needed in the interests of both. The Bill includes many useful provisions relating to the registration of colonial and foreign degrees, and the machinery for striking off unworthy members from the *Register*. It will be seen that added to it are schemes for the registration of dentists and for the registration of midwives. Except that some persons may object to the close connection into which this scheme brings dentists and midwives with the *Medical Register*, these schemes appear to be well considered, and, as such, have been approved in principle by the Parliamentary Bills Committee of our own Association on former occasions, and by the Obstetrical Society of London in respect to midwives, and by the Odontological Society in respect to dentists. These, however, are not essential parts of a Medical Act Amendment Bill. Useful in themselves, they are rather supplementary to than parts of medical legislation. It is not a little remarkable that this Bill should, in the course of a week or ten days, have undergone such serious changes in respect to some of its most important provisions; these changes, it must be observed, being not mere matters of detail, but important matters of principle. There is, of course, some Polonius behind the scenes; but it is not certain that he will answer the challenge to come out. The Duke of Richmond has been at great pains in this matter, and has done his best to satisfy opposing views; but we fear that the Bill, in its present state, will cause much disappointment, and, even if the Government should succeed in passing it, will hardly be generally accepted as a final settlement of the question.

THE ANTISEPTIC METHOD IN OVARIOTOMY.

DR. CARL SCHROEDER, Professor of Obstetrics and Gynaecology in the University of Berlin, has just published in the *Berliner Medicinische Wochenschrift* a highly interesting and valuable communication on the subject of ovariectomy. From May 25th, 1876, to February 24th, 1878, he has operated in fifty cases, which he summarises in a table, to which he adds comments. From the total cases, three must be deducted in which the patients were the subjects of cancer, and died, in consequence of the extension of that disease, on the tenth, nineteenth, and forty-fifth days after the operation. In the remaining forty-seven cases, there were seven deaths; *i.e.*, 14.9 per cent. of deaths and 85.1 of recoveries. On dividing, however, the table into two equal parts, it is found that (excluding the three cancer cases)

the first twenty-four operations were followed by six deaths=25 per cent., and the last twenty-three by only one=4.3 per cent. This great reduction in the mortality, Dr. Schroeder says, may be attributed to improved skill on the part of the operator; but he attaches much greater importance to the avoidance of infection, which he regards as almost exclusively the cause of death after ovariectomy.

As regards the places where the operations were performed, thirty-three patients were operated on in the Lying-in Institution in Berlin, twelve in private houses, and two in the Charité Hospital. (The three cases of cancer all occurred in the Lying-in Institution.) Of the thirty-three patients in the Institution, only one died=3 per cent.; while the mortality among the fourteen operated on elsewhere was six=43 per cent.

Dr. Schroeder says that the low death-rate in the Lying-in Institution is very remarkable, when the circumstances are considered. The institution was originally a private house; the wards are defective in their sanitary arrangements, and are always overcrowded by one-half of the normal number; women with offensive discharges are often admitted; and, under all the circumstances, the occasional occurrence of puerperal fever is unavoidable; and hence a more unfavourable place for ovariectomy could scarcely be conceived. Yet, among thirty-three patients, there was only one death; and this was not from infection, but from intraperitoneal hæmorrhage, which proved fatal on the nineteenth day.

The key to this success, Dr. Schroeder says, lies in having so perfect a control over the persons and instruments concerned in the operation, that infection is warded off from the subjects of operation. The operations are performed in private rooms, into which parturient women are never admitted, and suppurating cases only rarely. The instruments to be used are always freshly cleaned by the instrument-maker, and allowed to lie in a five-per-cent. solution of carbolic acid; the sponges are quite new, and are always most carefully cleaned and scalded on the preceding day by the head midwife, and placed during the night in solution of carbolic acid. At the operation, five persons are present besides the assistant who administers chloroform. The operator and one assistant only come into contact with the wound; a second assistant has charge of the instruments; the head midwife mixes the solutions and renders occasional assistance; and a nurse stands beside the operator with a vessel containing carbolic acid solution. The head midwife is required to avoid coming into contact with all sources of infection; and the nurse is detailed for duty in the ovariectomy wards exclusively. Dr. Schroeder and his assistants take the greatest pains to avoid all contact with infective materials.

The operation is always performed in the morning, before any other patients are visited: at half-past seven in the summer; in winter, as soon as it is sufficiently light. On rising, Dr. Schroeder takes a bath, dresses himself so that his clothes may not convey infection, and washes in carbolic acid solution before proceeding to operate. At least half an hour before the operation, the carbolic acid spray is brought into play in the room; and then, the patient having been washed in a pure atmosphere, the operators proceed to their work with clean hands and clean instruments. These precautions are, in Dr. Schroeder's opinion, sufficient to obviate the risk of peritonitis, which, in its generalised form, he holds to be the result of infection and not of injury.

Even in the most severe cases, and in those where the peritoneum was extensively interfered with, there was scarcely any reaction. The pulse, indeed, rose to 90 or 100; but the temperature never exceeded 100 Fahr., or sometimes on the first evening 100.4; not uncommonly it remained absolutely normal. Even in one very difficult case of suppurating cyst with extensive adhesions (followed by recovery), the temperature did not exceed 98.8 during the first ten days.

In a foot-note, Dr. Schroeder remarks that there is, as a rule, a fall of temperature, sometimes as low as 95 Fahr., immediately after the operation. This, however, has never been followed by any ill result. He has never seen indications of carbolic acid poisoning, nor has he found in any case carbolic acid in the patient's urine.

Vomiting, dependent on the anæsthesia, is very common on the day after the operation, and rarely continues beyond this. On the second or third day, the appetite returns. The dressings are allowed to remain nine days; on the tenth, they are removed under the carbolic acid spray, and the sutures are taken out. The wound is found to be united by the first intention, without the formation of a drop of pus. The pedicle is always returned into the abdomen, as the retention of it outside the wound interferes with the application of Lister's dressing. Silk sutures certainly irritate; but Dr. Schroeder does not know how to do without them, as catgut, he says, is not to be depended on, and he has no faith in the actual cautery. He used drainage of the peritoneum in only one case, and considers that it is never necessary, and sometimes even injurious.

This communication of Dr. Schroeder is a most valuable contribution to the settlement of the question as to the applicability and utility of the antiseptic method in ovariectomy. He heads his paper, "A Report on Fifty Listerian Ovariectomies (*Lister'sche Ovariectomien*)"; but, though he describes minutely the antiseptic precautions employed, he does not give details as to the manner in which the wound is dressed—merely speaking of the "*Occlusivverband*". Anyhow, his results go to prove the applicability to ovariectomy, if not of Lister's method in all its minutest details, at least of a modification of that method.

SURGICAL TREATMENT OF STONE IN THE BLADDER.

SIR HENRY THOMPSON'S paper at the last meeting of the Royal Medical and Chirurgical Society, in which he gave the pith and marrow of his experience derived from the treatment of five hundred cases of stone in the bladder of the male adult, is unique in the history of surgery. The profession has never before been presented by one man with such extensive, exact, and laboriously acquired information on the subject of stone in the bladder. With but few exceptions, the author showed to the Fellows on Tuesday night every stone he has removed, either by lithotripsy or lithotomy. On the table was placed a schedule containing all the essential particulars of each case, with numbers corresponding to the specimens. Such an arrangement must have required immense care and attention to detail, and would have been almost impossible had not the author, as he told his audience, methodically made written records of each case on the same principle from the commencement. So anxious was he to be authentic, that he attached to each case the name of the medical man who had original charge of the patient, or, none such existing, he mentioned the name of any medical man who happened to be present at the time of operation.

Sir Henry's five hundred cases represent his entire and unselected work from the commencement of his career up to January 1877—a period of nineteen years. These five hundred cases occurred in four hundred and twenty individuals of twenty years old and upwards, the mean age being sixty-one years and a half; no women are included in the series. Four hundred and twenty-two were cases of lithotripsy with a mortality of one in thirteen, and seventy-eight were cases of lithotomy with a mortality of one in two and three-quarters. The mortality of the whole five hundred cases was one in eight and a half. So low a rate is a very enviable result, and shows how much can be done by a judicious selection of the two operations. And perhaps no fact was more important than this, upon which the author laid stress, viz., that lithotomy and lithotripsy are not to be regarded as antagonistic, but as complementary the one to the other; and, so far from being opposed to each other, that they are really inseparable companions. Sir Henry Thompson has long taught this close relationship. Yet even now, in many minds, the two procedures present conflicting claims; and it is observable that this belief seemed to characterise the remarks of some of the speakers who followed in the discussion. This feeling has to some extent originated in the enthusiasm with which the celebrated father of lithotripsy, Civiale, very naturally advocated the operation. He, indeed, endeavoured almost to supplant lithotomy,

and moreover claimed an immunity from all risk to life for his favourite innovation.

Sir Henry Thompson, at the conclusion of his paper, strongly urged the prudence of restricting the application of lithotomy to narrower limits; and stated, as the result of his experience, that he should rarely attempt to crush a hard stone over one inch and a quarter in its largest diameter, or any stone that could not be crushed by a flat-bladed lithotrite, utterly condemning the use of the fenestrated variety. As lithotomy, confined within due limits, is unquestionably a safer operation than lithotomy, it naturally results that the early detection of stone in the bladder should be the constant aim of the practical surgeon. The author adverted to the occasionally distressing after-results of lithotomy, and agreed with Mr. Cadge that there are some who neither die nor recover, but continue to suffer with painful symptoms. But he thought that these cases would be much more unfrequent, if lithotomy were confined to the limits laid down. And he pointed out that they were cases in which the bladder, ureters, and kidneys were diseased previously to operation, and in which lithotomy was almost necessarily fatal; whilst the occasional introduction of the lithotrite afterwards was the price paid for life. And he inferred, therefore, that, when the patient ultimately succumbed, it was unfair to attribute his death to lithotomy, when it might more fairly be said that the last few years of his life had really been gained by it.

It is worth remarking that this report comprises all the author's cases; and it, therefore, includes his period of inexperience as well as the results of his ripe and mature knowledge. It is, therefore, possible that the surgeons of the future, recognising the proper relations between lithotomy and lithotomy, and the importance of the early detection of calculus, may even obtain a lower rate of mortality than Sir Henry Thompson's result of one in eight and a half; and so contribute still further to render surgery (to use the felicitous language of Sir James Paget) "a most happy profession".

MR. H. SPENCER SMITH, whose retirement by lapse of time from active duties as senior visiting surgeon to St. Mary's we last week mentioned, has been appointed consulting surgeon to that hospital.

WE are informed that Mr. William Gilbert, of whose vigorously written article on the abuse of charity we spoke last week, is a member of our profession, having passed his examination at the College of Surgeons so long ago as 1830.

WE are informed that Mr. Jonathan Hutchinson is likely to succeed Mr. Erasmus Wilson in the Professorship of Dermatology at the Royal College of Surgeons founded by Mr. Wilson, and of which chair Mr. Wilson has fulfilled the duties with characteristic industry and erudition. It is unnecessary to speak of the high claims of Mr. Hutchinson to such a chair. Although dermatology is only one of his many accomplishments in the department of surgery, he holds in that department of practice an authoritative position which is well known and recognised in this and other countries.

WE understand that Mr. Lund of Manchester is likely to be brought forward as a candidate for membership of the Council of the College of Surgeons at the next election, and that his candidature is likely to meet with considerable support at the great London schools. Mr. Lund stands in the first rank of provincial surgeons, and was last year President of the Surgical Section at the Manchester meeting of the British Medical Association, towards the success of which he largely contributed both in a scientific and a social sense.

At a recent meeting of the Hydrophobia and Rabies Committee, satisfactory progress was reported in the tabulation of the cases and the investigation of the literature of the subject. Dr. Gowers reported that he had altogether material of five cases placed at his disposal by professional friends, relating to the investigation of the pathological appearances. Mr. Callender and Dr. J. Burdon Sanderson have had

the opportunity of visiting one patient suffering from hydrophobia, under the charge of Dr. Nicholls at Chelmsford, through the courtesy of that gentleman. We are requested to remind the members of our Association that Dr. J. B. Sanderson, Mr. Callender, and Dr. T. L. Brunton, as members of this Committee, will be glad to receive intimation of any case occurring under the care of members, and would be willing that they should have the opportunity of observing the symptoms and discussing the treatment of any case of hydrophobia. Hitherto, the only case in which this opportunity has been afforded to them is the one above mentioned.

THE breakdown of the Army Medical Department for want of sufficient medical officers for duty is so complete, that at this moment there are not army doctors enough for duty at Woolwich, and the services of local civil practitioners have been put into requisition. What would be the case if war should break out? And is this a satisfactory state of things at a moment when war is considered so probable that extra votes have been taken in preparation for it? The sooner the War Office Committee reports on the causes of the difficulty of recruiting the Army Medical Department the better. Mr. Meldon had a notice on the paper of the House of Commons last week, to call attention to the present state of the department; and it was understood that Dr. Lush, Dr. O'Leary, and the Right Hon. Lyon Playfair were prepared to take part in it. Documents bearing on the subject, and showing what have been the past representations to the Secretary of State at War by our Parliamentary Committee were placed in their hands, and would have furnished some of the materials for debate. But, at the last moment, Mr. Hardy requested that the debate might be postponed until he had received the report of the War Office Committee, of which we have already stated the composition, and which is now hard at work on the subject.

WE are enabled to state that the War Office Committee, which has been appointed to investigate the state of the Medical Branch of the Army, is making extended inquiries as to the causes why so few young surgeons come forward as candidates for commissions in it; and we hear that it is not unlikely that important changes will be made in the terms on which service in the department will be in future regulated. The changes referred to are still, however, under consideration. The desiderata which were last week set forth in this JOURNAL have been forwarded to the Secretary of State at War by the Chairman of the Parliamentary Bills Committee of the British Medical Association, Mr. Ernest Hart, and urged by the Right Hon. Lyon Playfair; and this statement also has been referred to the consideration of the War Office Committee.

MR. HUXLEY has signified his desire to join the Committee to which we last week referred, which has been formed for the purpose of raising an auxiliary fund for a memorial in France in honour of the illustrious physiologist Claude Bernard. The Committee, therefore, now consists of Sir James Paget, Professor Huxley, Dr. J. Burdon Sanderson, Professor Humphry, Mr. Ernest Hart, Mr. Romanes, and Dr. Gerald Yeo (King's College); the latter two gentlemen, being the Secretaries of the Physiological Society, have kindly undertaken, at the request of the Society, also to act as Honorary Secretaries of this Committee.

THE question of the admission of women to the medical licence of the College of Physicians was discussed at the meeting of the Fellows on Monday, and a negative resolution was affirmed by a considerable majority. Dr. T. K. Chambers addresses to us a letter, which will be found in another column, in which he expresses a strong opinion adverse to the decision arrived at. This question seems to have the unhappy privilege of exciting a good deal of strong feeling, and causing the use of rather unusually strong language on every side, whenever it comes under discussion. This, we cannot help thinking, is much to be regretted, as being unlikely to further satisfactory conclusions.

MR. LIEBREICH, who has during the last few years preferred to take his professional vacation in the winter months, in order to be able to enjoy it in a more genial climate has, we understand, requested the authorities at St. Thomas's Hospital to accept his resignation of the office of ophthalmic surgeon and lecturer on ophthalmic surgery in that hospital, because he does not feel justified in withdrawing this vacation-time from the period of instruction of students during the active session of the school. Mr. Liebreich's resignation has been accepted by his colleagues with much regret. He has, however, on the proposition of the Treasurer and staff, by the unanimous decision of the governors, been appointed consulting ophthalmic surgeon to the hospital. In that capacity, he will give to the hospital the benefit of such time as the pressure of professional engagements will allow. The ophthalmic department at St. Thomas's Hospital, created by Mr. Liebreich, with the liberal assistance of the Treasurer and governors and the sympathetic approval of his colleagues, is likely to attract considerable competition, and among the candidates already mentioned are Mr. Nettleship and Mr. Anderson Critchett.

THE subject has been mooted recently of taking steps to procure a suitable celebration of the tercentenary of the anniversary of the birth of Harvey by a banquet, in which the leading members of the medical profession and leading physiologists and others should take part. This proposition, which originated, we believe, with Dr. Michael Foster, and was by him laid before the Physiological Society, has been unofficially discussed and submitted to the leading authorities at the College of Physicians, in connection with which body it is thought such celebration might be most appropriately held. It is suggested, and we believe the suggestion meets with the approval of some of the authorities of the College, that the College of Physicians might appropriately take the leading part in promoting such a celebration of the memory of of the worth of him, of whom the College has most reason to be proud; and that the occasion of the Harveian Oration, which this year will be delivered by no less distinguished a physiologist than Professor Burdon Sanderson, might very properly be chosen for the day of the banquet. The Harveian Oration is delivered on the anniversary of the funeral of Harvey, in virtue of endowments left by him. Harvey directed that his funeral should take place from the College of Physicians, and made some provision in order that the Fellows might dine on the anniversary of that day. His memory kept alive by his great works, has been annually honoured at the College by the Oration, and, until recently, by a banquet, which has of late years been discontinued. The present proposition would involve a celebration which would be so extended as to be of a general character, going beyond the limits of the Fellows, and to which it might be expected that some of the most illustrious persons in the country would be glad to lend the authority of their presence.

WE publish in another column replies from Dr. Markham and Dr. Bond, to the correspondence of Mr. Brown of Northallerton, on the subject of the legal position of the two ladies who are at present members of the Association; and, in the presence of the announcement that a special general meeting is to be held for the purpose of considering the subject, it is unnecessary perhaps that this correspondence should be further continued. We would only remark that the solicitor of the Association will no doubt be able to offer a statement as to the question of law raised by Mr. Brown affecting the actual legal position of the lady members. This question seems to us the less important, as the Association has, under the by-laws, undoubted power of taking a step for any reason satisfactory to itself, as the result of which any member ceases to be a member. If the membership of women be objectionable, that becomes a valid reason for such step. That being the avowed reason, we do not see that it involves any imputation either on the manners of the Association, or on the individuals affected, if this step be taken. It appears to us that the main question is: Is the presence of these two ladies inconvenient and objectionable by reason of

their sex? If it be decided that it is so, and the two ladies are unwilling to relieve the Association voluntarily of that inconvenience, then the taking of steps to provide that they shall cease to be members may follow as a logical consequence, and involves no other imputation on them than that they are women; and that such steps have been taken to prevent their attendance at meetings, where they may cause inconvenience to an Association otherwise wholly composed of men.

A DISTINGUISHED correspondent in the University of Edinburgh writes to us: "It is very pleasing indeed to see the fresh start in life which you have given to Oxford. I can imagine no better place for a medical school." We are glad to be able to add that the attention which we have felt it our duty to call to this question and the vigorous discussion which has taken place in our columns has been already so far productive of good, that Oxford University Commission, which has been sitting for the last few weeks in London, has devoted a large amount of attention to the subject, and has taken evidence bearing upon it from many members of the University, as well as from some outside authorities, of whom a portion are understood to represent the views adopted by Dr. Acland, while others have strenuously advocated the restoration of Oxford as a medical school and the adoption of measures which will enable that University to resume the duties which it owes to medical science and to the medical profession, and which it has so long neglected. Among those who have given evidence in favour of the views which we have advocated are, we believe, Professor Ray Lankester, Dr. Frank Payne, Dr. Risdon Bennett, and Dr. Glynn Whittle; evidence has also been given by Sir James Paget, Sir William Gull, and Dr. Andrew (St. Bartholomew's). It is much to be desired that this evidence, on a subject of such great importance to the University and the future of medical science in this country, should be published. It is already printed, but we believe there may be some difficulty in obtaining publication of it.

WE would direct attention to the letter of Mr. Hatherly, the honorary secretary to the Nottingham Branch of the Medical Defence Association, with reference to the appeal made by Mr. Stanger in our issue of the 9th inst. for pecuniary assistance in carrying on the case of the plaintiffs in the appeal of the Apothecaries' Company v. Shepperly. This case will be one of the highest importance not only for the interests of the profession but also, we believe, for the safety of the public. Every one has seen, in either hospital practice or general practice, the immense amount of mischief done by the existing abuse under which chemists make hasty diagnoses across the counter, or, upon the report of some ignorant relative, undertake to prescribe on cases which, apparently simple in the outset, are often in subsequent development most serious and frequently fatal. We reported a case last week in which such counter-prescribing involved the diagnosis of chicken-pox as small-pox, and set up a centre of contagion dangerous to a whole neighbourhood. The practice, however, is so common, and the instances of evil results are so numerous, within the knowledge of almost every medical man, that it is hardly necessary here to emphasise or discriminate them. What we wish to point out once more is that, in the case of the Apothecaries' Company v. Shepperly, a small local society in Nottingham is virtually fighting a cause which is that of the public and of the profession against the whole weight of a powerful society of chemists, in putting down that dangerous and, we believe, illegal practice. We will, therefore, again express the hope that this appeal will meet with considerable support from medical men; and we do not doubt that this will be the case if our readers sufficiently consider how large are the issues involved in the battle which Mr. Stanger, Mr. Hatherly, and their associates, are fighting.

THE EARL OF HARDWICKE.

THE Master of the Queen's Buckhounds fell from his horse in the hunting-field on Tuesday last, and is suffering from concussion of the brain and spinal cord. He was at once brought to his house in Arlington Street, and on Wednesday was reported to be doing well.

PENAL SERVITUDE COMMISSION.

THE Royal Commissioners recently appointed have already begun their inquiries into the working of the Penal Servitude Acts. Among the many questions which must come before them, will be the all-important one whether the moral effect of our present system of indiscriminate association does not press too heavily on the better educated class of prisoners, such as political offenders and those who are not habituated to crime. Another subject will, no doubt, be the association of habitual criminals: whether it does not tend to the increase of crime, and fail to satisfy the penal and reformatory objects aimed at by the dread sentence of the law. Their decisions on both these subjects will be interesting. We are glad to see they have secured the able services of Dr. Greenhow to assist them on the many medical questions which must claim their consideration. Last week, we called attention to the anomalous duties and exceptional services rendered by prison surgeons to their thankless patients, and the small recompense they receive. We hope the facts and medical statistics laid before the Commissioners will satisfy them as to the work done, and have the effect of procuring for the medical officers a more just recognition of their claims. The redundancy of the executive, as compared with the medical department, at the large invalid and lunatic establishment at Woking, cannot fail to attract the attention of the Commission, and raise the question whether it is not advisable that such establishments should be under the control of a medical superintendent. We are of opinion that the safe custody of invalid prisoners, and all the discipline desirable or possible for them, could be more justly secured by the adoption of this reform. With a staff as constituted at present, there must of necessity be sudden difficulties arising out of the opposing efforts of the executive authorities to enforce discipline, and of the doctors to protect infirmity.

DENTAL PRACTITIONERS' BILL.

WE are very glad to be able to agree in the views expressed by Mr. Coleman, the President of the Odontological Society, and Mr. Sibley, President of the Metropolitan Counties Branch, as to the course which is to be taken in reference to the Dental Practitioners' Bill. That Bill passed its second reading on Friday last without further opposition. The Chairman of the Parliamentary Bills Committee of our Association felt justified in withdrawing further opposition upon the pledge which has been given to Dr. Cameron, who has acted for the Committee in this matter, that the obnoxious clauses will be remodelled in a form to meet the views expressed by the Committee at their last meeting, and in accordance with the resolutions they passed. Sir John Lubbock has undertaken at once to reprint the Bill in its amended form; and in that form we believe that the Bill, subject probably to some further amendments of subsequent clauses in Committee, will be likely to meet the obviously just requirements of a satisfactory registration of dentists without infringing any privileges of the medical profession; and, under such circumstances, we agree with our correspondents that this Bill will deserve support. It will, however, be seen that what we intimated would take place has occurred; the Government Medical Acts Amendment Bill includes a provision for the registration of dentists. Sir John Lubbock has, in any case, undertaken not to proceed with his Bill until the General Medical Council have had time to consider it. Under these circumstances, we are inclined to believe that Sir John Lubbock's Bill will not ultimately become law, but, when the principles which it embodies have been approved, the Bill itself will give way to the Government measure having the same objects.

THE SAMARITAN HOSPITAL.

THE annual meeting of the Governors of the Samaritan Free Hospital was held in the board-room of that institution on Tuesday, March 19th, Sir Charles Rowley, Vice-President, in the chair. The secretary, Mr. George Scudamore, read the balance-sheet, from which it was shown that the total income for the year 1877 was £8,552 12s. 6d., and the expenditure £8,472 17s. 4d.; leaving a balance of £79 15s. 2d. The

results of the past year, both financially and from a medical point of view, were highly satisfactory. Sir Henry Montgomery, in proposing a vote of thanks to Mr. Spencer Wells, referred to his great success, and regretted that he was obliged to withdraw from the active surgical work of the hospital. Mr. Wells, in acknowledging the vote of thanks, bore testimony to the increasing success in the treatment of ovarian disease, attributing the good results to the introduction of the antiseptic treatment. Votes of thanks to the lay and medical officers and to the chairman brought these interesting proceedings to a close.

THE HARVEY TRICENTENARY MEMORIAL.

WE published last week an appeal from Mr. Eastes, the secretary of the Harvey Tricentenary Fund, on behalf of a Committee which has already raised £800 towards the cost of a statue to Harvey, and which desires to raise nearly as much more in order to complete the object in view. This subscription has dragged over several years, and it is some reproach to the country that it has not been more speedily filled up. It is now proposed, in virtue of a resolution passed on the motion of Sir Thomas Watson and Sir George Burrows, to make a special appeal not only to the profession at large, but also to the British Medical Association and its Branches and to all the great corporate bodies and universities in their collective capacities, to assist by contributions to the fund, and by taking measures to promote the subscription. We trust that this appeal may be successful, and that the national reproach, that no adequate memorial to Harvey exists in a country where statues abound to the shedders of blood, may be speedily wiped away.

THE CHARING CROSS HOSPITAL.

A CORRESPONDENT writes to us in reference to the recent proceedings at the Charing Cross Hospital:—"The rule of the Hospital is clear enough, and is to the following effect: 'Every physician and surgeon of the Hospital is to retire from his office on the completion of the sixtieth year of his age, when he may become Consulting Physician or Consulting Surgeon, and be also eligible to be elected an Honorary Life Governor and to serve as a member of the Council. This rule is to be prospective only, and not retrospective (1868).' Now when this rule was generally accepted by the staff, and fully discussed and passed, Mr. Hird was and had been only a short time Assistant-Surgeon to the Hospital. Five years ago, Mr. Hird attained his sixtieth year, and then it was deemed advisable to notify the fact to the Council and ask for a further extension of his term of office, in consideration that he had *only for a few years been surgeon*. This was granted, and just before the last annual meeting this additional period expired." The facts, therefore, appear to be exactly as we stated them; and the further prolongation of office seems to be a second infraction of a very useful rule, and one which needs to be noticed not only on its own account but as forming, possibly, a bad precedent.

THE TELEPHONE AS AN ELECTRIC REAGENT.

AT the meeting of the Paris Société de Biologie, on March 2nd, M. Darsonval said that, up to the present time, the most sensitive electric reagent was the nerve-tissue. The telephone, however, is an infinitely more sensitive reagent; he proves this by first placing an induced current in contact with the sciatic nerve of a frog, and showing that this current, when it can no longer excite the nerve, still makes the telephone vibrate.

THE DEPOPULATION OF POLYNESIA.

A PAPER by M. Bordier, published in the *Revue d'Anthropologie*, states that Polynesia is becoming depopulated. The direct agent of this state of things is pulmonary phthisis. At Tahiti, which has the finest climate in the world, every one coughs, every one has bronchitis, and eight out of ten are tuberculous. In the Gambier Archipelago, the population has, in thirty years, diminished from 1,600 to 150; at Nonka Iiiva, the aborigines have, in twenty-six years, decreased from 6,000 to 1,000. Captain Cook, in 1774, estimated the entire popula-

tion of the Hawaiian Islands at 200,000; in 1800, but 150,000 survived. They have now diminished to 55,000; and, during the last six years, there have been 2,671 births against 4,167 deaths. It would seem that wherever the European has passed he has sown the seeds of death for these unfortunate Polynesians. Darwin has already long since pointed out that the departure of an European vessel is always followed, even amongst populations isolated up to that time, by the breaking out of infectious diseases, without characteristics which we should term classic, and which bear hardly on the aborigines only.

INQUESTS WITHOUT INQUIRY.

SOME coroners appear to think that their particular function is to make as happy a guess as possible at the causes of death, and to veil their ignorance of details under the general terms of an open verdict. It is very difficult on any other hypothesis to understand the reason which induced the coroner, in the case of the recent mysterious deaths at Ware, obstinately to refuse to order a *post mortem* examination, in the absence of which none other than a distant guess was possible as to the cause of death. We have had recently to record and to regret a similar course upon the part of other coroners. No course could well be devised better calculated to defeat the object of the inquiry.

SURGICAL AID SOCIETY.

THE Secretary of this Society informs us that, since the last general meeting of the subscribers, the Committee have given him the power, in any case in which it may appear necessary, to order the appliance (upon the certificate of the surgeon) at once, without waiting for additional letters; and, in addition, they have every month before them a list of all cases requiring a number of letters, and vote the remainder to such cases as they may deem deserving.

THE METROPOLITAN COUNTIES BRANCH AND THE CHARITY ORGANISATION SOCIETY.

AT the meeting of the Council of the Charity Organisation Society held on Monday, March 4th, Sir Charles Trevelyan called attention to the recent meeting of the Metropolitan Counties Branch to hear Mr. Holmes's paper on provident dispensaries, and also called attention to the resolution of Council of March 15th, 1874: "That, as the conversion of the existing free dispensaries into provident dispensaries, and the establishment of new provident dispensaries where required, is an indispensable preliminary to the reform of the system of medical relief, the local committees of this Society be recommended to exert themselves for the promotion of this object in their respective districts." He submitted to the Council that the time had arrived when an united and persistent effort should be made by all the committees of the Society, acting in concert with the members of the medical profession and the governing bodies of the hospitals and dispensaries, to place medical relief on a footing which would at once secure the efficient medical treatment of the working classes and promote the formation of provident self-respecting habits. An adjourned meeting of the Metropolitan Counties Branch, to conclude the discussion on Mr. Holmes's paper, will be held on Wednesday next, at 8 P.M., at the rooms of the Medical Society of London.

SCOTLAND.

THE trial of M. Chantrelle, a teacher of French in Edinburgh, for the murder of his wife, is expected to come on soon. The evidence, which is of a voluminous and intricate character, will render the trial one of unusual interest to the medical jurist.

DR. J. B. RUSSELL, the Medical Officer for Glasgow, has issued in a pamphlet form his report on the outbreak of enteric fever in the West End of Glasgow and Hillhead, just submitted to the Health Committee of the Glasgow Town Council. From the figures supplied by Dr. Russell, it appears that there were one hundred and sixty-six cases of fever traceable more or less to poisoned milk, but out of this number only sixteen proved fatal.

THE epidemic of measles, which has been so severe in Edinburgh for some weeks past, is rapidly subsiding. Last week, only seven deaths from this disease were registered. There were three deaths from whooping-cough, and none from scarlet fever, diphtheria, or small-pox. The death-rate for the week fell from 30 to 22 per 1,000.

AN extensive fire took place on Wednesday, March 13th, at the premises in Nicholson Street belonging to the Edinburgh Blind Asylum. In the part of the premises which were burned were the rooms occupied by a large number of the blind and some "seeing" assistants at work at various branches of industry, including brush-making, pailasse-making, and similar employments. All the men were got out without injury; but a quantity of valuable property was destroyed. The loss is estimated at £10,000, which is covered by insurance. Employment was given in these workshops to about one hundred and sixty people, of whom one hundred and forty were blind.

AT Lochgelly last week, Sheriff Bell heard evidence relative to the introduction of a water-supply from Lochernie. The evidence showed that such a supply was eminently needed. The cost of the works was estimated at £6,800; and it was stated that the supply would be twenty thousand gallons per day, which would give twenty gallons to each inhabitant. It was stated that the water had a yellowish tinge, but that Lochernie was the only available source. Dr. Macadam had reported that it was quite suitable for domestic purposes. The sheriff thought the colour of the water a somewhat serious objection, and intimated that he would report the state of matters to the Secretary of State. The scheme was opposed by the Right Hon. W. P. Adam of Blairadam and Mr. Constable.

THE GLASGOW OPHTHALMIC INSTITUTION.

THE Glasgow Ophthalmic Institution has just published its ninth annual report. 3,663 cases have been treated during the past year, of whom 355 were taken into the hospital for treatment, the remainder being out-patients. The average period of the patients' residence in hospital was 20.10 days; of the cases treated, 3,504 were dismissed cured, 105 relieved, and 54 dismissed as incurable. The number of in-door patients was much restricted by want of sufficient accommodation. It was necessary to enlarge the house, and, in order to do so, the patron, the Earl of Stair, had agreed to give a sum of £200, provided nine other subscribers of a like sum could be found. Seven gentlemen had since come forward. The treasurer's report showed a slight excess of expenditure over income.

UNIVERSITY OF GLASGOW.

A PRIVATE meeting of the members of the General Council of Glasgow University, "who are of opinion that the nomination of a Chancellor for the University should be made on academic grounds", was held on Monday last, under the presidency of Professor Dickson. There was considerable diversity of opinion as to what course should be followed, but ultimately the Duke of Buccleuch and Sir Joseph Dalton Hooker were suggested for the vacant office. A vote was taken, when fifty voted for the Duke of Buccleuch and thirty-one for Sir Joseph Hooker. Some of those present more than hinted that they did not look upon the result of the vote as binding. Ultimately, a committee was appointed with the view of bringing about an arrangement so that the Duke might be returned without a contest.

IRELAND.

QUEEN'S UNIVERSITY.

AT a recent meeting of the Senate of this University, the following examiners were appointed in the place of those who retired by rotation. T. W. Grimshaw, M.D., Examiner in Medicine; William Mac Cormac, Esq., Examiner in Surgery; R. J. Kinkead, M.D., Professor of Obstetric Medicine, Queen's College, Galway, Examiner in Midwifery; J. W. Moore, M.D., Examiner in Materia Medica; and J. F. Hodges,

M.D., Professor of Medical Jurisprudence, Queen's College, Belfast, Examiner in Medical Jurisprudence. There are now, accordingly, a physician and a surgeon of two London hospitals on the Board of Examiners of the Queen's University. Dr. Bastian, of University College Hospital, was appointed an Examiner in Medicine at the last election. Mr. Mac Cormac, of St. Thomas's Hospital, who is now his colleague, resigned the seat he occupied on the Senate of the University, of which he is a distinguished graduate, in order to become a candidate for the examinership to which he has been appointed. The examiners generally hold office for two years, and we understand that there is a probability of there being another election to these posts in July.

SMALL-POX EPIDEMIC IN DUBLIN.

ONE hundred and eighteen cases were reported as having been under treatment in the Dublin hospitals at the end of last week. The Committee appointed by the South Dublin Union to consider the best means of providing increased hospital accommodation for small-pox patients have recommended the guardians to rent forthwith, for a period of not less than three years, the sheds and grounds at Kilmainham, which were used as a small-pox hospital during the epidemic of 1871-73. They also recommend that arrangements be made for making the department available at the earliest moment for the reception of patients, and that a medical man be appointed to take charge of the premises and act as resident medical officer.

CORK STREET FEVER HOSPITAL.

THE annual report of this valuable institution for the year ending March 31st, 1877, has been recently issued. The admissions during the year were 666, against 653 in the previous year, showing an increase of 13 patients. The total number of cases treated during the year, including the balance from the previous year, was 718. Of these, 67 died, against a mortality of 56 in the year 1875-76; the general rate of mortality being 8.57 for 1875-76, and 10.06 for the past year. In the able medical report which the late senior, and present consulting, physician to the hospital, Dr. Grimshaw, also furnishes, we are informed that of the 67 deaths that occurred during the year, 21, or nearly one-third, were admitted in a condition practically beyond the aid of medical treatment. The high rate of mortality may thus be accounted for to a great extent; and a table is given analysing these 21 deaths, which affords strong evidence of the effect similar cases have upon hospital statistics. It should be noticed that one-third of the deaths detailed in the table alluded to were cases of bronchitis admitted in a moribund condition. Such cases are not suited for admission into a fever hospital; but as a matter of humanity, it was necessary, in the present instance, to take them in and care for them. If all the cases admitted in a state past the hope of recovery be excluded, Dr. Grimshaw states that 7.14 per cent. would represent the mortality among those cases coming fairly under treatment. As pointing to a very low state of vitality among the poor of Dublin, attention is called to the unpleasant fact that the percentage rate of mortality from such common and constantly prevailing zymotics as typhus and enteric fevers has increased during the past few years. Valuable tables, showing for quinquennial and septennial periods the monthly and quarterly admissions, etc., of the different forms of continued fever, accompany Dr. Grimshaw's report. The mortality from enteric fever was higher during the year which the report covers than in any year since regular statistical tables have been kept in the hospital. This increased fatality of fever may, it is believed, be in a great measure attributed to the increase of the vice of intemperance. An interesting sketch of the inception of the present epidemic of small-pox in Dublin concludes the report. The disease appears to have been introduced from Manchester in August 1876, and to have slowly spread in the usual manner. Dr. Grimshaw, like every other "well educated sanitarian", considers the complete destruction of the clothing of small-pox patients to be the only certain, effectual, and economic method of checking the spread of this formidable malady. He shows that the destruction of the clothing of one

person infected by small-pox, as provided for by the Public Health Act, the owner being compensated at the public expense, would be a saving to the community if it only prevented the occurrence of one case. We can fully endorse a statement the Board of Superintendence of Dublin Hospitals made in reference to former reports in the case of the present, viz., that "the reports of this hospital are drawn up with great care, and contain valuable information". We should not omit to mention two important meteorological tables, drawn up by Dr. J. W. Moore, one of the physicians to the hospital, which are included in the report.

SCIENTIFIC LECTURES.

THE last of this season's series of scientific lectures at the King and Queen's College of Physicians was delivered on Monday by Dr. Grimshaw, it being his second lecture, on Contagion and its Relation to the Prevention and Cure of Zymotic Diseases. The first portion of the lecture was devoted to the consideration of the contagion of specific diseases. The relation of the theories of spontaneous generation and contagium vivum, and the development of contagious zymotics were considered. The lecturer adopted the latter theory of defining the term as a "seed of disease". The nature of the operation of contagium and septic infection was contrasted, and the views of Dr. Beale as to the part that bioplasm plays in the propagation of contagion were considered. The various proofs of the particulate nature of contagion were referred to, and adopted by the lecturer. The grounds for believing in the living and vegetable nature of contagion were considered, and then the various organisms which had been met with by different observers in vaccinia, variola, sheep-pox, splenic fever, and relapsing fever were described, and diagrams exhibited illustrative of the lecturer's remarks. The second portion of the lecture was occupied by the application of the information we possess to the prevention and cure of disease. The various means of preventing septic infection were considered, and tables of antiseptics and their relative powers exhibited. It was pointed out how the action of many of these antiseptics might be interfered with. The lecturer showed that, while we did not possess any antidote to the septic poison, yet we had many means of preventing its production, by the destruction of bacteria. The lecturer viewed the question of the prevention and cure of contagious fever from the following points of view. *a.* The modification of the nature of contagion (as by vaccination). *b.* The destruction of contagion—1. Without the body, by the application of disinfectants; 2. Within the body, by the use of salicylic acid, quinine, etc. *c.* The counteracting the effects of contagion. In considering the last subject, the lecturer dwelt upon some points in the treatment of fevers which he considered important, and pointed out what he believed to be errors in some forms of antipyretic treatment.

SEWERAGE OF DUBLIN.

THE state of the sewers in this city, taken in connection with the high death-rate, has been lately very forcibly brought before the public mind. At present, many streets are left without any provision for the timely removal of refuse. Not only this, but in some of the best districts of the city in which main sewers do exist, the inhabitants of excellent houses are in many cases so apathetic that they either have not connecting pipe-drains with the main sewer, or else have permitted these connections, in cases where they exist, to become so defective that their houses become noisome and pestilent from the entrance into them of foul sewer gases. Out of sixty-eight houses surrounding one of the largest squares in Dublin, only seventeen availed themselves of a recent opportunity of the main sewer being opened to make connecting pipe-drains. We are glad to see that the Chairman of the Public Health Committee of the Corporation, Mr. E. D. Gray, M.P., has taken the matter up; and that he carried a resolution at the last meeting of the Corporation by which steps will be taken forthwith to have the entire sewerage of the city completed in the least possible time. This will take five or six years more to do, and will cost about £30,000.

BILL TO AMEND THE MEDICAL ACT (1858).

BE it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

Preliminary.—I. This Act shall be construed as one with the Medical Act (1858), and the Acts amending the same, mentioned in the first schedule to this Act so far as they are unrepealed, and those Acts and this Act may be cited together as *The Medical Acts, 1858 to 1878*; and each of those Acts may be cited by the short title in the said schedule mentioned, and this Act may be cited as *The Medical Act, 1878*.

II. This Act shall come into operation on the first day of January, one thousand eight hundred and seventy-nine, which day is in the Act referred to as the commencement of this Act.

Registration.—III. After the commencement of this Act, the medical registrar shall not register a person in the *Medical Register* unless either such person holds a double qualification within the meaning of this Act, obtained after examination in the United Kingdom, or unless such person is a colonial or foreign practitioner entitled under this Act to be registered without examination in the United Kingdom.

For the purposes of this Act a double qualification means a qualification to practise both medicine and surgery, and shall be either—(a) a medical diploma granted by one of the medical authorities to a person who has obtained from a medical board under this Act a qualifying certificate, that is to say, a certificate that he has shown himself by examination to be qualified under this Act to practise both medicine and surgery; or (b) two of the qualifications described in Schedule A to the Medical Act, 1858, as amended by subsequent Act, of which one is a qualification granted after examination in respect of proficiency in medicine, and the other is a qualification granted after examination in respect of proficiency in surgery;

Provided that nothing in this section shall extend to a person who at the commencement of this Act is registered or entitled to be registered in the *Medical Register*, or prevent the restoration to the *Medical Register* of the name of any person who had been registered therein before such commencement, and whose name might, but for this section, have been restored to the *Register*.

IV. Where a person, who either has obtained after the commencement of this Act a double qualification within the meaning of this Act, or has obtained before the commencement of this Act, a qualification to be registered under the Medical Act, 1858, produces or sends to the medical registrar the document conferring or evidencing such qualification, with a statement of his name and address, and the other particulars, if any, required for registration, and pays the registration fee, he shall be registered in the *Medical Register*.

V. Where a person, who either is not domiciled in the United Kingdom, or has practised medicine or surgery or a branch of medicine or surgery for more than ten years elsewhere than in the United Kingdom, shows that he holds some recognised medical diploma or diplomas (as hereinafter defined) granted in a British possession, and that he is of good character, such person shall upon payment of the registration-fee be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the *Medical Register*.

VI. Where a person, who is not a British subject, or who has practised medicine or surgery or a branch of medicine or surgery for more than ten years elsewhere than in the United Kingdom, shows that he obtained some recognised medical diploma or diplomas (as hereinafter defined) granted in a foreign country, and that he is of good character, and either continues to hold such diploma or diplomas, or has not been deprived thereof for any cause which disqualifies him for being registered under this Act, such person shall upon payment of the registration-fee be entitled, without examination in the United Kingdom, to be registered as a foreign practitioner in the *Medical Register*.

VII. The medical diploma or diplomas granted in a British possession or in a foreign country, which are to be deemed recognised medical diploma or diplomas for the purposes of this Act, shall be such medical diploma or diplomas as may be recognised for the time being by the General Medical Council as entitling the holder thereof to practise medicine and surgery in such possession or country, and as representing at the time of the grant thereof a degree of knowledge, as tested by examination, equal to or greater than that which at the same time was required to obtain in the United Kingdom such qualification as entitles the holder to be registered in the *Medical Register*.

If a person is refused registration as a colonial practitioner or as a foreign practitioner, the medical registrar shall, if required by him, state in writing the reason for such refusal, and if such reason be that the medical diploma or diplomas held or obtained by him is or are not such recognised medical diploma or diplomas as above defined, such person may appeal to the Privy Council, and the Privy Council, after hearing the General Medical Council, may dismiss the appeal or may order the General Medical Council to recognise such medical diploma or diplomas, or any of them, and such order shall be duly obeyed.

VIII. Where the General Medical Council are satisfied of the eminent professional acquirements and character of any person, who for more than ten years has been practising medicine or surgery or any branch of medicine or surgery in any foreign country or elsewhere out of the United Kingdom, they may if they think fit, by a special order, direct such person to be registered in the *Medical Register* as a foreign or colonial practitioner, as the case may require, and such person, upon payment of the registration-fee, shall without examination in the United Kingdom be registered accordingly as a foreign or colonial practitioner in the *Medical Register*.

IX. 1. The *Medical Register* under the Medical Act, 1858, shall—(a) Contain in one alphabetical list all persons who are either registered at the commencement of this Act, or being entitled at the commencement of this Act to be registered are subsequently registered, and all persons who are registered in respect of a qualification obtained after the commencement of this Act in the United Kingdom; and (b) Contain in a separate alphabetical list all such colonial practitioners as are registered in pursuance of this Act; and (c) Contain in a separate alphabetical list all such foreign practitioners as are registered in pursuance of this Act.

2. The *Medical Register* shall contain the said lists made out alphabetically according to the surnames, and shall state the full names and addresses of the registered persons, the description and date of the qualifications in respect of which they are registered, and, subject to the provisions of this Act, shall contain such particulars and be in such form as the General Medical Council from time to time direct.

3. The registration-fee shall be such fee, not exceeding five pounds, as the General Medical Council from time to time fix.

4. The General Medical Council shall cause a correct copy of the *Medical Register* to be from time to time and at least once a year printed under their direction, and published and sold; and such copy shall be deemed to be the copy of the *Medical Register* referred to in section twenty-seven of the Medical Act, 1858.

5. The *Medical Register* shall be deemed to be in proper custody when in the custody of the medical registrar, and shall be of such a public nature as to be admissible as evidence of all matters therein on its mere production from that custody.

6. Subject to the orders from time to time made by the General Medical Council, the medical registrar shall inform the local registrar of every entry or alteration in the *Medical Register* which requires to be made in the local register, and the local registrar shall inform the medical registrar of any entry or alteration appearing to him to be required in the *Medical Register*.

7. The General Medical Council may, if they think fit, from time to time make, and when made, revoke and vary orders for the registration in (on payment of the fee fixed by the orders) and the removal from the *Medical Register*, of any diplomas which appear to the Council to be granted after examination by any of the medical authorities in respect of a higher degree of knowledge than is required to obtain such qualification as entitles the holder to be registered in the *Medical Register*, and orders for carrying into effect the provisions of the Medical Acts 1858 to 1878 with respect to the registers; and every registrar shall in all respects, in the execution of his discretion and duty in relation to any register, conform to such orders, and to any special directions given by the General Medical Council.

X. 1. The medical registrar shall from time to time insert in the *Medical Register* any alteration which may come to his knowledge in the name or address of any person registered.

2. The medical registrar shall erase from the *Medical Register* the name of every deceased person.

3. The medical registrar may erase from the *Medical Register* the name of a person who has ceased to practise, but not (save as hereinafter provided) without the consent of that person; and the medical registrar may send by post to a person registered in the *Medical Register* a notice inquiring whether or not he has ceased to practise; and if the registrar does not, within three months after sending the notice, receive any answer thereto from the said person, he may, within fourteen days after the expiration of the three months, send him by post in a registered letter another notice, referring to the first notice, and stating that no answer thereto has been received by the registrar; and if the

registrar, either before the second notice is sent receives the first notice back from the dead-letter office of the Postmaster-General, or receives the second notice back from that office, or does not within three months after sending the second notice receive any answer thereto from the said person, that person shall, for the purpose of the present section, be deemed to have ceased to practise, and his name may be erased accordingly.

4. In the execution of his duties, the registrar shall act on such evidence as in each case appears sufficient.

XI. The General Medical Council shall cause to be erased from the *Medical Register* any entry which has been incorrectly or fraudulently made.

Where a person registered in the *Medical Register* has, either before or after the commencement of this Act, and either before or after he is so registered, been convicted either in Her Majesty's dominions or elsewhere of an offence which, if committed in England, would be a felony or misdemeanour, or been guilty of any infamous or disgraceful conduct in a professional respect, that person shall be liable to have his name erased from the *Register*.

The General Medical Council may, and upon the application of any of the medical authorities shall, cause inquiry to be made into the case of a person alleged to be liable to have his name erased under this section; and, on proof of such conviction, or of such infamous or disgraceful conduct, shall cause the name of such person to be erased from the *Register*.

Provided that the name of a person shall not be erased under this section on account of his adopting or refraining from adopting the practice of any particular theory of medicine or surgery, nor on account of a conviction for a political offence out of Her Majesty's dominions, nor on account of a conviction for an offence which, though within the provisions of this section, does not, either from the trivial nature of the offence, or from the circumstances under which it was committed, disqualify a person for practising medicine and surgery.

XII. Where the General Medical Council direct the erasure from the *Medical Register* of the name of any person, or of any other entry, the name of that person, or that entry shall not be again entered in the *Register*, except by direction of the General Medical Council, or by order of a court of competent jurisdiction.

If the General Medical Council think fit in any case, they may direct the medical registrar to restore to the *Medical Register* any name or entry erased therefrom (either before or after the commencement of this Act), either without fee or on payment of such fee, not exceeding the registration fee, as the General Medical Council from time to time fix, and the registrar shall restore the same accordingly.

The name of any person erased (either before or after the commencement of this Act) from the *Medical Register*, at the request of such person, or with his consent, shall, unless it might, if not so erased, have been erased by order of the General Medical Council, be restored to the *Register* on his application, on payment of such fee not exceeding the registration fee as the General Medical Council from time to time fix.

XIII. The General Medical Council shall exercise the powers of erasing from, and of restoring to, the *Medical Register* the name of a person or an entry by a Committee of their own body, not exceeding five in number, of whom the quorum shall be not less than three.

The General Medical Council shall from time to time appoint and shall always maintain a Committee for the purposes of this section, and, subject to the provisions of this section, may from time to time determine the constitution, and the number and tenure of office of the members, of the Committee.

The Committee from time to time shall meet for the despatch of business; and, subject to the provisions of this section and of any regulations from time to time made by the General Medical Council, may regulate the summoning notice, place, management, and adjournment of such meetings, the appointment of a chairman, the mode of deciding questions, and generally the transaction and management of business, including the quorum, and if there is a quorum the Committee may act, notwithstanding any vacancy in their body. In the case of any vacancy, the Committee may appoint a member of the General Medical Council to fill the vacancy until the next meeting of that Council.

A Committee under this section shall exercise in the name of the General Medical Council all powers vested in that Council of or incidental to the erasing from or restoring to the *Medical Register* the name of a person or an entry, and for the purpose of the exercise of such powers may, at the expense of the Council, employ such legal or other assessor or assistants, and institute and defend such legal proceedings as the Committee think necessary or proper.

Examination Rules.—XIV. Whereas, under the Medical Act, 1858,

the General Medical Council has certain duties as regards the superintendence of the examinations to be gone through in order to obtain qualifications for registration from the medical authorities, and it is expedient to give to that Council further powers for the performance of those duties, in order that the double qualification may be granted on the like terms in all cases. Be it therefore enacted as follows:

1. The General Medical Council shall from time to time frame, and when framed may revoke, alter, and add to rules (in this Act referred to as examination rules), for regulating the examinations of persons desiring to obtain a double qualification within the meaning of this Act, and determining the subjects thereof and the standard for passing and the method of conducting the same, and providing for the superintendence thereof by such Council.

2. The examination rules shall not require a candidate to adopt or refrain from adopting the practice of any particular theory of medicine or surgery.

3. The examination rules shall determine the conditions of admission of candidates to the examinations, and shall provide for the admission thereto on special terms of persons who have obtained medical diplomas or studied in any British possession or foreign country, or have passed other examinations.

4. The examination rules shall provide for the admission of women to the examinations, provided that—(a) they shall not compel any medical authority, who at the passing of this Act have not any obligation to grant and have not granted a medical diploma to women, to admit a woman to examination for a qualification granted by that authority; and (b) they shall not compel a woman, in order to obtain such qualification as will entitle her to be registered in the *Medical Register*, to pass, if she object so to do, the same examination as men, without any distinction on the ground of sex.

5. The examination rules, and the revocation or alteration thereof, so far as they relate to the admission of candidates, shall be submitted to the Privy Council for confirmation; and the Privy Council, after giving to the medical authorities an opportunity for objecting, and after considering any objection made, may, if they think fit, by order confirm such rules, revocation, or alteration, either without modification, or with any modifications therein of which notice has been given to the medical authorities and General Medical Council.

6. If any medical authority feel aggrieved by any of the examination rules, or if any authority or persons feel aggrieved by the failure of those rules to recognise any particular examination or any particular place or course of study, such authority or persons may appeal to the Privy Council; and the Privy Council, after communication with the General Medical Council, may make such order in the matter as they think just, which order shall be duly observed.

7. If the Privy Council refuse to confirm any examination rules, the General Medical Council shall, as soon as may be, propose to the Privy Council new rules.

8. If it appears to the General Medical Council that any medical authority fail to comply with the examination rules, they may represent the same to the Privy Council; and, upon such representation, sections twenty-one and twenty-two of the Medical Act (1858) shall, so far as circumstances admit, apply as if the representation were a representation within the meaning of those sections.

Board for Medical Examinations.—XV. Whereas, by section nineteen of the Medical Act (1858), any two or more of the medical authorities are authorised, with the sanction of the General Medical Council, to unite in conducting the examinations required for qualifications to be registered under that Act, and it is expedient to make further provision with respect to such union. Be it therefore enacted as follows:

Any two or more of the medical authorities may agree to frame, with the sanction of the General Medical Council, a scheme for appointing persons to examine on behalf of all the authorities who are parties to the scheme persons who desire to practise medicine and surgery, and such scheme when confirmed, as hereinafter mentioned, shall, so far as is consistent with the other provisions of this Act, have full effect, and the persons in whom the nomination of the examiners is vested by the scheme are in this Act referred to as a medical board.

Where any two or more of the medical authorities have before the passing of this Act agreed, with the sanction of the General Medical Council and the approval of the Privy Council, upon any such scheme as aforesaid, that scheme is hereby confirmed and shall come into operation at the commencement of this Act without any further confirmation.

In any other case the General Medical Council may submit the scheme as sanctioned by them to the Privy Council for confirmation, and the Privy Council, after considering any objection made, may, if they think fit, by order confirm the scheme, either without modifica-

tion, or with any modification therein made after communication with the medical authorities concerned and the General Medical Council.

Such scheme when confirmed shall come into operation on the date of the order confirming it, or any later date mentioned in the order.

XVI. A medical board under a scheme shall from time to time hold examinations according to the scheme, and subject thereto in such manner and at such places and times as the board think expedient.

A medical board shall comply with the examination rules under this Act as well as with the scheme, and shall have the same opportunity as a medical authority of objecting to any examination rules, and of applying to the Privy Council respecting them.

The General Medical Council and the Privy Council respectively shall have the same power and authority in relation to a medical board under a scheme, and to the examinations held by them, as they have under the Medical Act, 1858, in relation to the medical authorities parties to that scheme and sections eighteen to twenty-three, both inclusive, of the Medical Act, 1858, so far as unrepealed shall apply as if there were herein re-enacted and in terms made applicable to the board as well as to the said medical authorities, and any order made thereunder shall apply as well to the said authorities as to the board; and if the General Medical Council represent to the Privy Council that a medical board fail to comply with the scheme or examination rules, the above-named sections shall, so far as circumstances admit, apply as if the representation were a representation within the meaning of those sections.

XVII. A medical board under any scheme, as soon as may be after the close of each examination held by them for qualifying certificates, shall with respect to each of the persons who have passed such examination, and paid the required fees, certify that he has shown by examination that he is qualified under this Act to practise both medicine and surgery, and shall do so by sending to the medical registrar and to every medical authority party to such a scheme, a list, certified by the board, of the names and addresses of all such persons.

Every person named in such list shall be deemed to have obtained a qualifying certificate under this Act from such board, and shall be entitled on application to receive from any medical corporation being a party to the scheme, one of the medical diplomas which that corporation have for the time being power to grant, but shall be entitled to receive from each medical corporation such one only of those diplomas as that corporation from time to time provide, and shall not, except so far as the medical corporation otherwise in their discretion provide, be entitled to any share in the government, management, or proceedings of that corporation, or to any rights or privileges in connection with that corporation.

If a medical authority certify to the medical registrar the names and addresses of the persons who, having obtained qualifying certificates under this Act from a medical board, have received medical diplomas from that authority, together with the other particulars required for the registration of such persons, the registrar may register every such person, upon payment of the registration fee, in the *Medical Register* without application from that person.

XVIII. A scheme for amending any previous scheme in operation under this Act for a medical board, or for revoking such scheme and making a new scheme, may from time to time be agreed or submitted and confirmed, and when confirmed shall come into operation, in like manner as near as may be as an original scheme under this Act.

A scheme under this Act, besides providing for the constitution, proceedings, powers, and duties of the medical board, may provide for the relations between the board and other boards and the General Medical Council, and for the fees to be paid on admission to the examinations of the board, and the application of such fees, and generally for such matters as appear to be necessary or proper for carrying into effect the scheme.

Medical Authorities.—XIX. Every medical authority shall give to the General Medical Council such information respecting a registered practitioner who has received a diploma from that authority, and respecting the grant or withdrawal of diplomas by that authority, as the General Medical Council from time to time require.

XX. A medical authority without prejudice to any other power vested in them may from time to time by a statute or by-law made with the approval of the Privy Council constitute a new medical diploma to be granted by them to persons who have obtained qualifying certificates from a medical board under this Act, and may attach to that diploma such rights and privileges in connection with the said authority as may be from time to time provided by any such statute or by-law.

The power of a medical authority under this Act or otherwise to grant a medical diploma shall extend to the granting of that diploma

to persons of both sexes, provided that—(1) this enactment shall not render compulsory the exercise of that power; and (2) a woman who receives a medical diploma from a medical authority who at the commencement of this Act have not any obligation to grant, and have not before the commencement of this Act granted a medical diploma to any woman, shall not, in respect of that diploma, except so far as the medical authority otherwise in their discretion provide, be entitled to any share in the government, management, or proceedings of that authority.

XXI. Nothing in any Act or in any charter, statute, or by-law, shall prevent a medical authority from carrying into effect a scheme for a medical board or other scheme under this Act, or otherwise from carrying into effect this Act, but such medical authority without prejudice to any other power of repealing or altering may, by a statute or by-law made, with the approval of the Privy Council, repeal, or alter a provision of any Act, charter, statute, or by-law which appears to be inconsistent with such scheme or with this Act, or which it appears to be necessary or proper to repeal or alter for the purpose of carrying into effect the scheme or this Act, and the statute or by-law when so approved, shall have effect as if it were enacted in this Act.

Unregistered Persons.—XXII. If a person who for gain either practises medicine or surgery, or a branch of medicine or surgery, or is engaged in the cure or treatment of diseases or injuries, and is not for the time being registered in the *Medical Register*, takes or uses the designation of any qualification or medical diploma which entitles a person to be so registered (including any recognised medical diploma granted in a British possession or foreign country), or the designation of licentiate in or professor of medicine and surgery, or medicine or surgery or a branch of medicine or surgery, or the designation of physician, surgeon, apothecary, or doctor, or any designation used to distinguish registered practitioners of medicine or surgery or of a branch of medicine or surgery, or any designation implying that he has obtained a qualifying certificate under this Act, or is registered or entitled to be registered in the *Medical Register*, or is duly qualified to practise medicine or surgery or a branch of medicine or surgery, he shall for every such offence be liable, on summary conviction, to a fine not exceeding twenty pounds.

Provided that a person shall not be liable to such fine if he shows that he is not ordinarily resident in the United Kingdom, and holds a medical diploma which entitles him to practise in a British possession, or foreign country.

If a person who for gain either practises medicine or surgery, or a branch of medicine or surgery, or is engaged in the cure or treatment of diseases or injuries, wilfully takes or uses any of the above-mentioned designations to which he is not entitled, he shall for every such offence be liable on summary conviction to a fine not exceeding twenty pounds.

If a person not for the time being registered in the *Medical Register* gives any certificate which, under the Medical Act 1858 is invalid unless signed by a person so registered, he shall be liable on summary conviction to a fine not exceeding twenty pounds.

A prosecution for an offence under this section shall not be instituted by a private person, except with the consent of the General Medical Council, or of some branch medical council, but may be instituted by the General Medical Council, by a branch medical council, or by a medical authority, if such Council or authority think fit.

This section shall not prevent a person, who lawfully holds a license in dentistry or in dental surgery of, or a certificate of fitness to practise as a dentist from, any of the medical authorities, from taking or using the designation of licentiate in dentistry or in dental surgery, or of certified dentist, and shall not prevent a person from using the designation of midwife, nor, if such person lawfully holds a license in midwifery of, or a certificate of fitness to practise as a midwife from, any of the medical authorities, from taking or using the designation of licentiate in midwifery or certified midwife, and shall not impose a fine on such person for taking or using such designation.

Dentists.—XXIII. 1. The General Medical Council may, if they think fit, submit to the Privy Council a scheme for the examination, licensing, and registration, under the control of the General Medical Council, of dentists, and such scheme when approved by the Privy Council shall have effect as part of this Act, subject to being from time to time revoked, altered, and added to, by a subsequent scheme submitted by the General Medical Council to, and approved by, the Privy Council.

2. The examinations may be conducted by any medical board or boards, authority or authorities, who consent thereto, or by persons appointed by the General Medical Council or otherwise, as provided by the scheme.

3. Every person who is certified to have shown by his examination that he is qualified to practise dentistry shall be licensed, either by the General Medical Council or by a medical authority, as may be provided by the scheme, to practise dentistry, and be entered in the dentists' register upon payment of such registration fee, not exceeding five pounds, as may be fixed by the scheme.

4. There shall also be entered in the dentists' register in one alphabetical list with the above-mentioned licentiates, every person for the time being registered in the *Medical Register* who applies to be entered in the dentists' register and pays the said registration fee, and also every person who at the date of the scheme coming into operation—(a) holds a license in dentistry or in dental surgery of, or a certificate of fitness to practise as, a dentist from any of the medical authorities; or (b) is *bonâ fide* engaged in the practice of dentistry either separately or in conjunction with the practice of other branches of medicine or surgery; and claims to be registered before the expiration of twelve months after the scheme comes into operation, or any longer period allowed by the scheme, and produces sufficient evidence of his title so to be registered, and pays the said registration fee.

5. There shall be also entered in the dentists' register, in separate alphabetical lists, such colonial or foreign dentists as are authorised by the scheme to be so registered, and the scheme shall make the like provision for the registration of colonial and foreign dentists as is made by this Act with respect to the registration of colonial and foreign practitioners in the *Medical Register*.

6. The scheme may provide for the like matters as can be provided for by a scheme for a medical board, and also for applying to dentists with such modifications and exceptions as are contained in the scheme, the provisions of the Medical Acts 1858 to 1878, with respect to examination rules, to medical boards, to registers (including the provisions respecting falsification, or false or fraudulent representation or declaration), and to erasure from and restoration to the *Register*, subject as follows—(a) The registration of a person in the dentist's register shall entitle that person to practise dentistry, but not any other branch of medicine or surgery, and shall not entitle him to assume any designation which a person not registered in the *Medical Register* is forbidden by this Act to assume, except that a person registered in the dentists' register may take and use the designation of dentist, or dental practitioner, or any designation implying that he is duly qualified to practise dentistry, so that such designation do not imply that he is duly qualified to practise any other branch of medicine or surgery; (b) The register of dentists shall be from time to time, and at least once a year, printed, published, and sold, either in one volume with the *Medical Register*, or separately, as the General Medical Council from time to time direct.

7. After a scheme under this section comes into operation, a person shall not be entitled to recover any charges for any advice, attendance, or operation in relation to dentistry, unless he is registered in the *Medical Register*, or in the dentists' register, under this section.

8. After a scheme under this section comes into operation, if a person who for gain practises dentistry, and is not registered in the *Medical Register* or in the dentists' register under this section, takes or uses the designation of dentist, either alone or in combination with other words, or of dental practitioner, or any designation implying that he is registered in the dentists' register, or that he is duly qualified to practise dentistry, such person shall be liable on summary conviction to a fine not exceeding twenty pounds.

Provided that a person shall not be liable to such fine if he shows that he is not ordinarily resident in the United Kingdom, and is entitled by law to practice dentistry in a British possession or some foreign country, and did not use a designation implying that he is registered in the dentists' register.

9. A prosecution for an offence under this section shall not be instituted by a private person, except with the consent of the General Medical Council, or of some branch medical council, but may be instituted by the General Medical Council, by a branch medical council, or by a medical authority, if the Council or authority think fit.

Midwives.—XXIV. 1. The General Medical Council may, if they think fit, submit to the Privy Council a scheme for the examination, licensing, and registration, under the control of the General Medical Council, of midwives; and such scheme, when approved by the Privy Council, shall have effect as part of the Act, subject to being from time to time revoked, altered, and added to by a subsequent scheme submitted by the General Medical Council to, and approved by, the Privy Council.

2. The examinations may be conducted by any medical board or boards, authority or authorities, who consent thereto, or by persons appointed by the General Medical Council, or otherwise as provided by the scheme.

3. Every person who is certified to have shown by her examination that she is qualified to practise midwifery shall be licensed, either by the General Medical Council or by a medical authority, or otherwise as may be provided by the scheme, to practise midwifery, and be entered in the midwives' register, upon payment of such registration fee, not exceeding five pounds, as may be fixed by the scheme.

4. There shall also be entered in the midwives' register in one alphabetical list with the above-mentioned licentiates every person not registered in the *Medical Register* who at the date of the scheme coming into operation—(a) holds a licence in midwifery of, or a certificate of fitness to practise as a midwife from, any of the medical authorities; or (b) is *bonâ fide* engaged in the practice of midwifery, and who claims to be registered before the expiration of twelve months after the scheme comes into operation, or any longer period allowed by the scheme, and produces sufficient evidence of her title to be so registered, and pays the registration fee.

5. The scheme may provide for local examinations and local registers; and any justices, commissioners, grand jury, council, board, or other local authority having any power of local government or of rating, may, if they think fit, undertake at their own expense any power given to them by a scheme under this section in relation to examinations and registers; and, if they do so, shall have the same power of instituting prosecutions for offences under this section as is given to a branch medical council.

6. The scheme may also provide for the like matters as can be provided for by a scheme for a medical board, and also for applying to midwives, with such modifications and exceptions as are contained in the scheme, the provisions of the Medical Acts 1858 to 1878 with respect to medical boards, to examination rules, to registers (including the provisions respecting falsification, or false or fraudulent representation or declaration), and to erasure from, and restoration to, the *Register*; subject as follows: (1.) The registration of a person in the midwives' register shall entitle that person to practise midwifery, but not any other branch of medicine or surgery, and shall not entitle that person to assume any designation which a person not registered in the *Medical Register* is forbidden by this Act to assume; except that a person registered in the midwives' register may take or use any designation implying that such person is duly qualified to practise midwifery. (2.) The register of midwives shall be from time to time, and at least once a year, printed, published, and sold, as directed by the scheme and subject thereto, either in one volume with the *Medical Register*, or separately, as the General Medical Council from time to time direct.

After a scheme under this section comes into operation, if any person who, for gain, practises midwifery, and is not registered in the *Medical Register* or in the midwives' register under this section, takes or uses the designation of registered midwife, or any designation implying that such person is registered in the midwives' register, or is duly qualified to practise midwifery, such person shall be liable, on summary conviction, to a fine not exceeding five pounds.

Provided that a person shall not be liable to such fine if she shows that she is not ordinarily resident in the United Kingdom, and is entitled by law to practise midwifery in some British possession or foreign country, and did not use a designation implying that she is registered in the midwives' register.

A prosecution for an offence under this section shall not be instituted by a private person, except with the consent of the General Medical Council or of some branch medical council, but may be instituted by the General Medical Council, by a branch medical council, or by a medical authority, if the Council or authority think fit.

Miscellaneous.—XXV. All powers vested in the Privy Council by the Medical Acts 1858 to 1878 may be exercised by any two or more of the Lords and others of Her Majesty's most honourable Privy Council.

Any order made by the Privy Council or any appeal to them under this Act, may be made conditionally or unconditionally, and may make such terms and directions as to the Privy Council seem just.

XXVI. The General Medical Council may delegate to any branch medical council, medical board or boards, medical authority or authorities, or to any person or persons consenting thereto, the duty of framing any examination rules, or of framing any scheme for the purposes of this Act, and such rules and scheme when so framed, if approved by the General Medical Council, may be submitted by them to the Privy Council in like manner as if they had been framed by the General Medical Council.

XXVII. Any offence under this Act which may be prosecuted on summary conviction, and any fine under this Act recoverable on summary conviction, may be prosecuted and recovered in like manner as an offence and penalty under the Medical Act, 1858.

XXVIII. All fines under this Act, save as herein expressly pro-

vided, and all penalties under the Medical Act, 1858, shall, notwithstanding anything in any Act relating to municipal corporations or to the metropolitan police courts, or in any other Act, public or local, be paid to the treasurer of the General Medical Council.

XXIX. Where by an Act relating to lunatics or lunatic asylums a certificate is required from a physician, surgeon, apothecary, or medical practitioner, such certificate may be given by any registered medical practitioner, in any part of the United Kingdom.

If such practitioner gives a certificate under any such Act which states or certifies anything falsely, or gives a certificate for admitting a lunatic into an asylum or house in which such practitioner or his father, son, brother, or other relative, or his partner is interested, or of which he is the medical attendant, he shall be guilty of a misdemeanour, and be liable to fine or imprisonment, or both.

A person, not being a registered medical practitioner, who signs a certificate under any such Act in which he is described as a physician, surgeon, apothecary, or medical practitioner, shall be guilty of a misdemeanour, and liable to fine or imprisonment, or both.

A medical practitioner who gives a certificate under any such Act without having seen and carefully examined the person named therein, or in any way gives the same contrary to the provisions of such Act, shall be liable on summary conviction to a fine not exceeding fifty pounds.

Where the certificate in respect of which the offence was committed purported to be granted under an Act relating to lunatics or lunatic asylums in England, an offence against this section, wherever committed, may be prosecuted by the secretary to the Commissioners of Lunacy, or by the clerk of any visitors of lunatics, or by some person authorised by the Attorney-General or Solicitor-General for England, or such commissioners or visitors, and not otherwise.

Where the certificate in respect of which the offence was committed purported to be granted under an Act relating to lunatics or lunatic asylums in Scotland, an offence against this section, wherever committed, may be prosecuted, and a fine under this section may be recovered, on proceedings taken by the secretary to the General Board of Lunacy in Scotland, or by the procurator fiscal, or by some person authorised by the Lord Advocate, General Board of Lunacy, or procurator fiscal, and not otherwise.

All fines under this section shall be payable and applied in like manner as fines under the Act relating to the certificate in respect of which the offence was committed.

XXX. Nothing in the Medical Act, 1858, shall prevent a person holding a medical diploma entitling him to practise medicine or surgery in a British possession from holding an appointment in a vessel registered in that possession.

XXXI. An order confirming a scheme or examination rules under this Act, and the scheme and rules therein referred to, shall be deemed to have been duly made and authorised by this Act, and the validity thereof shall not be questioned in any legal proceedings whatever.

Every such order, together with the scheme and rules therein referred to, shall be laid before both Houses of Parliament as soon as conveniently may be after it is made, if Parliament be then in session, and if not, after the beginning of the then next session of Parliament.

XXXII. Subject to the other provisions of this Act, all notices and documents required by or for the purposes of this Act to be sent may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of post; and in proving such sending it shall be sufficient to prove that the letter containing the notice or document was prepaid, and properly addressed, and put into the post.

Such notices and documents may be in writing or in print, or partly in writing and partly in print, and when sent to the General Medical Council, or a medical board, or a medical authority, shall be deemed to be properly addressed, if addressed to the General Medical Council, medical board, or medical authority, or to some officer of such council, board, or authority, at the principal office or place of business of such council board or authority; and when sent to a person registered in the *Medical Register*, shall be deemed to be properly addressed if addressed to him according to his address registered in that register.

XXXIII. In this Act, unless the context otherwise requires, the expression "General Medical Council" means the General Council of Medical Education and Registration of the United Kingdom; the expression "medical authorities" means, as regards each part of the United Kingdom, the authorities in that behalf mentioned in the in the second schedule to this Act; the expression "medical corporations" means as regards each part of the United Kingdom, such of the medical authorities of that part as are not universities; the expression "diploma" means any diploma, degree, fellowship, mem-

bership, licence, letters testimonial, certificate, or other title, status, or document granted by any university, corporation, college, or body; the expression "medical diploma" means a diploma in respect of medicine or surgery, or some branch of medicine or surgery, and includes a licence or authority to practise medicine or surgery granted by any department of or persons acting under the authority of the government of the country or place (whether within or without Her Majesty's dominions) in which the licence or authority is granted; the expression "British Possession" means any part of Her Majesty's dominions, exclusive of the United Kingdom; the expression "medical registrar" means the registrar of the General Medical Council, and the expression "local registrar" means a registrar of a branch medical council, and this Act should apply, so far as circumstances admit, to the local registrar for England as if he were a different person from the medical registrar; the expression "medical register" means the register kept by the medical registrar in pursuance of the Medical Act, 1858, as amended by this Act.

XXXIV. The Acts mentioned in the third schedule to this Act are hereby repealed to the extent in the third column of that schedule mentioned, as from the commencement of this Act; provided that this repeal shall not affect anything done or suffered, or any right or title acquired or accrued, or any offence committed, before such repeal takes effect, or any remedy or proceeding in respect thereof, or any power of the General Medical Council to make any order in relation thereto; and any person entitled before such commencement to be registered in the *Medical Register* may be registered accordingly.

FIRST SCHEDULE.—*The Medical Acts.*

Year and Chapter of Act.	Title.	Short Title.
21 and 22 Vict., c. 90 ..	An Act to regulate the qualifications of practitioners in medicine and surgery	The Medical Act (1858)
22 Vict., c. 21	An Act to amend the Medical Act (1858)	The Medical Act (1859)
25 and 26 Vict., c. 91 ..	An Act to incorporate the General Council of Medical Education and Registration of the United Kingdom, and for other purposes	The Medical Act (1862)
31 and 32 Vict. c. 29 ..	An Act to amend the law relating to medical practitioners in the colonies	The Medical Act Amendment Act (1868)
39 and 40 Vict., c. 40 ..	An Act for enabling legally qualified medical practitioners to hold certain public medical appointments, and for amending the Medical Acts	The Medical Practitioners Act (1876)

SECOND SCHEDULE.—*Medical Authorities.*

MEDICAL AUTHORITIES OF ENGLAND.

The University of Oxford.	The Royal Coll. Phys. of London.
The University of Cambridge	The Royal Coll. Surgs. of England.
The University of Durham.	The Apothecaries Society of London.
The University of London	

MEDICAL AUTHORITIES OF SCOTLAND.

The University of Edinburgh.	The Royal Coll. Phys. of Edin.
The University of Aberdeen	The Royal Coll. Surgs. of Edin.
The University of Glasgow	The Faculty of Physicians and Surgeons of Glasgow.
The University of Saint Andrew's	

MEDICAL AUTHORITIES OF IRELAND.

The University of Dublin	The Royal College of Surgeons in Ireland.
The Queen's University in Ireland.	
The King & Queen's Coll. Phys. Irl.	The Apothecaries Hall of Ireland.

THIRD SCHEDULE.—*Acts Repealed.*

Note.—A description or citation in this schedule of a portion of an Act is inclusive of the words, section, or other part first or last mentioned, or otherwise referred to as forming the beginning or as forming the end of the portion described in the description or citation.

Date and Chapter of Act.	Title.	Extent of Repeal.
3 Hen. VIII, c. 11 ..	An Act concerning physicians and surgeons	The whole Act
5 Hen. VIII, c. 6. . .	An Act that surgeons be discharged of constableness and other things	The whole Act
14 and 15 Hen. VIII, c. 5.	An Act concerning physicians	Section three and so much of the residue as restricts persons not admitted by the College of Physicians from practising medicine or surgery
32 Hen. VIII, c. 40 ..	Concerning physicians	The whole Act

[Table continued.]

Date and Chapter of Act.	Title.	Extent of Repeal.
32 Hen. VIII, c. 42 ..	Concerning barbers and chirurgions	Section one from "and that all persons of the said company" to the end of the section so far as regards surgeons; sections two & four, and so much of section five as relates to surgeons
34 & 35 Hen. VIII, c. 8 ..	An Acte that persones being no cōen surgeons maie mynistr medicines outwards	The whole Act
13 Geo. II, c. 15 ..	An Act for making the surgeons of London and the barbers of London two separate and distinct corporations	Sections nine and ten and so much of the residue of the Act as restricts persons not tried and examined as therein mentioned from practising surgery
55 Geo. III, c. 194 ..	An Act for better regulating the practice of apothecaries throughout England and Wales	So much as restricts persons who have not obtained such certificates as therein mentioned from practising medicine or surgery
21 and 22 Vict., c. 90 ..	The Medical Act	Section 14 from "and " to erase" to the end of the section, section 15, section 16 from "as nearly" to end of section, section 19, section 24 down to "education being one of them and", section 25, section 26, section 27 down to "called the Medical Register and", section 28, section 29, section 30, section 40, Schedule A. from "or doctor of medicine by doctorate granted" to end of schedule, and Schedule D.
22 Vict., c. 21 ..	An Act to amend the Medical Act (1858)	The whole Act except section four
36 and 37 Vict., c. 55 ..	The Medical Act (University of London), 1873	The whole Act
37 and 38 Vict., c. 34 ..	The Apothecaries Act Amendment Act (1874)	Sections two and three
38 and 39 Vict., c. 43 ..	The Medical Act Royal College of Surgeons of England (1875)	The whole Act
39 and 40 Vict., c. 41 ..	An Act to remove restrictions on the granting of qualifications for registration under the Medical Act, on the ground of sex.	The whole Act

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting of the Fellows was held on Monday last, the 19th instant, to consider whether, under any circumstances, the College was prepared to grant its licence to practise physic to women.

The following resolution was moved by Sir G. Burrows, and seconded by Dr. West: "The Royal College of Physicians, having considered the important question of granting licences to practise physic to women, resolves—That the College do steadily adhere to the terms of its charter, and do not grant its licence to practise physic to women."

An amendment was moved by Dr. Maudsley, and seconded by Dr. J. Pollock—"That this College is prepared to grant its licence to women who submit to all the requirements of medical study and the tests of examination which it considers sufficient for men." The amendment, on being put, was lost. The original motion was carried by a large majority.

CONJOINT COMMITTEE ON THE COUNTY GOVERNMENT BILL.

ON Wednesday (the 14th instant) a meeting of the Conjoint Committee of the British Medical and Social Science Association was held under the presidency of Mr. Powell. The attendance was large. A letter was read from Dr. Stewart, resigning the membership of the Committee on the ground of ill-health, and was received with expressions of sorrow and acknowledgments of his long and valuable services. Mr. Michael and Captain Clode having expressed a wish also to retire, a subcommittee was appointed to report as to the secretariat in the constitution of the Joint Committee. A long discussion took place on the County Government Bill, resulting in a resolution that the secretaries should draw up a memorial to the Government, and submit the same at the next meeting of the Joint Committee.

THE MEDICAL ACTS AMENDMENT BILL.

WE understand that the General Medical Council will be summoned to meet on April 10th, in order to consider the Medical Acts Amendment Bill of the Government.

HOSPITAL AND DISPENSARY MANAGEMENT.

SUSSEX COUNTY HOSPITAL.

THE annual Court of the Governors of the Sussex County Hospital was held lately. The Earl of Chichester was appointed Treasurer. The balance-sheet adopted showed an excess of expenditure over receipts amounting to £943. Three resolutions, embodying a proposal for the establishment of a Convalescent Home in immediate connection with the Hospital, provoked a long discussion. The principle was approved; but, on an amendment, the matter was referred back to the Committee to report on details.

THE INCOMES OF MEDICAL CHARITABLE INSTITUTIONS.

THE following comparative statement of the incomes of the metropolitan medical charitable institutions for the years 1875-6 and 1876-7 is taken from the new edition of the *Classified Directory to the Metropolitan Charities*. Where the income has decreased, it is indicated by italics.

	1875-6.	1876-7.
18 General Hospitals	£269,337 0 0 ..	£315,517 0 0
10 Consumption Hospitals	45,911 0 0 ..	46,136 0 0
5 Ophthalmic Hospitals	12,833 0 0 ..	13,134 0 0
3 Orthopaedic Hospitals	4,039 0 0 ..	3,467 0 0
4 Skin-Hospitals	3,050 0 0 ..	4,024 0 0
17 Hospitals for Women and Children ..	55,326 0 0 ..	54,304 0 0
5 Lying-in Hospitals	7,076 0 0 ..	7,327 0 0
23 Miscellaneous Special Hospitals ..	89,294 0 0 ..	100,001 0 0
	£486,918 0 0	£542,909 0 0
33 General Dispensaries	23,003 0 0 ..	26,842 0 0
13 Provident Dispensaries	9,256 0 0 ..	8,638 0 0
2 Institutions for Vaccination	2,750 0 0 ..	2,700 0 0
5 Ditto for Surgical Appliances	10,337 0 0 ..	9,157 0 0
33 Convalescent Institutions	39,719 0 0 ..	49,245 0 0
13 Nursing Institutions	3,642 0 0 ..	9,181 0 0
	£83,707 0 0	£96,783 0 0

THE LEEDS HOSPITAL FOR WOMEN AND CHILDREN.

THE twenty-fifth annual report of this institution has lately been published, and shows that the hospital has been actively at work during 1877. During the year, 350 in-patients were treated, and 1,190 out-patients. This shows a decrease in the number of out-patients, as compared with 1876; and we gladly accept the statement, in the report, that this arises from the greater discrimination which has been exercised in the out-patient department in admitting persons to the benefits of the charity. The report adds: "With reference to the out-patient system at public hospitals, your medical officers are quite aware that it is liable to abuse and requires reforming; and a growing feeling exists in the metropolis, and in all our large cities and towns, that more care should be exercised with regard to the indiscriminate reception of out-patients; and that the expenditure of the funds of the medical charities should be more carefully administered; and that the working classes in good wages should be induced and encouraged to provide, by means of sick clubs, self-supporting dispensaries, and other agencies for medical aid, for themselves and families without charitable assistance."

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY.

THE annual meeting of this institution was recently held in the Town Hall, Cardiff. From the report, it appears that a larger number of patients had been relieved at the infirmary during 1877 than in any previous year. Indeed, in the out-patient department, the increase has been so considerable that it has been found necessary to appoint three additional medical officers with special charge of out-patients. Upon this subject, Dr. Sheen made some excellent remarks. Referring to the increased number of out-patients, he said there were various ways of looking at that fact. He regarded it as by no means a subject for congratulation; rather for regret; for he was firmly convinced, from his experience of six or seven years, that a large number of people were receiving the benefits of the institution who were not fit and proper objects of charity—people in a position to pay a small fee to a medical man, or a contribution to a club. The working men of Cardiff and its

neighbourhood subscribed to the infirmary, during the year, £678, through their "Saturday Committee". This serves to show how much they might do for themselves, if they were encouraged to form a system of provident dispensaries.

TWICKENHAM PROVIDENT DISPENSARY.

THIS dispensary has issued its first report; but, as the institution has only been in existence six months, we can scarcely expect that much progress has been made, especially when we remember the difficulties which all provident dispensaries in and around the metropolis have to contend with. We observe that the first three months were almost entirely occupied in making the dispensary known. In the next three months, two hundred and fifty members were enrolled. In such a place as Twickenham, there must be plenty of scope for such an institution. We trust the managers will persevere in their good work, being assured that the current of public and professional opinion is setting in their favour, and that they cannot assist their poorer neighbours in a better way than by helping them to provide against the time of sickness.

THE CHILDREN'S HOSPITAL, MANCHESTER.

ON January 30th, three new pavilions were opened in connection with the Children's Hospital, Manchester; and thus the buildings which have recently been erected at Pendlebury were completed. The structure consists of a front administrative block, a spacious corridor one hundred yards long, and six pavilions branching off from it. It is considered to equal, if not to surpass, any hospital in the kingdom which is devoted to the same purpose. It contains one hundred and sixty-eight beds, and the total cost has been about £40,000. It is situated three or four miles out of the city; but this disadvantage, if it be a disadvantage, is compensated by the dispensary which the board maintains in Gartside Street, and which is in constant communication with the hospital. Thus the dispensary is in the midst of the population, while the patients who are admitted through it into the hospital have all the benefits of the country. Another novel plan is, we understand, about to be adopted; the medical staff are to be paid for their services. This system, though general on the Continent, is not common in this country; but there is much to be said in favour of it.

HOSPITAL REFORM.

Sir,—A statement has just been published, on the authority of the Honorary Secretary, that, during the year 1877, the Governors of the London Hospital "have been compelled to sell out £21,770 Stock, besides borrowing nearly £5,000, in order to meet the current expenses".

It seems to me that a large number of people must be prevented from subscribing to hospitals by their pertinacious neglect of reform. I have myself been reluctantly holding back for some years on this account, anxiously waiting for the improved administration repeatedly advocated by leading members of the medical profession. A system of inquiry into the circumstances of each applicant ought surely to be adopted. Persons found to be in a position to contribute towards the cost of their treatment should be made to do so; and those who have received parish relief, unless requiring special treatment, should be referred to the workhouse infirmaries. I know, from my own experience, that the London Hospital, for instance, habitually admits what may be termed ordinary "pauper" cases requiring no special treatment, and that persons suffering from ordinary illnesses exchange the workhouse infirmaries for that hospital with impunity. The plan suggested would augment the funds, obviate the necessity of refusing admission to many legitimate cases for whom at present there is frequently no room, and also tend to encourage thrift.

I am, sir, your obedient servant, A. G. CROWDER.

* * Mr. Crowder's long experience in East-end work entitles him to speak with authority and unusual personal knowledge. We have long since arrived at similar conclusions, and indeed only recently pointed briefly the moral which Mr. Crowder has forcibly expressed. The present management of the out-patients' department of hospitals is, we fully believe, morally more injurious to the population than it is physically beneficial; and the interests of science, of charity, and public economy alike suffer from the neglect and indifference with which hospital governors have long treated this vital question. In the letters which we published during the last year from a member of the Charity Organisation Society, a mass of information will be found on this subject, and we trust that the efforts of the Committee of the British Medical Association, appointed at the last annual meeting, will assist in bringing about some general measure of reform.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Faculty of Medicine.—Clinical Teaching at the Hôtel-Dieu.—The Paris Municipal Council and Hospital Nurses.—The New Hôtel-Dieu.—The Saint-Louis Hospital.

THE winter session of the Faculty of Medicine closed on the 15th instant, and the summer session began the next day. The following is a list of the professors who are to lecture during the course: Natural History, M. Baillon.—Physiology, M. Béclard.—Morbid Anatomy, M. Charcot.—Surgical Pathology, M. Guyon.—Medical Jurisprudence, M. Rigal (officiating for M. Tardieu).—Pharmacology, M. Regnaud.—Obstetrics, M. Charpentier (officiating for M. Pajot).—Experimental and Comparative Pathology, M. Vulpian.—Medicine, M. Peter.—Hygiene, M. Bouchardat.—Therapeutics and Materia Medica, M. Gubler.—Clinical Medicine, MM. Sée (Hôtel Dieu); Lasègue (La Pitié); Hardy (La Charité); Potain (Necker).—Clinical Surgery, MM. Gosse (La Charité); Richet (Hôtel Dieu); Broca (Necker); Verneuil (La Pitié).—Clinical Obstetrics, M. Depaul (Hôpital des Cliniques).

Although the Hôtel Dieu has been occupied for some months, yet, owing to insufficiency of material, from the small number of patients allotted to each clinical professor and the unfinished state of the building, the clinical lectures in Medicine and Surgery could not be proceeded with. Even now, it is not known when these lectures will begin, as the number of patients has not been increased, and the operating theatres or lecture-rooms are not quite finished. The new Hôtel Dieu is intended to contain four hundred and thirty-two beds, which in cases of emergency may be increased to five hundred; but owing to a decision of the Municipal Council, which is omnipotent, they are reduced to half the first-mentioned number to prevent, as has been alleged, the evil effects of overcrowding. According to this arrangement, there are six wards wholly unoccupied, and the clinical professors, who in the old hospital used to have about one hundred patients each of both sexes, are now reduced to half that number. This decision of the Municipal Council has caused great disaffection among the hospital staff.

I may bring to notice another instance of officious, unjustifiable, and uncalled-for interference on the part of the Paris Council. It has been proposed by some of its members to substitute lay *garde-malades* or sick nurses for the sisters of charity employed at the hospitals, who for ages have been the only attendants on the patients at these institutions and elsewhere. The pretext for this radical change is that the state of celibacy, which is imposed on the sisters, whether voluntarily or otherwise, renders them unsuited for the occupations of sick nursing! The idea is notoriously opposed to all past experience. On the other hand, say the Municipal Councillors, lay women, and particularly mothers, are, from the very nature of their social position, better qualified for such delicate duties. Such an assertion cannot stand the test of critical examination. As far as my own experience and that of greater authorities go, the patients in the hospitals will not benefit by the change, for the experiment was made during the late Commune, when the sisters were unceremoniously turned out of the hospitals and replaced by lay women, which proved a lamentable failure. Soon after the suppression of the Commune, the sisters were restored to the hospitals, where they have been working with their wonted zeal; but some fastidious members of the Council have found out that these good sisters do more in the way of praying than attending to the patients, and yet it is a well known fact that they are to be seen in the wards before daylight in the morning, and retire to rest, and this when they can, only late at night. I cannot say that no good women can be found among the laity, but from the class where sick nurses are generally taken, at least in this country, good ones are the exception, for they are generally given to intemperate and pilfering habits.

The raising of the old Hôtel Dieu, which occupied several months, is now quite completed, and the ground on which it stood is being levelled and planted with trees. When this is finished, it will form one of the largest squares in Paris, as it is an extension of the "Parvis-Notre-Dame", the name given to the already spacious area in front of the venerable Cathedral. The new Hôtel Dieu is situated to the north of the Parvis, and exactly opposite to the site of the old building. It is composed of six pavilions of three storeys high, two of which are devoted to the general stores, etc., while the other four are occupied by the patients. The principal entrance is on the Parvis-Notre-Dame, and this part of the building is allotted to the offices and residence of the director. The portion facing the north, and overlooking the Seine,

is devoted to study-rooms, amphitheatres, dissecting-rooms, chemical and pharmaceutical laboratories, rooms for chemical and physical experiments and pathological researches, and a library. There are altogether eighteen wards, each containing twenty-four beds, and are heated by warm air issuing from an immense *calorifere* or stove, which is so regulated that the heat is distributed and kept up at an equable temperature. The pavilions are separated by squares, four in number, having an ornamental fountain in the middle of each, and planted with trees, where patients who are able may enjoy the open air in fine weather. Independent of these squares, there is an open terrace extending uninterruptedly along the whole length of the second floor, where the patients may take airing, and there is a closed gallery along the first floor when the weather does not permit the patients to go out of doors. For convalescents and patients not well enough to go out into the gardens, a closed gallery on the ground-floor, and comfortably heated, is left at their disposal. The wards are well ventilated, and this is insured by grated apertures over every other bed, independent of the windows, and which are kept permanently open in all seasons. This, I must say, is a grand step in the sanitation arrangements of a French hospital. Lifts are also established for the accommodation of the patients and for the general purposes of the hospital. The service is so divided that there are forty-eight beds, that is, twenty-four of each sex, for each physician and surgeon. The staff is composed of six physicians, three surgeons, and one pharmacist; five *internes* for the medical wards and six for surgery, one *interne* for pharmacy, and a certain number of *externes* for the three services, proportional to the number of patients. The underground portion of the building contains the kitchen, cellars, warm baths for ordinary purposes, and cold and vapour baths in the form of douches or otherwise. The establishment is complete in every respect; but, owing to the unfinished state of the building, clinical lectures, pathological researches, etc., are still in abeyance, and even divine service has to be performed in a ward fitted up for the occasion, as the chapel is not yet completed. This hospital is certainly a great improvement on the old one, and the change has not been effected a day too soon.

Many and great are the changes that are taking place all over Paris, not only in improving the town itself, but the wants of the hospitals and asylums are not overlooked. A large sum of money has lately been voted by the Municipal Council for the enlargement and improvement of the pathological museum attached to the Saint-Louis Hospital, which is unique of its kind, containing as it does some of the finest specimens in the world of skin-diseases, either natural or imitations in plaster of Paris. The bathing establishment of the hospital is to be entirely reconstructed, as it has been found wholly insufficient for the requirements of the hospital, which, as you are aware, is chiefly devoted to diseases of the skin.

ASSOCIATION INTELLIGENCE.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE first meeting of the above District for the present year will be held at the New Kentish Hotel, Tunbridge Wells, on Friday, March 29th, at 3 P.M.: F. MANSER, Esq., of Tunbridge Wells, in the Chair.

Dinner at 5 o'clock. Charge, 6s., exclusive of wine.

Members intending to read papers, or offer communications, are requested to forward notice of the same, not later than Thursday, the 21st instant, to the Honorary Secretary, in order that they may be inserted in the circular convening the meeting.

The following have been promised.

1. Dr. Fairlie Clarke: Case of Diffused Melanotic Cancer.
2. Cases by the Chairman: *a*. Spindle-celled Sarcoma; *b*. Long-standing Hydrocele cured by Injections of Port-wine and Spirits of Wine.

THOMAS TROLLOPE, M.D., *Honorary Secretary*.

9, Maze Hill, St. Leonard's-on-Sea, March 12th, 1878.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE next meeting of this Branch will be held at Carmarthen, on Thursday, April 4th.

Members desiring to read papers, etc., are requested to forward the titles to Dr. Sheen, Cardiff, before the 28th instant.

ANDREW DAVIES, M.D. } *Honorary Secretaries*.
ALFRED SHEEN, M.D. }

March 11th, 1878.

NOTICE OF EXTRAORDINARY GENERAL MEETING.

NOTICE is hereby given, that an Extraordinary General Meeting will be held at the Queen's Hotel, Birmingham, on Tuesday, the 2nd day of April next, at three o'clock in the afternoon:

1. To consider requisition received from members of the Metropolitan Counties Branch, of which the following is a copy.

To the President and Committee of the Council of the British Medical Association.

Gentlemen,—We hereby request you to make arrangements for submitting the following resolutions to an early special general meeting of the British Medical Association.

- "1. That this meeting is of opinion that the Reports of the Proceedings of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted.
- "2. That this meeting desires to express its opinion that in the selection of a house for the Association, it is desirable that the Council, Committee, and consulting rooms should be separate from the printing and publishing offices."

2. To consider the privileges of lady-members.

By order of the Committee of Council.

FRANCIS FOWKE, *General Secretary*.

London, March 13th, 1878.

YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Infirmary, Rotherham, on Wednesday, March 27th, at 3 P.M.

Members wishing to read papers or bring forward cases are requested at once to communicate with the Secretary.

After the meeting, the members will dine together at the Ship Hotel at 5 P.M. Tickets (exclusive of wine) 6s. 6d. each.

W. PROCTER, M.D., *Honorary Secretary*.

York, February 26th, 1878.

WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 11th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the Use of Water desirable in Dressing Wounds?"

The Secretary requests that early notice be sent to him of the title of any communication intended to be brought forward at the meeting.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, March 16th, 1878.

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at Hexham, on Thursday, April 25th.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to signify their intention to the Secretary at their earliest convenience.

G. H. PHILIPSON, M.D., *Honorary Secretary*.

Newcastle-upon-Tyne, March 12th, 1878.

METROPOLITAN COUNTIES BRANCH.

A GENERAL meeting of this Branch will be held at 11, Chandos Street, Cavendish Square, on Wednesday, March 27th, at 8 P.M., when the adjourned discussion of Mr. Holmes's paper on Provident Dispensaries will be resumed, and the following resolutions will be submitted to the meeting:

1. That, in the opinion of this meeting, no patients ought to be admitted gratuitously at the out-patient departments of hospitals, except for medical reasons, shown by the recommendation of the patient by some medical authority.
2. That the poor, who are above the necessity of gratuitous out-patient relief under the Poor-law, would obtain more efficient medical attendance by paying the proper subscription to a provident dispensary than they now have at the free out-patient departments of hospitals.
3. That, if freed from the competition of the free hospitals and dispensaries, provident dispensaries might be founded in London, on principles fair both to the patients and to their medical attendants.
4. That the out-patient departments of public hospitals might be

connected with the institutions charged with the medical care of the poor, with great advantage to the public health and to medical education.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*
W. CHAPMAN GRIGG, M.D. }

London, March 20th, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH : ORDINARY MEETING.

THE fifth ordinary meeting of the session 1877-8 was held in the Queen's College, Birmingham, on February 14th; present, Mr. SAMPSON GAMGEE, President, in the chair, and thirty-five members.

New Members.—The following gentlemen were elected members of the Branch: Messrs. W. G. Archer, H. R. Bracey, W. Leah, G. J. Lloyd, H. G. Lowe, M. Perceval, W. P. Whitcombe, W. M. Yeates, and Drs. Bostock, Hill, and H. Malet of Birmingham; Dr. Cunningham, Oldbury; Mr. R. Davies, Walsall; Dr. H. T. Shapley, Leamington; and Mr. V. G. Webb, Colshill.

Communications.—1. Mr. RALPH TAIT exhibited a new form of Trocar for Abdominal Tapping, formed of a solid tube with a steel point, bevelled so as to follow a lancet-puncture. The point is sufficiently sharp to puncture a secondary cyst if necessary, but not sharp enough to do any harm except by reckless manipulation. The solidity of the instrument entirely prevents the possibility of the entrance of air, and enables the trocar to be used for exploration.

2. Mr. TAIT showed an Anomalous Growth passed by Rectum. The patient was sent to Mr. Tait as a case of ovarian tumour, but the growth was recognised to be intimately associated with the parietes, and to have intestine adherent in front of it. It suppurated, and discharged a large quantity of pus through the umbilicus. The growth in question then was passed by rectum, and the tumour has since almost entirely disappeared, only a small lump being left adherent to the umbilicus. Mr. Tait was quite unable to recognise the nature and origin of the growth. All he could say was, that it contained a large amount of unstriated muscular fibre.

3. Mr. TAIT also showed a small Scirrhus Cancer which he had removed from the Linea Alba.

4. Mr. TAIT exhibited a series of Casts of Children, all belonging to the same family, from Turkey, in which the sex had been mistaken owing to arrest of closure of the perinæum. They were hypospadiac males, but had been named and brought up as females, until the elder, at about ten years of age, began to indicate the true nature of his genital apparatus.

5. Mr. TAIT also exhibited a case of Exophthalmic Goitre in process of cure.

6. Dr. BINDLEY showed a woman who was the subject of Lichen Planus.

7. Mr. SAMPSON GAMGEE exhibited a girl aged 11, whose right thigh he had amputated. The vessels were tied with catgut, the wound closed with silver sutures and styptic colloid, a drainage-tube having been previously introduced; the face of the stump was covered with an oakum pad, and perfect immobility secured with pasteboard splints and uniform compression. The first dressing was on the ninth day, the second on the fifteenth. Union was complete and solid in eighteen days with three dry dressings.

8. Mr. LAWSON TAIT read a paper, entitled Fifty Cases of Ovariectomy.—A discussion followed, in which the President, Mr. Oliver Pemberton, Mr. Baker, Dr. Savage, Dr. Hickenbotham, and Mr. Yates took part.

9. Mr. LLOYD OWEN read a paper on Nystagmus.—A discussion thereupon arose, in which Mr. Priestley Smith, Mr. Lawson Tait, and Dr. Russell shared.

NORTH WALES BRANCH : INTERMEDIATE MEETING.

THE intermediate meeting of this Branch was held at the Owen Glyndwr Hotel, Corwen, on Friday, March 8th, at one o'clock; ROBERT ROBERTS, Esq., President, in the chair.

Letters of apology, etc., were read from Mr. Charles Williams of Northwich, Dr. Williams of Wrexham, and Dr. Roberts of Chester.

New Members.—The following new members were elected: Mr. David R. Jones (Corwen), Mr. Humphrey Roberts (Llanfaiethalarn), Mr. David Griffiths (Gronant), Mr. Robert Roberts (Oakley Hospital, Festiniog), Mr. Thomas Ellis Roberts, M.B. (Oakley Hospital, Festiniog), and Dr. John E. Jones (Dolgelley).

The Dental Practitioners Bill.—A petition against the Dental Practitioners Bill was signed by all the members present.

Admission of Ladies to the British Medical Association.—A resolution was proposed and carried: "That, in the opinion of the members present, the admission of lady doctors to the proceedings of the British Medical Association is undesirable and to be deprecated."

Communications.—1. Dr. EYTON JONES exhibited a specimen of Aneurism of the Ascending Aorta, taken from a discharged soldier, whom he had treated for three months with large doses of iodide of potassium, chloral, low diet, and enforced rest.

2. Mr. R. W. J. EVANS exhibited a specimen of Mollusum Fibrosum, one of seven grape-like tumours that had been removed from the side of a woman in the Wrexham Infirmary.

3. Mr. JAMES WALKER gave his experience of the value of Hydrobromine Acid in conjunction with Quinine.

4. Dr. EYTON JONES related a case of Pneumonia in a boy aged 9, whose temperature for two days was 106½ deg., and the value of stimulants in his recovery.—A discussion took place, some members speaking highly of the value of stimulants, others equally as strongly insisting on the value of the tartar emetic treatment.

5. The PRESIDENT related a case of Tetanus, in which Chloral-Hydrate was so successful that the patient called it "physic gyn-deiriol".

The Secretary.—The HONORARY SECRETARY gave notice that, at the next annual meeting, he should resign his appointment, pressure of professional work compelling him to do so.

Dinner.—The members present, together with the Rector of Corwen and the Rector of Llangwm, adjourned to a most excellent dinner, at which the usual loyal and other toasts were ably proposed, responded to, and duly honoured.

BATH AND BRISTOL BRANCH : ORDINARY MEETING.

THE fourth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, March 13th. There were present Dr. MARSHALL, President, in the chair, and sixty-seven members.

New Members.—Mr. J. H. Pavey and Dr. Tunstall were unanimously elected members of the Association and this Branch.

Communications.—1. Dr. SWAYNE read a case of Puerperal Convulsions, which gave rise to a long discussion, during which Drs. Davey, Lawrence, and Harrison, and Messrs. H. Grace, Thompson, H. Swayne, Mason, and Dowson made remarks.

2. Dr. SPENCER read a paper on the Use of Salicylic Acid in combination with Opium and Aconite. An animated discussion followed this paper, in which Drs. Cole, Steven, E. L. Fox, Shaw, and Skerritt, and Mr. W. M. Clarke joined.—Dr. SPENCER then replied; and the meeting terminated.

CORRESPONDENCE.

THE APOTHECARIES' COMPANY v. SHEPPERLEY.

SIR,—The appeal made by Mr. Stanger, in your issue of the 9th instant, has met with a very satisfactory response; and I beg, on behalf of the Nottingham Branch of the Medical Defence Association, to acknowledge the receipt of many encouraging promises of support from influential medical men. It is not thought necessary or desirable to publish the names of those who have promised pecuniary assistance, especially as no consent has hitherto been obtained to such a course.

The importance of this prosecution to the profession at large can scarcely be overestimated, the issue involved being neither more nor less than the right of chemists and druggists to prescribe. It is obvious that, if we admit the "right" of prescribing at all, it is difficult to draw any line or limit where the practice shall cease, and chemists and druggists will become, to all intents and purposes, medical practitioners. The prefix "counter" to the word "prescribing" does not alter in the slightest degree the meaning of the latter word. If chemists can prescribe legally, there is no law which limits them to prescribe across a counter. If they visit a patient at his own residence, the offence is not in the visiting, but in the prescribing. Chemists and druggists have not received the professional training which would enable them to distinguish between the premonitory symptoms of dangerous diseases and what they are pleased to term "simple ailments"; the patient for whom they prescribe for across the counter on account of a cough or cold may be in reality suffering from consumption or heart-disease.

The case of the Apothecaries' Company v. Shepperley is a test case, and, from its very simplicity, will solve in the most decisive manner

the important question, Have druggists a *right* to prescribe? The chemists and druggists contend that they have a right to the practice of "counter-prescribing", and are fighting for this alleged right with all the weight, influence, and pecuniary support of a large and powerful association. The Nottingham Branch of the Medical Defence Association is but a small local society. Nevertheless, we hope to have the question finally settled, and, if the prosecution be successful, which we have good grounds for believing it will be, the Branch will be able and willing to meet all liabilities. But there is a proverbial uncertainty about law, and the Nottingham Branch feels that it is absolutely necessary to have a guarantee fund to provide against the possibility of an adverse decision or of an appeal to a higher court. It is with this object we are soliciting the aid of our medical brethren, and we look with confidence to the profession at large for such support as will enable us to fight the Chemists and Druggists' Association (the real, although not the nominal, defendant) on equal terms.—I am, yours obediently,

HENRY R. HATHERLY, Honorary Secretary, Nottingham Branch of the Medical Defence Association.

THE DENTAL PRACTITIONERS' BILL.

SIR,—I was much disconcerted to read in your article of last week that you consider "this Bill may now be counted among the things of the past", although you think this to be regretted now that the objectionable clauses in it have been modified in much that was seriously open to objection, and admit a measure of the kind is much wanted, and that something will hereafter be provided for the dental profession without independent legislation on their part. As one of the early promoters of the measure, but from which I was compelled to withdraw with others when its objectionable characters, which I first pointed out would most certainly prevent its attaining success, were so unfortunately retained, I must express a strong hope that an object so essential to the public benefit may not, even for a time, be lost sight of now that its objectionable aspect no longer exists.

That any portion of the human frame ended with, to define it sharply, say, nerves and blood-vessels, and, moreover, representing organs which play no unimportant part in the animal economy, should be left to be dealt with by any individual who may possess the temerity or effrontery to call himself "a tooth doctor", irrespective of training or experience demanded in the case of all other similar structures, has evidently been, in such an age as this, a great oversight, and it seems lamentable an evil so apparent should be, even for a day longer than is possible, permitted to exist. *Deferred legislation* is tantamount to *interred legislation*; and, having aroused the sympathy and attention of the legislature to this great public need, I sincerely trust, through your able advocacy, the medical profession at least may be induced to afford their general support to a measure which, if not even now perfect in its very altered form, is, in its general principles, such that they, as guardians of the public welfare, may well uphold.—I am, etc.,

ALFRED COLEMAN, President of the Odontological Society.
19, Savile Row, March 16th, 1878.

SIR,—As there appears to me to be considerable misapprehension as to the object and scope of the Dental Practitioners' Bill, now before Parliament, I hope that you will allow me to assign some of the reasons why, in my opinion, the Bill deserves the cordial support of the medical profession.

The chief object of the measure is to consolidate the scheme which was commenced some twenty years ago, when the dental profession placed itself under the guidance of the College of Surgeons; and, in consequence, the licence in dental surgery was granted by that College. Since that time, the licence has been very generally made use of by those entering the dental profession.

Exception was taken to the Bill in its original form, that it might allow dental licentiates to trespass on the ground occupied by surgeons. I do not myself think that these fears were well grounded; but, in deference to the opinions expressed by many members of our profession, the objectionable clauses have been removed, and there is nothing which can now interfere with any privilege of the profession.

On the other hand, little attention has been paid to one important privilege which this bill confers on the medical profession, and in virtue of which it will be able to exercise a complete control over the dental profession; and this is a desirable object, both as regards public and professional interest.

It is, I think, very inexpedient to do anything to facilitate the formation of specialities; but it must be remembered that dentists at present constitute a speciality, as it were, half outside the domain of medicine, and that it has acquired its position in the course of time with the con-

sent of the medical profession, and with the approval of the public. In nearly all other specialities, it is necessary that the practitioner should be a qualified medical man, and something more. In dentistry, however, there is so much that is purely technical, that it would prolong the education to an undue extent if all were expected to become members of the College, and then be educated as dentists; and, although it may be expedient that those wishing to take high rank in their class should become members or fellows of the College, it is not necessary that all should become qualified surgeons in order to practise as dentists. The College of Surgeons, therefore, acted wisely when they granted their licence with a curriculum in which part of the purely medical studies was omitted, and special technical subjects substituted, the total length of the curriculum being equivalent to that observed by candidates for the membership.

The alternative scheme is to allow the dentists to form their own corporation, independent of and uncontrolled by the Medical Council: a course of action which would, I think, be much more likely to interfere with the privileges of the profession. It is much to be regretted that this was allowed to be done by the pharmaceutical chemists. At present, they constitute a separate body, over which we exercise no control; and it would have been much more to the interest of the public if the chemists had been placed under the General Medical Council. Formerly, the College of Physicians had the power of visiting apothecaries' shops and of inspecting drugs. It is unfortunate that some controlling power was not preserved to our profession, for this would enable us to check irregular practice.

On these grounds, it is expedient that the dental profession should be placed under the Medical Council; and in order to do this, it is necessary to give the proposal a generous support, and to treat the question in a liberal manner and upon broad principles.

Yours obediently,

London, March 18th, 1878.

SEPTIMUS W. SIBLEY.

LYING-IN HOSPITALS.

SIR,—We have read with much satisfaction, in the editorial notes of your JOURNAL of the 9th instant, the statement "that considerable changes are likely to be made in the management of the General Lying-in Hospital, York Road, with a view of increasing the efficiency of that old-established and endowed charity"; and what immediately follows, which more especially concerns the hospital to which we are physicians: "that the changes effected in the management of Queen Charlotte's Lying-in Hospital have, we hear, operated most satisfactorily in the reduction of the rate of mortality and in the production of excellent vital results, such as have not always been attained at that institution."

Our London lying-in hospitals have engaged, and are engaging, considerable attention in the profession, and rightly so; for we unhesitatingly state that the internal management of all our London lying-in hospitals has been up to quite recently deserving of the severest criticism, which a mortality of not less than one in thirty in the best of them clearly shows.

That condition commonly known as *hospitalism* was first brought to light in these institutions, and they were recently stated by the Registrar-General to be the pioneers in hospital sanitation; but, owing to a combination of false principles which regulated the internal management of these institutions, they have not only made no advance in sanitary matters during the last quarter of a century, but, on the contrary, they have fostered a state of things which has resulted in a mortality as stated above. The chief of these false principles were:

1. Leaving the entire medical superintendence of these institutions, in the absence of the physicians in charge, in the hands of a matron, a scientifically trained resident medical superintendent not being deemed necessary;
2. Uniting the two duties of head nurse and midwife in one and the same person.

These defective principles have, in the case of one hospital, resulted in a death-rate as high as one in fourteen. Mr. Charles Hawkins, after twenty years' experience at Queen Charlotte's Lying-in Hospital, publicly stated, in July 1876, that he considered that lying-in hospitals should be closed, and that he lamented the day that he had been instrumental in the rebuilding of such a hospital; but he added that it was a problem which he left to accoucheurs to solve.

We—aided by the powerful influence of Dr. Gream, Senior Consulting Physician-Accoucheur, and assisted by his great experience in all matters of detail connected with the puerperal state, and recognising as he did the vital necessity and importance of placing a lying-in hospital in harmony with our present knowledge of hospital sanitation—were enabled to respond to Mr. Charles Hawkins's challenge.

The hospital was closed in November 1876 through an outbreak of puerperal fever, which caused the loss of eight lives out of eighty-eight women admitted within two months of the reopening of the hospital after its usual annual autumnal six weeks' cleaning, and whilst it was being worked in direct opposition to the wishes of Dr. Gream and ourselves, and under the very same system, the effects of which had forced Mr. Hawkins to come to the afore-stated conclusion. We had, too, been compelled to work the hospital under the old system through an unfortunate medical vote in the Committee of Management.

The hospital was reopened on February 15th, 1877, under an entirely new system of management. The results of the working of the year under the old system, and of twelve months under the new, up to February 15th, 1878, we beg to append.

Statistical Table.

Women Delivered	1876.	1877.
Married	164	179
Single	252	359†
Total	416	538‡
Died	19	6
Proportion of deaths*	about 1 in 22	about 1 in 90
Children born alive	400	515
Died	33	9
Proportion of deaths	about 1 in 12	about 1 in 57
Women discharged weakly	29	10
Children	31	13
Total	60	23
Proportion	about 1 in 13	about 1 in 45
Total deaths, including children	62	15
Proportion	about 1 in 13	about 1 in 70

This diminished death-rate unfortunately excludes another most important factor, which it is very difficult to place statistically before you: it is shown by considerably diminished percentage in the "bad gettings up" and almost the entire absence of mischief in the pelvis, *i.e.*, pelvic peritonitis, cellulitis, and cystitis. There is another important fact, the exact interpretation of which we would rather leave to Professor Lister for an explanation, *i.e.*, the great absence of offensive lochia, the presence of which was the rule formerly, but is now the exception. These remarkable results have been obtained in a building possessing many structural defects and still requiring some important additions, which the general body of governors, upon our recommendation, have decided to remedy. The fundamental principles, however, upon which the hospital is constructed are, in our opinion, good.

The following is the basis upon which the internal management of the hospital has been changed.

1. The thorough reorganisation of the system of internal management.
2. The delivery of the patients by midwives summoned from without the hospital, and in labour-wards strictly set apart for that purpose.
3. Placing the entire medical control of the patients, in the absence of the physician in charge, in the hands of a qualified paid resident medical officer.

It would be tedious to your readers, and we should be trespassing too far upon your valuable space, were we to enter into minute details under these respective heads; but we may mention that, with regard to the first, and experience has proved it to be so, there is no matter of detail, however small, in regard to the safety of a patient in a lying-in hospital, to which attention should not be paid. The chief principles of the system under which we are at present working are as follows.

1. Making the matron head-nurse, and not allowing her to attend midwifery or even to enter the labour-wards.
2. The reduction of the number of patients in each ward from three to two persons; all our wards, with the exception of two, being small and containing only 2400 cubic feet of air in each.
3. Placing a nurse in each ward along with each set of patients allotted to her (usually two) during the time they remain in the hospital, and prohibiting her from entering any other ward but that in which she has charge of patients.
4. The habitual use of some disinfectant during the necessary ablutions of the patients, and for the washing of hands, vaginal tubes (all of which are made of glass, each ward having its own syringe), as well as for disinfecting the various utensils, etc. Every nurse, before taking charge of a fresh set of cases, has to undergo a system of thorough

purification (being required to be in the open air and take a disinfectant bath, and to have their clothes stove).

5. The stoving at a temperature of 250 deg. of every article of bedding, clothing, and linen used in the lying-in room, with each relay of patients.

6. The complete isolation of all the wards from the current of air in the main corridors by means of double doors to each ward; the frequent opening of windows, and the employment of a system of ventilation introduced by Mr. Peter Squire of Oxford Street.

7. The prohibition of the washing of floors during the stay of patients in the wards; the thorough fumigation and purification of the respective wards after they have been vacated; and allowing them to remain empty for a week, if possible, before they are again occupied.

—We remain, sir, your obedient servants,

WILLIAM HOPE, M.D., } Physicians to the In-patients of Queen

W. C. GRIGG, M.D., } Charlotte's Lying-in Hospital.

London, March 14th, 1878.

THE COLLEGE OF PHYSICIANS AND MEDICAL WOMEN.

SIR,—There is said to be a mode of refusing a request so gracious that it removes all the sting of the refusal. Certainly there is a mode so ungracious that it aggravates a thousandfold the pain, namely, the refusing it before it is asked. This mode has been adopted by the London College of Physicians, when they called a meeting on Monday for the purpose of determining on a public announcement that they would not admit to examination any women, even for the lowest licence which they are empowered to grant. I am heartily ashamed of my College, and, at the risk of violating *secreta Collegii*, must shield myself from the possible imputation of having joined in that vote. There are two railways running from the same village to the same terminus. There are certain unpopular persons (say Russians or Turks) who travel first class by one of these lines. The other line puts up at its station a notice that no person in a caftan or a fez shall have even a third-class ticket. Is that folly, or is it a bullying insult? Yet I cannot see that it differs essentially from the position assumed by the College of Physicians in regard to the University of London. I call the degree of the University of London a first-class ticket, because no persons would apply for the licence who could write themselves M.D. Lond. Certainly no women would; for they, unwisely perhaps, have a great love of well-known and distinctive titles; they become Knights of the Star of India; they have been decorated with dukedoms, earldoms, baronies (I am not sure about baronetcies), and they will traverse, and have traversed, sea and land to be able to append M.D. to their names.

It would seem to be this M.D. which has acted as a red rag to our usually sedate fellows, and made them positively rude to their fellow subjects. They are so fearful of the public confounding all M.D.s together, that they hasten to make an opportunity of abjuring the connection. Is not the alarm needless, so long as they maintain their real superiority? Many years ago, we are told, the he-goats complained to their Maker that the she-goats wore beards; but they were consoled by Him with the assurance that the show was of little moment so long as the substance of virility remained to the *beati possidentes*.

"Sinite illis," inquit; "vanâ gloriâ frui.
Pares cum non sint vestrâ fortitudinis."

"Be satisfied," he would have said, "with the assurance of an athletic fellow that you have an average height of 5 foot 9, and are 36 inches round the waist, and with the opinion of your obstetricians that you are less liable than women to pregnancy and other sicknesses; and do not grudge them an ornamental distinction, which is really so common that you do not value it much."

If the University of London had rejected the petition of women to be admitted to their degrees, nobody could have blamed them, for they were forced to answer it one way or another. But the case was quite different with the College of Physicians; for they were assured on the highest authority that it did not matter the least to the success of the Conjoint Scheme, or of anything else, which way they determined, or whether they came to any determination at all. They were exactly in the position of a braggadochio who suspects a lady of having a secret liking for him, and then tells her publicly that he will not return the affection, even if she ask him. Surely the Royal College cannot do better than retract without delay their unhappy breach of good manners.—I am, Sir, yours faithfully,

London, March 21st, 1878.

T. K. CHAMBERS.

* The average mortality since 1857 has been about 1 in 30.

† The largest number of single women admitted in a year.

‡ The largest number, with one exception, admitted in one year.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS—Tuesday, March 19th, 1878.

MEDICAL ACTS AMENDMENT BILL.

THE DUKE OF RICHMOND AND GORDON called attention to the subject of the Medical Acts and presented a Bill. He said: My lords, I wish to call your lordships' attention to some of the Medical Acts which are now in force, and to point out to your lordships in what manner I think they may require some amendment; and I shall conclude by presenting your lordships with a Bill, to be read a first time, which will, I hope, have the effect of remedying some of the defects which now exist, and of improving the law on the subject. My lords, I believe I am right in stating that every person is entitled by the common law to practise medicine in this country if that person be competent to do so; and there have been many Acts passed, during the last three hundred years, regulating the competency of the person and the manner in which that competency can be ascertained. So far back as the reign of Henry VIII, there is an enactment which enacts "that no person within the city of London or within seven miles thereof shall be entitled to take upon him to exercise the occupation of a surgeon except he be first examined and approved by the Bishop of London and the Dean of Paul's and four other professional advisers". And in the country no person was allowed, by the same Act of Parliament, to practise unless he had been first examined and approved by the bishop of the diocese and the vicar-general. My lords, both these clauses in this statute are still on the statute-book; and, unless I find some opposition on the part of the right reverend bench to my depriving them of the privileges which they formerly enjoyed—but which I hope, for the sake of mankind, they no longer practise [*laughter*—I shall ask your lordships to repeal them. At that time, it was assumed that every one possessed the double qualification of medicine and surgery, because one of the clauses of the Act sets out "that, forasmuch as the science of physic does comprehend, include, and retain as a special member and part of the same a knowledge of surgery, therefore be it enacted that any of the said company or fellowship of physicians, being persons chosen and admitted by the said president and fellowship of physicians, may from time to time, in the city of London or elsewhere within this realm, practise the said science of physic in all its members and parts, any acts or statutes to the contrary notwithstanding". It was assumed at that time that the science of physic included the practice of surgery. At the time of the passing of the Medical Act—to come down to a more recent period—of 1858, medical legislation was in a most unsatisfactory condition. There were various bodies in the three kingdoms who were all entitled to confer degrees. They were often in competition with one another, not, I am sorry to say, with a view of raising, but rather of lowering, the standard of education. Some of these bodies could grant degrees over the whole of the kingdom, whilst others were confined to that part of it to which the body belonged; so that it was possible, and might well happen, that the most competent physician—the most eminent physician—in England might be precluded from practising in Scotland or Ireland, and, *vice versa*, the same thing might happen—that is to say, the most eminent physicians in Scotland might not be able to practise in England. It is not, therefore, surprising that, for some years previous to 1858, various attempts were made to remedy this condition of things. But, owing to the jealousy of various persons who were to be affected, and the fear of losing certain privileges which they then possessed, no Bill at all was passed for some years. In 1858, however, Mr. Cowper introduced a Bill into the other House of Parliament, and that measure was approved and adopted by the Government of the late Lord Derby. The Bill which Mr. Cowper introduced into the House of Commons had three objects. The first was to raise to an uniform and sufficient standard the educational acquirements of all persons entering the medical profession; secondly, it provided that there should be an authoritative register, in which the names of all persons so qualified should be clearly set out and defined; and thirdly, it provided for removing the local jurisdiction, which restricted a competent man from practising in any part of the country except that in which the licensing body had authority. Those were the three objects which Mr. Cowper desired to obtain by his Bill, and, as I have said, that Bill was approved of and taken up by the Government. The preamble of that measure states "that it is expedient that persons requiring medical aid should be en-

abled to distinguish qualified from unqualified practitioners"; then it goes on to say, "be it therefore enacted", etc. Now, that is a principle we must all agree with—viz., that we should be able to distinguish between qualified and unqualified practitioners. The provisions of the Bill were drawn with that view, and I am bound to say that, to a certain extent—indeed to a great extent—that measure has been successful; but, through the lapse of time that has occurred since 1858, various things have occurred to show that it is desirable to amend that measure in some particulars. The mode which was provided by that measure for carrying out that which was then held necessary to distinguish between qualified and unqualified practitioners was first of all the setting up of a Medical Council. Then there was a very important clause in that measure—the nineteenth section—which suggested a course by which an uniformity in the qualification of candidates for the medical profession could be attained. The English bodies have been for some time engaged in trying to form a scheme under that section—a scheme well known to those who take an interest in this matter as the "conjoint scheme". That had for its object to include bodies representing medicine and surgery within a conjoint board. The difficulty experienced in connection with that has been great; and though up to the present time that difficulty has not been surmounted, yet I hope and believe that the English bodies will, before long, have come to such an agreement as will enable them to form a conjoint board. If that be done before the passing of this Bill, orders in Council will be issued to confirm it, and it will be left to other bodies in Scotland and Ireland to come in afterwards, if they think fit to do so. There is a difficulty in regard to Scotland, in consequence of the universities and various corporations existing there being somewhat different from the universities in this country. In consequence of this, it has not been found to be feasible up to the present time to include the Scotch bodies within a conjoint scheme, such as I have alluded to with regard to England. I trust that this difficulty is not one which is insurmountable. A provision will be inserted in the Bill by which the Scotch bodies, if they can come to an agreement, after the passing of the Act, for the formation of a conjoint board, will be able to form part of the board which will be set up in England. There has been an attempt made to provide for the establishment of a general board, but it has failed, and therefore each country has been kept distinct. But, at the same time, the Bill is entirely of a permissive character. Then there is a provision in the Bill for the confirmation by an order in Council of the establishment of a conjoint board. The Act of 1858 contains a provision for enabling persons practising in the colonies and elsewhere to be registered; but, as that provision only dealt with persons before the passing of the Act, there was nothing to fix the position of persons afterwards. That is a defect in the Act, and it has been discovered also that the clause providing penalties in the case of a person pretending to be registered when in reality he was not on the Register required amendment. I may also mention, as I shall show when I allude briefly to the provisions of the Bill, that the Act known as Russell Gurney's Act for enabling women to be examined by the College of Surgeons was so drawn, that it compelled them to be members of the senate of the corporation, which was not intended when the Act was passed. These are the conditions of the law as it at present stands, and I think I shall best suit your lordships' convenience if I go very briefly over the provisions of the Bill, to which I ask your lordships to give a first reading. The principal object of the Bill is to require the person registered in the *Medical Register* to have both a medical and a surgical qualification. At present, there is only a single qualification; but, for the future, there will have to be a medical and a surgical qualification. Secondly, the Bill will allow the registration of foreign and colonial practitioners. I will point out how that is done as I go on. Thirdly, the measure will restrict the assumption by unqualified persons of designations implying qualification. The state of the law on this subject is not satisfactory, as some persons designate themselves physicians when they have no right to do so. Fourthly, the Bill will make further provision for securing uniformity of qualification in the United Kingdom. Fifthly, it will make provision for women similar to that intended to be made by the 39 and 34 Victoria, chap. 41, commonly called "Russell Gurney's Act". Sixthly, it contains a provision for the examination and registration of dentists and midwives, and it also amends the Act of 1858 in the matter of registers and deals with the subject of lunacy, qualification of medical officers on colonial ships, and other matters. The alteration of the Register is an important function. If it is to be done by the Medical Council or a Committee, it is a very important duty to entrust to any one to strike off the Register persons who have no right to be there. As to the mode in which these various heads are to be carried out, the third clause will prevent a person from being registered in future unless he has obtained a diploma for medicine and one for surgery from

the medical board established under the Act. If it should happen that a person in England should be examined under the Conjoint Board, that would give him a double qualification; but, if the person be in Scotland, then he would require to have two diplomas: one from the Board of Physicians and the other from the Board of Surgeons. The Act will not apply to persons registered at the time of its passing. It is not to be a retrospective Act, but one to deal with the future. Three clauses which follow those to which I have referred enable a person who has obtained a medical diploma entitling him to practise in a colony or foreign country to be registered on proof being found of good character, and if the diploma be one recognised by the Medical Council as a diploma representing a degree of knowledge attested by an examination equal to that which is necessary in the case of those who practise in the United Kingdom. If the Medical Council refuse to grant a licence to either of these persons—the colonial or the foreign practitioner—then there is an appeal to the Privy Council by the party who may think himself aggrieved. The next clause requires that the colonial and foreign practitioners shall be entered on a separate list or register distinct from that kept for the United Kingdom. Another clause requires the Medical Council to exercise the power of striking the names off the *Register*, or restoring them when necessary. As this proceeding will be of a very critical character, it has been thought that it could be more safely entrusted to a small committee than to a large body of the Council. Then the next clause of importance is one which extends the power which the General Medical Council possesses at present of superintending and examining medical diplomas, and allows them, with the approval of the Privy Council, to make rules for the purpose after the passing of the Act. These rules are to be made subject to two important provisos. The first is with regard to the admission of women; namely, that a medical authority, who is now not bound and does not examine women, shall not be compelled to do so hereafter; and the second is, that rules shall be made so that women shall not be compelled, if they object, to pass the same examination as men. These examinations are the only means by which persons can, under the provisions of the Bill, enter the profession; and, as the Bill makes the law against unregistered practitioners very strict, I thought it only right that the examination should be subject to some general control. The Privy Council, therefore, is entitled to control if the rules in the examination shall be considered to be unduly objectionable. The next clauses are those which give the medical authorities power to combine for the purpose of conducting a joint examination. With regard to women, it is provided that the obtaining of one of the diplomas shall not entitle any person to any right in connection with the medical corporations. That is to meet the difficulty which has arisen under Russell Gurney's Act, where, practically, women are excluded from being examined. Then the second paragraph of Clause 20 effects the intention of Russell Gurney's Act. Clause 21 is to effect what has already been effected in the case of the University of London, the College of Surgeons, and the Society of Apothecaries by their special Acts, which enables them to remove any obstacles to providing joint schemes of medical boards which arise from any of their Acts or Charters. This clause is to make the matter perfectly clear. The next clause (22) is one which enlarges very much the provisions of the Act of 1858 dealing with the assumption by unregistered persons of designations which imply that they are duly qualified practitioners in medicine and surgery. It does not—for that would be impossible—attempt to prevent unregistered persons from practising, but it prevents persons from assuming certain designations, or it imposes a penalty on persons who, for purposes of gain, assume certain designations to which they are not entitled. The clause contains some saving powers in respect of midwives and dentists. Private individuals are restricted in their rights of prosecution without the consent of the authorities. Unless they have the consent of the Medical Council, they cannot prosecute. The next clause, which is an important one, enables the Medical Council, with the consent of the Privy Council, to arrange for the examination, licensing, and registration of dentists. The clause requires them to enter in any register which is made the existing practitioners and also foreign and colonial dentists. Your lordships will, no doubt, be aware of the measure brought in the other House of Parliament to deal with the subject of dentists. I have had the advantage of seeing and consulting some of the most eminent practitioners in this country, and I may say that, though that Bill is not altogether satisfactory, I hope the present Bill will carry out mainly what the promoters of that Bill had in view, but carry it out, if I may say so, in a better manner. The Bill provides that no person shall assume the designation of dentist, or any designation signifying that he is qualified to practise dentistry, unless he is on the *Register*. This will avoid some of the objections to the measure in the other House of Parliament. Then the Bill goes on to deal with another important question, on which I

have had many communications; namely, the subject of midwives. This is a matter which we must all admit is of the greatest importance, but it is also a difficult question to deal with in anything like a stringent or a strict manner. I think all we can do is to indicate the best mode of proceeding in the matter, and I hope that by degrees we shall raise the status of midwives and improve their education, and let the people of the country see that there is an advantage in employing those who have passed a certain examination. Clause 24 requires the *Register* to include existing practitioners; but it does not touch foreigners or colonists. It enables local authorities to undertake at their own expense the duties of examining and registering, and it provides that no persons, unless they have passed the examination, shall be entitled to call themselves registered midwives, which would be the title of the persons who had passed the required examination. The twenty-ninth clause is intended to encourage those who have only a single qualification to obtain a double qualification. It was taken from the Bill introduced several years ago by my noble friend opposite, and I believe it will have a beneficial effect. I ought to mention that there are clauses in the Bill which touch the Lunacy Acts, and that I have thought it right, as your lordships may well imagine, to send these clauses to the Lunacy Commissioners, to ask their opinion as to the wisdom of passing them in the form in which they now are. The Lunacy Commissioners have informed me that they are not altogether satisfied with the clauses as they stand in the Bill. I have thought it better to leave them in the Bill as they stand, because I have not received any amendments from the Commissioners. Of course, when I do receive the amendments, I shall insert them in the Bill, to meet the views which may be entertained by the Commissioners. Then there is a provision for allowing persons who have been properly examined and registered in the colonies to practise and hold positions on board colonial ships. I think, my lords, these are briefly some of the more important provisions which I propose to deal with in this Bill. The matter is one of very considerable importance. It is a question which, I think, your lordships will all admit is very complicated and complex in its character. It is one that requires very great consideration. It is one which ought not to be hastily legislated upon, and I should hope, by postponing the second reading of the Bill for some time, to get the benefit of all persons in the country who are interested in it, and who are competent to give advice in the matter. I need not add, I think, that I shall be ready to give the most attentive consideration to all suggestions which may be made with a view, if possible, of passing a good and useful measure. My lords, I do not think I should be justified in trespassing longer upon your time in introducing the measure. It is one which is best seen in the perusal of the clauses as they stand in the Bill, and I shall now content myself by asking you to give the measure a first reading. [*Hear, hear.*]

THE MARQUIS OF RIPON: My Lords, I do not rise for the purpose of entering into a criticism of the measure the noble Duke has proposed, for I agree with him that it is a Bill which we shall be much better able to consider when we have it before us. I know the difficulty of dealing with this question, as I had charge of a Bill relating to it in 1870, which this House was good enough to pass, but which did not successfully pass the House of Commons, on account of the opposition of certain gentlemen who were anxious to obtain direct representation. I am glad the measure proposes to do away with what is called half qualification, and will require all persons for the future to be qualified both in medicine and surgery, and I am also glad that the measure proposes to make further arrangements with respect to the registration of foreign candidates, which is most desirable. But as my noble friend has invited the consideration of the subject, I must confess that I cannot but express my regret, if I rightly understand the explanation of my noble friend, at the exceedingly permissive character of the Bill. It will secure for England a single examination provided a conjoint Board is appointed. But, unfortunately, if it should be wrecked, as it has been on previous occasions, I do not see that there is in the Bill, as there was in that of 1870, any power to provide, by legislative enactment, for the failure of existing bodies to agree to the constitution of a conjoint board. I will only say this, that I believe the one thing which is most important in this matter is that you should provide that for the future, at all events for each of the three kingdoms, there should be but one portal to the medical profession, and that you should shut the nineteen doors by which you can at present get to it. If my noble friend does not secure that by his Bill, I am sorry for it.

The Bill was then read a first time.

THE DUKE OF RICHMOND AND GORDON: I propose to ask your Lordships to read the Bill a second time on Monday, the 15th of April.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

"A CONSTITUTIONAL QUESTION."

SIR,—Breach of faith towards medical officers makes all public services unpopular. It is breach of faith to violate the laws of the land and particular contracts by depriving medical officers—I beg pardon, servants—of their legitimate dues. The law compels medical servants to attend at once, without orders, urgent and dangerous cases. Such cases are attended to under pain of a reprimand from the coroner and dismissal from office; yet for the first time Guardians can refuse to pay, stating that the medical servant must attend "on spec." He is to procure the fee from the already underpaid agricultural or other labourer. A dangerous case of flooding was attended by me three miles from my residence. The Guardians refused an order, and I could not gain my fee of £2, although the well entitled parties complained to the London Local Government Board. I prosecuted the labourer in the County Court. The influence of the Local Board was manifest there; and, after a year or so, the fee of £1 1s. was ground out of the poor labourer. Do you, sir, not think that if the Guardians refuse to give orders, medical servants have a right to refuse to attend? They are compelled to be brought into conflict with the Guardians and the patient sufferer.

I enclose you an order received to day to attend, a month after labour, a woman likely to require a pessary, the Guardians having refused the distressed husband an order previous to his wife's confinement. I should have been compelled to attend on spec., or be liable for manslaughter. Surely, sir, the worst paid ministers of the poor—I mean the Poor-law medical officers—require protection; and it is in their interest I write, as it has pleased God to provide me with private means beyond their control. Without this I could not live, as my salary is more than swallowed up by Poor-law medical expenses. Moreover, the Poor-law doctor experiences further breach of faith by the discovery that he is ostracised from private practice. He finds the extortionate exactions upon his time, medicines, horses, price of necessities of life, and other matters, weigh him down. Millers, doctors, and brewers were lately told they ought to pay all expenses for the maintenance of roads. The Bible tells a Christian land to bear one another's burdens. Now, the medical expenses of this country amount to the comparatively small sum of six millions only, as shown by the recent returns of this week, and other expenses not medical inclusively make the total about thirteen millions. [The income of the country is at least three hundred and seventy millions.] This is a paltry sum for these most necessary and useful expenses, making up as they do largely for deficiency in wages; but it is only fair to say that a peasantry who can afford to waste one hundred and sixty millions a year in drink should provide for their own medical requirements. Till this is done, and by whatever means we are paid, we should at least be protected.

I must say, also, that I acknowledge relief by the self-supporting dispensary system; but when extra fees, amounting to about £40 a year, are almost completely cut off, and we have to do heavy sanitary work for only £20 a year, we are at a loss, financially and in every other respect.

The woman I have to attend is likely to require a pessary. Is it my duty to provide one? [A record of similar flagrant cases is desirable.] I complain, sir, that the medical servants of the poor are not allowed sufficient pay, upon the ground that they are properly paid, the contrary fact being well established; neither will the civil authorities allow public subscriptions for the benefit of poor medical ministers.—I am, sir, yours obediently,
RUFFLEO.

March 2nd, 1878.

CERTIFICATES FOR IMBECILES IN WORKHOUSES.

SIR,—Can you or any of your readers inform me whether I am entitled to charge 2s. 6d. for signing the quarterly certificates of each of the imbeciles that are in the union-house, I being the medical officer to the union-house and district?—I am, yours truly,
A. J. A.

. The medical officer of a workhouse is prohibited from charging a fee of 2s. 6d. for certifying the fact that there is a harmless lunatic who may be legally detained in the house. Such quarterly return forms part of his official duty. The fee is strictly limited for visiting a pauper lunatic or imbecile not in a workhouse or licensed asylum.—Ed. B. M. J.

PUBLIC HEALTH EXAMINATIONS: LONDON OR CAMBRIDGE.

Will any gentleman who has been up for either of these examinations kindly say what books are most suitable for the necessary reading, where some practical instruction in chemical inquiries can be obtained, and add anything more that may help to guide?
A CANDIDATE.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

MERTHYR.—The medical officer, Mr. Dyke, reported that the birth-rate for the district during the quarter ending December 31st was 34, and the death-rate 16.5, per 1,000 inhabitants; that the mortality from contagious diseases amounted to 11 per cent. of the total deaths; but there were only four deaths from typhoid. He also briefly reported the vital statistics for 1877, which show that the birth-rate was 37 and the death rate 21 per 1,000; the mortality of children under five years being 45 per cent. of the whole. There were 66 deaths from tubercular disease, 38 from convulsions, 86 from inflammatory diseases of the lungs, and only 30 from zymotic diseases.

LINCOLN RURAL.—Dr. Harrison reports 821 births and 455 deaths in this district during 1877, of which 8 deaths were caused by typhoid.

About 12 per cent. of the deaths were caused by phthisis, 17 per cent. from bronchitis, and only 8 from diarrhoea. The death-rate was 17.8 per 1,000 including all deaths in the county asylum, and 14.7 after excluding them. The by-laws as to new buildings were being strictly enforced even in the small villages, and cases of overcrowding discovered had been abated, as well as other nuisances. The drinking-water from wells was bad.

CREWE.—The death-rate during the quarter ending December 31st was 17.6 per 1,000 *per annum*. Dr. Lord also reports 7 deaths from typhoid, 4 from scarlet fever, and 1 from typhus; and objects to rheumatism and several other diseases being classed with zymotics. The largest number of deaths was caused by bronchitis, tubercular diseases, and convulsions. He considers that much injury to health is caused by vegetable matter being thrown into the cesspools with the night-soil, and from stoppage of the drains. He also reports that the medical men of the town will in future report to him the existence of cases of zymotic disease.

WANDSWORTH.—The population was estimated at 153,648 in the middle of 1876. There were 5,999 births and 3,154 deaths registered in the district, which give a death-rate of 20.5 per 1,000 population, which is considered to be too high, as the population is probably larger than the estimated number. This district is made up of the following subdistricts; viz., Battersea, in which 3,459 births and 1,745 deaths were registered in 1876; Wandsworth, in which 679 births and 461 deaths occurred; Clapham, in which 1,029 births and 545 deaths were registered; Streatham and Tooting, in which there were 536 births and 260 deaths; and Putney, in which 300 births and 143 deaths were registered. The proportion between the births and deaths in the Putney district was somewhat unusual, there being more than 200 births to 100 deaths. Measles and scarlatina prevailed to a great extent; and small-pox was also prevalent, especially in Clapham. The epidemic death-rate varied between 4.8 per 1,000 population in Battersea and 1.7 in Putney, having been 2.8 in Clapham. The mortality amongst infants was large; viz., 43.3 per cent. of the total deaths. The water-supply is said to be bad, and the want of a hospital for infectious diseases is mentioned as one cause of the spread of small-pox. The sanitary work appears to have been actively carried out, as 5,929 houses were inspected, and 2,773 drains connected with the sewer.

WHITECHAPEL.—The number of births registered in the district during 1877 was 2,751, and of deaths, including 567 non-residents, 2,506, which give a death-rate of 25.2 per 1,000, which is in excess of that in the previous year by 1.3 per 1,000. If, however, the deaths in extraneous hospitals be added on, the death-rate would be at least 26.2 per 1,000, or, eliminating all deaths in hospitals, 23.2. The estimation of death-rates in districts having large hospitals within their limits is a somewhat disputed point; but it is clear that in such a district as Whitechapel the proportion of deaths in hospitals must be much greater than in rich parishes, and Mr. Liddle's estimated death-rate too low. There were 48 deaths from small-pox in the year, including 25 in the Homerton Hospital, which do not appear to have been included in the registered deaths; but it is difficult to be certain on the matter, owing to the indefinite wording of the report. But the deaths from zymotic diseases, including those in hospitals, are returned at 12.5 per cent. of the total mortality. The table of sanitary work performed shows much energy on the part of the medical officer and inspectors.

NEWBIGGIN.—Dr. Reid states that the death-rate for the last quarter of 1877 was the smallest he had ever recorded, there being an almost total absence of zymotic diseases and a low rate of deaths from all other causes. He expresses his regret at the want of proper cottages for the poor, and instances the death of an infant which he believes was caused by the extreme dampness of the room in which it was born and the emanations from the mouldy paper on the walls. He also reports the want of proper drainage for some cottages, and the bad state of the road leading to the sands.

BIRMINGHAM.—During the quarter ending December 23rd, Dr. Hill reports that 3,927 births and 2,284 deaths were registered, giving a birth-rate of 41.6 and a death-rate of 24.21 per 1,000 *per annum*, which was in excess of that for the corresponding period of 1876. The excess of mortality was chiefly owing to diseases of the respiratory organs, measles, and whooping-cough. The mean temperature for the quarter was 45.5 deg. Fahr., against 46.2 deg. for 1876, but 2.5 deg. above the mean of the same period for ten years. The mortality from zymotic diseases represented an annual rate of 4.75 per 1,000, against

3.0 in 1876. Dr. Hill examined as many as one hundred and fifty-nine samples of well-water, and gives a table of the results, showing that in nearly every instance the water was unfit for use. The amount of sanitary work performed was large, and a great quantity of meat unfit for food was destroyed. Thirty-five articles of food, drink, and drugs were examined, of which nine were adulterated; viz., four of gin (watered), four of precipitate of sulphur with sulphate of lime, and one of pepper with sand.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 14th, 1878.

Collins, George Duppa, King's College Hospital
Diggle, John Arthur, Stretford Road, Manchester
Pylus, John Alfred, Godalming, Surrey
Smith, Herbert Arthur, Haverstock Hill
Webster, Ridley Manning, Colebrooke Row, Islington
Wood, Charles, 38, Trinity Square, S.E.

The following gentlemen also on the same day passed their primary professional examination.

Hackman, L. K. H., St. Mary's Hospital
Mennell, Zebulon, St. Thomas's Hospital
Veale, William Edward, St. Bartholomew's Hospital

UNIVERSITY OF DUBLIN.—At the Spring Commencement, held on Shrove Tuesday, March 5th, 1878, the following Degrees in Medicine and Surgery were conferred by the University *caput*.—Bachelors in Surgery.

Daly, Ulysses A.
Fogarty, Thomas F. W.
Mallins, Clement

White, Edward W. W.
Young, Alexander G.

Bachelors in Medicine.

Cox, Henry L.
Cowen, Edward J.
Egan, Constantine R.
Daly, Ulysses A.
Day, James D.
Malley, Abraham C.

M'Cullagh, James A.
Neville, William Cox
Pentland, Alexander
Rockliffe, W. C. (*ad eund. Cantab.*)
Tench, Charles H.
Young, Alexander G.

Masters in Surgery.

Hurford, Cedric H.

Taylor, Rogers W. C.

Doctors in Medicine.

Alexander, James
Cosgrave, Ephraim M.D.
Gibson, George

Irwin, John A.
Rockliffe, William Craven

MEDICAL VACANCIES.

THE following vacancies are announced:—

ALICE DALE INFIRMARY, Cape Colony—Obstetric Physician. Salary, £500 per annum, with house, servants, and horse. Applications to be made on or before May 1st.

BALLINASLOE UNION—Medical Officer for Kiltormer Dispensary District. Salary, £112 a year, and £15 yearly as Sanitary Officer, together with registration and vaccination fees. Applications to the 25th instant.

BIRKENHEAD BOROUGH HOSPITAL—Junior House-Surgeon. Salary, £60 per annum, with board and lodging. Applications to be made on or before the 25th instant.

BLACKPOOL, Borough of—Medical Officer of Health. Salary, £100 per annum. Applications to be made on or before the 27th instant.

BRISTOL GENERAL HOSPITAL. Physician's Assistant. Salary, £50 per annum. Applications on or before April 19th.

CERNE UNION—Medical Officer of Health. Salary, £60 per annum. Applications on or before the 25th instant.

LANCASTER INFIRMARY AND DISPENSARY—Salary, £120 per annum, with apartments, coals, gas, and attendance. Applications to be made on or before April 3rd.

LURGAN UNION—Medical Officer for Aghalee Dispensary District. Salary, £100 per annum as Medical Officer, and £16 yearly as Sanitary Officer, with the usual registration and vaccination fees. Applications to the 25th instant.

MANCHESTER ROYAL INFIRMARY—Resident Surgical Officer. Salary, £150 per annum, with board and residence. Applications on or before the 31st instant.

NARBERTH UNION—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

QUEEN'S HOSPITAL, Birmingham—Honorary Physician. Applications to be made on or before April 13th.

ROYAL UNITED HOSPITAL, Bath—Resident Medical Officer. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 30th inst.

STAFFORD HIRE GENERAL DISPENSARY—House-Surgeon and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications on or before the 26th instant.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before the 30th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*BARLOW, Wm. H., M.D., appointed Consulting-Physician to the Dispensary of the General Hospital and Dispensary for Sick Children, Manchester and Pendlebury.
*BERDOE, E., L.R.C.P.Ed., appointed Surgeon in Ordinary to Queen Adelaide's Dispensary, London, *vice* G. P. Bate, M.D., resigned.
HOLLAND, Lucius, M.D., appointed Aural Surgeon to the Newcastle-upon-Tyne Dispensary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

RENDALL.—On March 13th, at Maiden Newton, Dorsetshire, the wife of William Rendall, M.R.C.S., of a daughter.

PNEUMONIA AND EPIDEMIC DISEASES.—At a recent meeting of the Epidemiological Society of London, Dr. William Squire read a paper on the relation of pneumonia to epidemic diseases. He said that pneumonia is not specially a disease of cold weather or of cold climates; like phthisis, it occurs with greater proportional frequency among dense populations; but, unlike phthisis, the mortality is not evenly distributed throughout the different months of the year. Nor does the seasonal mortality from pneumonia correspond with that for bronchitis, which increases in cold times and places, but follows a course very similar to that for some epidemic diseases. In northern towns, many cases of bronchopneumonia in the very old and very young are included in the pneumonia returns, making them higher in the winter than in the spring; laterly, with more precision in the diagnosis, we find a progressive increase in the returns from bronchitis, with the highest mortality in January; and a decrease in returns for pneumonia, the greatest mortality occurring always in the spring. Among epidemic diseases, small-pox and whooping-cough are found invariably to have their greatest increase in their spring. Scarlet fever as invariably increases at the end of summer, and is most fatal in the autumn. Measles has both a summer and winter recrudescence. Enteric fever is an autumn epidemic, and not coincident with pneumonia. It was with typhus and not with enteric or typhoid fever that von Ziemssen associated pneumonia; their decrease in London, as noticed by him, coincided with the enforcement of the Common Lodging House Act; but typhus prevails without pneumonia and pneumonia without typhus. The diseases which correspond more nearly with pneumonia are puerperal fever, erysipelas, quinsy, and croup. The pneumonia, frequently fatal after measles, and which complicates whooping-cough and diphtheria, is of the catarrhal or secondary kind; this should be considered as part of the diseases it complicates: it has no appreciable influence on the pneumonia returns. Acute primary lobar pneumonia is, according to the author's experience, not rare in children; part of the large infantile mortality from pneumonia may be fairly attributed to it. A marked difference between the acute primary pneumonia and the secondary or catarrhal form is found in the temperature chart of the two diseases, constructed from numerous cases of both kinds at all ages. In catarrhal pneumonia, three, four, or more days of moderate fever lead to a central peak of 103 deg., or rarely 104 deg., and never long maintained at that point, but subsiding as free expectoration is formed. True pneumonia commences with a temperature of 103 deg., even on the first day of chill, and before the local signs of the disease are distinct; the temperature then rises suddenly to 104 deg. or to 105 deg., and is steadily maintained at or near this height, with no marked evening exacerbation, for six or seven days, and then descends by two steps to the normal, the first descent preceding any marked improvement in the lung. This typical temperature course is found equally in sthenic and asthenic cases, whether produced by foul air or by chill, in children of from one to five years of age, as well as in adults. It is not necessary to assume a specific poison for pneumonia because of this marked course; the definite duration, the cessation of the general febrile disturbance before the subsidence of the local mischief, and the tendency of that to disappear after the febrile stage is over, are all found in diseases not brought about by an infecting germ. Nor is the difficulty of producing pneumonia by direct irritants, as in the experiments of Heidenhain, a sufficient reason for such assumption; the changes noted in the lungs by Friedländer after section of the vagus and recurrent nerves has a closer bearing on the subject. Many conditions of fatigue, chill, malaria, and constitutional change may lower nerve-tone and predispose to an attack of pneumonia. In its tendency to affect some persons more than others and to recur, it resembles erysipelas; both are found in local outbreaks associated with circumstances of defective hygiene. All these considerations remove pneumonia further from the local inflammations, and correlate it with the general diseases more directly under the influence of conservative medicine.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Drs. Manson and Cobbold, F.R.S., "On Filaria Sanguinis Hominis clinically considered in reference to Elephantiasis Chyluria and Allied Diseases (with specimens)."

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. George Thin, "On the condition of the Skin in Tinea Tonsurans"; Mr. Laidlaw Purves, "On Paracentesis of the Tympanic Membrane"; Dr. Southey, "On the Minute Anatomy of the Kidney as bearing on its Physiological Functions."

WEDNESDAY.—Hunterian Society, 8 P.M. Mr. J. E. Adams, "On some rare forms of Iritis". Other members will bring forward cases.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE BARBER FUND.

SIR,—I beg to acknowledge with thanks the following contributions to the fund.

	£	s.	d.
Cesar Hawkins, Esq., London	5 0 0
Dr. Barr Meadows, London	1 1 0
T. Corbett, Esq., Kingston-on-Thames	1 1 0
F. E. A.	0 5 0

Further subscriptions are urgently needed.

PHILIP E. HILL.

Latham House, Crickhowell, March 19th.

GLAUCOMA.

SIR,—The information which Mr. Wilson Hope requires appears to be the *modus medendi* of the operation of iridectomy as curative of the above disease. It is not by setting up inflammation in a secreting membrane, but by establishing a drainage between the posterior chamber and the subconjunctival areolar tissue, and thus relieving tension.—Yours faithfully,

London, March 16th, 1878.

ALFRED E. BARRETT, M.R.C.S.Eng., etc.

WILLIAM CAMPBELL, described as the heaviest man in the world, is exhibiting himself just now in the Egyptian Hall. He stands 6 feet 4 inches in height, and weighs over 52 stones. He measures round the shoulders 96 inches, round the waist 35 inches, round the calf of the leg 35 inches. He is twenty-three years of age, and is the second son of a family of seven children of ordinary proportions. His father was of average weight, almost 6 feet 2 inches high. His mother was under the average height, and not stout.

SEVERE VOMITING.

SIR,—I advise your correspondent "M.R.C.S." to administer every two or three hours one minim of terebene suspended in one or two drachms of mucilage. All stimulants should be avoided, and the lower bowel should be kept clear by means of enemata. I have seen excellent results from this course of treatment.—Yours truly,

Macclesfield, March 18th, 1878.

B. Z.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the *Post Office* do not allow letters to be addressed to initials and directed to a *Post Office* in the United Kingdom, but letters may be addressed to initials to the *JOURNAL* Office or any stated address other than a *Post Office*.

LADY-MEMBERS OF THE ASSOCIATION.

SIR,—To prevent misunderstanding, will you give me a few lines of reply to Mr. Henry Brown's letter in your *JOURNAL* of the 16th instant? His reading of the laws of the Association is very confident, but to me in no way convincing. Wrong he assuredly is, when he says that the Committee of Council can at their pleasure expel me or any member. They cannot do so without assigning due and sufficient reason for their action, such as will stand the test of their own laws, and of a court of law. Moreover, until sufficient legal authority determines otherwise, I shall hold to the opinion that neither can the Committee expel duly elected lady-members merely because they are of the so-called weaker sex. The law says, that "any qualified medical practitioner" (it does not say medical man) "may be elected, etc." Lady-practitioners may, therefore, clearly be elected in accordance with the letter, if not with the spirit, of the law. The interpretation of the law, as being exclusive of females, by the light of the words *he* and *his* in other of the laws, on which Mr. Brown lays so much stress, would properly be regarded by lawyers as valueless. We all know that the female is constantly included under the nobler *he* and *his* in general rules of common life; and it is so from one end of the Bible to the other. Every railway time-table tells you that the passenger shall "deliver up *his* ticket", and so on. The lawyers read laws as they stand; and in this case will ask why, if they were meant to exclude females, did the framers of them write down "practitioners" instead of "men". It would be no answer to say that they were so meant. There ought to be no ambiguity on the subject, and there evidently must be until the laws are altered. I may add, that if my views of the laws are wrong, I err in very good company. If Mr. H. Brown be right, the Committee of Council committed a very patent blunder, and, in fact, broke the laws when they admitted lady-members; and have, moreover, ever since tacitly permitted the infringement of the laws in not ejecting the ladies from the Association. I cannot doubt that the Committee find themselves powerless in the matter; and I would again venture to express the hope that the Association, considering all attendant circumstances, will not attempt any arbitrary exclusion of these ladies. The Association, rightly or wrongly, admitted them. The ladies are *de facto*, and, I believe, *de jure*, members of it, and it would ill become this great body of medical men to punish others for the consequences of their own act. By interfering with these ladies as members of the Association, the profession will surely be subjected to the reproach of the public, and in my opinion, for once in a way, to their well deserved reproach. What more in reason can any member ask or desire than the passing of a law which shall in future prevent the recurrence of a fact that weighs so heavily on his conscience?—Yours obediently,

March 16th, 1878.

W. O. MARKHAM.

SIR,—Mr. Brown comes down rather severely on Dr. Markham for not having consulted the by-laws of the Association before having written his moderate and sensible letter on the above subject. Although Mr. Brown has taken up nearly a column of your space in discussing the right of Mrs. Hoggan and Mrs. Anderson to be considered members of the Association, on the ground that the by-laws on this subject only use the word *he* in reference to membership, he appears to be quite unacquainted with the fact, that it has been ruled over and over again in the law-courts, that wherever the word *he* can, by the circumstances of the case, be considered to include females also, it must be taken to do so, unless they are excluded by distinct provision. His contention, therefore, falls to the ground, and the ladies in question are as legally members of the Association as Mr. Brown himself is.

Really, sir, when one hears all this terrible uproar and indignation created by the admission of two solitary females amongst a constituency of some five thousand or six thousand men, one feels inclined to ask whether the subject is not too ludicrously contemptible to be worth the space it occupies in your columns.—I am, etc.,

FRANCIS T. BOND, M.D.

DR. R. H. TAYLOR will observe that it was proposed by the Committee of Council, at their last meeting, to pass a by-law of the kind which he suggests; and the question of the best method of dealing with the two ladies in question is referred to a special general meeting in Birmingham. The by-laws of the Association provide ample means for taking steps that these ladies shall cease to be members, provided such is the wish of the Association.

The following communications have been handed to the General Manager:—Mr. J. Moulding, Liverpool; Mr. F. W. Hodder, Mhow, Bombay; Mr. R. T. Morgan, Cricklade; Mr. J. Mottram, Norwich; Dr. Garrod, London; Dr. E. J. Levinge, Stapleton (with enclosure); Dr. John Beddoe, Clifton; Mr. Wm. Maycock, Leamington; Messrs. Reed and Wayman, Downham; Mr. James Dickson, Bootle; Mr. Wm. Rendall, Maiden Newton (with enclosure); Mr. Hutton, Bolton.

MR. HENRY M. CESTANCE's letter shall appear next week. The idea is an excellent one, and we shall be glad to give it all the help in our power.

AN EASY METHOD OF PLUGGING THE POSTERIOR NARES IN CASES OF HAEMORRHAGE.

SIR,—As I believe that more or less trouble and difficulty are generally experienced in using either Delbecq's cannula or the ordinary catheter, as usually directed, I would beg to call attention to the following plan, which I find to be both extremely easy as well as rapid of performance. Provide two soft (commonly called worm) catheters, and with scissors remove the end containing the eyelet-hole; then, by means of a long wire or needle, thread each with a double ligature. Pass one through each nostril well into the pharynx. Dangling loosely here, it is easily drawn through the mouth by passing the forefinger around it. The catheters having been removed, either through the nose or mouth, the plugs are tied and drawn back. It is better to use a catheter for each nostril before attempting to plug, as I have found that when the first plug is in position, the catheter did not pass so readily through the other nostril.—I am, etc.,

March 23rd, 1878.

T. T. FRANKLAND.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

THE TEACHING OF MATERIA MEDICA.

SIR,—Your correspondent Mr. C. M. Jessop, writing from Clifton, seems to have peculiar ideas about what qualifications constitute the best physicians and surgeons. There is no doubt such a multiplicity for the medical student of this present day, that any proposal which would simplify and systematise his work should be examined with great attention. In the main, I quite agree with Dr. Farquharson's remarks, and think that if the general operations of drugs and their doses are well known, the remembrance in most cases of the minutæ of preparations might surely be dispensed with. An exception to this rule might be made as to those drugs which are more immediately toxic in extended doses, and a comparatively intimate acquaintance with such required. The first years of a student's life are really of the first importance, that he should carry on his habits of education which we presuppose he has acquired. I entirely doubt that work in a surgery or a chemist's shop is likely to foster these; but such questions as these may in great measure be left to the Medical Council and teachers in our schools. I opine that it is not desirable that a youth of very immature judgment should learn by rote various modes of prescribing. Prescribing should be adapted to each case of disease, and a distinct reason be assignable for every part of a prescription.

It strikes me that Mr. Jessop is very unhappy in his selection of two prescriptions as incompatible—one, a mixture of dilute hydrocyanic acid with dilute nitromuriatic acid; and another, "quinine mixture in a mineral acid solvent with Fowler's solution". Now I fail to see the slightest incompatibility in either of these mixtures. In the first, chemically, there is no change; therapeutically, the effects are the same as far as the hydrocyanic acid is concerned, whether it is given simply in water, in water acidulated with a mineral acid, or whether it is given as cyanide of potassium. Why is this so? It is simply that in each of the first-named cases the hydrocyanic acid is in a free state; in the last case, the hydrocyanic acid is set free in the stomach by the acid there, or if it reach the blood in a combined state, the free carbonic acid of the blood liberates it. Donovan recommends an eighth of a grain of cyanide of potassium, with some syrup of lemons, as a substitute for hydrocyanic acid. Sir R. Christison distinctly states that those specimens of dilute hydrocyanic acid keep best in which there is a trace of free mineral acid. Now, as to the second prescription mentioned by Mr. Jessop, Fowler's solution in a quinine mixture, with a mineral acid as a solvent; I thought it was generally allowed that the various preparations of arsenious acid were dependent on the proportion and solvency of acid (arsenious) that they contained, rather than the manner in which it was combined (at least as far as the arsenious acid is concerned); and a little reflection should have showed Mr. Jessop that the mineral acid in the quinine mixture merely converted the arsenite of soda in the Fowler's solution into a compound like the liquor arsenici hydrochlor. For many years in India, I saw prescribed and prescribed myself liquor arsenicalis and quinine mixture as an antiperiodic; and I am quite sure that if Mr. Jessop tries this combination, he will get distinct evidence of the therapeutic effect, which is, I presume, the aim of prescribing.—Your obedient servant, T. M. LOWNDS, M.D., Surgeon-Major
Egham Hill, March 9th, 1878. (Retired) H. M. Indian Army.

SIR,—Having lately had occasion to prescribe nitro-muriatic and prussic acids in mixture, I am sufficiently horrified to-day to find, on the authority of Mr. Jessop, that I had in all probability been laughed at by the chemist who dispensed it. Will Mr. Jessop kindly inform me, through the medium of your JOURNAL, why he considers such a mixture incompatible? On turning to written authority, I find such a mixture more than once recommended in Tanner's *Medicine*. Dr. F. Roberts mentions them as being useful in chronic alcoholism, and another author remarks that incompatibility may be "therapeutically ideal". Led by these authorities, I am emboldened to add that in my particular case the treatment was not incompatible with the patient's improvement.—I am, etc., L.R.C.P.
Edinburgh, March 9th, 1878.

THE DEGREE OF M.D. BRUSSELS.

SIR,—In reply to the question on this subject in last week's JOURNAL, I should recommend the following books: Bryant's *Surgery*, Taylor's *Medical Jurisprudence*, Gray's *Anatomy*, Kirke's *Physiology*, Green's *Pathology*, and Churchill's *Midwifery*. For full particulars of the examination, etc., at Brussels and other Continental Universities, I should recommend your correspondent to obtain the *Guide to European Universities*, which has just been published, and was advertised in the BRITISH MEDICAL JOURNAL last week.—Sir, yours very truly,
March 1878. M.D.

CONGENITALLY IMPERVIOUS PREPUCE.

SIR,—A parallel case to that described by Dr. Mackenzie of Ragby came under my notice some years back, when I was attending midwifery in connection with the out-patient department of St. Bartholomew's Hospital. The child was well developed, and had no other defect about him. Before leaving the house, I removed the redundant prepuce with scissors, and divided the mucous membrane sufficiently to allow of full retraction, very little hemorrhage occurring. The urethra itself was natural. On the seventh day, the wound had quite healed.—I am, etc., J. HERBERT STOWERS, M.D., Physician to St. John's
Hospital for Diseases of the Skin.

March 12th, 1878.

MR. HATTON'S (Bolton) letter has been handed to Mr. Fowke, who will, no doubt, be able to give a satisfactory explanation.

TURPENTINE IN POST PARTUM HÆMORRHAGE.

SIR,—I have never given turpentine in post partum hemorrhage, but I can quite understand its value as a stimulant to the uterus in such cases. If administered by the month, it must have three disadvantages. 1. It is intensely disagreeable to take; 2. It is difficult to swallow in cases of collapse from excessive hemorrhage; 3. It is very likely, as Dr. Savage observes, to be rejected by vomiting. Might not all these difficulties be overcome, and the treatment perhaps rendered more effectual, by injecting the drug per rectum?—Yours, etc., GEORGE WELLER.
Wanstead, March 1878.

W. D. H.—Many thanks. We were not aware of the facts mentioned.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

VIGOROUS MIDWIFERY.

SIR,—Philanthropists amongst us have for some time been engaged in the effort to provide the poor with competent midwives, by means of a compulsory system of legislation that would exclude fictitious practitioners. The movement has not yet, I think, made very practical progress. Perhaps the following case that has recently come under my notice may help to show the necessity for some improvement in our present system, or want of system.

I was called on the night of February 8th to go to a woman four miles off, who was reported to be very ill after delivery by a village midwife. I went at once, and found the patient dead. The midwife brought me something in a chamber-vessel, with the remark, "This is what followed the child, sir". I examined it, and found it to consist of the whole uninjured uterus, a small portion of the placenta lying loose in the vessel, but the greater part remaining unremoved and "adherent". There was no portion of the cord attached. I subsequently, by order of the coroner, made a post mortem examination, and found the bladder so lacerated and torn from its position as to be scarcely recognisable, the small bowel torn across, and the mesentery stripped up for eighteen inches of its length. I was informed that all this mischief was the result of an hour and a half's resolute action on the part of the midwife, who silenced peremptorily all suggestions that medical aid should be sent for, and disregarded the piteous appeals of the poor patient for "one five minutes' rest".—I am, etc., HERBERT G. LEE.
Thame, February 18th, 1878.

UNDERTAKERS' BRIBES.

SIR,—Instead of holding up our hands in virtuous indignation, it would better become us, I think, to fold them in profound humility, at the thought that there are a sufficient number of members of our profession who are, or who are supposed to be, ready to accept a disgusting bribe, to make it worth the while of a touting firm to send out their offensive circulars broadcast.—Your obedient servant,
March 1878. LEONARD W. SEDGWICK.

HEADACHE.

SIR,—Will any one kindly suggest a cure for headache? The patient is a girl, aged 22, who is a cook. Her general health is in every respect good. She suffers from continual headache, more or less severe, which often awakes her at night. It is in no particular spot, but seems to affect the whole of the head. Among other remedies, guarana has been given, without the smallest good effect. I believe the headache to depend upon the air of Brighton being too exhilarating for her; but as she cannot well leave it, I should be glad to receive hints for the treatment of her case.—I am, etc., J. K.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Courant; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. Ferrier, London; Dr. G. M. Humphry, Cambridge; Dr. Douglas Powell, London; Mr. T. H. Bartlett, Birmingham; Dr. George Johnson, London; Mr. Teevan, London; Mr. R. Harrison, Liverpool; Dr. Joseph Coats, Glasgow; An American Physician, New Brighton, S.I.; Mr. James Moulding, Liverpool; Mr. Ralph Thompson, London; The Secretary of the Sanitas Company; Mr. Callender, London; Dr. T. Eytton Jones, Wrexham; X.; Dr. W. D. Fairless, Bothwell; Dr. Garrod, London; Mr. E. Berdoe, London; Dr. H. J. Hardwicke, Sheffield; Mr. J. Mottram, Norwich; B.; Mr. R. T. Morgan, Cricklade; Mr. C. M. Jessop, Clifton; Dr. W. O. Markham, London; M.R.C.S.Eng.; Mr. N. A. Humphreys, London; Dr. R. L. Bowles, Folkestone; Mr. Alban Doran, London; Our Paris Correspondent; Mr. John Michel, New York; The Secretary of the Royal Medical and Chirurgical Society; Mr. F. N. L. Hodder, Mhow, Bombay; Mr. G. Bland, Macclesfield; Dr. E. G. Levinge, Stapleton, Bristol; Dr. G. de G. Griffith, London; Dr. Bond, Gloucester; Dr. A. T. Brett, Watford; Mr. W. Clode, London; Mr. Alfred Cohen, London; The Right Hon. J. Stansfeld, London; The Secretary of Apothecaries' Hall; Dr. Edis, London; The Secretary of the Medical Society of London; Mr. G. Eastes, London; The Registrar-General of England; Z.; Dr. J. W. Moore, Dublin; Dr. Joseph Bell, Edinburgh; Dr. J. Milner Fothergill, London; M.D.; The Registrar-General of Ireland; Mr. T. Holmes, London; Dr. W. Fairlie Clarke, Southborough; Mr. Daniel Biddle, Kingston-on-Thames; Dr. W. Newman, Stamford; Mr. J. Colby, Cheltenham; Dr. Goldie, Leeds; Messrs. Reed and Wayman, Downham; A Physician; Mr. W. D. Hemming, London; Dr. J. D. Mann, Manchester; Mr. S. M. Bradley, Manchester; Dr. Gosdon, London; Another Member; Mr. Wm. Maycock, Leamington; Dr. E. Jones, London; Dr. Beales, Congleton; Dr. Lockhart Clarke, London; Dr. Francis Warner, London; Dr. John Beddoe, Clifton; Dr. Wm. Hitchman, Liverpool; Mr. Trevor Fowler, Epping; Mr. C. E. Davis, Boston, U.S.; Mr. Alfred E. Barnett, London; Messrs. A. Williams and Co., Washington, U.S.; W.; Mr. Sibley, London; Mr. R. Clement Lucas, London; Dr. C. Theodore Williams, London; Dr. Maybury, Richmond; Mr. A. W. Stocks, Salford; Mr. T. F. Chavasse, Birmingham; Dr. H. K. Hitchcock, Lewisham; Dr. T. K. Chambers, London; Mr. W. Campbell, London; Mr. Hutton, Bolton; Mr. Thomas Button, Ladywood; Mr. W. Pugin Thornton, London; Mr. Chiene, Edinburgh; The Secretary of the Hunterian Society; Mr. Henry N. Custance, London; etc.

THE GOULSTONIAN LECTURES ON THE LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.,
Professor of Forensic Medicine in King's College; Assistant-Physician to King's
College Hospital; etc.

LECTURE I (concluded).—March 15th.

MM. FRANCK and PITRES* have shown that a distinct interval elapses between the excitation and the movement: an interval which, after deducting the latent periods of nervous and muscular stimulation, and the rate of transmission of neural impulse in the cord and nerves, leaves a residue of nine-two-hundredths of a second of retardation in the grey matter. If, however, the grey matter be removed, and the stimulus applied to the medullary fibres, the period of retardation diminishes to six-two-hundredths of a second. This proves, in accordance with the laws of stimulation of nerve-centres, that the grey matter intervenes, not as a conductor, but as a centre. It has likewise been proved by the experiments of Putnam, Carville and Duret, etc., and verified by Franck and Pitres, that, in order to excite movements after removal of the cortex, a stronger stimulation is necessary than that required for the cortex itself. This, on the physical conduction theory, would be, the less the resistance, the less the effect: a proposition manifestly absurd. It is, however, the property of the nerve-centres to reinforce an excitation; and such is the case with the cortical grey matter. Still more important, perhaps, than these results, is the fact that certain modifications occur in the excitability of the medullary fibres after removal of the cortex, which conclusively demonstrate that we have to deal with neurility, and not with mere electrical conductivity, as Mr. Lewes supposes.

We know from Waller's researches that, when a motor nerve is divided, the excitability gradually diminishes and ultimately disappears: phenomena which proceed *pari passu* with progressive degeneration of the nerve from the centre towards the periphery. In a similar manner, it has been found by Albertoni and Micheli,† confirmed by Dupuy,‡ and by MM. Franck and Pitres, that, after a certain period, excitation of the medullary fibres no longer gives rise to the movements which can be caused by stimulation immediately after removal of the grey matter of the cortex. In dogs, as a rule, as Franck and Pitres have shown, the excitability totally disappears about the fourth day; and this coincides with the period at which, in consequence of the degeneration described, the motor nerves of the dog lose their excitability. By such facts, the only plausible arguments in favour of mere physical conduction of the electrical currents are shown to be absolutely without foundation; and, all other evidence apart, the direct relation of the cortical grey matter to movements is established beyond all doubt.

I have purposely excluded until now the consideration of the effects of localised destruction of the cortex. These, as I hope to be able to show you, are, in the case of man at least, clear and decisive in the same direction. But, it must be admitted, there is a considerable want of unanimity among the conclusions which physiologists have considered themselves entitled to draw from their several experiments. Many of these differences seem to me in a great measure due to narrowness of view, and to the entire disregard of the facts relating to man himself.

We should think it a very misleading research if a pharmacologist were to set himself to determine the mode of action of a drug on the human economy by experiment on an animal, before he had first ascertained whether the animal on which he proposed to experiment exhibited symptoms of being similarly affected by the drug as man himself. Before his researches could be allowed to have any bearing on therapeutics, this would have to be established; for we know that drugs may act differently on different animals. It is even more necessary, in regard to the physiology of the brain, that a similar caution should be exercised. Anatomical homologies must not be pushed too far in support of identity of function.

A frog deprived of its cerebral hemispheres still remains capable of a number of the most complicated and adaptive reactions, so little differing from those normally manifested by this animal that, except for the defect of spontaneity, they might be regarded as identical. But no one will say that the symptoms presented by the brainless frog at all resemble the clinical picture of a case of disorganisation of the cerebral lobes in man. The same may be said of pigeons, the favourite subjects of Flourens' experiments, and the origin of many misleading conclusions in human physiology and pathology. Nor are the phenomena in the case of the much-experimented-on rabbit at all comparable to those observed in cerebral disease in man. We might be led, from the effects of ablation of the cerebral hemispheres in this animal, to regard the cerebral hemispheres as having special functional relation to the upper extremities, as these are more particularly paralysed; and this conclusion has a germ of truth in it, when looked at in the proper light, but is a grave error if applied without qualification to human physiology.

The destruction of the cerebral hemispheres in the dog approaches more nearly in its results to the universal powerlessness caused by a similar lesion in man, but not so complete or enduring. The destruction of the cortex only, however, though at first producing a greater or less degree of paralysis of the opposite limbs, does not render the animal quite powerless; and within a few days or weeks the motor powers are regained to such an extent that, except on hurried movements, a superficial observer might come to the conclusion that the animal had not suffered by the lesion.

Some, who do not extend their view beyond dogs, at once jump to the conclusion that facts like these justify them in asserting that not only in dogs, but in man also, the cortex of the brain has no real relation to motility; and that the phenomena which ensue from cortical lesions are merely transitory disturbances of the functions of other parts. Others, if they do admit any direct relation between the two, assume, from the apparent recovery, that there is no exclusive localisation of function, and formulate a law of functional substitution of one part by another to explain the difficulties, chiefly of their own creation.

When, however, we ascend higher, and come to experiments on animals which in conformation, habits (and shall we say kinship?), most closely approach man, and to the experiments of disease on man himself, we meet with results little in harmony with the conclusions drawn by some from their researches on the lower animals. In monkeys, destruction of those regions, excitation of which gives rise to definite movements of the limbs, causes paralysis of voluntary motion complete and enduring, and restricted to those very movements the centres of which are specially destroyed. It will be my endeavour to show you that what is true of the monkey is strictly true also of man.

Taking these facts as established—the proofs of which will be given subsequently—may we not, instead of trying to contradict one set of facts by the other, find some generalisation which will admit of all these apparently discordant results being harmonised with each other and with the great law of evolution? This, I think, can be arrived at, if we recognise the fact towards which all these experiments on different animals point; viz., that the same movements have a plurality of causes, and are represented, though with different significations, in different centres, higher and lower. Those which involve conscious discrimination, and which we term volitional in the strict sense of the term, are those alone which are necessarily paralysed by destruction of the cortex; while those which are variously described as automatic, instinctive, or responsive, including all the motor adjustments concerned in equilibration, locomotor co-ordination, and instinctive emotional expression, are more or less completely and independently organised in the centres situated below the cortex. Though there is a general solidarity of the whole cerebro-spinal system, yet there exist in different animals great differences in the degree of organisation of such movements in the lower ganglia, and in their relative independence of the higher centres. This is greatest in the frog and pigeon, and lowest in the monkey and man. Hence the marked differences which we observe in different animals in the results of destruction of the cerebral hemispheres.

If we clearly distinguish, therefore, between the different *kinds* of movement and their respective centres, and regard paralysis of truly volitional movements, or those involving conscious discrimination, as the only essential feature of cortical lesions, we shall be in harmony with the results of comparative experimental physiology, and shall not need a hypothesis of functional substitution, which cannot, I think, be maintained consistently by those who accept the doctrine of specific localisation.

In accordance with this generalisation, I ventured to predict that, even in the case of animals whose motor powers did not seem permanently to suffer from destructive lesions of the cortical motor centres,

* Soc. de Biologie, December 23rd, 1877.

† Sui Centri Cerebrali di Movimento. *Lo Sperimentale*, February 1876.

‡ *Physiology of the Brain*, p. 9.

those movements must be paralysed which involved conscious discrimination, and were not automatically organised. This has been amply verified by Goltz's experiments on dogs.* Goltz found that, though a dog's paw is not permanently paralysed as an organ of locomotion by destruction of the cortex, yet it remains permanently paralysed for all those actions in which it is employed as a hand.

The conclusion, therefore, which I would provisionally draw from the results of experimental physiology, and proceed to justify by a consideration of the facts of human pathology, is, that there are certain regions in the cortex to which definite functions can be assigned; and that the phenomena of cortical lesions will vary according to their seat, and also according to their character—viz., whether irritative or destructive, two classes into which they may all be theoretically reduced. And, as the experiments of physiology necessitate the strictest topographical accuracy in the position and limits of individual centres, it is of vital importance that the same accuracy should be observed in respect to the situation of lesions in the human brain. For this reason we are, however unwillingly, obliged to discard most of the older records of cerebral disease, unless where supplemented by drawings, or by description of the position of the lesion with reference to certain fixed points; for, although we can now read these cases in the light which laws otherwise arrived at throw upon them, they cannot be used to establish these laws. In the older records, we, as a rule, meet with nothing more exact in the topography of a lesion than that it was situated "on the convexity" of one or other hemisphere, or in the anterior, middle, or posterior lobe—terms which admit of considerable looseness of interpretation. Anatomically, the frontal lobe was generally considered as marked off from the middle lobe by the antero-parietal (Huxley) or præcentral sulcus (Ecker); but we find Bouillaud extending the frontal lobe so as to include as much as the half of the hemisphere: an extension of this lobe which may serve to explain his theory as to the seat of the faculty of speech. In the question of localisation of cerebral function, we must follow Bacon's dictum: "*Frustra magnum expectatur augmentum in scientiis ex superinductione et insitione novorum super vetera, sed instauratio facienda est ab imis fundamentis.*"

It is in the observations of the last few years, in which only the necessity of strict accuracy in cerebral topography has been duly recognised, that we must look for our chief material, and of this the largest share has been contributed by Charcot and the French school of pathology. As to the kind of evidence on which we must base our conclusions, I cannot do better than quote and emphasise the injunction given by Charcot and Pitres in their recent valuable papers on the localisation of cerebral disease.† "It is necessary rigidly to exclude as valueless in this relation all observations in which the topography of the lesion is not indicated with rigorous exactitude; and, among those which, in a topographical point of view, leave nothing to be desired, it is necessary to make a selection and reject the majority of the cases of multiple lesions, and all those in which the lesion was diffuse. It is necessary also to accept with extreme caution cases of tumour compressing without destroying the cerebral convolutions; for the effects of pressure may be felt at a distance from the seat of lesion, and complicate the results. In making these estimations, in our opinion absolutely indispensable, the number of ancient observations really available is extremely small; and it is by the aid of new observations, made with all the requisite precautions, that we must approach the study of cerebral localisation." The lesions which are of special value are cases of wounds, laceration, or loss of substance, and various forms of chronic degeneration, such as atrophy, necrosis, etc., and the results of hæmorrhage, inflammation, and the like, which, though at first complex, subside into local lesions, such as softening, cysts, and abscesses; or, in general, all lesions which exclude diffuse meningo-encephalitis, mechanical compression, or general cerebral disturbance.

From the standpoint of regional diagnosis, the exact nature of the lesion is unimportant, except in so far as it is likely to cause irritation or destruction of the cerebral substance. The diagnosis of the nature of the lesion will depend on other characters, such as its mode of onset, general symptoms, and the various recognised features by which we are enabled, with more or less accuracy, to arrive at it. To discuss

these, however, would be foreign to the subject more immediately in hand. I would likewise remark at the outset that, notwithstanding the large and daily increasing body of evidence from the pathological side, for the present at least, physiological experiment is considerably in advance of pathology as regards precision and exactitude; and that, but for the aid of physiological experiment, pathology would not even yet have succeeded in arriving at much beyond general indications as to localisation.

For my part, I should consider it hasty and not to the advantage of "la belle doctrine" of cerebral localisation to make pathological evidence carry more than it can legitimately bear at present, or to found on it measures of treatment, not well considered, the only effect of which will be to make cerebral localisation pray earnestly to be saved from its friends.

Lesions of the Frontal Lobes.—I will first direct your attention to lesions of the frontal lobes. The frontal lobe includes the *superior*, *middle*, and *inferior frontal* convolutions, and the *ascending frontal* or *præcentral* convolution, together with the *orbital* and *internal* aspect of the corresponding region (see figs. 1 and 2, with description).

Though anatomically all this region may be included in the frontal

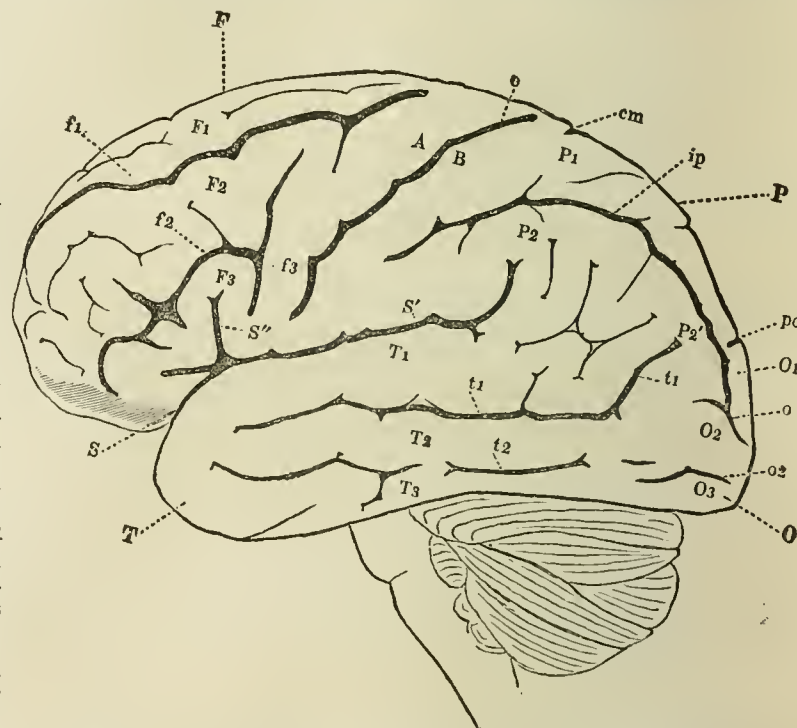


Fig. 1.—Lateral View of the Human Brain.—F. Frontal Lobe. P. Parietal Lobe. O. Occipital Lobe. T. Temporo-sphenoidal Lobe. S. Fissure of Sylvius. S'. Horizontal. S''. Ascending Ramus of the same. c. Sulcus Centralis, or Fissure of Rolando. A. Anterior Central Convolution, or Ascending Frontal. B. Posterior Central Convolution, or Ascending Parietal. F₁. Superior; F₂. Middle; F₃. Inferior Frontal Convolution. f₁. Superior; f₂. Inferior Frontal Sulcus; f₃. Sulcus Præcentralis. P₁. Superior Parietal Lobule, or Postero-Parietal Lobule. P₂. Inferior Parietal Lobule—viz., P₂. Gyrus Supramarginalis. P₂'. Gyrus Angularis. ap. Sulcus Intraparietalis. c.m. Termination of the Callosal-Marginal Fissure. O₁. First, O₂. Second, O₃. Third Occipital Convolution. p.o. Parieto Occipital Fissure. o. Sulcus Occipitalis Transversus. o₂. Sulcus Occipitalis Longitudinalis Inferior. T₁. First, T₂. Second, T₃. Third Temporo-Sphenoidal Convolution. t₁. First, t₂. Second Temporo-Sphenoidal Fissures.

lobe, it is necessary for physiological and pathological purposes to subdivide it, and to term that part which, in its relation to the skull, is roughly bounded by the coronal suture, the *prefrontal lobe* or *antero-frontal* region (fig. 3). In the monkey, electrical irritation of this region causes no motor reaction; and destruction of these lobes causes no paralysis of motion or sensation. If the positive results, which will be alluded to subsequently, are not altogether definite, the negative results are clear and decided.

There are multitudes of cases on record in which these regions have been the seat of extensive disease on one or both sides with a like negative results as regards sensation or motion; and recovery has taken

* Pflüger's *Archiv für Physiologie*, Band xlii, Heft i, 1876.

† *Revue Mensuelle*, 1877, No. 1, p. 6.

place after the most frightful lacerations and loss of substance. One of the most remarkable of these is that known as the "American Crowbar Case"; and as this case, in addition to its importance otherwise, has lately been appealed to by Dr. Dupuy,* as showing that

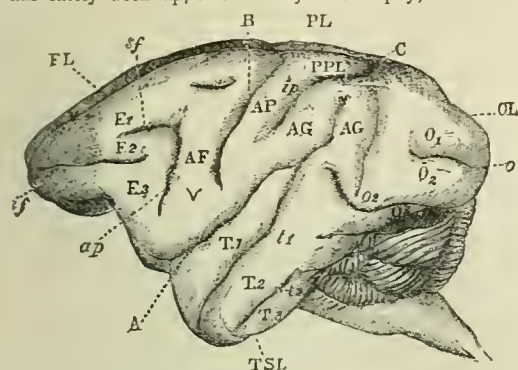


Fig. 2.—Lateral View of the Monkey's Brain.—A. The Fissure of Sylvius. B. The Fissure of Rolando. C. The Parieto-Occipital Fissure. F.L. Frontal Lobe. O.L. Occipital Lobe. T.S.L. Temporo-Sphenoidal Lobe. F₁, F₂, F₃, Superior, Middle, and Inferior Frontal Convolutions. s.f. Supero-Frontal Sulcus. i.f. Infrero-Frontal Sulcus. a.p. Antero-Parietal or Precentral Sulcus. A.F. Ascending Frontal; A.P. Ascending Parietal Convolutions; P.P.L. Postero-Parietal Lobule. A.G. Angular Gyrus. i.p. Intra-parietal Sulcus. T₁, T₂, T₃, Superior, Middle, and Inferior Temporo-Sphenoidal Convolutions. t₁, t₂, Superior and Inferior Temporo-Sphenoidal Sulci. o₁, o₂, o₃, Superior, Middle, and Inferior Occipital Convolutions. o₁, o₂, First and Second Occipital Fissures.

lesions of the so-called motor region may occur without paralysis, I have thought it necessary to obtain exact particulars in reference to it. And I am enabled, by the kindness of my friend Professor Bowditch of Harvard, to place before you photographic delineations of the skull in

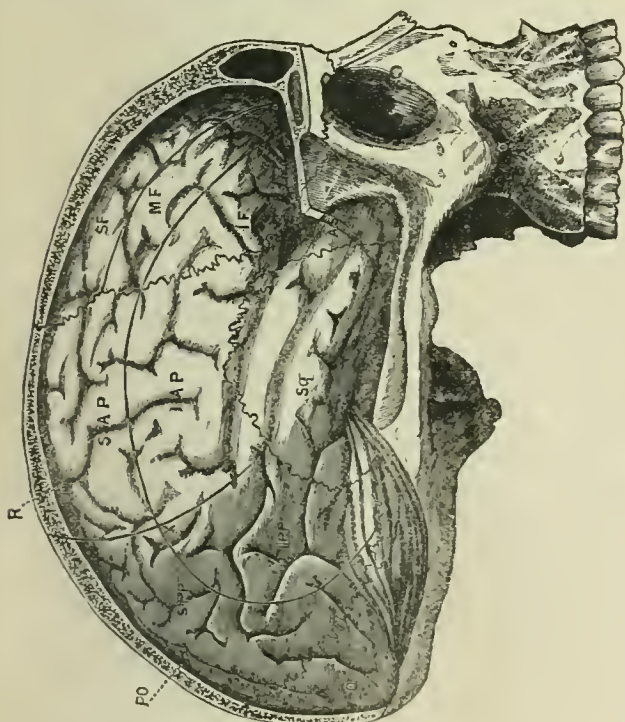


Fig. 3.—Relations of Skull and Brain (Turner).

this case, which was at one time regarded incredulously as a mere "Yankee invention". The skull is preserved in the Medical Museum of Harvard University. There is no doubt about its authenticity. An account of the case was published by Dr. Bigelow,† and another

and later, after the man's death, by Dr. Harlow,* under whose care he came immediately after the accident, and through whose interest in the man till death we owe the preservation of this unique specimen. (See figs. 4, 5, 6.)

The subject of the lesion was a young man, Phineas P. Gage, aged twenty-five. While he was engaged tamping a blasting charge in a rock with a pointed iron bar, 3 feet 7 inches in length, 1 1/4 inches in diameter, and weighing 13 1/4 lbs., the charge suddenly exploded. The iron bar, propelled with its pointed end first, entered at the left angle of the

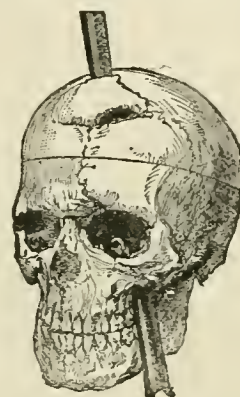


Fig. 5.

patient's jaw, and passed clean through the top of his head, near the sagittal suture in the frontal region, and was picked up at some distance covered with "blood and brains". The patient was for the moment stunned, but, within an hour after the accident, he was able to walk up a long flight of stairs and give the surgeon an intelligible account of the injury he had sustained. His life was naturally for a long time despaired of; but he ultimately recovered, and lived twelve and a half years afterwards. Unfortunately, he died (of epileptic convul-



Fig. 4.



Fig. 6.

Figs. 4, 5, 6 (Harlow).—Illustrations of Dr. Harlow's Case of the Passage of an Iron Bar through the Head.

sions) at a distance from medical supervision, and no *post mortem* examination of the brain was made; but, through the exertions of Dr. Harlow, the skull was exhumed and preserved. Upon this the exact seat of the lesion can be determined. The union of the cicatrices of entrance and exit, however, allowed a pretty accurate estimation of the track of the bar during life, and Dr. Bigelow made experiments on a skull to determine this, and, as the photographs, when compared with figures before you, show,† with very considerable accuracy. Dr. Bigelow, who examined the man two years after the accident, thus describes the appearances presented. "A linear cicatrix of an inch in

* "Recovery from the Passage of an Iron Bar through the Head." Read before the Massachusetts Medical Society, June 3rd, 1868; Boston, 1868.

† The lectures were illustrated by numerous diagrams, to which reference was constantly being made.

* *Medical Times and Gazette*, 1877.

† *American Journal for Medical Sciences* for July 1850.

length occupies the left ramus of the jaw near its angle...The eyelid of this side is shut, and the patient unable to open it; the eye considerably more prominent than the other. [Vision lost (Harlow).]...Upon the head, and covered by the hair, is a large unequal depression and elevation...A piece of the cranium of about the size of the palm of the hand, its posterior border lying near the coronal suture, its anterior edge low on the forehead, was raised upon the latter as a hinge, to allow the egress of the bar; still remains raised and prominent."

From his examination of the skull itself, Dr. Harlow thus describes the track of the bar. "The missile entered, as previously stated, immediately anterior and external to the angle of the inferior maxillary bone, proceeding obliquely upwards in the line of its axis, passed under the junction of the superior maxillary and malar bones, comminuting the posterior wall of the antrum, entered the base of the skull at a point the centre of which is an inch and a quarter to the left of the median line, in the junction of the lesser wing of the sphenoid with the orbital process of the frontal bone—comminuting and removing the entire lesser wing with one half of the greater wing of the sphenoid bone—also fracturing and carrying away a large portion of the orbital process of the frontal bone, leaving an opening in the base of the cranium, after the natural effects at repair by the deposit of new bone, of one inch in its lateral, by two inches in its antero-posterior, diameters." (P. 17.) Dr. Harlow does not describe the further track of the bar through the frontal bone, but you will clearly see, from the figures, that the whole lesion is situated anterior to the coronal suture. If, now, you will compare the track of the bar through the skull and brain with the diagram before you (fig. 3), showing the relations between the skull and the brain, you will, I think, have no doubt in convincing yourselves that the whole track is included within that region of the brain which I have described as the prefrontal region, and that, therefore, the absence of paralysis in this case is quite in harmony with the results of experimental physiology. The only other region which the bar could have injured is the tip of the temporo-sphenoidal lobe and the outer root of the olfactory bulb. Respecting the condition as to smell, nothing is, however, said, by either Bigelow or Harlow. This case is generally quoted as one in which the man suffered no damage bodily or mental. But hear what Dr. Harlow says as to his mental condition. "His contractors, who regarded him as the most efficient and capable foreman in their employ previous to his injury, considered the change in his mind so marked that they could not give him his place again. The equilibrium or balance, so to speak, between his intellectual faculties and animal propensities seems to have been destroyed. He is fitful, irreverent, indulging at times in the grossest profanity (which was not previously his custom), manifesting but little deference for his fellows, impatient of restraint or advice when it conflicts with his desires, at times pertinaciously obstinate, yet capricious and vacillating, devising many plans of future operation, which are no sooner arranged than they are abandoned in turn for others appearing more feasible. A child in his intellectual capacity and manifestations, he has the animal passions of a strong man. Previous to his injury, though untrained in the schools, he possessed a well-balanced mind, and was looked upon by those who knew him as a shrewd, smart business man, very energetic and persistent in executing all his plans of operation. In this regard, his mind was radically changed, so decidedly, that his friends and acquaintances said he was 'no longer Gage'." (P. 13.)

After these facts, I do not think it can be said with justice that the man suffered no damage either bodily or mentally, or that the "American Crowbar Case" is in opposition to the experimental facts which I have adduced as to the effect of lesions of the frontal lobes.

A similar case of wound of the frontal lobe, also without motor or sensory paralysis, is related by Bouilland.* The wound was caused by a bullet which traversed the upper lip and right nostril, and, passing through the roof of the orbit, emerged at the upper part of the frontal bone, near the sagittal suture.

Trousseau gives a frequently quoted case of an officer who, in a duel, received a bullet, which passed through the head in the middle of the frontal lobes. The man could speak freely, and showed no signs of paralysis of any kind. Death occurred from encephalitis.†

An interesting case of wound of the frontal lobe has been recorded by Congreve Selwyn.‡ A boy aged 4, while at dinner, accidentally fell on a cheese-knife, four inches and a half long in the blade, which penetrated the orbit above the right eye to the depth of three inches and a quarter. After removal of the knife, some brain-matter escaped, and more was discharged on the eighth day. The accident occurred in September 1821. At the date of writing (1838), the only symptoms

observable were blindness of the right eye, dilated pupil, and ptosis. "As regards the present state of his mind, all the senses are perfect, excepting the vision of the injured eye. The memory is very defective. He is incapable of applying to any pursuit requiring mental activity. His disposition is irritable, especially after indulging in liquor, or after any unusual stimulus. He has occasional pain on the injured side of the forehead, and has once had typhus fever since. His bodily health is now good, and he has the free use of the superior and inferior extremities."§

But cases of injury of one or other frontal lobe, without sensory or motor affection, are very numerous. Many are given by M. Pitres, in his recent work,† to which reference may be made for exact citations; a case, by Morgagni, of perforation of the right anterior lobe by a pointed iron; a case, by Morrin, of recovery from a bullet-wound of the left frontal lobe; a case, by Padeau, of recovery after a bayonet-wound of the same region; a case, by Tavignot, of fracture of the frontal bone, and death, without affection of sensation or motion, in which the right anterior lobe was disorganised; a case of wound of the left frontal lobe by the ferrule of an umbrella which penetrated the orbit, related in the *Dublin Journal of Medicine*, 1851; a case of a bullet-wound above one of the orbits, the bullet lodging and causing no symptoms; recorded by Quesnay.

A case has been recently reported by Marot‡ of fracture of the frontal, followed by pyæmia and death, in which it was found that there was effusion into, and laceration of, the first frontal convolution, on the right side. No cerebral symptoms were observed.

The same observer brought another similar case before the Société Anatomique.§ In this, there was depressed fracture of the frontal bone and laceration of the frontal region by a piece of bone. There was no affection of sensation or motion. Death occurred a month afterwards. The laceration occupied the middle frontal convolution of the right side, at the junction of the anterior with the posterior two-thirds. The superior frontal was injured at the same level. There was loss of substance, and an irregular cavity filled with detritus and blood replacing it. There was also slight extravasation over the left frontal lobe. In the discussion which followed, M. Renault quoted a similar case, also without symptoms; and M. Petit two like instances.

I might multiply instances all demonstrating the same fact, that sudden and extensive lacerations may be made in the prefrontal region, and large portions of the brain-substance may be lost, without causing impairment either of sensation or of motion; and, indeed, without very evident disturbance of any kind, bodily or mental, especially if the lesion be unilateral. And if it be true that sudden lesions may be thus latent, *à fortiori*, it might be expected that the slowly progressive lesions of disease would be free from objective symptoms; for it is frequently said that the absence of symptoms may be accounted for by the compensation and functional substitution of other centres: a hypothesis which the negative character of sudden lesions renders altogether inadmissible.

Of cases of softening or abscess, etc., in these regions many are on record. Charcot and Pitres,|| and Pitres in his before mentioned memoir,¶ have collected numerous cases in which one or both frontal lobes have been the seat of disease without any objective symptoms. Time will not permit me to describe these cases in detail, and I will content myself with merely giving the headings: a case of hæmorrhage into the substance of the second right frontal convolution; a case, by Andral, of softening of the orbital lobule of the left hemisphere; a case, by Bergeron, of abscess of the left frontal lobe following a blow; a case, by Hertz, of abscess of the left frontal lobe; a case, by Reed, of fracture of the frontal bone followed by abscess occupying the whole of the right frontal lobe; a case, by Begbie, of abscess of the whole of the left anterior lobe in connection with an abscess of the ethmoid; a case, by Cholmeley, of abscess of the anterior part of the left hemisphere; a case, by Evans, of abscess of the left frontal lobe following a blow; a case, by Prescott Hewett, of abscess of the left anterior lobe; and a similar case by Bouilly. To these, quoted by Charcot and Pitres, may be added a recent case, reported by Lepine,** of abscess of the right frontal lobe, connected with disease of the nasal fossæ.

In all these cases, there was an entire absence of sensory or motor paralysis; and in many, there was nothing recorded or nothing calling for special attention as regards the mental condition. In some of these, however, and in one or two others to be referred to, the psychological

* *Loc. cit.*, p. 16.

† *Lésions du Centre Ovale*. Paris, 1877.

‡ *Prog. Méd.*, February 26th, 1876.

§ Meeting of February 11th, 1876; *Le Progrès Méd.*, June 2nd, 1876, p. 437.

|| *Revue Mensuelle*, 1877.

¶ *Lésions du Centre Ovale*.

** *Revue Mensuelle*, November 1877, p. 862.

* *Traité de l'Encéphalite*, p. 331.

Peter, "De l'Aphasie." *Gaz. Hebdomadaire*, 1864, p. 433.

Lancel, February 28th, 1838.

condition seems to have attracted notice. Lepine says of his case of abscess of the right frontal lobe: "He was in a state of hebetude. He seemed to comprehend what was said, but could scarcely be got to utter a word. He would sit down when he was told to do so, and when taken up could walk a few steps with assistance."

A very interesting case is reported by Baraduc,* in which there was atrophy of the frontal convolutions in both hemispheres. The patient was an inmate of the Hospice de Ménages for six years. His muscular powers and sensation were unimpaired. He was, however, in a state of complete dementia, marching about restlessly the whole day, picking up what came in his way, mute, and quite oblivious of all the wants of nature, and requiring to be tended like a child. The lesion in this case was purely cortical, atrophic, and dependent on partial obliteration of the arterial supply. The lesion occupied the two anterior lobes, that is to say, the first, second, and third frontal convolutions, and also the internal aspect of the frontal lobes. The ascending frontal, ascending parietal, and paracentral convolutions were intact. The rest of the brain was normal, except in the region of the inferior parietal lobule of the right hemisphere (supramarginal and angular gyrus).

Another case, presenting several interesting features, has been put on record by Dr. Davidson.† A labourer received a severe blow on the head with an iron book, which smashed and carried away a considerable portion of the frontal bone, exposing and injuring the brain as far back as the coronal suture. "The injured portion of the brain, as determined *post mortem*, included, on the right side, the greater part of the superior and middle frontal convolutions; and on the left side, a piece of bone was found firmly adherent to the superior frontal convolution at its middle part, this part being disintegrated to the depth of an inch or so. With the exception of a spasmodic extension of the right arm occasionally, the only symptoms of the cerebral lesion in this case were of a psychical nature. Though the man seemed to understand what was said to him and did what he was told, "every action he performed left the impression on the mind of the observer that it was purely automatic" or machine-like.

Marked mental deficiency has been frequently noted in connection with arrested development, or atrophy, of the frontal lobes, without any objective symptoms as regards motility or sensibility. One good instance of this has been described and figured by Cruveilhier. This was a case of a girl aged 15, who had remained in a complete state of idiocy from birth. The prefrontal regions or anterior two-thirds of the frontal lobes in this case were completely wanting. But, indeed, the frequent association of idiocy with such defect of the frontal lobes is a generally recognised fact.

Whatever opinion we may form as to the positive indications of disease of the prefrontal lobes, I think it is abundantly manifest, from the cases I have cited from among many, that, in the total absence of affections of motility or sensibility, whether in connection with sudden or slowly progressive lesions of these regions, we cannot attach objective motor or sensory functions to them. With such evidence before us, to say nothing of the facts of experimental physiology, we cannot regard cases in which, with lesions in the prefrontal lobes, sensation or motion has been affected, as other than cases of co-existence or multiple lesions, whether organic or functional. Between lesions of the prefrontal lobes and such symptoms, we have no grounds for assuming even indirect causal relationship, unless they can be shown to be of very frequent, if not constant, occurrence. Such relationship we all admit in the case of tumours, which, as we know, influence regions at a distance from the actual seat of disease; or in the case of diseases spreading backwards, such as encephalitis or meningitis.

It is chiefly on the indirect or accessory symptoms that we at present rely for our diagnosis of lesions in the frontal regions. We may obtain indications from the history of some traumatic lesion, or from the proximity of some such affection as disease of the nasal fossæ; or we may have uncertain signs of pain localised in the frontal region; or there may be disturbances of the sense of smell. But, in the absence of all these—and they may be absent—the question is: whether there are any symptoms directly indicating disease of the prefrontal lobes? Even if we have to admit that such symptoms cannot be definitely specified, yet it will not have been in vain if experimental physiology has succeeded in bringing into prominence certain facts to which attention should be more particularly paid in future.

Touching the effects of removal of the prefrontal lobes in monkeys, I may be allowed to quote from myself: "Removal or destruction by the cautery of the antero-frontal lobes is not followed by any definite physiological results. The animals retain their appetites and instincts, and are capable of exhibiting emotional feeling. The sensory faculties,

sight, hearing, touch, taste, and smell, remain unimpaired. The powers of voluntary motion are retained in their integrity, and there is little to indicate the presence of such an extensive lesion, or a removal of so large a part of the brain. And yet, notwithstanding this apparent absence of physiological symptoms, I could perceive a very decided alteration in the animals' character and behaviour, though it is difficult to state in precise terms the nature of the change. The animals operated on were selected on account of their intelligent character. After the operation, though they might seem to one who had not compared their present with their past fairly up to the average of monkey intelligence, they had undergone a considerable psychological alteration. Instead of, as before, being actively interested in their surroundings, and curiously prying into all that came within the field of their observation, they remained apathetic or dull, or dozed off to sleep, responding only to the sensations or impressions of the moment, or varying their listlessness with restless and purposeless wanderings to and fro. While not actually deprived of intelligence, they had lost, to all appearance, the faculty of attentive and intelligent observation."

I have elsewhere attempted some explanation of the faculty of attention—the basis of the higher intellectual operations—and its relation to the anatomical substrata of the prefrontal lobes; but I will not enter further on these speculations at present. I would, however, call your attention to the psychical characters in some of the cases of disease and injury of the frontal lobes to which I have referred (*e.g.*, the American "Crowbar" case, Baraduc's, Selwyn's, Lepine's, Davidson's), as, in many respects, similar to those seen in monkeys after removal of the prefrontal lobes. I may also adduce the observation of Dr. Crichton Browne on General Paralysis of the Insane,‡ tending to show that the earlier symptoms, *inter alia* "general restlessness and unsteadiness of mind, with impairment of attention, alternating with apathy and drowsiness" (page 223), coincide with the morbid changes occurring at this stage, more particularly in the frontal regions.

ON SOME POINTS IN THE CLINICAL HISTORY OF CHOREA.‡

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THE object of the following paper is to call attention to, and illustrate by cases, some points in the common or occasional clinical history of Chorea, which have hitherto received little notice. The points specially considered are four: the electrical condition of nerve and muscle in chorea; the proportion between the choreiform movements in their relation to the will; the distribution of hemichorea; and the relation, occasionally to be observed, between chorea and certain convulsive disorders. The patients whose cases are narrated, except when it is stated otherwise, were under my care at the National Hospital for the Paralysed and Epileptic.

I.—THE IRRITABILITY OF NERVE AND MUSCLE IN CHOREA.

Observation on this point can only be made, with accuracy, on patients with hemichorea, in whom the irritability of the unaffected side can be taken as a standard for comparison. An examination of such cases shows that, a few weeks after the onset of the affection, there is to be observed, in most, though not in all, cases, a distinct increase in the irritability of both nerve and muscle on the affected side, the increase existing to both faradisation and to the voltaic current. The difference varied in the cases examined, from one to three *centimètres* of the secondary coil of Stöhrer's larger induction apparatus, and from two to five cells of the Stöhrer or Leclanché voltaic battery. The change was always in the same direction to both faradisation and the voltaic current. The increase in irritability was found to subside with the subsidence of the chorea. The following cases illustrate the alteration.

CASE 1. *Hemichorea: Increased Irritability of the Muscles of the affected Arm.*—A healthy-looking lad, aged 14, noticed slight unsteadiness of the right arm the day after some severe rowing, he having had an attack of severe general chorea two years previously. A fortnight after the onset of this second attack, there were slight occasional choreic movements of the right arm, varied by an occasional sudden start, and there was also slight inco-ordination on movement. There was no cardiac murmur. The electrical irritability of the muscles of the two arms was carefully compared, and was found to be greater in the right

* *Functions of the Brain*, p. 230.

† *West Riding Reports*, vol vi, p. 170.

‡ Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

* *Soc. Anat.*, March 1876; *Le Progrès Méd.*, Aug. 19th, 1876, p. 598.

† *Lancet*, March 10th, 1877, p. 342.

(affected) arm than in the other. A similar difference was observed to both faradisation and the voltaic current. The irritability was equal in the biceps, the difference being in the forearm and hand muscles. On the right side, for instance, the extensor communis digitorum contracted to ten cells of a Stöhrer's battery, while on the left side fourteen cells were required to produce the slightest contraction. A month later, the same difference was still present: the common extensor contracted to one centimetre less of the secondary coil of Stöhrer's larger induction apparatus, and to six cells less of the voltaic battery.

CASE II. Right Hemichorea: Increased Irritability of Muscles of the Right Arm, subsiding with the Chorea: Subsequently Left-sided Chorea, with Increased Irritability in Muscles and Nerves of the Left Arm.—A child nine years of age had, when seen, suffered from unilateral chorea for two months; the movements being first noticed a fortnight after a fall out of a window. There were slight choreic movements and inco-ordination, in the right arm only. On testing the muscles, it was found that the irritability to faradisation, in both flexors and extensors of the forearm, was distinctly greater on the affected side. Three weeks later, the movements had almost ceased, and, a fortnight later, had quite ceased; and on again testing the muscles, no difference could be found between them of the two sides: the increased irritability had subsided. Two months later, the child reappeared with slight left-sided chorea of a week's duration. Very distinct choreic movements were present in the left arm. No distinct alteration could be discovered in the electrical irritability of the muscles or of the nerves, even as high as the brachial plexus. A fortnight later, the child was again examined. The chorea was still well marked on the left side, and absent or almost absent on the right. Both muscles and nerves of the left arm now presented a very distinct increase in their irritability. The flexor communis digitorum contracted to three centimetres less of the secondary induction coil, and to four cells of the voltaic battery less than the right. The left extensor communis digitorum contracted to the same strength of the induced current, but to two cells less of the voltaic battery, than the right. The same increased irritability was found in the median nerve, the left acting to two centimetres less of the secondary coil and four cells of the voltaic battery less than the right.

CASE III. Hemichorea: Increased Irritability in Muscle and Nerve on the affected Side, subsiding with the Chorea.—A man, aged 25, came under treatment with characteristic choreic movements, limited to the left arm, spontaneous, and interfering with voluntary movements. In all the muscles compared (flexor and extensor of wrist, and abductor indicis) the irritability was greater on the affected than on the healthy side; about two centimetres less of the secondary coil of Stöhrer's apparatus being required. The left ulnar nerve was one centimetre more irritable than the other. The muscles presented the same difference in their irritability to the voltaic current as to the faradic; and in the nerves the difference to voltaism was still greater, the right responding to twelve cells and the left to eight cells. Three weeks later, the arm was almost well. Electrical examination then showed a slight excess in the irritability of the muscles of the affected side, although the difference was less than before. It could not be noticed in the extensor of the forearm, but was distinct in the flexors and in the ulnar nerve. A month later, all spontaneous movement had disappeared, and with it all increase in irritability. The ulnar nerve, indeed, seemed a little less irritable than on the unaffected side.

In another case, described below (Case v), in illustration of another important point, the same increase was observed.

The existence of this change in the irritability of the muscles in hemichorea, in which the movements were characteristic, justifies the inference that it exists in cases of general chorea. The observation is not a new one. It has been made by Rosenthal and Benedikt; but I am not aware that their statements have been previously confirmed in this country. The same observers have asserted that a marked deviation from Pflüger's law is to be observed in chorea, a greatly increased sensitiveness to the cathodal opening contraction being observed. I have not been able to detect so profound a deviation from the usual order; but I have observed the anodal opening contraction occur, not only earlier than the anodal closure, but so much earlier than normal that it occurred almost as soon as the cathodal closure contraction.

What is the significance of the increased irritability in nerve and muscle which may be assumed to exist in many, probably in most, cases of chorea, which have lasted for a certain time? I do not think that it can be regarded as a local change, consequent on the overaction of the nerves and muscles of the affected limb; for the overaction in some of the cases was far too slight to account for such an effect. The increase in irritability is to be regarded as the expression of a change in the nutrition of the nerve-fibre; and we have learned to regard the nutrition of the nerve-fibres as depending on the grey matter of the cord, probably on the nerve-cells of the anterior cornua, with which

they are connected, and of which they are in effect the processes. Indeed, it is probably not too much to assert that, in testing the irritability of the motor-nerves, the nutrition of which is unaffected by any local cause, we are really testing the state of nutrition of the motor nerve-cells of the spinal cord. The increased irritability is, therefore, the indication of a change in the nutrition of those nerve-cells, similar to that which is expressed by the granular and other changes lately found by Mr. Sankey and myself in these cells in the chorea of the dog.* The change in their nutrition is no doubt the result of an irritation propagated down the cord upon them from the changed encephalic centre, and is similar to that which occurs in some cases of hemiplegia, from an irritative lesion in the corpus striatum; and it is an instance, if slight yet distinct, of the way in which "functional" disturbance is attended with nutritive change.

II.—ON THE RELATION OF THE MUSCULAR DISTURBANCE IN CHOREA TO VOLUNTARY MOVEMENTS.

Two elements may be, and commonly are, distinguished in the choreic disorder of movement: first, the spontaneous movements; and secondly, what may be termed the inco-ordination of voluntary movement. The latter term is a convenient one, but its accuracy may be questioned; since it may be urged that the so called inco-ordination is simply the result of the inability of the will to quell the spontaneous spasm during voluntary movement. I believe, however, that an inco-ordination may often be recognised over and above the spontaneous spasm. But a distinction of the two elements is sufficient for the statement of the point to which I wish to call attention, which is that this inco-ordination of voluntary movement and the spontaneous spasm, although frequently proportioned, bear no necessary relation to one another, either when compared in different cases or even in different periods of the same case. In illustration, I may cite the following cases.

CASE IV. Chorea of One Month's Duration: Spontaneous Movements slight: Inco-ordination great.—A boy aged 6 had suffered from chorea for a month, when he came under observation. The attack began gradually without assignable cause. The affection of the two sides was equal, and consisted in very slight spontaneous movements of arms, head, and legs—so slight as almost to escape notice. On trying to execute any movement, the inco-ordination was extreme. If he tried to grasp an object, the fingers were twisted about and the hand thrown about in a wild manner. There was no cardiac murmur.

CASE V. Repeated attacks of Chorea, following Acute Rheumatism: Much Spontaneous Movement; Little or no Inco-ordination; Increased Irritability in Muscles.—M. W., a girl aged 18, in October 1875, came under treatment for her fourth attack of chorea. At 14, she had had an attack of acute rheumatism, in which her heart was affected. At 15, she had a severe attack of chorea, which commenced a fortnight after a fright (being knocked down by a horse). She had a second attack at 17; a third attack at 17½, which commenced the day after a severe fright at a thunderstorm. The fourth commenced a week after she had been startled by an unseen person. In every attack, the affection was general, but the left side was the more severely affected. In the last, the spontaneous spasm was constant and great, but there was very little inco-ordination of movement; she could hold an object placed in her hand quite steadily. She had a loud mitral systolic murmur. This patient came under treatment again a year later with a fifth attack, limited to the left arm. In this the spontaneous movements were distinct, though not extensive; but there was no inco-ordination of voluntary movements. In all the muscles of the affected arm, the irritability was increased to both faradisation and the voltaic current, the increase of the former amounting to two centimetres of the secondary coil.

CASE VI. Second Attack of Chorea: much Spontaneous Spasm: no Inco-ordination.—Lydia B., aged 18. Second attack of chorea. She had never suffered from rheumatic fever, but her father had died from it. The first attack had commenced two years previously without assignable cause, lasted six months, and affected the right side only. The second attack commenced three months before she came under treatment; for three weeks the right hand only was affected, then the left also became affected, and for several weeks the left side was worse. At the commencement of the attack, speech was much interfered with. At first, the chorea was worse in the morning and better in the evening. When seen, the mind was unaffected, face free from movement, the arms were the seat of considerable chorea; twitching and fidgety movements constant. There was, however, scarcely any inco-ordination of voluntary movement. She could pick up an object, as a pen, without any difficulty, and hold it out at arm's length for a quarter of a

* *Medico-Chirurgical Transactions.*

minute with perfect steadiness. The legs were free from movement. There was no cardiac murmur.

CASE VII. Chorea: Three Attacks: much Spontaneous Movement, but no Inco-ordination.—Mary Y., aged 12, a healthy-looking child, had a first attack of chorea when nine years of age, which commenced three days after a fright. The attack lasted only a few weeks. A loud systolic apex murmur was present. She had never had rheumatic fever. A second attack of chorea occurred nine months later, and also lasted a few weeks. She continued free from the affection for two years, and then came again under observation with a third attack. In this there was much spontaneous fidgetty spasm in both hands, but hardly a trace of inco-ordination. She could pick up a small object from the table quite steadily. The mitral murmur continued loud: heard both at the apex and at the angle of the scapula.

CASE VIII. Variation in proportion of Spasm and Inco-ordination at different periods of Attack.—A little girl aged 12, when first seen at University College Hospital, had slight chorea, of a week's duration, and confined to the left arm. There were very slight spontaneous movements, characteristic in form. There was great inco-ordination, out of all proportion to the spasm, so that it was with difficulty that she could pick up an object. The grasp of the left hand was distinctly weaker than that of the right. A week later, there was much more clonic (choreic) spasm, marked in both foot and hand. The inco-ordination, however, was much slighter; she could pick a very small piece of paper from the table without any difficulty. There was no murmur at the apex or base of the heart, but just within the apex was a long systolic murmur: heard in a very limited area, not conducted. A month later, she was nearly well, and the murmur could only be heard with an occasional beat of the heart.

These cases prove, I think, the assertion that, in chorea, inco-ordination of voluntary movement bears no relation to the spontaneous spasm, but varies independently. It is clear that this variation must depend on one of two causes; either the power of the will to overcome the spontaneous spasm is subject to variations altogether irrespective of the degree of that spasm; or else there is, as I believe, an inco-ordination to be recognised which varies independently of the spontaneous movements. I believe that it will be found that, when such a disproportion exists, the inco-ordination is in excess of the spontaneous spasm early in an attack, and the spontaneous spasm is in excess of the inco-ordination late in an attack and during relapses.

The independent variation in these two elements in chorea suggest that they may depend on an affection of distinct and separate regions of the nerve-centres. It is not easy to conceive that so considerable a variation as was noted in some of the above cases, can be due to a variation in the affection of one region.

[To be continued.]

ON THE GENERAL UTILITY OF SPONGES AS SURGICAL DRESSINGS, AND ON TEREBENE AS A SURGICAL AGENT.

By FURNEAUX JORDAN, F.R.C.S.,

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I FULLY recognise the value of the antiseptic treatment as taught by Mr. Lister. A method of treatment which enables us to open important cavities and make deep incisions, for diagnostic and other purposes, without danger, constitutes an epoch in surgery as great as the introduction of lithotomy, amputation, or anaesthesia.

Sometimes, however, unavoidable circumstances prevent our using antiseptic precautions. The operating surgeon is frequently called upon to perform even important operations with but little assistance. He may be called upon, especially in country districts, to remove (say) the breast with only three pairs of hands in the room, one pair being confined to the management of anaesthesia.

There are certain localities also, as the face and the mucous outlets and their vicinity, where functional exigencies prevent the adoption of a treatment which, although of inestimable value, involves much detail, complicated apparatus, the isolation of large surfaces, and long periods of non-interference.

For the last few years, I have used sponges as dressings after many operations and injuries. At one time, there was a great dread of sponges, even for operative purposes—a dread which was tersely expressed thus: "Whenever and wherever you see a sponge, throw it into the fire." The introduction of more efficient antiseptic fluids has

changed all this. In reality a sponge conveys, renews, or maintains antisepticity with signal convenience and efficiency. A soft, cleansed, moist antiseptic and sufficiently large sponge may be put over, or occasionally even within, the parts which have been recently injured or operated upon with benefits so marked as to deserve printed commendation. Such a dressing apparently secures all the conditions which favour the healing process; and all that we can do is to control conditions. We have no surgical charms, royal touch, or prayers which are able to heal.

A sponge exerts a soft, uniform, diffused, elastic, and measurable pressure. Slight pressure will keep a wound clean; moderate pressure keeps up efficient drainage of all deep-seated fluids, and renders the ordinary drainage-tube, as a rule, unnecessary. The drainage (and pressure) of a sponge is diffused and complete; the drainage of a tube is local and incomplete. In many cases, where I have used a tube with a superjacent sponge, I have found, on removing the first sponge after some days, all the parts healed, except the locality of the tube. In similar cases, where the tube has not been used, the healing has been complete. There is one structure which, in my experience, strongly resents the presence of an India-rubber tube passed through its substance: it is the female breast, multiple abscesses arising in the vicinity of its tract.

Moderate sponge-pressure also keeps the deep parts in apposition, and thus promotes the deeper solid union—a greater virtue no dressing can possess. A little more, though not at all severe, pressure arrests hæmorrhage from all except the larger vessels; even the latter might, if necessary, be held in check for a considerable time. In operations and injuries, where hæmorrhage is free and from many and not large vessels, as in wounds of the palm, indeed in any operation or injury involving the hands and feet, the advantages of a sponge and bandage are clearly seen. In operations on the breast, especially where axillary glands require removal, I look on a big sponge as my best friend. In some cases such as these, a bit of sponge put inside the wound (Mr. Lister's writings first suggested this to me), the margins being drawn together, or a large sponge placed thereon, instantly stops all bleeding. Here I should change the first dressing, as soon as the probability of primary and reactionary hæmorrhage had passed away, so that deep union might not be hindered. There is probably some physical peculiarity in sponge which tends to arrest hæmorrhage, independently of mere pressure. Protracted pressure with lint or cotton, sufficient to arrest hæmorrhage, would cause sloughing; it is not so with sponge-pressure. Sponge "bites" the skin, and thus keeps the superficial parts in place, while its elastic pressure keeps the deep parts together. I will now merely hint at some other of its qualities. Sponge may be kept very wet or slightly damp, hot or cold, small or large, by merely altering the character and the amount of the fluids which may be applied to it; all this is possible without removing the sponge. The lotion may be nearly boiling, or it may be constantly iced. Fluid may be applied with any frequency; it may be medicated with any approved agent. Lotions which give deposits, as those containing lead, are not so suitable, as they harden the sponge—a condition which can rarely, if ever, be necessary. If the sponge-dressing require to be prolonged more than a few days, the lotion must not be of a character or a strength to unduly irritate the skin.

Turkey sponge is better for smaller wounds and operations; in larger lesions, the honeycomb is more manageable. Sponge-dressings may be removed frequently, or, which is much more important, very unfrequently. The softness and bulk of damp sponge protect from movement, friction, blows, or other injury. Sponges take any shape, may be adapted to any surface, or cut to any size. Two or more (stitched together or not) may be used when one is not large enough or only small ones are available.

It is well to have separate suitably shaped and prepared sponges for dressing; but, if this be overlooked or be inconvenient, the operation-sponges may be used. Sponges which have been used, if completely cleaned and disinfected, are even better than new ones.

How long should we continue the sponge-dressing? Not long; until all danger of urinary and recurrent bleeding has ceased; until deep union is fairly established and there is little fear of the separation of parts; until (which is much the same thing) the discharges have become slight and the wound is mainly superficial. All these results I very frequently find on removing the first dressing, which has remained some days—three, four, six, eight, or ten.

In amputations of the limbs, sponges, one or two, may be readily made to cover the incisions, support the deep parts, check hæmorrhage, drain, and act as splints. In removal of the breast and tumours generally, the sponge-dressing has special advantages. The sponge should be large; say, in a woman of medium size, ten or eleven inches long, five or six wide, and four or five thick. It should be placed

directly over the stitches or strapping; indeed, it is one of the merits of the sponge that it can be placed over any other contrivance. If strips of plaster be needed to relieve tension, they should be long—say from over the shoulder to near the groin—when the slight moisture of the sponge will not spoil their adhesion. A few neat and firm turns of wide, thin, smooth bandage are better than a large number in several ways, especially in the medication or antiseptication (may I say?) of the sponge. During the few years I have used sponge-dressing, I have not had a single instance of early recurrent or later reactionary, or of secondary hæmorrhage. I scarcely ever tie a vessel. One or two may be twisted or compressed a few minutes by spring-forceps; but patient pressure for a time with relays of well-wrung sponges within the wound rarely fails to stop primary hæmorrhage.

In the deep excision of cancers from mucous outlets—a branch of surgery in which it falls to my lot to have much experience—I should be much at a loss if I had not at hand my large sponge with its antiseptic, styptic, compressing, and draining properties. A few months ago, I removed a cancerous penis as far down as the triangular ligament in the perineum (splitting the scrotum to do so, the man preferring to retain the testes); a sponge with a catheter passed through its centre, stopped the bleeding, dressed the wound, and kept it antiseptic, all at once.

I need not detail every operation in which sponge-dressing is of benefit; I will briefly refer to a few only. I have just had striking evidence of its utility in trephining. Twenty-one days ago, a young man was brought into the Queen's Hospital with a cut, and therefore a comminuted and depressed, fracture of the right parietal bone, caused by a falling slate. Brain was oozing out, and as much as would fill a walnut-shell escaped. Left hemiplegia was marked, but not complete. I trephined, and removed numerous fragments and a bit of felt hat, leaving a gap two inches long and an inch and a half wide. The soft parts were very loosely adjusted, and well covered and overlapped by a soft sponge kept constantly moist with terebene, and fixed by one strip of adhesive plaster twenty inches long and three inches wide. On this, the fourteenth day, his state could not be more favourable.

In wounds generally, in compound fractures, after operations for caries or necrosis, after opening abscesses, superficial or deep, the sponge-dressing is of ready utility.

After operations for hernia, a large antiseptic sponge under a few turns of spica bandage forms an ideal dressing, which at once gives elastic-truss pressure, cleanliness, drainage, and antisepticity.

After lithotomy, when there is free bleeding, there is no mechanism which equals in accessibility, simplicity, and efficiency an elongated bit of sponge, a kind of sponge-tent, passed by the side of an elastic tube or catheter. I have now in the hospital a man, aged 75, who is convalescent from lithotomy. The stone was very large, the incision necessarily free, the hæmorrhage great, and the patient naturally feeble; after a few spoonfuls of iced water, I put a large elastic catheter through the wound, and by its side a sponge-tent of the size of my finger. In a few moments, the bleeding ceased, not to return, the urine shortly came through the catheter. All went on well, save that severe signs of senile exhaustion appeared after seven or eight days; these were successfully checked by repeated alteration in position, and even partially clothing the patient: the risk of a permanent fistula, from getting up too soon, seemed better than death. In lithotomy wounds, as elsewhere when the sponge is put within the wound, it speedily creeps into every corner, crevice, or recess from which blood may flow. It is on this principle that an ordinary uterine sponge-tent, passed along the floor of the nose, as recorded by a surgeon whose name I forget, checks epistaxis immediately, without time, trouble, or apparatus.

In the later stages of injuries and operations, and in surface lesions generally, I find terebene a most useful dressing, pure or mixed with water. It is an excellent addition to the sponge-dressing, which it readily keeps moist and soft. Occasionally, however, if used with firm pressure and under many layers of bandage, it causes a little pimply redness of the skin; this is of slight importance, as it never leads to erysipelas or deeper inflammation. The remarkable experience of Mr. Waddy of Gloucester, who used only one dressing in operations, with frequent additions of pure terebene, deserves more attention than has been given to it.

Terebene, which was introduced by a well-known officer of health, Dr. F. T. Bond, is not poisonous internally; it is astringent and hæmodynamic, but not escharotic. It is a powerful disinfectant; as a deodorant, it is without an equal: it is something more than a deodorant, it diffuses an agreeable and soothing odour. It may be used without diluting, mixing, shaking, stirring, or other preparation, or it may be mixed with water, and very readily with olive oil. With a third or half of olive oil, it forms a surface-dressing of very general utility. Lint and tow absorb it readily. For burns, ulcerations, sloughing conditions, the

various gangrenes and open cancers, terebene does all that a dressing can do, and entirely removes all ill odour from the parts from the room. Terebene is a very suitable dressing for cavities that require to be temporarily stuffed, as after the removal of carious or necrosed bone. Its non-poisonous character and its fragrance especially adapt it as a dressing after partial or complete removal of the upper jaw.

To return for a moment to the subject of sponge-dressings. Now and then, under exceptional circumstances, it is probable that surgeons have left a sponge in a surgical dressing. Since the above notes were put together, I have seen the surgical application of sponges recommended in an American serial. Quite recently, an able surgeon, Mr. Chiene, has advocated sponges as a cheapening adjunct to the antiseptic method. I simply desire to point out the advantages of a general and systematic use of constantly moist antiseptic sponges in checking and preventing hæmorrhage, in adjusting, uniting, cleaning, draining, antiseptising, and protecting wounds.

ON EFFUSION INTO THE PERITONEAL CAVITY ANALOGOUS TO LATENT PLEURISY.*

By JOHN SMITH, M.D.,

Physician to the Dumfries and Galloway Royal Infirmary.

IN the BRITISH MEDICAL JOURNAL of September 16th, 1876, Dr. George Johnson published four cases of serous effusion into the cavity of the peritoneum, which he characterised as a class of the affection which, so far as he was aware, had not been recorded by writers on the practice of physic. He also considered that they bore by their peculiarity an analogy to cases of so-called latent pleurisy, in which we find a copious pleuritic effusion without a previous history of, and unaccompanied by, pain or febrile disorder. I have to record two cases which have come under my treatment, and which appear to bear the same analogy as those referred to by Dr. Johnson.

CASE I.—Jane M., aged 22, was admitted to the Dumfries and Galloway Royal Infirmary on May 15th, 1875. She was unmarried, and had always been healthy until about three months before, when she contracted typhoid fever, which lasted about four weeks. Three weeks or so after rising from the fever, and about a week after she had menstruated, she observed swelling in the lower part of the belly, which increased rapidly. She had no pain or uneasiness, and pressure or handling did not cause her any annoyance. On examination, the patient lying on her back, the abdomen was found much enlarged, having a broad flattened appearance, and bulging considerably and equally in both flanks. Percussion elicited resonance in the anterior and upper part, and dulness in the sides. Change of position altered the percussion-sound, being dull at the most dependent part and resonant at the upper. Palpation could detect no solid tumour, and the fluid wave was quite easily seen and felt. The heart, lungs, kidneys, and liver were, so far as could be ascertained, healthy and acting normally. There was no increase of temperature, and the pulse was natural.

After consultation with my colleagues, this was considered a case of ascites, and she was ordered hydragogue cathartics and diuretics. After giving these a fair trial without apparent benefit, she was ordered syrup of the iodide of iron and full diet, and to have gentle exercise. A short time afterwards, she commenced to improve; and, about four weeks after the supportive treatment began, she left the house much better in health, with the abdomen much reduced in size, but still containing a considerable amount of effused fluid. Several months after she left the Infirmary, her medical attendant wrote concerning her, that the abdominal enlargement had entirely disappeared.

CASE II.—Jane A., aged 28, consulted me in July 1875 for a swelling of the abdomen, which she had observed about three weeks previous to my seeing her. She had several times within the last twelve months observed a similar swelling immediately after her menstrual period; but it never became so extensive, and always went away. She had always been otherwise healthy, and menstruated regularly. From the commencement of the swelling until recently, she had not experienced the slightest amount of pain or uneasiness. Two or three days previously, however, she began to have a distensive feeling, which had gradually increased to severe pain; and her breathing had been rather difficult. The abdomen was much distended, of a rounded symmetrical form, resonant on percussion at the anterior and upper part, and quite dull at the lower and lateral. On altering the position of the patient, the bulging and dulness changed to the most dependent part; and the level of the fluid could be distinctly made out in whatever position she

* Read at the Autumnal Meeting of the Border Counties Branch.

was placed. The fluctuation-wave was easily felt. The heart and lungs were healthy; and the liver, so far as could be ascertained, was natural in size and action. There was no trace of jaundice; the urine was natural in appearance and free from albumen; the pulse was 102, and the temperature normal. Owing to the severity of the symptoms, I suggested tapping as the surest and most expeditious way of giving relief; but, this being objected to, I ordered forty grains of the compound jalap powder to be given. On visiting my patient on the following morning, I found her somewhat relieved; the bowels had acted very freely, and the urine was more abundant. I then ordered the following diuretic.

R Potassæ acetatis ʒii; spiritus ætheris nitrosi ʒvi; syrupi scillæ ʒi; decocti scoparii q. s. ad ʒvi. A teaspoonful in cream of tartar water to be given every six hours.

Under this treatment, she gradually improved; the pain ceased, and the abdominal enlargement speedily lessened. After continuing the diuretic for about a fortnight, I substituted for it ten grains of the carbonate of iron (saccharated), to be taken three times daily after meals, and ten-minim doses of the tincture of digitalis thrice daily, an hour before meals. The patient was also ordered good nourishment, and to have gentle open-air exercise. Within three months from the commencement of my treatment, no ascites could be detected; and, although she has frequently since consulted me for dyspepsia and general debility, no effusion into the peritoneum has returned.

The accumulation of serum in the peritoneal cavity is generally understood to depend on one of two causes—first, and most commonly, on some obstruction to the return of blood from the peritoneal blood-vessels; and second, on some modification of the action of these blood-vessels, and probably of the lymphatics contained in the peritoneal membrane. That the cases which Dr. Johnson has published, and those that I have here recorded, approach in their nature to the second class, cannot be doubted; but the almost total want of evidence of inflammatory or tubercular action characterises them as a very rare or previously unrecognised affection. Several cases of latent pleurisy have come under my notice—cases in which the first symptom of the disease was the discomfort occasioned by the presence of effused fluid, and into which the most searching inquiry from the patient could elicit nothing betokening pleuritic pain or other symptoms of pleurisy. From what I have observed in these cases and the analogous cases of peritoneal effusion, I am led to think that the accumulation is rather due to a peculiar state of the constitution, whereby the power of absorption is abridged, while the progress of exhalation is unchecked, than to any local cause. Dr. Johnson has applied to the cases he has recorded the term subinflammatory effusions, attributing them to a subinflammatory process of a local nature. As a type of what may be termed subinflammatory effusions, we may instance the common complaint of hydrocele, which is purely a local affection, the result of some change in the tunica vaginalis testis, whereby the proper balance of power between absorption and secretion is lost. In such cases, no constitutional treatment will restore to that membrane its normal equilibrium of action; and nothing short of local interference will suffice to effect a cure, which fact goes far to prove their local origin. In the two instances I have specified, from the history of the cases, both occurring at a time when the constitution was enfeebled, the one after fever and the other after menstruation, and from the beneficial results of constitutional treatment, I am led to the conclusion that their origin was more from the loss of constitutional than of local power. I am persuaded that, as in cases of hydrocele no constitutional treatment would have the necessary topical effect, so in cases similar to those I have here described no local interference would be effectual in setting up and maintaining normal action.

Believing with Dr. Johnson that it is highly important, for correct diagnosis and successful treatment, that such cases should be distinguished, I have placed my experience before the profession, with the hope that by so doing others may be enabled to recognise and successfully treat similar cases.

SURGICAL MEMORANDA.

ANTISEPTIC SURGERY.

DR. THOMAS'S contribution to the statistics of antiseptic surgery is welcome; but I must decline to allow him to manipulate my table so as best to suit his special pleading. My statistics consisted of fifty-five amputations and excisions, not of thirty-five amputations only. It is true I included four amputations of the forearm, inclusive of one at the elbow-joint, to which Dr. Thomas takes exception; but, as the latter proved fatal, I thought it best to include it. The table also contained a

case of removal of a loose cartilage from the knee-joint, and an operation for ununited fracture of the forearm, because such operations are prone to some of the evils resulting from septicity; and I must, therefore, request to be allowed to reconstruct my table as consisting of fifty-five operations, with five deaths, showing a mortality of 9.09 per cent., and not, as given by Dr. Thomas, of thirty-five amputations, with four deaths, showing a mortality of 11.42. It is manifest, however, that Dr. Thomas extracts the amputations alone in order to compare them with the more favourable results obtained by one of the surgeons in the Glasgow Infirmary styled "F.", during the same period, who had thirty amputations, with one death, giving a mortality of 3.22 per cent.

Having made his selection and added his contribution from the Glasgow Infirmary, Dr. Thomas proceeds to remark: "A glance at these tables will show the great superiority, so far as results are concerned, of Mr. Lister's method over Mr. Bradley's."

Similarly, I will take the liberty of remarking that, if Dr. Thomas will turn to the *St. Bartholomew's Hospital Reports* for 1874, he will find sixteen consecutive amputations tabulated by Mr. Callender, without a single death, and, the following year, forty-four consecutive amputations, with but one death, which should equally clearly convince him of the great superiority of Callender's method over Lister's: a conviction which must be distressing to Dr. Thomas, since, by parity of reasoning, he must admit that this superiority is due to open dressing and avoidance of Listerism.

I did not, however, furnish my statistics with the intention of proving that I had the smallest percentage of deaths, but for the purpose of seeing how far the deaths were due to septic, and therefore removable, causes. I found that the five deaths were respectively due to typhoid fever, hæmorrhage, diathetic causes, shock, and mental depression; and, unless Dr. Thomas is prepared to maintain that Listerism is protective against such ills as these, I cannot admit that an honest examination of the two tables "shows the great superiority of Mr. Lister's method" over my own.

This part of my argument, which is the very gist of the whole matter, Dr. Thomas completely ignores, and goes on with his comparison as though nothing of the kind had been said.

S. MESSENGER BRADLEY, Manchester.

CATGUT LIGATURE.

IN the JOURNAL for March 23rd, Mr. Messenger Bradley refers to a case in which he tied the hind (third?) part of the right subclavian artery with a catgut ligature, and, from the issue of this case, he arrives at conclusions respecting the safety of that material which, I think, ought not to pass without some comment.

"The patient," he says, "died of cardiac disease on the eighth day following, and, on examination, it was found that the ligature had, with the exception of a short interval about one line in length, completely cut its way through all the coats of the vessel. There was no occlusion whatever of the artery, nor even any coagulum, so that doubtless the hæmorrhage would have been very fierce and uncontrollable had the man survived longer".

This is a very singular statement. If the condition of the artery were really as described, how is it that uncontrollable and probably fatal hæmorrhage did not take place during life? There was nothing whatever to prevent it. Mr. Bradley then says he thinks the case "goes far towards establishing the correctness of the opinion that catgut is an unfit agent for securing arteries in their continuity". In what way does it show that the condition of the artery would not have been as bad, or even probably worse, if silk had been used instead of catgut?

Next, we are told that "catgut is efficient and safe in deligating the vessels severed in amputation, for the reason that, the limb being removed, less blood is sent down the divided arteries, and so but little stress comes upon the encircling ligature (it is otherwise when a ligature is applied for the cure of aneurism), and, as a consequence of this, it yields, and so, permitting the re-establishment of the stream, prevents the formation of a coagulum". Where is the evidence that there is less stress upon the ligature after amputation? May it not be argued with more plausibility that, after ligature for aneurism, the blood speedily becomes diverted into enlarging collateral channels, and the stress is, therefore, diminished; whereas, after amputation, there is no necessity for this diversion, and, during the critical period, the full impulse continues to fall upon the point ligatured? At all events, in this case, it seems impossible that the ligature could have yielded so as to permit the re-establishment of the stream without causing fatal hæmorrhage, if it had, as we are told, completely cut through all the coats of the vessel, with the exception of a short interval.

It has long been taught—and the teaching is as true as ever—that, when an artery is properly tied, the internal and middle coats, being brittle, are cleanly cut through, while the external coat, being tough, is gathered up into a cord within the noose of the ligature, and forms for a time a sufficient barrier to the escape of blood. Plastic effusion then soon takes place from the divided ends of the inner coats and into and around the tissue of the constricted outer coat; coincidentally with which a coagulum is formed above and below the ligature, unless this is prevented by the proximity of some large branch or by some abnormal condition of the blood itself.

When both these processes are complete, there is little or no risk; but, if no coagulum form, safety must depend entirely upon the perfect and speedy organisation of the plastic material. The question arises, therefore, whether this adhesive process will be best promoted by the use of catgut or of some other material, such as silk or twine.

I believe carbolised catgut to be preferable, for the following reasons. It does not cause local irritation; it is capable of gradual solution and absorption, and its ends may, therefore, be cut off short. It has the same immediate effect upon the coats of the vessel as other materials, and, if of sufficient thickness, it will hold long enough for the natural hæmostatic processes to take place, while it will, in most cases, be dissolved without ulcerating through the external coat. Silk or twine, on the other hand, are in themselves irritants; being insoluble, they can only escape by ulceration and its attendant suppuration, processes essentially antagonistic to the perfection of adhesive union. To insure the exit of the ligature, it is necessary to leave one end protruding through the wound, and this serves not only to keep up a communication with the outer air, but to conduct pus or other morbid secretions from the superficial parts directly down to the tied artery itself, which can never, therefore, so long as the ligature remains, become completely surrounded by a sheath of adhesive lymph. This may be comparatively unimportant when a good coagulum forms; but I submit that, in those dangerous cases where the coagulum is absent or imperfect, it may sometimes make all the difference between life and death. My own experience in fifteen cases, referred to in the JOURNAL of November 10th, 1877, is entirely favourable to the catgut ligature. No untoward accident referable to the ligature occurred in any of them; and, in three instances where I had the opportunity of examining the vessels after death, I found the deeper parts of the wound securely closed and protected by reparative material, although diffuse suppuration or sloughing was going on nearer the surface.

Catgut requires more care in its application than silk, or the first knot may easily slip while the second one is being tied; and, to insure complete safety, a third knot should always be made. Is it not most probable that, in the cases in which the circulation has been re-established in the vessel shortly after operation, the knot has not been tied with sufficient care, and has opened out under the pressure of the current of blood. It is most unlikely that such an accident should happen with a ligature of sufficient thickness, if it be tied tightly enough to divide the inner and middle coats, and securely enough to prevent all risk of its slipping.

JAMES R. LANE, F.R.C.S.

CATGUT DRAINS.

IN the JOURNAL of March 9th, Mr. Bradley states that a skein of catgut ceases to act by capillarity when it becomes saturated "by the contiguous fluids". This statement appearing inconsistent with the laws of capillarity, I was led to investigate the question, and, after repeated experiments, I found that, on the contrary, the more thorough the saturation the more perfect the drainage—a skein of catgut proving as effective a drain at the end of four days as after thirty minutes. Of course, if a narrow vessel be used, the surface will fall considerably in a few minutes, thus decreasing the flow, owing to the increased work required to raise the water over the edge of the vessel; and, in such a case, it is evident that the flow would cease entirely when the amount of work required became equal to the capillary force.

PATRICK M. PLAYFAIR, The University, Edinburgh.

CLEANING CATHETERS.

THE plan proposed by Mr. Davy in the last number of the JOURNAL, for cleaning catheters by drawing a bristle through them, has much to recommend it. But it is an objection to such a plan that it is not applicable to the catheters usually made, with openings or "eyes" at the side, at a distance from the point. For many years, I have found that I could clean catheters sufficiently by using the common wire stilet, having the end twisted into a small eye, through which a thread is passed, or a piece of string, according to the size of the catheter. The wire should be long enough to reach to the tip of the catheter. By

moving this backwards and forwards as a piston, in a basin of warm water, the remains of the urine or other matters within the tube are effectually pumped out through the eyes at the side. About twenty-five years ago, I had a set of catheters made, with the wire stilet for each one having an eye at the point. With these, the catheters can be cleaned without much trouble. In some cases of retention of urine, I have found this kind of piston or pumping action useful in withdrawing the contents of the bladder when distended with blood, or in cleaning the catheter when the tube is plugged by a clot.

E. L. HUSSEY, Oxford.

REPORTS AND ANALYSES

AND

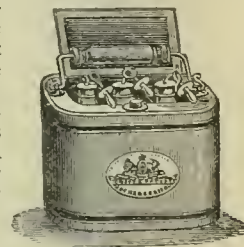
DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

GROUT'S PATENT INFANTS' FOOD-WARMER.

WE have recently had the opportunity of testing one of Grout's "Food-Warmers", and now bring it before our readers as likely to prove of inestimable value to all mothers and tenders of invalids. It consists of a double box to contain boiling water, having in its interior room for two or three bottles, and closing with a padded lid. When the apparatus is filled, the bottles with the milk or food cold are placed inside and the lid closed; it quickly becomes warm, and will keep so for twelve hours; so that the nurse finds the milk quite ready to give to the infant at any time in the night.

Some of the advantages are, that there is no expense of night-lights, etc.; it requires no attention in the night; and the food never gets burnt. It can also be used by day, thereby obviating the need of a nursery fire. The warmer cannot get out of order, and can take any ordinary feeding bottles. Another advantage will be its great utility in long journeys. Three bottles can be placed in the box, which is easily carried by its handle, and so the infant can have its regular food throughout the journey without any trouble. For invalids also, the food-warmer will prove most useful, for the divisions can be taken out and any larger vessel put in the box, and food, such as beef-tea, etc., kept hot all day. The prices vary from 10s. 6d. to 25s.; and it can be obtained of Swan Nash, 253, Oxford Street.



NEW MEDICINAL PREPARATIONS.

MR. MARTINDALE, pharmaceutical chemist, of 10, New Cavendish Street, Portland Place, has forwarded us several valuable specialities prepared in his laboratory. Among them, we would particularly draw attention to a solution of the alkaloids aconitia, atropia, morphia, and veratria, in oleic acid. This is rapidly absorbed, and forms a strong anodyne liniment, which can be diluted by the addition of rectified spirit or oils. It is supplied under the name of *oleanodyne*. The glass capsules of nitrite of amyl encased in silk, containing one, two, and three minims, are an ingenious mode whereby this volatile but valuable therapeutic agent may be employed. When used, all that it is necessary to do is to take the ends of the capsule between the thumb and forefinger of each hand, snap it in the centre, and inhale. He also forwards us a novel preparation in the shape of salicylate of iron, presented in the form of a purplish powder. This drug might be usefully administered in debility after rheumatic or arthritic attacks.

TREATMENT OF ERYSIPELAS BY SILICATE OF SODA.—Dr. Alva-ranga of Lisbon records forty-eight cases of erysipelas of the scalp, face, and limbs, both fixed and erratic. He asserts that with the aid of the above mentioned remedy the disease does not last more than four or five days. The silicate of soda—the same that is used for immovable apparatus—is diluted with eight times its weight of distilled water, and neutralised when it is acid with soda. The solution is spread with a brush morning and night on the affected parts, and allowed to dry in the air. After four or five days, when the fever, tumefaction, and redness have diminished, the use of the silicate is suspended, and the affected parts are covered with wadding steeped in oil of sweet almonds.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 30TH, 1878.

PHYSIOLOGICAL TEACHING AT TRINITY COLLEGE, DUBLIN.

WHEN, either by accident or design, an important medical school, educating a large number of students and officered by a full staff of accomplished professors, is placed in such a position that the most elementary instruction in practical and experimental physiology cannot be given within its walls, it becomes a matter of serious regret from an educational point of view. When we add to this that not one of its professors can undertake any original research within the institution with which he is connected, involving any observation on an animal which the most sensitive person could suppose to be calculated to give pain, it may be said to be still more depreciated in value scientifically. Such a medical school can educate students of medicine but very imperfectly; it can add absolutely nothing to human knowledge in a large department of chemistry, toxicology, therapeutics, experimental pathology, or physiology. It will seem almost incredible to say that this is the position to which the Medical School of the University of Dublin is now reduced by the deliberate act of its own professors, accomplished, if we are rightly informed, by a casting vote of one.

As our readers are aware, the Act which passed in 1876 to regulate experimental researches on animals practically requires that such researches shall be carried on only in certain places registered by the Home Secretary (or in Ireland by the Chief Secretary to the Lord Lieutenant); otherwise no efficient supervision or control could be adopted by the inspectors, and the Act becomes inoperative. Whether it be for original research or for purposes of instruction, it is necessary that some apartment to which the inspector can at any time have access shall be "registered". Unless this prime condition of the Act be complied with, no original research can be undertaken; neither can even the most elementary instruction, such as showing the circulation in the web of the frog's foot, be given legally to students.

This step as to the registration of lecture-rooms or laboratories has been taken in London, at Oxford, at Cambridge, at the Scotch Universities, and at some of the medical colleges in Dublin. In fact, a considerable number of our most important medical educational institutions have shown a disposition to meet the authorities fairly, and co-operate in carrying out an Act of Parliament framed in a spirit of extreme humanity.

About a fortnight since, the Council of the University of Dublin passed a resolution to the effect that it was desirable that some places within the University or its medical school should be registered under the Act. The question was at a later period referred, as we are informed, to the professors of the medical school for their consideration. Whether from a natural disposition to recalibrate against laws passed by "the English House of Commons", or from timidity lest they may be assailed by the "anti-vivisectionists", the professors have by a majority of one expressed an opinion against the desirability of having any place registered under the Act.

Inasmuch, therefore, as the authorities have declined to register any private house or private laboratory, the medical professors of Trinity College, Dublin, have placed themselves and the medical school in which they teach in this absurd position. Not one of them can insti-

tute any original research in any of the subjects already spoken of; nor can they demonstrate to their pupils the most elementary phenomena connected, for instance, with the circulation of the blood. It is not a question of vivisection, but of any experiment or research relating to antidotes for poisons, dietetics, animal chemistry, therapeutics, etc. Whatever may be the reasons which have prevailed in bringing about this decision, it has placed the institution in a most unenviable position of retrogression, and most painfully lowers its position among medical schools, not only in the United Kingdom, but throughout the world. Indeed, it may be expected that some of the more intelligent students will themselves take the matter up and petition the ruling authorities not to allow the teaching of biological science to be so completely extinguished in Trinity College, as it must be if nothing be done to fall in with the law as it at present exists; otherwise they would have to look to other schools for the education which they cannot obtain in that which should be, and in many respects is, a model school. As regards original research, it seems a hard case that really able and earnest men like Professors Emerson Reynolds, Purser, and Macalister should be prevented by those who may take less interest in the progress of scientific medicine from pursuing inquiries and adding to necessary knowledge, in a manner worthy of the country and university to which they belong, by being prevented from engaging in original biological inquiry in scientific medicine and the ancillary subjects. A medical school which has not complied with the terms of the Act is not one in which physiology can be taught efficiently, and from this point of view it may be doubted whether the licensing bodies are justified in recognising its physiological teaching or accepting its educational certificates. This is a point of view which concerns also the General Medical Council. That body meets on April 10th; and it may be the duty of those who warmly disapprove and view with deep regret the course adopted (among whom, we understand, are some of the most eminent members of the University), to bring the subject formally under the notice of the Council, where it can be adequately discussed from all points of view. We hope that meantime all sides of the subject will be duly weighed, and the decision brought under review, when we think it would be felt that an unwise course has been adopted, which it is not too late to retrace.

RECENT RESEARCHES ON INFLAMMATION.

WE have lately placed before our readers the results of investigations into the nature of the inflammatory process recently undertaken in the laboratories of Virchow and Stricker; the object of study in the one case being the inflamed bronchial mucous membrane; and in the other, inflamed tendon. It may be convenient to complete our references to the subject by calling attention to some of the latest work done in the now well-beaten field of keratitis.

When a frog's cornea is cut out and placed entire in the field of the microscope, being a transparent and not very thick object, it can be examined throughout its whole depth with a fairly high power. By moderate staining, large nuclei can be seen in its substance. If an inflamed cornea be subjected to the same treatment, it is to be supposed that any changes which take place in the nuclei or the granular substance that surrounds them—histologists not yet being agreed as to whether this latter is cellular or an amorphous precipitate—will become apparent; and if any cells exist in the inflamed cornea which do not exist in the healthy structure, that it will be easy to trace not only their presence but their source. This apparently satisfactory object of study has, therefore, become classic, but the results are widely different from those which one might at first sight be induced to expect; for there is nothing that has been described in the inflamed cornea by one pathologist that has not met with direct contradiction from some other. Let us take, as an example, a point that might seem capable of an easy and definite solution—the fate of the large flattened nuclei so easily demonstrated in the cornea. Although Ranvier described, a

few years ago, a new method by which in keratitis the division of these nuclei into several round smaller bodies could be satisfactorily shown, we have quite recently Mr. Dowdeswell stating, as the result of some painstaking studies in the laboratory of University College (*Proceedings of the Royal Society*, vol. xxv, p. 390), that "the most careful scrutiny of his preparations fails to detect any difference whatever as regards their forms or aspects, between the fixed corpuscles of inflamed corneas and those of normal corneæ prepared in a similar way"—nuclei, of course, included. And for the further confusion of students of pathology, we find Cohnheim and Stricker (the two foremost representatives of the diametrically opposite opinions held regarding one of the chief phenomena of inflammation, the origin of pus-cells) engaged in bringing out important works on general pathology, in which their irreconcilable opinions are consecrated and perpetuated. Stricker (*Vorlesungen*, II Abth., Vienna, 1878) lays it down as indisputably proved by a long series of observations that the nuclei of the cornea and the granular network in which they seem to be imbedded, under the "stimulus" of inflammation, "proliferate" into new cells. Cohnheim, on the other hand (*Vorlesungen*, Band I, Berlin, 1878), maintains that "we are still a long way off any proof that pus-cells originate otherwise than as emigrated colourless blood-corpuscles; and that the most that can be said is that pus-cells probably increase in number by undergoing division". The opinions of both these authorities are supported by numerous followers; the sides on which the latter are ranged being evidently determined, in the majority of instances, by the spirit that prevails in the school or laboratory in which they have carried out their investigations.

An examination of the memoirs in which their researches are recorded shows that there is still much uncertainty attending many of the methods employed by pathologists in these inquiries. It is only thus that we can explain how the persevering and conscientious labours of so many workers fail to secure unanimity on even the elementary questions that are involved. To take some examples which may illustrate our meaning: Walb found that solution of carmine can be injected into the living cornea without producing much acute inflammation, and that at first the cornea corpuscles (that is, the nucleated network) are stained. After some time, red carmine-coloured giant-cells are found in the network; and it seemed reasonable to infer that the giant-cells resulted from a proliferation of the corpuscles. But Senfleben observed that, when carmine is injected into a dead rabbit's cornea and the latter is placed into the peritoneal cavity of a living rabbit, the same giant-cells are formed; and he thence concludes that they are formed by the massing together of colourless corpuscles from the living animal, which enter the interstices of the dead tissue. We may add that it is evident that a third explanation is not excluded, so long as the process of their formation is not followed in all its stages.

Amongst the more noteworthy of these later experiments may be instanced those described by Dr. Ernst Fuchs in Virchow's *Archiv*, 1876. In order to test whether certain nuclei found in the inflamed frog's cornea are due to proliferation of fixed corpuscles, or are migratory colourless blood-cells, he excised the corneæ of living frogs, cauterised them after they were excised, inserted them in the anterior chamber of the eyes of pigs removed from animals recently killed, and closed the incision by which they were inserted. After they had remained in this cavity for various periods he observed, on examination, that a much greater number of nuclei were visible in the frog's corneæ so treated than are usually seen in the frog's cornea; and in addition, evidence that there are various kinds of cellular elements in such corneas was obtained. Dr. Fuchs infers that the excised and cauterised frog's corneæ (cauterised after being excised, it is to be remembered) became inflamed in the chamber of the pig's eye, and that all extraneous sources from which the numerous cellular elements seen

could be derived being excluded, the corpuscles had proliferated. Without raising the question as to the propriety of applying the term inflammation to any possible changes that may take place in an excised cornea placed in a dead eye, a critic might with much reason object to the imperfect scope of the investigation. Before laying any weight on the appearances seen in the excised and cauterised cornea, we should first have a series of observations on frogs' corneæ excised and placed in pigs' eyes without being cauterised, and also on the corneæ of entire frogs' eyes similarly treated. The fact seems to be, that the appearances visible in an inflamed cornea depend, to a greater degree than seems yet to be generally appreciated, on the agent used to produce inflammation, and on the methods by which the cornea is prepared for examination. Whilst in a cornea moderately inflamed by nitrate of silver or a fine seton, then excised and stained by gold, such nuclei as are preserved are usually seen entire (Mr. Dowdeswell, in twenty corneæ so treated, did not find the nuclei divided in one, although, even in gold preparations, such division has been observed and figured by several histologists), in corneæ punctured and stained in purpurine (Ranvier's method) the division of the nuclei into smaller pieces is easily observed. Whilst in gold preparations the beautiful purple network described as the "corpuscles" comes out in even exaggerated relief in the various stages of inflammation produced by nitrate of silver or a seton, on the other hand, a cornea cauterised by caustic potash, excised and stained in silver, and afterwards allowed to swell in acidulated water, shows an appearance of a totally different kind. In the latter case, instead of a network of finely granular matter, we have a network formed by the juxtaposition of numerous small epithelioid cells, and in the central or nodal points patches of such cells, several cells in breadth.

Stricker, in the volume to which we have referred, represents this appearance in a coloured plate. The cellular elements shown are similar to those figured by himself and his pupils at various times during the last seven years. This newest representation illustrates a very successful preparation of a cat's cornea inflamed from twenty to twenty-four hours; and is described as the "cell-network divided into small nucleated fractions". It would, indeed, be difficult to imagine that in twenty hours' inflammation, the colourless blood-corpuscles which enter the cornea could arrange themselves in the regular epithelioid fashion which is here portrayed, and have all of them acquired the same exaggerated and uniform size.

We should not omit, in this connection, to recall the fact that Dr. Thin has explained this appearance on the theory that the destructive action accompanying inflammation of the cornea so alters the tissues that cell-outlines, always present but not usually seen in silver preparations, become visible; and Dr. Klein appears quite recently to have taken a similar view. In a note in the *Quarterly Journal of Microscopical Science* for 1877, after confirming the appearances described by Stricker as obtained by silver-staining corneæ which have been inflamed by caustic potash, he remarks that the method "demonstrates the normal structure in an exceedingly beautiful manner". But we must not forget that Stricker himself countenances no such view, and considers the appearance as strictly pathological.

THE MEDICAL DEPARTMENT OF THE ARMY.

THAT Parliament and the press continue to evince an interest in the affairs of the Army Medical Department, is a healthy sign of the times. It may be safely asserted that no branch of the military service is, at this moment, so unfit to bear the least strain of war. Indeed, it is but too painfully manifest that its present weakness is such that, at one of our largest military stations, not ten miles from London, there has just been a serious breakdown of the department, owing to a glaring insufficiency in the number of medical officers required for the perform-

ance of the ordinary routine duties of the garrison. This is a fact, the full details of which are now in our possession. The civil practitioners of Woolwich having been appealed to, these gentlemen are doing their best "to keep things going". But to any one acquainted with the nature of the duties devolving upon army surgeons, it will be at once apparent how, with such hasty and crude arrangement as this, the physical efficiency and *morale* of the troops can hardly fail to be less or more injuriously affected.

We are not now going into an analysis of all the causes leading to the occurrence of this ominous incident. Suffice it to say, in the meanwhile, that, when in the seemingly desperate but futile attempt "to save appearances", to obviate alarm and hide the woeful dearth of army surgeons, the senior surgeon-majors are being forced to execute the most subordinate duties of the department, hitherto always discharged by the subaltern ranks, the actual condition of this service may at least be imagined if not quite realised. And all this, and much more equally bad, is happening at Woolwich and all over the United Kingdom, at the Cape, in our other Colonies, and in India; whilst Mr. Hardy assures the House that there are only eight vacancies in the Army Medical Department!

What must happen were we to be immediately embroiled in a great and prolonged European war? What but disaster as regards the Army Medical Department? And what else? Well, should such be the probable fate of that department *ut nunc est*, concerned as it is, with the maintenance of the physical efficiency of the army and of much of its *morale*, the "what else", it requires no prophetic gift to foretell.

"The Bare Statement" which we recently republished cannot receive a too careful study from those who may now be investigating the condition of the medical department with a view to the necessary remedies being speedily applied. This statement, in a somewhat less comprehensive form than its present, was first published by us nearly a year ago; and since that time, we have had ample opportunity of judging as to its correctness. It is of no use any longer wilfully ignoring the fact, that the Army Medical Department is the subject of serious organic disease as well as of grave functional disorder. This is an undoubted fact, and one which no keen-eyed and wise observer, anxious for its restoration to health and efficiency, can possibly fail to perceive and admit. The *Army and Navy Gazette* thinks that it may be the want of "feathers, belts, and lace" that is playing the mischief with the department. The *Daily Telegraph* says that the army surgeons are always making "a fuss about trifles". Mr. Hardy, after nearly four years as War Minister, cannot see what these gentlemen have to complain of. He has, however, appointed a small committee to inquire and report. This committee is of such purely official constitution, including Sir W. Muir as its sole medical member, that it has not commanded general confidence: it has, however, recognised the gravity of the situation, and is making such extended inquiries among the schools and in the service as will, we hope, lead it to wise conclusions. At any rate, we shall hope for the best.

It is announced that yellow fever is extremely prevalent at Rio de Janeiro.

THERE is some reason to believe that the College of Surgeons and the College of Physicians of London will resolve not to proceed with their conjoint scheme, unless the Government Bill for the Amendment of the Medical Acts be so modified as to make it compulsory on the examining bodies of Scotland and Ireland also to frame and carry into effect conjoint schemes for minimum examinations.

WE understand that the Council of the Pathological Society have it in contemplation to fill up the number of vacancies in the list of honorary members of the Society. The additions will, as is usual, be carefully selected from foreign medical men of eminence. The question of adding the names of one or two eminent Englishmen has also been mooted.

DR. HOWARD of New York gave a demonstration, at St. Mary's Hospital, in the operating-theatre, of his method of restoring animation by artificial respiration, on Tuesday last, at 3 P.M. His method has been much approved by many eminent medical men. We are preparing for publication an illustrated report of it.

THE Council of the Metropolitan Counties Branch is taking active steps towards the formation of district sections, with a view to supplying the wants of the outlying suburbs of the district in the way of scientific and social medical organisation. We some time since urged this course upon the Branch, and the scheme was then taken up, but allowed to drop. It has now been revived, and is being carried through with so much vigour and judgment, as to have been speedily brought into working shape. Districts will be formed in the north, east, south, and western parts of the extensive and thickly populated territory of the Branch. There are about 1,200, we believe, members of the Association within the districts, or about one in every two members of the profession. Local secretaries have undertaken to act, and a scheme of organisation has been prepared, which is based upon that efficient plan in operation in the South-Eastern Branch, to which we have often had occasion to refer. By this plan, all the districts are supplied with local centres for scientific and social meeting, and the activity and efficiency are developed of the fertile principles of professional association and of local self-government which underlie the prosperity and usefulness of the Association.

AT the last meeting of the Council of the Metropolitan Counties Branch, an appeal was read from the Harvey Tercentenary Committee, of which the like has, as we have announced, been addressed to all the Branches, and we believe also to the Committee of Council of the British Medical Association, as well as to all the medical corporations and universities. The Metropolitan Council unanimously voted a sum of ten guineas from their funds; an example of judicious, if restricted, liberality which will probably find many parallels in the other similar bodies which have been addressed.

TWO new wards, each containing twenty-four beds, have been opened in the Hôtel-Dieu, Paris. The two clinical professors, whose courses of lectures have been interrupted since the opening of the new hospital, will now be enabled to resume them.

THE preliminary report of the Pyæmia Committee of the Pathological Society has been forwarded to the Local Government Board, who, it will be remembered, have made a Government grant towards the expenses of the investigation; and it is also expected that the Committee appointed to report on the conditions and pathological changes in the vessels in Bright's disease, will do so before the end of the session.

THE last meeting of the Pathological Society, of which we publish a report in another column, was one of very great interest, and in every way worthy of the new phase of scientific activity on which the Pathological Society has entered during the last two years with much vigour and success. The complaints which we formulated just before that time on several occasions, that the proceedings of the Society were rather those of an anatomical society which discussed purely dead-house specimens in a disconnected and unscientific spirit, was followed by a very speedy reform under the auspices of Dr. Murchison, which has placed the Society in the foremost rank of active scientific working bodies. The discussion at the last meeting bore upon the pathological conditions and processes belonging to the lymphadenoma, or as Dr. Gowers proposes that the state in question shall be called, lymphadenosis. This obscure and surgically interesting condition is still very imperfectly understood, and is by some pathologists still considered as though it were synonymous with leucæmia. The extremely interesting communications of Dr. Wilks, Dr. Greenfield, and Dr. Gowers, throw a great deal of light upon the pathological conditions and processes connected

with lymphadenosis; and it is a specially notable point in Dr. Greenfield's communication that, in all but one of the series of cases which he brought forward, there was nothing like a condition of leucocythæmia.

THE President of the Royal College of Surgeons has summoned an extraordinary meeting of the Council for Monday next, to consider of the Government Bill for the Amendment of the Medical Acts.

THE Council of the Pharmaceutical Society proposes holding a *conversazione* at the South Kensington Museum in May next.

THE many friends of Dr. Black of St. Bartholomew's Hospital will sympathise with him in the irreparable loss he has sustained by the death of his son, Lieutenant W. E. Black, in the foundering, on Sunday last, of H.M.S. *Eurydice*; on which occasion, Staff-Surgeon James Leech Whitney and Surgeon Robert Murdoch also perished. This is the second son whom Dr. Black has devoted to and lost in the naval service of the country. Surgeon Murdoch was a member of the British Medical Association.

THE Crown Prince of Austria has caused a letter to be sent to Professor Flower to express His Royal Highness's best thanks for the services rendered by the Professor during his visits to the Museum of the Royal College of Surgeons of England.

THE MEDICAL ACT AMENDMENT BILL AND THE TITLE OF DOCTOR. We have before pointed out the hardship inherent in the present state of things as affecting the students of the metropolitan schools and diplomates of the London examining bodies, by the recent decisions of the Royal College of Physicians of London. A person who has studied in the metropolitan schools, and availed himself of their great opportunities of teaching, and has subsequently obtained a diploma of the three principal licensing bodies of the metropolis, and has thus become fully qualified both as a physician and surgeon, is debarred from the use of the title of Doctor. That title, however, is the rightful appanage of the graduates of the principal licensing bodies of Scotland and Ireland, and also of the graduates of the Queen's University in Ireland. It is not generally contended that by reason of the education of, say, the graduates of the Queen's University, or of the University of Durham or of St. Andrew's, they are more perfectly equipped as medical men than are the students of the London and provincial schools, who become diplomates of the three great licensing bodies of England. Nevertheless, it results from the present state of things, that whilst the great majority of medical men licensed in Ireland and in Scotland achieve a legal claim to the title of "Doctor", those who are educated in the great centres of England, whether at London, Manchester, Liverpool, Bristol, or other schools, have no opportunity of acquiring that title, and have thus far an official, and possibly often social, disadvantage as compared with their more fortunate Irish and Scotch brethren. We are inclined to think that, in any general revision of the scheme of examinations for the three kingdoms, such as is at this moment under consideration, some regard ought to be had to the subject of the grievance which has been discussed in our columns, by which the great proportion of English medical men are debarred from the use of the title of "Doctor".

FEEES AT THE LONDON SCHOOLS.

THE course which the teachers attached to the metropolitan schools propose, of raising considerably the fees for the course of medical teaching, is very naturally prompted by the steady increase in the cost of teaching inevitably attached to the improvement in methods and the extension of subjects in modern medical education. This cost is likely to go on increasing rather than diminishing. The expense of material and apparatus for histological and practical classes in all the subjects of scientific medicine, and the improved system by which students are now required to study facts and learn manipulations, instead of merely sitting on benches and gazing at diagrams while the amalgamated con-

tents of collated text-books are poured into their ears, involve considerable outlay in increased supervision of studies, as well as materials and instruments of work. Nevertheless, we may point out that this determination may have an unfortunate influence on the future of the London medical schools. If this "unsurpassed" system of teaching rise to the highest standard of cost, of difficulty, and of intellectual labour, while, as a result, its acolytes, when duly qualified, are still not technically "doctors", while the more cheaply equipped graduates of other schools are duly dubbed with the magic title to which so much importance is attached, and while a perfect reciprocity of practice is granted to the practitioners of Ireland and Scotland, it is to be feared that an increasing proportion of students of the English schools will prefer to seek those centres of education where they can consult economy and at the same time satisfy the longing for the higher title.

NON-COMBATANTS.

THE *Golos* publishes a telegram from their correspondent at Adrianople despatched on the 12th instant, stating that an entire sanitary corps of doctors, consisting of twelve persons, has been swept away by typhus, and, owing to the excessive mortality among the remainder of the medical staff, many of the sick and wounded have been left without attendance. The hospitals are full, and two thousand typhus patients are billeted upon the townspeople. Thirty-five doctors were sent from Warsaw and twenty from Odessa to take the places of the victims to the fearful epidemic which is raging. We referred lately to the statistics of the excessive mortality among the medical officers of the British army, and this report emphasises the perils of "non-combatant" medical officers in a very striking manner. It may be observed that the notice in the *Golos* is made to speak of medical officers as though they were "stores" to be shipped off to order; and, in fact, another telegram states that all medical officers have been requisitioned *en masse*, and forwarded to the fever-stricken districts of the war.

THE CASE OF THE REV. A. J. DODWELL.

THIS case is likely to cause much discussion in legal as well as medical circles from its peculiar nature. It frequently happens that a man is brought in by a jury as of unsound mind and the verdict subsequently set aside, but we do not remember where, after the jury have pronounced a man irresponsible for his actions, that the verdict has been over-ruled. The question is, what will the Government do with Mr. Dodwell? Dr. L. Forbes Winslow and Dr. Winn have seen him twice, and sent in their report to the Home Secretary, stating that they could detect no symptoms of insanity. It appears that the conduct of the accused during his residence in Newgate has been exemplary and most rational. He premeditated for some months the act for which he is now suffering. He is indignant at the question of his sanity being raised, and complains of being pronounced as *non compos mentis* without any medical witnesses having been called to support such an allegation, not even Mr. Gibson, the surgeon of the gaol. He considers that anything is more preferable than to be stamped as a criminal lunatic and incarcerated as such for life in a living tomb. He entirely repudiates any intention of having contemplated murder. He is a man of determined purpose; and if he have once taken an idea into his head, he will endeavour to carry it out to the utmost of his ability. He had written several letters to the authorities, stating that it was his intention to break the law in order to have his case properly discussed in the Court of Appeal. He appears to have been driven to desperation and ruin by what he considers to be an injustice. He does not labour under any delusion. He occupies his time in Newgate in writing Latin poems, being a man of highly cultivated and classical attainments.

UNAUTHORISED DEATH-CERTIFICATES.

THE national death-register, since the Births and Deaths Registration Act of 1874 came into operation, affords most valuable, although indirect, information as to the amount of unqualified medical practice in different parts of the country. At the present time, this subject has an exceptional interest. The death-register shows how many causes of

death are certified by registered medical practitioners, how many by coroners, and how many are uncertified. Causes of death are uncertified from three causes: either because the deceased person has been attended by a qualified but unregistered practitioner, these cases being but few; or because the deceased has been attended by an unqualified practitioner; or because the deceased has died without any medical attendance. The proportion of the latter cases varies in different localities, and is, of course, largest among the lowest classes in large towns and in very sparsely populated districts, where the distance from the nearest medical practitioner is often very great. As a rule, however, except in such districts, it may be generally assumed that, if the proportion of uncertified deaths exceeds 2 or 3 per cent., it arises from the fact that a considerable proportion of the medical practice is in the hands of unqualified practitioners. We have recently had occasion to examine the death-register of Dartford, Kent, for example, and observed that more than 10 per cent. of the causes of death are uncertified. Now, in such a district, it is impossible to suppose that many persons die without medical attendance; and, on inquiry, it appears that there is in Dartford a person who styles himself an "eclectic physician", and, moreover, assumes the title of "Dr.", who has a considerable practice, and in cases of deaths among his patients furnishes a printed certificate of the cause of death to the relatives, who take it to the registrar. This cause of death is, in accordance with instructions, entered in the death-register as an uncertified cause of death. Under the present state of the law, the difficulties in the way of prosecuting such an unqualified practitioner are well nigh insuperable; and, unless the local coroner could be persuaded that a few inquests in such uncertified cases would be useful, at any rate in informing the public that such and such a practitioner is unqualified, the attempt to suppress such practice seems hopeless. It is to be hoped that the provisions of the new Medical Act Amendment Bill will supply a better remedy for the evils of unqualified medical practice than at present seems probable.

TOO MUCH ZEAL.

AN unpleasant occurrence has taken place at the Paris Faculty of Medicine. By the rules, the students are forbidden to take away any parts for dissection; but notwithstanding this formal regulation, several parts had disappeared from the dissecting-rooms of the École Pratique. The Academical Council met and decided to remind the pupils of the regulations on this point by placards affixed to the walls; and at the same time, the curators had orders to look better after the students. A few days afterwards, a student was taken in the act. M. Vulpian, the dean, after having consulted the Academic Council, has expelled him and announced the fact to all his fellow-students by placards in the École de Médecine and the École Pratique.

SPONTANEOUS GENERATION.

M. COLIN read, at a recent meeting of the Paris Academy of Medicine, an interesting paper on the successive development of virulent foci during the incubatory stage of anthracoid diseases. His conclusions, if accepted, would overthrow the theories of M. Pasteur, whose admirable experiments on anthracoid infection are well known to our readers. M. Pasteur, consequently, proceeded to make a vigorous attack on M. Colin's paper, refusing to receive his conclusions on the ground that the experiments of other workers have no value if they are not conducted according to M. Pasteur's method. Finally, M. Colin asked for a commission to verify the facts advanced by him; and the Academy appointed MM. Pasteur, Colin, Bouley, Davaine, and Vulpian, to report on the results submitted to them by M. Pasteur and M. Colin.

THE SUSSEX MEDICAL FRIENDLY SOCIETY.

THE twentieth annual report of the Sussex Medical Friendly Society, just issued, is very interesting, as showing the difficulties attendant on the establishment of such a Society, and the success that waits on persistent effort. The Society had its origin at the annual meeting of the East Sussex Medico-Chirurgical Society, held at Hastings on July 4th,

1857, at the instance of some gentlemen who were of opinion that considerable benefit would be likely to accrue from a local society founded on the principle of mutual benefit, on a plan similar to that followed by societies already then established in Kent and Surrey. By the end of the first year, the Society consisted of thirty members, and increased steadily until 1860, when it numbered thirty-nine. From various causes, such as the absence of novelty and the appearance of any good result from the funds subscribed, its numbers, in 1864-5, fell to twenty-five, and in June last the Society was composed of twenty-seven members. The part of the report relating to finance is very encouraging. The receipts from all sources amount to £966. The demands for relief have been few—only three in thirteen years just passed, and none previously to the commencement of that time. The sums expended in meeting those applications amounted to £320. The cost of management has been very slight indeed—only £61, or about £3 a year. The remainder of the sums subscribed have been invested. A proposition to transfer the centre of management to Brighton will be carried into effect, so soon as the numerous practitioners of that town shall have joined the Society.

TAMPERING WITH A PATIENT.

MR. JUSTICE LOPES, at the Lancaster assizes, recently passed the severe sentence of ten years' penal servitude on John James Coupe, lunatic asylum attendant, for inciting a man named Jackson, a patient at the Lancaster County Lunatic Asylum at Whittingham, to murder and rob two other attendants. For this purpose, he furnished the patient with a piece of sharpened iron, and taught him how it was to be used, arranging also time and place and the plan of Jackson's escape. Jackson fortunately related the whole affair to Dr. Holland, the superintendent, and in consequence Coupe was discovered in the neighbourhood under circumstances that left no doubt on Jackson's story.

THE GERMAN SURGICAL CONGRESS.

THE seventh congress of German surgeons will be held in Berlin on April 10th to 13th. At the last annual meeting, it was decided that discussion on malignant tumours should take place this year; and Dr. Thiersch undertook to draw up the necessary propositions. As, however, the propositions have not been received in time for distribution among the members of the German Surgical Society, Dr. von Langenbeck, as president of the committee, has decided that the discussion on the entire subject shall be deferred until 1879, and that at the forthcoming congress the following arrangement of subjects only shall be considered. 1. Etiology of tumours, and especially of malignant new growths: *a.* Heredity and congenital predisposition; *b.* Origin of tumours after chronic irritations and chronic inflammatory processes; *c.* Influence of other diseases on the origin and recurrence of tumours (psoriasis, eczema, acute exanthemata, lupus); *d.* Relations of congenital and acquired syphilis, and especially of syphilomata (gummata) to the formation of sarcoma and cancer; *e.* Origin of tumours in consequence of single wounds and injuries; *f.* The communicability of carcinoma; *g.* The relation of certain physiological conditions to the origin and return of tumours (pregnancy, lactation, puberty, uterine involution); *h.* Depressing mental affections. 2. Diagnosis of tumours: *a.* Ulcerated syphiloma and cancer; *b.* Syphilitic ulceration of the skin and mucous membranes, and cancer; *c.* Phagedænic chancre and superficial epithelioma. 3. The various degrees of malignity in the different anatomical forms of carcinoma and sarcoma, and according to their seat in the various organs and regions of the body. 4. Malignant course of growths, which at other times are held to be benign in a clinical sense (lipoma, fibroma, enchondroma). 5. Spontaneous cure of tumours, especially cancer (by absorption, calcification, or sloughing). 6. Duration of cure after removal of tumours with or without loss of blood: *a.* Permanent cure; *b.* Time of appearance of local return; *c.* Time of appearance of recognisable disease of the lymphatic glands; *d.* Time of occurrence of metastasis after operations for cancer; *e.* Do metastases occur more frequently and sooner, after or without

operation? 7. Results of treatment of malignant tumours: *a.* Influence of the method of operation; *b.* Influence of the treatment of the wound; *c.* Results of electrolytic treatment; *d.* Results of parenchymatous injections of non-irritant fluids; *e.* Results of the use of internal remedies; the dietetic treatment; *f.* Are there any remedies which, used locally, have a specific effect on the elements of the new growth, so as to destroy them without affecting the healthy tissues? 8. Contributions to the general statistics of tumours, especially malignant new growths.

MANCHESTER ROYAL INFIRMARY.

OUR Manchester correspondent writes:—Mr. Thomas Windsor has resigned the post of Ophthalmic Surgeon to the Manchester Royal Infirmary, which he has held for the comparatively short period of five years. He was the first to hold the appointment, and was induced to become a candidate at the general wish of a large body of the medical profession in Manchester. His rare skill and his profound learning render his resignation a great cause of regret, for certainly in many respects it will be almost impossible to fill his place. There are already several candidates in the field, amongst whom is Mr. E. A. Birch, who has for some time been Mr. Windsor's assistant at the Infirmary.

A LARGE HEART.

DR. SOURDES of Nancy obtained, at the medico-legal necropsy of a man who died suddenly, a heart which exceeded in size and weight all the recorded instances of *cor bovinum*. According to the *Revue Médicale de l'Est*, except in one case where the weight of the heart exceeded 1000 grammes (2 lbs. 3 oz.), the recorded weights have varied between 500 and 680 grammes (1 lb. 1½ oz. and 1 lb. 8 oz. av.). The one in question weighed, on the day of the necropsy, 1480 grammes (3 lbs. 4.2 oz. av.), and after it had been prepared and placed in spirits for some days it still weighed 1250 grammes (2 lbs. 12 oz. avoirdupois).

THE SUDDEN DISUSE OF STIMULANTS.

THE Reverend T. H. Chope of Hartland, North Devon, in writing to the *Times* on Monday, combats the general opinion that any sudden abstinence from alcoholic stimulants is injurious to health, especially if the abstainer be a person of advanced age. To support his statement, he instances an old widow, eighty-two years of age, who had through life been accustomed to drink gin and beer previously to her eightieth year. She suffered from occasional attacks of gout in her left hand, and also a running foot-sore. Two years ago, she adopted the total abstinence principle, with the result that the gout ceased to visit her and the foot-sore healed. Now, in her eighty-third year, the old lady is in good health.

HOSPITALS FOR OUR SEAMEN ABROAD.

FROM a recently issued Parliamentary paper, relating to the hospital accommodation for British seamen in Foreign ports, we learn that in some ports there is a hospital tax. This is sometimes levied for the support of hospitals established by the Government of the country, and in others for the support of hospitals founded either by the foreign residents or by a foreign Government in places where no native hospitals exist, or because of the insufficient accommodation afforded by the native hospitals. The ports are divided into three classes: 1. Where there is no hospital for seamen; 2. Where there is a native hospital; 3. Where the hospital is established by a foreign Government. In the case of the first, the medical attendance is limited to private practice. The charges are often heavy, and the skill of the practitioners uncertain. The native hospitals are often totally unfitted for British seamen, notably in South America, where the doctors are generally ignorant of the constitution of foreigners, and the religious bigotry of the directors mars the good which otherwise might be done. The British Government undertakes the protection of hospitals at a few ports, at many of which a tax has been successfully levied; at others, where there exists no power to tax, an attempt has been made

at voluntary taxation, but without success. In some instances, where the merchants and shipmasters lent their aid to the effort, it worked well; in other ports, with only a small foreign element, it has proved a failure. It may, therefore, be said that the voluntary system has failed, and that the self-supporting system without a guaranteed income has only been partially successful. Success alone has attended the hospitals supported by taxation where there is power to enforce it.

THE DISINFECTION OF THE LATE BATTLE-FIELDS.

ACCORDING to advices from Vienna, the Austrian Delegation on Saturday last unanimously adopted a motion to refer to the common Ministry a petition of the Association of Officials and various Insurance Companies, praying the Government to take steps for disinfecting the battle-fields of the late war. The Delegation at the same time requested the Ministry to use their endeavours to arrest, by means of an international understanding, the danger which threatens the general health of Europe from the vast number of corpses lying unburied in Roumania and Bulgaria, and with this view to take steps for immediately organising an international sanitary commission.

BERNOUILLI ON CROUPAL BRONCHITIS.

BERNOUILLI relates, in the *Deutsches Archiv*, vol. xx, a case of primary croupal bronchitis attacking a compositor, sixteen years of age, who had suffered as a child from scrofula and had the signs of stenosis of the mitral valves. After the patient had suffered for a long time from simple bronchial catarrh, and expelled daily three or four fibrous casts, there could only be discovered, in connection with this, one painful place on the left side below the axillary line, where *râles* were perceptible. After two or three days, these symptoms disappeared, but they returned again at the end of one, four, and eight weeks. These casts were thrown up especially during the night. Bernouilli has found the treatment of croupous bronchitis with inhalations to be without any success, and so also the treatment by emetics. He recommends that the patient be ordered to take deep respirations in order to excite the impulse to cough, and thus expel the casts mechanically.

PRESERVATION OF THE BRAIN.

M. ORÉ of Bordeaux employs the following method for preserving the brain. He removes the membranes with great care, and plunges the brain into alcohol, 90 deg. Four days afterwards, he passes pieces of cotton between the convolutions. The alcohol is changed every five days for twenty or twenty-five days. He then wraps the brain in three folds of linen placed one over the other and kept in place by India-rubber bands, and places it in a stove heated to 45 deg. or 50 deg. cent. (113 or 122 Fahr.) during fifteen or twenty hours, taking care to place the preparation in the lower part of the stove at some distance from the gas furnace which warms it. The linen envelopes are removed the brain is then covered with several coats of white India-rubber varnish. The brain thus prepared is then submitted to the galvano-plaster process.

SCOTLAND.

THE winter session of the Scottish medical schools all ended this week, when the prizes were delivered, as usual, to the successful students in the various classes.

WE understand that Dr. P. Heron Watson, as one of the suite of the Earl of Rosslyn on his mission to the marriage of the King of Spain, has been made a Companion of the Order of Charles the Third.

AT a meeting of the managers of the Edinburgh Royal Infirmary, on Monday last, Mr. John Chiene was elected surgeon to the institution, in succession to Dr. Patrick Heron Watson, whose fifteen years' term of office has expired. This leaves a vacancy in the post of assistant-

surgeon, for which there are several candidates spoken of, among others, Dr. Cadell, Dr. P. H. McLaren, Dr. Bishop, and Dr. C. W. McGillivray.

EDINBURGH ROYAL MATERNITY HOSPITAL.

AT the annual meeting of the subscribers of this institution, the report read by the Secretary showed a most satisfactory year's work—206 patients were attended in the house, and 308 outside, at their own homes, with only one death, which occurred in a patient sent, in an almost moribund condition, from the Royal Infirmary. The report detailed the advance that had been made in the building of the New Maternity in Lauriston Place, of which it was proposed at present only to build the front and one of the wings, owing to a want of sufficient funds to complete the whole building immediately. It was anticipated that so much of the building would be completed and ready for occupation within a year from the present time. It was pointed out that one feature deserving increased support was the fact that the hospital is open to all women who apply, whether married or unmarried, and from any part of Scotland or elsewhere. The expenditure for the whole work of the year had only been £524.

DANGEROUS EMPLOYMENTS.

A REPORT has been published from Dr. Russell on a fatal case at Glasgow, in which he urges the probability that the disease from which the patient died was of foreign origin, communicated by the air in which she worked. Entering more fully on the subject, Dr. Russell urges legislative action in the matter of unhealthy employments, and states that, but for an accidental circumstance, within one week three adults, previously in perfect health, employed in one occupation, seized with illness and dying in a few days without medical attendance, admittedly from an unknown cause, would have been buried and their bodies placed beyond recovery.

IRELAND.

A MAN named Woods died, on the 23rd instant, in the County Derry, at the advanced age of 103 years.

DR. WILLIAM FRANCIS MARA died at Athy, on the 23rd instant, of typhus fever, contracted in the discharge of his professional duties.

OVARIOTOMY IN IRELAND.

MR. LAFFAN of Cashel has added another to the list of successful ovariectomies in this country. He operated, on the 1st instant, upon a patient aged 36. The tumour was large, unilocular, and free from adhesions. Bichloride of methylene was used, and thymol spray employed. The case is reported as now convalescent.

CHARGE AGAINST DR. O'HARE OF BELFAST.

AT the Crown Court, Antrim, before Judge Lawson, last week, Dr. O'Hare, to whose case we lately referred, was indicted for forging a writ, and, pleading guilty, was sentenced to twelve months' imprisonment. The accused had become seriously ill since his confinement, and had been paralysed for the past month.

BELFAST WATER-SUPPLY.

AT present, there are about four and a half million gallons per day of water supplied to the town, which allows twenty-two gallons per head for a population of 200,000. It is expected that an arrangement will shortly be entered into between the Carrickfergus Commissioners and the Belfast Water Commissioners, in reference to the Lough Mourne and Copland scheme. When this is completed, together with the present works in course of erection, it is estimated that Belfast will have a total daily supply of between eight and nine million gallons, or thirty gallons per head for a population of 280,000. Regarding filtration, should circumstances require it, the Commissioners have taken steps to carry out the necessary works.

A FAIR WEATHER POLICY.

AT a recent meeting of the Drogheda Union Guardians, a communication was received from the Local Government Board, enclosing the return of Dr. Kelly for the quarter ending December 31st, and pointing out that no cases of vaccination occurred during all that time. The Board wished to know if there was any reason for this, or unwillingness on the part of the people to comply with the Vaccination Act. The only explanation suggested by the guardians was that the parties who had children to vaccinate were waiting for finer weather, which appeared to be considered sufficient excuse, as no action was taken in the matter.

TRALEE BOARD OF GUARDIANS.

AT a meeting, held on the 20th instant, a letter was received from Dr. Richard Harold, resigning his appointment as medical officer of Brosna Dispensary District, which post he had held for the past twenty-seven years, the duties being laborious, and requesting superannuation. If the district was, however, divided, he offered to become a candidate for a portion of it. The guardians have accepted his resignation, and we trust will grant him the retiring allowance to which he is so justly entitled after his long services.

CORK IMPROVEMENT SCHEME.

A LOCAL Government Board inquiry was held at Cork, on the 20th instant, by Dr. MacCabe, in reference to an application of the Cork Corporation to put the Artisans' Dwellings Act into operation, by clearing seven areas in the city for building purposes. Five of these areas are unhealthy, and the houses not fit for habitation; whilst the remaining two are healthy, but are included to make the scheme more comprehensive. The consulting medical sanitary officer gave evidence in support of the scheme, and stated that in many instances the houses were unfit for habitation, were not provided with the proper sanitary accommodation, and were overcrowded. Evidence was also given in a report of Dr. Curtis, furnished some time ago when he was dispensary medical officer for the locality, which, referring to a certain portion, stated that, whenever an epidemic occurred in the city, it always broke out there; that the houses were in a fearful condition, and dangerous to the occupants; that the sewerage was bad, and that it was an abominable pest-hole. He believed that, if the fever-hospital records were consulted, it would be found that there were more cases of cholera and fever admitted from that place than from any other part of the city. The cost of the scheme, including the purchase of the houses, removing them, opening up new streets and sewers, etc., has been estimated at £51,500.

ST. MARK'S OPHTHALMIC HOSPITAL.

THE governors have appointed Dr. Hudson, Physician in Ordinary to the Queen in Ireland, Consulting Physician to the Hospital, in room of the late Dr. Stokes. Dr. James Little, Vice-President of the College of Physicians, has been also appointed Second Consulting Physician in conjunction with Dr. Hudson; and Dr. Edward H. Bennett, Professor of Surgery in the University, Second Consulting Surgeon in conjunction with Mr. George H. Porter, Surgeon in Ordinary to the Queen in Ireland. Mr. Baker has been appointed Surgeon-dentist to the institution. All the above offices are honorary.

STEWART INSTITUTION FOR IMBECILES.

THE annual meeting of this excellent institution was held on March 14th in the Molesworth Hall, presided over by Lord James Butler, Vice-Chairman of Council. From the report of the Managing Committee we learn that the subscriptions last year amounted to £784 12s. 6d., being £128 os. 6d. beyond the amount obtained the preceding year; and the donations to £987 3s. 8d. The new buildings at Palmerstown are still in the hands of the contractors, but are approaching completion; and if the necessary funds are forthcoming, will most probably be ready for occupation in the course of the year. So many applications for admission of inmates of all ranks of society have been held

over, pending the completion of the buildings, that there is no doubt that the institution when ready will afford the means of relief to numbers of families, to an extent not contemplated by those who are unaware of the anxiety and care entailed by the existence of an imbecile or insane member. The Committee point out that, unfortunately, there are but too many of the inmates who, beyond kindly care, shelter, and protection, can derive but little benefit from being in the institution, and they desire to impress on the subscribers that it is the backward children, *les enfants arriérés*, those who are incapable of being taught elsewhere, and who suffer most from neglect and ill-treatment, who will derive most benefit from the ministrations provided for them in the institution, where they may be educated and sent out useful members of society, instead of being allowed to grow up in misery and degradation, to be the authors of crime and of misfortune to all who come into contact with them. Dr. Kidd, in seconding a resolution to sell the Lucan premises, with a view of helping on the completion of the new building by the money obtained, thought it could not too frequently be brought before the friends of the charity, that when they spoke of the educability of idiots they did not pretend that they could educate all idiots, or that they could restore any of them that were utterly idiots to an extent so as to be perfect individuals. But there was a large class of idiots who were not commonly looked upon as idiots, and in an institution such as theirs they could be educated in a manner impossible elsewhere, and could have their faculties so developed as to be quite capable of taking a place in society, and become useful and happy individuals, instead of being a burden to their friends and a source of mischief to society. There was an excessive proportion of hopeless cases, and he regretted that, when patients were voted for, the votes were not given for those who would receive the most benefit from the institution. Referring to the new building, he observed that they would be able to accommodate three hundred inmates; and in making the arrangements they were obliged, in accordance with the requirements of the Commissioners of Lunacy, to provide a certain amount of cubic space, which they had not exceeded. The expense of the building, he thought, would not exceed £80 to £85 per head for each inmate, which was extremely moderate. A vote of thanks to the chairman terminated the proceedings.

ABUSE OF DISPENSARY TICKETS.

AT the usual monthly meeting of the Queenstown Dispensary Committee held recently, the subject of certain visiting tickets issued by a member of the Committee was under discussion. On inquiry, it was ascertained that the parties who received medical advice and medicine in the cases complained of were not fit recipients for dispensary relief. It was suggested by several of the committee that the issuer of the tickets should be the plaintiff if the matter were brought into a court of justice; but no steps were taken to prevent any further tickets from being issued by the same person. We have before pointed out that there are two methods for putting an end to this nuisance of issuing tickets to parties for whom they are not intended, which, if carried out, would be a great boon to the hardworked dispensary doctor; viz., either to render liable for the medical attendance whoever gives the ticket, or to take from him the power of signing tickets for the future.

DONATIONS, ETC.—Mrs. Thompson has given £100 to found a bed in memory of her husband, the late Dr. Thompson, in the Cripples' Home, Bray. The Hospital for Incurables, Donnybrook, will receive a bequest of £700 from the late Mrs. O'Grady; and £100, being the second instalment out of property left by the late William Hogan for charitable purposes.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The sixth meeting of the twenty-second session was held on Friday, March 1st, at the Royal Kent Dispensary, Greenwich Road; W. Johnson Smith, F.R.C.S., President, in the Chair. Dr. A. L. Galabin read a paper on Operative Measures for the Relief of Congenital Atresia Vaginae. The next meeting is to be held on Friday, April 5th, at the same place. Dr. J. C. Thorowgood will read a paper on the Use of Mercury in Certain Inflammations.

ARMY MEDICAL SERVICE.

WE are glad to be able to state that, in connection with the inquiry of the War Office Committee now sitting to examine into the causes of the present unpopularity of the Army Medical Department among the students of the medical schools, the Secretary of State for War has addressed a communication to the authorities of the medical schools of Great Britain and Ireland, asking why it is that candidates do not come forward in sufficient numbers for the army medical service; and requesting them to offer suggestions for the improvement of the service, which he expresses himself as anxious to effect. We cannot but applaud so judicious a step on the part of the Secretary of State for War, which indicates a conviction that the War Office must depart from its former policy of ignoring the views expressed by our Parliamentary Bills Committee on this subject, as set forth by its deputations, that a satisfactory settlement of this question cannot be attained without consultation with the heads of the medical schools, and the settlement of the terms of service in the army on a basis compatible with its efficiency, at the same time offering sufficient inducements to make the service popular with the younger members of the profession.

A meeting of the lecturers and teachers in the various schools was held in the King and Queen's College of Physicians of Ireland on Wednesday last; the President of the College, Dr. Gordon, in the chair. Dr. Edward Hamilton, who is widely known throughout the profession as taking a deep interest in the department, stated that the object of summoning the meeting was to consider the best means of replying with unanimity to the very straightforward and candid inquiry of the Minister for War. He considered that there were five main distinct causes which combined to produce the existing difficulty in obtaining candidates; and, although there might be many minor causes, he advised that the replies to Mr. Hardy's query should be confined to these specific heads. These were as follows.

1. The existence of the ten-years system.
2. The uncertainty of warrants; and the difficulty that frequently arose in their interpretation, owing to the ambiguous language in which they are couched.
3. The abolition of the regimental system.
4. Medical officers not being placed on the same footing with their brother "combatant" officers as regards sick and ordinary leave.
5. The want of a system of retirement at the rate of £1 *per diem* after twenty years' full-pay service.

The meeting unanimously approved of adopting the course suggested.

MEDICAL TEACHING IN THE UNIVERSITY OF OXFORD.

A MODERATE and carefully drawn memorial has been prepared this week, for submission to the Royal Commissioners on the University of Oxford, respecting the relations between the University and the medical profession. It is pointed out in this memorial that the contributions to the science of medicine, and the influence of the University on the profession, are at present practically insignificant; and this is attributed to the absence of any adequate organisation in the University for medical teaching, or the promotion of medical science. The belief is expressed that a more intimate connection of the University with the profession would give to the University wider interests, and stronger claims upon national sympathy; would improve the general culture of the profession, and help the progress of medical and biological science. It is pointed out that European universities, with scarcely an exception, recognise the preparation of young men for the medical profession and advancement of medical science, as among the most important of academical functions; and that such obstacles as have been alleged to stand in the way of medical education at Oxford appear to be surmounted in other universities similarly situated. On these grounds, the present state of things at Oxford is regretted; and the Commissioners are asked to consider how far, and in what way, the imperfection may be remedied, so far as it begins with an avoidable cause. This memorial has been, in the course of the last day or two, signed by many eminent professors and teachers of medicine in London, as well as by members of the University of Oxford, generally interested in its welfare and in the perfection of its academical arrangements. The adhesion of those members of the medical profession who feel interested in the subject may be communicated to Dr. Frank Payne, Wimpole Street, one of the graduates of the University who are interesting themselves in the effort to improve the relations between the University and medical teaching, and the promotion of medical science.

HARVEY TERCENTENARY MEMORIAL FUND.

THE following letter has been sent during the past week to the various British Universities, Medical Corporations, Medical and other learned Societies, and to the Committee of Council and the various Branches of the British Medical Association.

"It is an approved custom in civilised countries to recognise and mark distinguished services to mankind by the erection of statues or other public monuments. There is in England no such national recognition of the services of Harvey, the discoverer of the circulation of the blood, who, by his labours resulting in that discovery, laid the foundation for all progress in physiology. The third centenary of his birth is now approaching, and it is felt that this will be a proper opportunity for erecting a statue of Harvey at Folkestone, where he was born. A movement to effect this object has been initiated at a public meeting held at Folkestone, and the project has been warmly espoused in London and elsewhere.

"Under these circumstances, we, the members of the London Executive Committee of the Memorial Fund, feel that we may appeal with every confidence of support to all classes of the community, especially to the Universities, to the Medical Corporations and Schools, and to the Medical and other learned Societies of the United Kingdom. We therefore ask that you will kindly bring this matter under the notice of (the Committee of Council of the British Medical Association), and seek to obtain for this project the kind co-operation and assistance of your Council in providing the necessary funds for the erection of the proposed statue.—We have the honour to be, sir, your obedient servants.

"George Burrows, M.D., Prescott Hewett, *Honorary Treasurers*.—William W. Gull, M.D.; James Paget; Richard Quain, M.D.; G. Owen Rees, M.D.; John Simon; Ed. H. Lushington; D. H. Stone.—George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; W. G. S. Harrison, B.A., Town Clerk, Folkestone, *Honorary Secretaries*."

A considerable addition to the fund has been made during the week. A special list of subscribers will be printed in the *Times* on Monday next, which is the three hundredth anniversary of the birth of Harvey.

At the West Surrey District meeting of the South Eastern Branch held at Guildford last week, the sum of seven guineas was subscribed by the members to the Memorial Fund. At the East Kent District meeting held the same day at Dover, it was resolved that the Council of the South-Eastern Branch should be requested to accede to the request of the Executive Committee of the Fund by a subscription from the Branch. On Wednesday last, the Metropolitan Counties Branch voted ten guineas to the Fund, and subscriptions in aid of the object were requested from the members. If the various Branches to which the letter of the Executive Committee has been forwarded respond in the same liberal spirit, the result cannot fail to be a very handsome addition to the Memorial Fund. At the same time, we would urge the individual members of the profession on this special occasion to send donations and prevail upon their friends to do the same, in order that the subscription-list may be shortly closed, and the necessary instructions given for the completion of the statue.

HOSPITAL AND DISPENSARY MANAGEMENT.

ROYAL SURREY COUNTY HOSPITAL, GUILDFORD.

A CORRESPONDENT of the *Charity Organisation Reporter* of March 21st says:—"At the annual meeting held on February 28th, the report was read, stating that the out-patients had increased to three thousand and fifty, and that this large number unduly taxed both the funds of the hospital and the powers of its medical staff. The hospital is at present working at a loss of about £250 *per annum*, and the expense of the out-patient department is about £372. With a view to meet this expense, and also ease the medical staff, the Committee propose to the governors to charge one shilling on each letter brought by an applicant. (These letters are available for one month, and, if the patient require visiting at his own home, he has to produce two letters.) There was some discussion as to whether this proposal was as good as reducing the governors' letters by one-half; but, being strongly urged by the Committee, the proposal was carried by twenty-one to nine. There is unfortunately no provident dispensary in the neighbourhood; but, as the want of one was alluded to in the course of the discussion, there seems a chance of one being originated. It would seem that the above vote will require confirmation by the Court of Governors six weeks hence."

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 19TH, 1878.

CHARLES MURCHISON, M.D., D.C.L., F.R.S., President, in the Chair.

DISEASES OF THE LYMPHATIC SYSTEM.

THE discussion on the diseases of the lymphatic system was illustrated by a large series of microscopic sections by Drs. Whipple, Gowers, Greenfield, Mr. Nunn, and others. The PRESIDENT suggested that the discussion should be deferred until the different speakers and exhibitors had been heard: a suggestion adopted forthwith.

Leukæmic Viscera.—Dr. WILKS commenced by referring to the original preparations of Dr. Hodgkin, which were exhibited. He said that Dr. Hodgkin wrote the first distinct paper on the disease, though so marked a disease must have been noted, more or less, from all time. This paper was published in the *Medico-Chirurgical Transactions* for 1832, vol. xvii. In it the disease was clearly defined for all time. It was illustrated by six specimens, of which five were those of viscera, and of these four were exhibited. The first case was a boy aged 9, who died of dropsy and peritonitis, in whom the mesenteric glands were like pigeon's eggs. There were also tubercles in different viscera. The second case was a boy aged 10, who had an enlarged spleen, and died of general anasarca. The glands of the neck were enlarged without any softening. Other glands were enlarged, the liver was large, and the spleen full of deposit. In the third case, the glands of the neck and groin were enlarged, firm, and white, from morbid hypertrophy of the gland structures. The spleen was enlarged, with small white opaque spots in it. The fourth case was that of a man aged 50, in whom the glands of the neck, groin, and axilla were enlarged, as were those of the mediastinum. Other glands were large, and the viscera contained tubercles. Dr. Hodgkin said that all were agreed that the enlargement of the absorbent glands in this disease was a primary affection of these bodies, and not a secondary change. It consisted of a general hypertrophy of all the tissues of the glands, without any tendency towards suppurative or the formation of pus. The spleen was usually affected, resembling milium tubercle. The disease had not been clearly defined before, but had been confounded with malignant disease. It was not a form of cerebriiform cancer, as Sir Robert Carswell had thought. Dr. Bright observed the changes in the spleen, and thought it a form of malignant disease, but he distinguished it from cancer and from scrofulous disease. The white matter in the spleen closely resembled suet. In 1853, Dr. Markham described a case of Hodgkin's disease before the Society; and Dr. Bristowe thought it was neither malignant nor scrofulous. The disease, however, had malignant characteristics, as these enlarging glands had been known to eat their way into the trachea and the bronchi. In one case which he knew, a man broke his leg in going upstairs, and at last it was found that his bones were destroyed by infiltration into the interosseous spaces. Had the disease any relation with tubercle, or with lardaceous disease? In his own first communication on this disease, he called his paper "Lymphatic Diseases with Allied Diseases". Was the blood affected? Virchow's definition was then given. In the splenic form, the cells were large; in the lymphatic form, the cells were small. In lympho-sarcoma, there was no increase in the number of white blood-corpuscles, while in Hodgkin's disease leukæmia was undoubtedly present. He should also like to hear of its relations to bone-marrow, and, still more, to suppurative. A case occurred at University College Hospital, where leukæmia was present while an abscess formed, and disappeared on its healing up. The term leukæmia was often loosely used, and applied to conditions where white blood-corpuscles were seen in excess of the normal number.

Lymphadenoma and Leucocythæmia.—Dr. GREENFIELD exhibited specimens, drawings, and microscopic sections from these maladies. The first case was one of lymphadenoma. It occurred in a man twenty-six years of age. He had first an attack of eczema, and then a lump formed in his neck; it grew, and then diminished in size several times, till the glands became involved. There was weakness, with loss of flesh, and the belly swelled. On *post mortem* examination, it was found that the glands of the neck, axilla, and groin were swollen, while the spleen weighed fifty-one ounces. The man died from the pressure of enlarged glands upon the recurrent laryngeal nerve. Many other glands were involved. The second case was that of a boy aged 12, who had a swelling on the left side of the neck, then under the axilla, and finally in the groins. There was a high temperature, extending to 103, 104, and 105 deg. Fahr. He died ultimately.

mately of asthenia. The cervical glands were found hard, as were those of the axilla, and there was nodular infiltration of the chest-walls, which extended down to the nipple. The glands on the right side were also enlarged, but not to the same extent. The thymus was enlarged and infiltrated. The spleen was large, and the liver had nodules in it; there was infiltration along Glisson's capsule. In the third case, of a man, the glands on the left side of the neck grew rapidly; then those of the right side; then those of the groins. The spleen was large. In the fourth case, also a man, there was a mass of enlarged glands in the left groin as big as a cocoa-nut. Then the glands along the iliac vessels and aorta enlarged. There were two masses close to the sternum, consisting of enlarged mediastinal glands. There was irregular infiltration of the left pleura, just as if candle-fat had trickled over it. He died of exhaustion. The spleen weighed twenty-five ounces, but was simply hypertrophied. The fifth case was that of a man aged 33, who had a lump under his left ear, which extended into the posterior triangle. He had abdominal pain and ascites, and became much emaciated. At the necropsy, the cervical glands were found not to be confluent; and there was no enlargement of the glands on the right side. The peritoneum was affected, resembling tubercular peritonitis. The spleen was unaffected. On microscopic examination of the glands in eight cases, it was found that the chief change was the fusion together of the glands and gland elements by a growth of fibrous tissue, causing them to be white and hard. In some, the growth was soft and pinkish; in others, the material was pigmented; in a few, it was caseated. The growth was an indurative overgrowth of the retiform tissue, which invaded the rest of the gland structures, until they were all lost in the new growth. Large multinucleated cells were found adhering to the reticulum. As to the spleen in eight cases: in one it was unaffected, in two it was enlarged by increase of the splenic pulp, while in the other five there was the typical growth. First, there were bands of fibrous tissue resembling cross sections, which grew chiefly around the arterioles. Then, treelike masses developed, which destroyed the splenic pulp by rapid induration and growth of giant-cells. The changes in the liver were much the same, the growth being chiefly in the walls of the portal canals; there was rapid caseation in some instances. This growth caught tracts of lobules which underwent fatty degeneration. The capillary network remained good, though the liver-cells underwent fatty degeneration. In the capillaries near the new growth there were often masses of protoplasm growing from their epithelioid lining, and possibly taking part in the new growth. He showed specimens from a case of leucocythæmia, in which there were numerous hæmorrhages. The child died, and hæmorrhages were found in the kidneys, the heart-walls, and elsewhere. In one case of lymphadenoma, the white blood-corpuscles were increased in number. In others, there was anæmia only. In two cases, microcytes, small red blood-corpuscles, were found when the temperature was high. Was this high temperature due to inflammatory action, inflammation bearing a different meaning now from what it did in Dr. Hodgkin's time? Was there some inflammation of the glands with pyrexia in the latter stage, the cachectic stage of Trousseau? The pyrexia was intermittent. In leucocythæmia, the so-called growths really consisted entirely of white blood-corpuscles.

Leucocythæmia and Lymphadenoma.—Dr. GOWERS showed two cases of lymphadenoma. One was a man with a tumour in the neck, and enlargement of the other cervical glands and of the glands in the axilla. There was slight anæmia, with excess of white blood-corpuscles, forty in each field. The other was a girl who had enlarged cervical glands, and of the glands of one axilla several years ago. The latter were removed; and since then, there had been a very slow growth. Charts of the blood-corpuscles were shown. Sections of the spleen in lymphadenoma were shown. Pigment was accumulated on the margins of the growths, but not within them. Many growths were obviously around arteries, and probably all were so: hence it was probable that, as Dr. Hodgkin had suspected, the growth originated in the Malpighian follicles and periarterial tissue, and not in the splenic pulp. This certainly confirmed Malpighi's idea, that the follicles were part of the lymphatic system. As to changes in the spleen, Dr. Gowers said, of ninety-seven cases of Hodgkin's disease, in fifty-seven (60 per cent.) there were splenic growths; in 20 per cent. the spleen was normal; and in the other 20 per cent. there was simple hypertrophy. What was the nature of the change causing the apparent hypertrophy of the pulp in splenic leucocythæmia? There was evidently a growth in the position of the pulp; but it was recently said that this was really a diffuse invading growth from the Malpighian follicles. In cases intermediate between lymphadenoma and leucocythæmia, there was a follicular growth; but, apart from this, a great increase in the pulp itself could be recognised, causing the enlargement of the organ. The Malpighian follicles in such cases, as in one shown, might suffer lardaceous degeneration alone; hence it was probable that the pulp itself was the

real seat of the change in leucocythæmia. Other sections illustrated the changes in the glands; and especial attention was called to the great increase of fibrous tissue around the arteries. In proportion as the glands enlarged, the intercellular stroma increased, causing induration. Was the secondary glandular enlargement in splenic leucocythæmia a growth or the accumulation in them of white corpuscles? If the latter, its occurrence should be proportioned to the degree and duration of the excess of white corpuscles in the blood; but no such relation could be traced. In most cases of extreme blood-change, the glands were not enlarged; hence Virchow's view that the change was a growth, was probably correct. Sections of growths in the organs were also shown. What was the relation between the lymphatic diseases? The French writers classed them all as one disease; certainly there were intermediate forms between the well-marked varieties. They were a continuous series; and yet distinctions were acknowledged betwixt the broader forms. To ascertain how far the obvious distinctions were borne out by other details, Dr. Gowers had compared one hundred and fifty-four cases of primarily splenic leucocythæmia with one hundred cases of primary gland-disease. Two-thirds of the cases of splenic disease and three-quarters of the cases of gland-disease occurred in males. As to the age at which death occurred, leucocythæmia differed from lymphatic gland-disease. Thus, in leucocythæmia, the death-rate, rising from four per cent. under ten years, culminated betwixt the thirtieth and fortieth years, during which thirty per cent. of the deaths occurred; while the line of death-rate in primary disease of the lymphatic glands reached a high point betwixt the twentieth and thirtieth years, recedes during the next decade, and rose again betwixt the fiftieth and sixtieth years, falling low during the decade when the other culminated. The glands most commonly affected in leucocythæmia (the mesenteric) were those least affected in lymphadenoma. As to the relations to intermittent fever, it was found that there was little connection betwixt lymphadenoma and aguish districts, while a large proportion (twenty per cent.) of the cases of leucocythæmia had either lived in malarial districts or had had ague. As to the nomenclature, "Hodgkin's disease" was a neutral term, but was not in use on the Continent; and here even, lymphadenoma was the term which seemed most likely to survive, but was applied to the growth. Would not lymphadenosis form a good term for the general disease?—In answer to a question put by the PRESIDENT about the proportion of white blood-corpuscles in the blood of the two patients exhibited, Dr. GOWERS said they were increased in one case, but not in the other.

The discussion was adjourned.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 7TH, 1878.

W. B. OWEN, Esq., Vice-President, in the Chair.

Use of Thymol.—Dr. A. WILTSHIRE made a communication on the use of thymol. He said it made a good ointment mixed with vaseline; but the quantity must be small, otherwise it was very irritating. It was a much more powerful germicide than carbolic acid. It was also deodorant and disinfectant. It could also be used as a lotion dissolved in alcohol and water.—Mr. OWEN, Drs. STEWART, FOTHERGILL, GIBBON, EDIS, MALCOLM, MORRIS, and GRIFFITH took part in the discussion which followed; after which Dr. WILTSHIRE replied.

Treatment of Syphilitic Disease of the Brain and Nervous System.—Dr. T. S. DOWSE read a paper on this subject. It did not include congenital syphilitic affections. Acquired syphilitic diseases of the nervous system yielded readily to appropriate treatment. The actual injury done to the nerve-structures could never be repaired. He related a case where the moral character was much affected by such disease, and restored again as the patient recovered generally. The treatment should be early and active. At a certain stage, both mercury and iodide of potassium were useless, indeed harmful. It was when the urine was albuminous and there was general depression. Here good food and stimulants were indicated. Alcohol was very useful at such times. Each case must be treated by itself for success. He thought mercury the remedy *par excellence* for syphilis, and dissented from the present view that it was only adapted for the early stages; while iodide of potassium was the remedy for the later changes. Some patients could only tolerate one or other of these remedial agents, and the treatment must be conducted accordingly. Baths containing iodide of potassium were often of service when other methods of administering this drug had failed. In acute congestive syphilitic disease of the brain, it was necessary to lower the vascular activity. For this end, chloral was serviceable. Cooling spirit lotions to the head were useful. The patient, however, should be fed well. If an epileptic seizure occurred,

it was well to give purgatives. When depression set in, then active stimulant treatment becomes necessary. He strongly advocated the resort to galvanism in comatose conditions. The general management of these diseases consisted of rest and quiet. Headache should always receive immediate attention. For neuralgia of the fifth nerve, hot solutions of chloral were most useful.—Mr. OWEN, Mr. EDMOND OWEN, Drs. GIBBON, GRIFFITH, and WILTSHIRE spoke on the paper; after which Dr. DOWSE replied, and the meeting adjourned.

GLASGOW CLINICAL AND PATHOLOGICAL SOCIETY.

TUESDAY, MARCH 12TH, 1878.

JOSEPH COATS, M.D., President, in the Chair.

Tumour of the Ankle.—Dr. JAMES DUNLOP showed a tumour of the size of a hen's egg, which he had removed from the outer aspect of the ankle of a woman aged 45. The tumour had grown for two years, and was closely adherent to the periosteum, though not attached to the bone. Dr. Foulis had examined it, and found it to be composed of small spindle-shaped cells.

Urethral Calculus weighing Six Drachms.—Dr. DUNLOP showed a calculus which he had removed from the prostatic portion of the urethra by lateral lithotomy (with the rectangular staff). The patient, a lad aged 19, stated that twenty months before admission he began to suffer from the symptoms of stone in the bladder; and that, after eight months' duration, these symptoms were suddenly complicated by obstruction to the flow of the urine, following prolonged exercise in dancing at a country gathering. Thereafter the urine merely dribbled away, and symptoms of distension of the bladder were present. Occasionally, the urine was bloody. On admission, an attempt was made to pass a sound, but this was found to be impossible, even under chloroform; a hard body was felt, both with the sound and with the finger *in recto*, lying in the prostatic and membranous parts of the urethra. The urine was foetid, ammoniacal, purulent, and bloody. At the operation (on February 6th, 1878), the stone was easily removed, and the extraction was followed by the escape of a large quantity of urine. There was almost no hæmorrhage at the time; but, on February 14th, a free flow of blood took place from the wound, and this recurred on February 16th and February 19th. No bleeding point could be seen; and Dr. Dunlop, therefore, tied in a full-sized catheter, and plugged the wound with strips of lint soaked in perchloride solution. The patient made a good recovery. The catheter was removed on the 8th day, no irritation having followed from its use, and the wound was now quite healed. The calculus was composed of a nucleus of uric acid, round which was a layer of oxalate, the outermost coating being of phosphates.—Dr. GEORGE BUCHANAN said the stricture of the calculus showed that it had been formed in the bladder, and had then escaped into the urethra. The hæmorrhage had probably come from the enlarged prostatic veins. He had never seen secondary arterial hæmorrhage after lithotomy. It was remarkable to what a size calculi might grow in the urethra, without causing obstruction to the flow of urine. They became encapsuled in a sort of false pouch by the dilatation of the urethra.

Calculus encysted near the Root of the Penis.—Dr. KNOX showed two calculi closely faceted upon each other, total weight three drachms and a quarter, removed by him from near the root of the penis of a man aged 22. At the age of 2, the patient had received a blow over the seat of the calculus, and for many years there had been obscure symptoms of vesical disorder. When seen by Dr. Knox, there was a hard lump at the right side close to the corpus spongiosum, and in this lump a harsh crepitation could be made out. Nothing could be made out with the sound; the urine was alkaline and phosphatic. An incision was made over the lump, and the stone extracted; the corpus spongiosum was found to be involved in the cyst-wall, and there was a free flow of blood. Dr. Knox learned that, at the age of 5, the patient had passed one or two small calculi *per urethram*.—Dr. H. C. CAMERON had seen three cases of prostatic calculus. In one case now under his care, he had pushed a calculus into the bladder and there crushed it; the debris were phosphatic. In the second case, three hundred calculi were removed by lithotomy; and in third case fifty calculi had been taken out. In all the cases which he had seen, the calculi were multiple and faceted, and composed of phosphates.

Early Ooium.—Dr. JAMES DUNLOP showed an ovum expelled at the third week; and he alluded to the opinion expressed by a German writer, that, when expelled under diseased conditions, the ovum was usually entire, whereas ova expelled in circumstances of criminal intention were usually broken up.

Rotary Lateral Curvature of Spine.—Dr. DAVID FOULIS showed five spines with rotary lateral curvature; and also Judson's apparatus for illustrating the subject. Dr. Foulis stated that, having had his atten-

tion directed to the subject, he had carefully examined all the spines in the *post mortem* room, and he had been surprised to find that, of forty-five adults, the spine was more or less twisted in thirty cases, while in the remaining fifteen the spine was perfectly straight. The method he employed was, in the first place, to clean the front of the spine from all loose tissue, and then, the body being placed quite straight, a thin wooden rod was employed to gauge the straightness of the spinal column. In the slighter cases, the twist was confined to the bodies of the vertebrae; in the more advanced cases, the spinous processes were also displaced, always to the same side as the bodies. The deviation was not limited to any one part of the spine, nor to either side; there were always slight compensatory curves present. The facts seemed to him to confirm Mr. Adams's theory, that faulty posture while at work was the starting-point of many cases of spinal curvature.—Dr. MACEWEN said that on one occasion he examined the spines of fifteen patients in one of his wards, and detected a trifling deviation of the spinous processes in twelve cases.—Dr. CAMERON thought that in the younger patients the curvature (usually to the right side) was probably due to faulty habits in sitting at study, etc.; while in later life the irregular slight curves exhibited by Dr. Foulis were probably the result of the nature of the occupation.

Case of Croup.—Dr. EBEN DUNCAN showed the larynx and exudation from a case of croup. He had examined the mucous membrane and the exudation for micrococci, and failed to find any; but, after soaking the cast (of exudation) in water, he found some micrococci in the fluid. He thought micrococci were more of a *post mortem* than of a *prie mortem* nature, and that the micrococci found in the mucous membrane of the throat in diphtheria might have spread into it from the exudation. In many cases, the exudation was decomposing during life, and in these there might be micrococci developed before death. He thought the term diphtheria rather vague. There was no one sign pathognomonic of it.—Dr. JAMES B. RUSSELL said that he had been much struck in examining large masses of statistics from all parts of the country, to see how the disease set down as croup ranked itself with the lung-diseases, while the disease called diphtheria was evidently akin rather to the typhoid and other fevers. He was aware that, in individual cases, there was often difficulty in distinguishing between the two diseases; but, taking the great mass of figures, he was driven to conclude that there must be some difference.

Sarcoma of the Eye.—Dr. THOMAS REID showed an eyeball removed by him from a man aged 33. When admitted to the Eye Infirmary, the patient complained of defective vision in the right eye; the pupil was normal, and reacted to light; one or two dilated veins were seen on the sclerotic at the side of the eyeball; the outer half of the field of vision was extinct, and the remainder defective. With the ophthalmoscope, an opaque crescentic body was seen behind the lens; the retina near it was detached. After enucleation, sections were made, and a brownish friable tumour was found enveloped in the detached retina a little behind the ciliary body. It was of the size of a filbert. The microscopic structure was that of alveolar sarcoma. Dr. Reid said that he attached great weight to the presence of dilated veins on the sclerotic over the tumour as diagnostic of sarcoma. He thought enucleation should be performed early in such cases.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

MARCH 1ST, 1878.

EBEN WATSON, M.D., President, in the Chair.

Midwifery Forceps.—Dr. J. T. WHITTAKER showed a form of revolving midwifery forceps, the principle of which consisted in the application of both blades at once, this being effected by means of a ball and socket joint in the middle of the instrument, which enabled the one blade to move round the other. He also showed a stylet for rupturing the membranes.—Dr. W. L. REID made some remarks on the long forceps, and exhibited a new form of that instrument with the intention of supplying four deficiencies which exist, he alleged, in the present forms: 1. By means of a perineal curve to admit of traction exactly in the axis of the pelvic inlet; 2. By means of a swivel-joint at the handle to permit of the head accommodating itself to any kind of abnormality in the cavity; 3. By means of antero-posterior blades (to be applied obliquely, however) to have the handles an exact index to the position of the blades and in the same axis; and 4. By means of a pelvic nerve in the shanks instead of the blades to admit of its being used to rotate the head from the occipito-posterior to the occipito-anterior positions.—Dr. DAVID CHRISTIE of Donegal also showed a new form of long forceps, in which he applied traction by means of hooks, and regulated pressure in one of the handles.

Arrest of Uterine Hæmorrhage.—Dr. D. CHRISTIE explained an in-

genious and simple method of arresting uterine hæmorrhage. This consisted of an India-rubber bag, which was smeared with glycerine and introduced into the uterus; water was pumped into it, and by its distension and pressure the hæmorrhage ceased. A tube connected with the bag had its distal extremity raised two feet, and when an uterine contraction took place the water which was expelled through the tube was received into a tumbler or other small vessel. In the event of the contraction not being maintained, the water ran back by syphon-action into the bag, and the bleeding was controlled. Dr. Christie had used this successfully in *post partum* hæmorrhage and placenta prævia.—A discussion followed, in which Drs. WALLACE ANDERSON, HUGH THOMSON, STIRTON, HUGH MILLAR, and MURDOCK CAMERON took part.—It was decided to refer the three specimens of forceps to a Committee, who were requested to report upon them.

OBSTETRICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 9TH, 1878.

THOMAS DARBY, F.R.C.S.I., President, in the Chair.

Milk-Fever.—Dr. MACAN read a paper on this subject, in which he gave an exhaustive *résumé* of the theories held regarding the etiology of milk-fever from the time of Willis, who attributed it to the accumulation in the blood of easily fermentable menstrual particles, which had failed to escape as milk from the breast, or as lochia from the uterus. The term "milk-fever" was, he said, of great antiquity. But, in these days of critical investigation and general scepticism, the propriety of the term, nay even the existence of any such disease, had been called in question. His conclusions on the subject were the result of thermometric observation of 423 pregnant women in the Rotunda Hospital. In 114 of these, the rise in temperature during the whole period of observation never exceeded 1 deg. Fahr. And, if Wunderlich's fever-limit of 100.4 deg. Fahr. be accepted, there were 196 cases in which the temperature never rose to fever-height. In 32 cases, the only cause for a rise in temperature was a painful condition of the breasts. In many of these, the fever lasted over twenty-four hours, the longest duration being five days. The temperature was often greatly out of proportion to the pulse: temperature 104.4 deg. Fahr., with pulse 108; or temperature 103.5 deg. Fahr., with pulse 92, as occurred in two of Dr. Macan's cases. In septic infection, on the other hand, the pulse was too quick for the temperature. This difference was important from a diagnostic point of view. The conclusions which he drew from his statistics may thus be briefly stated. 1. No rise in temperature necessarily accompanied the first secretion of milk. 2. Pain and distension of the breasts might cause fever, but it was different from the so-called milk-fever; the latter seldom lasted twenty-four hours, whilst the former, coming on some days sooner, often did. 3. In the fever due to distension of the breasts, the pulse was sometimes slower than the temperature would lead us to expect. 4. In cases of fever, the mere presence of full breasts was not sufficient justification for at once concluding that no serious puerperal affection was present.—Dr. DENHAM asked if this fever was more frequent in primiparæ than in multiparæ. He thought the fever was due to the constitutional disturbance occasioned by the unwonted physiological processes going on in the system, rather than to the swelling of the breasts. Frequently the fever preceded, not followed, the secretion of milk. He thought it of importance to distinguish cases of fever with filling breasts from those in which the rigor came on with diminished lochia and flaccid breasts. The former were seldom of importance, whilst the latter should always be regarded as serious.—Dr. KENNEDY thought difference in temperament an important factor in the production of this fever, in addition to which, civilised habits might make a natural process of secretion be attended by fever. The same varieties, he said, were noticed in the natural processes of menstruation; some women were always feverish at such periods.—Dr. MACSWINEY alluded to an article by a New York physician, in which he ascribed what is called "milk-fever" to a mistaken mode of treating the parturient woman. The fever, he said, was one of irritation, and existed in direct proportion to the degree of starvation.—The PRESIDENT had seen breasts overflowing with milk before parturition took place; and recalled one case of an unmarried girl who suffered from symptoms similar to those of milk-fever, which ended in abscess of the breast.—Dr. MACAN, in reply, said the real question at issue was the cause of the fever. There could be no question as to its occurrence, but only as to the explanation of its cause. Numerous circumstances in the puerperal state might excite a fever similar to the so-called milk-fever, viz., surgical fever following the trauma of labour. Cracked nipples also might cause a temperature of 105 deg. Fahr. The President mentioned that he had seen a case of abscess of the breast in a virgin give rise to all the symptoms of milk fever. When symptoms of inflammation of the

breast, such as pain on pressure and redness of the integuments, were found in women after delivery, accompanied by fever, why should we not conclude that the fever is due to inflammation of the parenchyma of the gland?

SURGICAL SOCIETY OF IRELAND.

FRIDAY, FEBRUARY 15TH, 1878.

ROBERT McDONNELL, M.D., F.R.S., President, in the Chair.

Amputation of Thigh for Ununited Fracture.—Dr. WHEELER exhibited the leg and thigh of a man, which he had amputated by Mr. Teale's method, the rectangular flap operation. In a railway accident near Wigan in 1874, the patient received a simple oblique fracture about the middle third of the left thigh, which did not unite in consequence, he says, of a racking cough from which he was suffering at the time. To relieve this, his nula was snipped off, without, however, affording any relief. Subsequently, a variety of methods were adopted to effect the union of the fragments. Twice they were pegged; once resected. For a considerable time, he wore a starched bandage, and was able to go about. He also described being beaten with a spoon over the seat of fracture, for the purpose, no doubt, of setting up a more healthy inflammation. When admitted into the City of Dublin Hospital, the lower fragment overlapped the upper by about five inches; the limb was, therefore, shorter, though as well nourished as the other. The knee was ankylosed. There was no pain in the limb, and the freest possible motion could be produced at the seat of fracture, it being quite easy to turn the fragments at right angles to each other. Over the upper fragment, he retained voluntary power, and could with it bulge up the skin of the thigh. He would not allow any means of saving the limb to be tried, unless Dr. Wheeler could promise him a movable knee-joint as the result. This being impossible, he insisted on having it removed, which was done on Tuesday last, as above stated. On examining the specimen, it was evident that a second fracture had occurred lower down in the thigh-bone, which had united. There was a considerable layer of muscle between the fragments, and round their extremities an adventitious membrane had been formed. The patient was doing well since the operation.

Minute Aneurism of the Aorta.—Dr. MOSS exhibited a very minute aneurism, which he removed from the body of a man of H.M.S. *Tophaz*. Whilst lifting a cask, the man felt something give way, and died in a minute and a half. The *post mortem* examination showed a small aneurism about the size of a pea to exist at the left side of the aorta, half an inch behind and to the left side of the right coronary artery. The opening was only of the size of a pin's head. Dr. Moss thought the case interesting from the small size of the aneurism, and the rapidity with which it proved fatal. The specimen was preserved in thymol, which he recommended as the best antiseptic fluid.

Multiple Polypi in Uterus.—Dr. KIDD showed six polypi which he had removed from the uterus of a girl aged 25. The patient's sister was also under his care, from whom he had removed twenty-nine polypi in four operations, performed at intervals of a few months. After the removal of the polyp, the interior of the uterus was swabbed out with fuming nitric acid. The cases were interesting, he thought, from the fact that most writers state that uterine polypi occur in almost all cases singly, and also from the apparent family predisposition to polyp.

Farre's Tubera Circumscripita of the Liver, and Sections under the Microscope.—Mr. RICHARDSON read a paper on this subject; and, after briefly mentioning Farre's explanation of the cupping of the tubers, drew the attention of the Society to some microscopic sections of the tubers made through their centres at right angles to the surface, exhibiting a cordlike band of fibrous tissue, which he thought was mainly instrumental in producing the central depression, though he did not deny the part played by the general contraction and the diminution in the amount of the cancer-juice. This band he compared to the cord tying down the button on a chair.

Excision of the Hip.—Dr. BARTON read the notes of a case of excision of the hip in a boy aged 4½, who had suffered from old-standing hip-disease, which suppurated. On opening the abscess, a quantity of offensive smelling gas and pus bubbled out. Dr. Barton excised the head of the bone, and gonged away a quantity of carious matter. The acetabulum was covered with granulations; no special antiseptics were used, but the wound was kept freely open, and frequently washed out with a weak solution of chloride of zinc. The limb was now one inch and three-eighths shorter than the other, but the motion in both foot and knee were perfect, and the thigh could be flexed on the abdomen to an angle of 60 deg. The boy, who before the operation was nearly wasted to a skeleton and dying from exhaustion, was now plump and strong, and able to walk with a crutch. Dr. Barton then showed the Society a boy on

whom he had operated four years ago under very similar circumstances. He was able to walk without crutch or assistance of any kind, with only a slight halt, supporting the whole weight of his body on the affected limb, which was two inches short, in consequence of the section having been made below the great trochanter. The case was remarkable as being the first successful excision of the hip in Ireland.—Some discussion took place as to the stage of the disease at which the operation was most advantageously performed. Dr. Barton considered it best suited to the third stage, and thought it unjustifiable until all other methods had failed and the patient's life endangered from the constitutional disturbances.—Several of the members related similar cases, the results of which, however, were not all so satisfactory as those of Dr. Barton.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 16TH, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Disease of Knee-Joint.—Dr. T. EVELYN LITTLE, on behalf of Dr. E. C. THOMPSON, Surgeon to the County Tyrone Infirmary, presented a specimen of extensive disease of the upper end of the tibia and neighbouring parts. The patient was a girl aged 3, whose right knee was "strained" thirteen months ago. The joint swelled, became painful, and matter formed. The limb underwent contraction, the leg being bent at right angles to the thigh. Startings of the limb occurred, the inguinal glands became enlarged, and an abscess discharged through a sinus below the tuberosity of the tibia. Resection being inadmissible, the limb was amputated by the double flap operation at the lower third of the thigh. As regards the soft parts in the leg, sinuses were found leading to diseased bone and to the knee-joint. The knee-joint itself contained pus; its capsule was thickened; the cartilages were in places ulcerated and absorbed; the floor of the joint was perforated through both articulating facets of the tibia; and vascular synovial fringes lay free in the joint. As regards the bones, the patella and femur were comparatively healthy (as were their cartilages also); but there was extensive disease of the upper cancellated tissue of the tibia, in which, indeed, a small sequestrum lay. Dr. Little considered that the focus of the disease was originally below the joint, *i.e.*, on the tibia, basing this opinion on—1. The site of the abscesses; 2. The relatively intact condition of the femur; and 3. The rapidity of the formation of abscess and sinuses.—Dr. E. H. BENNETT, recalling the observations of Chassaignac, Cruveilhier, etc., looked upon the affection as primarily an osteo-myelitis in the head of the tibia.

Peculiar Multiple Fracture of Femur.—Dr. E. H. BENNETT showed a very deformed femur, fractures of which had occurred subsequently to disease of the knee-joint. In early life, the subject of the injuries suffered from destructive disease of the left knee, which invalidated him for many years. Firm osseous ankylosis of the joint resulted—the tibia, patella, and femur being welded together, with subluxation of the tibia backwards, and ankylosis of the patella to the outer femoral condyle. The man was intemperate and got falls, which caused fracture of the shaft of the femur on two occasions. In both fractures, there was inversion of the lower fragment. The patient died of malignant disease of the stomach, aged about 70.

THAMES VALLEY BRANCH.

MARCH 14TH, 1878.

W. PRICE JONES, M.D., President, in the Chair.

Spinal Lesion in a Child.—Mr. G. FARR WHITE related a case of spinal lesion occurring in a child three years of age, and supposed to be the result of getting wet. There was, in the first instance, general pyrexia, but no vomiting. Later on, the head was thrown back on the spine; there were muscular spasms, and both legs were drawn up on the abdomen; the right seemed especially weak. The case ended in permanent paralysis of the right leg. Mercurial inunctions and purgatives seemed to do most good. Sedatives, such as chloral, chlorodyne, bromide of potassium, etc., were of little service; while galvanism and strychnia in the chronic stage yielded negative results.

Laceration of the Scalp.—Mr. FARR WHITE described a case of laceration of the scalp about the region of the left temporo-parietal bone, accompanied by paralysis of the right arm, pain in the neck, and spasms down the right side when the front or back of the right shoulder was touched. There was no fracture of the skull, nor bleeding from the nose or ears. The left pupil was slightly dilated, though sensitive to light. The tongue was protruded in the straight line. There was great shock; and consciousness, with vomiting, did not occur till four hours after the accident. There was paralysis of the bladder for six days after the accident. During sleep, there was very stertorous

breathing, and the respiration was excessively slow. There were no head-symptoms, and the nerves of special sense were unaffected.

Paroxysmal Hematuria.—Dr. FENN of Richmond communicated particulars of four cases of paroxysmal hematuria which had been under his care.—Case 1. A woman, aged 49, was seen in her fifth attack, which existed eight weeks. The first attack occurred sixteen years before. The complications were tonsillitis and subacute rheumatism.—Case II. A woman, aged 22, had a fourth attack, the duration of which was two weeks. The first attack occurred three years before. The complications were muscular pains and debility.—Case III. A young man, aged 18, had a fifteenth attack, which lasted a day. The first attack took place four years before. Anemia and subacute rheumatism existed as complications.—Case IV. A boy, aged 14, had the first attack, the duration of which was six weeks; it was complicated with mitral disease and rheumatic enlargement and tenderness of the finger-joints. The urine possessed the usual characters as described by all observers. In colour, it was very dark and opaque; the quantity was in excess. There was a copious brown deposit, exhibiting under the microscope a few misshapen blood-corpuscles or none at all, granular matter (hematin?), uric acid, and oxalate of lime crystals in abundance.—The author suggested the following sequence of events in this pathological condition: 1. A rheumatic or neurosal diathesis; 2. Defective assimilation, and consequent formation of unstable blood-elements; 3. A paroxysmal or continued disturbance of the nerve-ganglia which regulate the functional activity of the blood-glands; 4. A consequent rapid retrograde metamorphosis and imperfect oxidation of the blood-elements, shown by 5. An excess of *débris* thrown off by the kidneys in the form of unaltered hæmatin-granules, uric acid, and oxalate of lime. The prognosis was uniformly favourable. The treatment was unsatisfactory. In the prolonged cases, all styptic and astringent remedies seemed to fail. The chief indication then left was to nourish the patient as well as possible, and insist upon rest and warmth at the commencement of the attack.

ASSOCIATION INTELLIGENCE.

THAMES VALLEY BRANCH: ORDINARY MEETING.

A MEETING of this Branch was held on March 14th, at the Griffin Hotel, Kingston: Dr. PRICE JONES in the Chair.

Communications.—The following communications were made.

1. The CHAIRMAN brought forward a case of Epithelioma of the Tonsil.

2. Mr. G. FARR WHITE related a case of Spinal Lesion in a Child Three Years old.

3. Mr. FARR WHITE described a case of Laceration of the Scalp.

4. Dr. FENN described four cases of Paroxysmal Hematuria.

Dinner.—The members (nineteen in number) afterwards dined together.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.

THE second ordinary meeting of the session 1877-8 was held at the Surrey County Hospital, Guildford, on Thursday, March 21st. Present: HENRY TAYLOR, Esq., in the chair, and sixteen members.

Next Meeting.—It was proposed and carried that the next meeting be held at Epsom on Thursday, October 24th, 1878.

Ladies as Members of the Association.—A resolution was proposed and carried unanimously: "That, in the opinion of this meeting, it is not considered advisable to admit women as members of the British Medical Association."

The Secretary was re-elected.

Communications.—1. Mr. HENRY SMITH (London) read a paper on Surgical Interference in Malignant Growths. He divided his paper into two parts: 1. With reference to the question generally, how far the surgeon is justified in removing, or attempting to remove, growths of an unmistakably malignant character; 2. As to the line of treatment which should be adopted when the surgeon interferes with cases of malignant disease involving the shaft of a long bone.—A discussion followed, in which Drs. Holman, D. J. Francis (late of Northampton), and Messrs. Knowsley Thornton, A. Napper, C. W. Chaldecott, C. J. Sells, and H. Smith took part.

2. Mr. T. M. BUTLER showed a specimen of Diseased Kidneys in a child ten years old.

3. Mr. HENRY TAYLOR showed a Tumour of the Pituitary Body taken from a child seven years old; the child was only ill four days before death; also a large solid Tumour of the Ovary.

Dinner.—Eighteen members and friends partook of a most excellent dinner at the White Lion Hotel; the usual loyal and other toasts being duly honoured.

NOTICE OF EXTRAORDINARY GENERAL MEETING.

NOTICE is hereby given, that an EXTRAORDINARY GENERAL MEETING of Members of the Association will be held at the Queen's Hotel, Birmingham, on Tuesday, the 2nd day of April next, at Three o'clock in the afternoon:

I.—To consider Requisition, of which the following is a copy.

To the President and Committee of the Council of the British Medical Association.

Gentlemen,—We hereby request you to make arrangements for submitting the following resolutions to an early special general meeting of the British Medical Association.

"1. That this meeting is of opinion that the Reports of the Proceedings of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted."

"2. That this meeting desires to express its opinion that in the selection of a house for the Association, it is desirable that the Council, Committee, and consulting rooms should be separate from the printing and publishing offices."

II.—To consider the privileges of Lady-members.

By order of the Committee of Council,

FRANCIS FOWKE, *General Secretary.*

London, March 13th, 1878.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 17th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., March 25th, 1878.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE next meeting of this Branch will be held at Carmarthen, on Thursday, April 4th.

Members desiring to read papers, etc., are requested to forward the titles to Dr. Sheen, Cardiff, before the 28th instant.

ANDREW DAVIES, M.D. } *Honorary Secretaries.*
ALFRED SHEEN, M.D. }

March 11th, 1878.

WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 11th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the Use of Water desirable in Dressing Wounds?"

The Secretary requests that early notice be sent to him of the title of any communication intended to be brought forward at the meeting.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, March 16th, 1878.

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at Hexham, on Thursday, April 25th.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to signify their intention to the Secretary at their earliest convenience.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, March 12th, 1878.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETING.

A MEETING was held at the Crystal Palace Hotel, Upper Norwood, on March 14th, 1878: R. M. MILLER, M.D., in the Chair. Twenty-seven members were present.

Next Meeting.—It was agreed that the next meeting should be held at Reigate, on October 10th, Dr. HOLMAN in the Chair.

Secretary.—Dr. GATTON was re-elected Secretary.

Communications.—1. The SECRETARY read a paper by Dr. Philpot on an Outbreak of Diarrhoea at Upper Norwood.

2. Mr. GOLDING-BIRD read a paper on the Treatment of Scrofulous Lymphatic Glands by the Electrolytic Caustic.

3. Dr. HOLMAN drew the attention of members to the important points to be decided by the General Meeting at Birmingham, on April 2nd.

4. Dr. POOLE read a paper on the Non-alcoholic Treatment of Post Partum Hæmorrhage.

5. Mr. SIDNEY TURNER read a Case of Abdominal Tumour.

6. Mr. SIDNEY TURNER read a Case of Opium Poisoning.

Dinner.—Fifteen members sat down to dinner.

CORRESPONDENCE.

THE JOINT COMMITTEE ON STATE MEDICINE.

SIR,—I observe that, in this week's JOURNAL, it is announced that I lately "resigned the membership" of the Joint Committee on State Medicine of the British Medical and Social Science Associations. It was the secretaryship which I have had the honour of holding since the Joint Committee was formed in 1867, which I resigned, as, owing to repeated illnesses during the last fourteen months, I had not been able to discharge the duties of the office with satisfaction either to the Committee or to myself. But, unless it is desired that I should retire from the Committee, I hope to be allowed to continue a member of it, and, with returning health, to make up, in some small measure, in that humbler capacity, for my many shortcomings as secretary. But, however this may be, I do hope that the threatened disaster of Messrs. Clode and Michael's retirement from the secretaryship may be averted, as I cannot but think it would be fatal to the usefulness of the Committee.—Yours, etc.,

A. F. STEWART.

March 27th, 1878.

UNIVERSITY INTELLIGENCE.

THE UNIVERSITIES OF SCOTLAND.

THE Royal Commission appointed early in 1876 to inquire into the management, constitution, etc., of the Scottish Universities have just issued their report. It is of very great length, extending to four volumes of blue books. At the end is a summary of the principal recommendations contained in the body of the report, and which are submitted for the consideration of the Crown in Council. From this summary, we extract the following notes from among the parts which especially interest the medical profession. It is proposed, in Section 18, that every candidate for a degree in medicine shall, before commencing his professional course, be required to pass a "first examination" in Latin, Mathematics, English, and either French or German. The two modern languages may be taken up in lieu of Greek. In Section 19, it states that no one shall be examined in Human Anatomy or Physiology, or any purely medical subject, until he has passed an examination in Natural Philosophy, Chemistry, Botany, Physiology, and Zoology, as constituting the second and third groups of the fifth or natural science department for the degree of M.A. Section 20 proposes that the final examination for the medical degree shall be confined to the practical subjects of medicine and surgery, both systematic and clinical, obstetrics, pathology, therapeutics, and medical jurisprudence (including hygiene); and that no candidate shall be admitted to examination in these subjects unless he has passed in the other subjects of the medical curriculum.

Section 21 proposes that the degree of M.B. shall not be conferred without a degree in surgery, the degree to be granted in surgery along with the Bachelorship of Medicine being that of Bachelor in Surgery (Ch.B.), which has been recognised as a registrable title by the Medical Practitioners' Act (1876); and that the examination fees to be paid by candidates for the double degree shall be twenty guineas, to be paid in instalments. Section 22 proposes that the degree of Master in Surgery (C.M.) shall be made attainable separately at a future time under similar conditions to those which now apply to the degree of Doctor of Medicine (M.D.). Section 26 proposes that no attendance at the university before passing the "first examination" shall be available for any degree, but that a power of dispensing with this rule, in special cases, be reserved. Section 28 proposes that, in each university, provision for the

teaching of French and German shall be made through the recognition by the University Court of Lecturers in these languages. Sections 31 and 32 suggest that, in the Universities of Glasgow and Aberdeen, there shall be instituted (among others) Professorships of Pathological Anatomy. Section 33 proposes that, in Edinburgh, the name of the Chair of General Pathology shall be changed to Pathological Anatomy, and that a Lectureship on Mental Diseases shall be instituted. In Section 36, a number of provisions for assistance and apparatus are proposed to be attached to several of the Chairs; *e.g.*, to the Chair of Physiology two assistants, one at £150 and the other at £100 a year; also a sum of £1000 for the purchase of apparatus and material of a permanent kind, with an annual sum of £100 for maintenance and provision of new material. To the Chair of Botany, two assistant-demonstrators, at £100 each, if the class number one hundred, and more, if necessary; and that, in Edinburgh and Glasgow, the classrooms of Botany be enlarged. There are similar provisions for assistants to the Professors of Natural History, Pathological Anatomy, Practice of Physic, and Clinical Surgery and Medicine. Section 39 provides that the Court of Curators in Edinburgh shall be enlarged by the addition of two members: one to be elected by the General Council, and the other the President of the Royal Society of Edinburgh for the time being, *ex officio*. Section 42 proposes that the patronage of the Chair of Botany in Edinburgh be transferred from the Curators to the Crown. Section 59 proposes that means be provided for enabling the University of Edinburgh to carry out its scheme for providing new buildings for the accommodation of the medical and scientific departments; and that the dissecting-room at Aberdeen be extended to suit the requirements of the Medical School. The report, before concluding, carefully points out which of these recommendations require the authority of Parliament to give them effect, and which of them may be carried out by the Universities themselves.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

VACCINATION.—Mr. Goodall of Silverdale has been awarded by the Local Government Board a Government grant for superior vaccination, amounting to £60 13s. This is the fourth award of a similar kind which has been received by this gentleman.

THE CASE OF MR. BUCK.

THE following letter, dated March 23rd, 1878, has been handed to us: "Local Government Board, Whitehall, S.W.—Gentlemen,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 14th instant, respecting the claim of Mr. Buck, Medical Officer for the No. 3 District of the Saffron Walden Union, to a fee for attending on the child of a poor man named J. Wright. I am directed to state that the subject will receive the attention of the board.—I am, gentlemen, your obedient servant, HUGH OWEN, Junior Assistant-Secretary."

The letter is addressed to the Chairman and Secretary of the Poor-law Medical Officers' Association.

MILITARY AND NAVAL MEDICAL SERVICES.

SURGEON-MAJOR FALWASSER has been placed by Mr. Hardy at the disposal of the St. John Ambulance Association to instruct classes at Chelsea. The steam-yacht of Lord Conyngham has also been made available for the purposes of the Association in the conveyance of men, nurses, and material.

NAVAL MEDICAL SERVICE.

SIR,—As it is evident the Naval Medical Service still does not find favour amongst the schools, as shown at the recent examination for candidates for the department, and as it is well known that the last warrant, though a step in the right direction, fell far short of the recommendations that were offered to the Admiralty to quell the discontent which still continues, a few suggestions from one who has been some years in the service may be of service at the present time, when my lords must see the futility of temporising any longer. The principal points in the annexed scheme are those of retirement and the doing away of compulsory half-pay, which are of the greatest interest to us all. The promotion of surgeons to staff-rank and staff-surgeons to fleet-rank—the former after ten years' service and the latter after twenty years' service—is only what ought to be. These concessions,

together with the minor ones of cabin accommodation for fleet-surgeons, limitation of the time for holding appointments, and the selection of Director-General (which post few would wish to see done away with), would tend, in my opinion, to lessen the discontent reigning supreme at present through the ranks of the medical officers of Her Majesty's Navy.—I am, sir, your obedient servant,

A MEDICAL OFFICER ROYAL NAVY.

Retirement.—Inspectors-general to be compulsorily retired, as at present, at the age of sixty, on £2 *per diem*, without any qualification as to service whatsoever. Deputy inspectors-general to be compulsorily retired, as at present, at the age of sixty, on £1 : 13, without any qualification as to service whatsoever. Fleet- and staff-surgeons to be compulsorily retired at the age of fifty-five, on £450 *per annum*, without any qualification as to service, with the exception of half-pay time granted at an officer's own request, a deduction being made at the rate of £5 *per annum* for every three months of such time. Fleet- and staff-surgeons to be allowed to retire at the age of fifty on £400 *per annum*, with the same conditions as to half-pay time as the foregoing. All medical officers to be allowed to retire after twenty years' service on £300 *per annum*, with the same conditions as to half-pay time as the foregoing. All medical officers, if placed on the retired list through ill-health before attaining twenty years' service, to be retired as at present, but counting all compulsory half-pay time; if under fifty years of age, but having attained twenty years' service, to be allowed the option of retiring on £300 *per annum*, or as at present, but counting all compulsory half-pay time; if under fifty-five years of age, but over fifty, to be allowed the option of retiring on £400 *per annum*, or as at present, but counting all compulsory half-pay time. The same deductions to be made from the retired pay of officers placed on the retired list through ill-health for half-pay time granted at own request. Half-pay time granted while passing through a course at Netley to count towards retirement.

Promotion.—Surgeons to be promoted to staff-surgeons after completing ten years' service from the date of their entry into the service. Staff-surgeons to be promoted to fleet-surgeons after completing twenty years' service from the date of their entry into the service. Inspectors and deputy inspectors-general to be promoted, as at present, by selection.

Director-General.—The selection for this post to be made from the ranks of the active list of medical officers, and the time passed in office to count towards retirement.

Appointments.—All appointments to be held for a period of three years at least, and on no account to be exceeded, or for a commission.

Cabin Accommodation.—Fleet-surgeons to have special cabins told off, as at present in the case of chaplains, commanders, and paymasters.

PUERPERAL ANTISEPTICS.—Three papers by Langenbuch, Schülein, and Richter, in the *Zeitschrift für Geburtsh. und Gyn.*, report the extensive adoption of antiseptic measures for the prevention of puerperal infection in their respective hospitals. Richter's observations were made in the Charité Hospital at Berlin, where, especially after complicated labours, injections into the uterus were made for prophylactic purposes, and were continued throughout the puerperium. In all, about three thousand injections were made. The carbolic solution most frequently employed was a 2 per cent. solution. At first, a 3 per cent. solution was used; but, if repeated frequently, it was reduced to 2 per cent., as the former often caused carbolic acid to appear in the urine. Considering the numerous complications, the results were very favourable, being a mortality of 1.6 per cent. of all the women delivered, and of 4.83 per cent. among the cases in which the injections were used. Schülein, in the University Obstetric Clinic of Berlin, in the winter semester of 1876-77, treated two hundred and six out of two hundred and eighty-seven lying-in women immediately after delivery by prophylactic injections of the uterus with a 3 per cent. solution of carbolic acid. This injection was employed whenever in the lying-in bed frequent rises of the pulse and temperature occurred. A glass tube was at first used, and a double-current catheter afterwards. Under this treatment, with eighty-one cases of illness among the two hundred and six, or 28 per cent., the deaths amounted to only seven, or 2.4 per cent.; only one occurring from septic causes, one in a woman on whom Cesarean section had been performed. Langenbuch has since 1872 employed drainage of the puerperal uterus in order to afford a free outflow of the secretions. His experience shows that this treatment is quite innocuous. In one case, the drain remained nineteen days *in utero*. He recommends this treatment where septic infection already exists, in order to prevent a new invasion of septic material; and also as a prophylactic measure when the cases seem to offer a doubtful prognosis.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 21st, 1878.

Dickson, Hamner, 26, Nelson Square, S.W.
Fuller, Leedham Henry, 73, Denbigh Street, S.W.
Hughes, David Arthur, 42, Leamington Villas, W.
Marsh, Joseph Henry, Greenhithe, Kent
Michell, Henry Slyman, Chelsea Dispensary, Sloane Square

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the ordinary monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, March 12th, 13th, and 14th, 1878, the following were the successful candidates.—For the Licences to practise Medicine and Midwifery.

Burke, Andrew Joseph
Collis, Robert William
Denson, Joseph Leopold
Dimond, John Elliott
Edge, James Joseph
Miachin, Robert William

For the Licence to practise Midwifery.

Alford, George Ernest
Fogarty, Thomas Frederick W.
Grew, Francis Blaney
Hall, James Campbell

MEDICAL VACANCIES.

The following vacancies are announced:—

ALICE DALE INFIRMARY, Cape Colony.—Obstetric Physician. Salary, £500 per annum, with house, servants, and horse. Applications to be made on or before May 1st.

ASHTON-UNDER-LYNE DISTRICT INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board and lodging. Applications to be made on or before April 17th.

BOURNEMOUTH GENERAL DISPENSARY and COTTAGE HOSPITAL.—Resident Medical Officer. Salary, £120 per annum, with rooms, coals, gas, and attendance. Applications to be made on or before April 18th.

BRISTOL GENERAL HOSPITAL. Physician's Assistant. Salary, £50 per annum. Applications on or before April 19th.

DEWSBURY and DISTRICT INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board. Applications to be made on or before April 1st.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Salary, £100 per annum, with furnished apartments, coals, gas, and servants. Applications to be made on or before April 16th.

EAST LONDON HOSPITAL FOR CHILDREN and DISPENSARY FOR WOMEN.—Resident Medical Officer. Salary, £60 per annum, with board, lodging, and washing. Applications to be made on or before April 11th.

GERMAN HOSPITAL, Dalton.—Honorary Assistant-Surgeon. Applications to be made on or before May 1st.

LANCASTER INFIRMARY and DISPENSARY.—Salary, £120 per annum, with apartments, coals, gas, and attendance. Applications to be made on or before April 3rd.

LEEDS PUBLIC DISPENSARY.—Junior Resident Medical Officer. Salary, £80 per annum, with board and residence. Applications to be made on or before April 10th.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer. Salary, £150 per annum, with board and residence. Applications on or before the 31st instant.

MARLBOROUGH UNION.—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

QUEEN'S HOSPITAL, Birmingham.—Honorary Physician. Applications to be made on or before April 13th.

ROYAL CORNWALL INFIRMARY.—House-Surgeon, Secretary, and Dispenser. Salary, £200 per annum, with furnished rooms, coals, gas, and attendance. Applications to be made on or before April 24th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Senior House-Surgeon. Salary, £104 per annum, with board and residence.—Junior Resident Medical Officer. Applications to be made on or before April 3rd.

ROYAL UNITED HOSPITAL, Bath.—Resident Medical Officer. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 30th instant.

ST. MARY'S HOSPITAL, Paddington.—Assistant-Surgeon. Applications to be made on or before April 4th.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington.—Pathologist and Medical Tutor. Applications to be made on or before April 8th.

ST. THOMAS'S HOSPITAL.—Ophthalmic Surgeon. Applications to be made on or before April 6th.

WARNEFORD, LEAMINGTON, and SOUTH WARWICKSHIRE HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before April 16th.

WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY and DISPENSARY.—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before the 30th instant.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

SAWDON—RAWSON.—On November 28th, 1877, at Hull, Frederick John Sawdon, M.B., etc., C.M. (Edin. Univ.), to Anna Eliza, second daughter of the late William Rawson, Steamship-owner, Hull.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Squire, "Case of severe general Eczema treated by Phosphorus Alone" (living specimen); Mr. Teevan, "On the selection of an Operation for Stone in the Bladder".

TUESDAY.—Pathological Society of London, 8.30 P.M. Adjourned Meeting to consider Disease of the Lymphatic System. Specimens will be exhibited by Dr. R. Jones, Dr. Whipple, Dr. Goodhart, Mr. Nunn, Dr. Hoggan, Dr. Coupland, and Mr. Porter. Will be on view at 8 P.M.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens: A Fœtus whose Head was ruptured by means of the Forceps, by Dr. Cory; Cancerous Polypi removed during Pregnancy, with Microscopical Sections, by Dr. Galabin. Papers: Mr. Lawson Tait, "Two Cases of repair of the Female Bladder and Urethra"; Dr. Hickinbotham and Dr. Skinner, "Cases of Rupture of the Uterus";—Royal Microscopical Society, 8 P.M. Mr. J. W. Stephenson, "On a New Form of Object-glass".

THURSDAY.—Harveian Society of London, 8 P.M. Mr. Henry Morris's Report on Diseased Kidney. Dr. Griffith, "A case of Congenital Displacement of Heart" (living specimen); Mr. Teevan, "On the importance and means of effecting an early Diagnosis of Stone in the Bladder".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE WOMEN'S QUESTION.

UNDER this head, an erudite correspondent draws attention to the following curious extract from the will of Mr. Thomas Axe, of Orchard, in the county of Somerset, which he recently copied from a tablet in the fine old church of Ottery St. Mary, Devon. It will, no doubt, be read with some interest by the "lady-doctors", for whom good "Maister Thomas Axe" appeared to have great respect. The will, which is dated July 20th, 1691, directs, amongst other good bequests, that of the profits of premises at Blandford, three-twelfths be given to some man or woman of exemplary life and some skill in physic and surgery, who should industriously endeavour to help all the poor of Ottery St. Mary gratis, in cases of sickness and accident, till better advice could be had. Testator's kindred were to be preferred for the office, the clerk's wife next, the vicar's wife before any other, if she should be very fit, or as fit as Mrs. Alford, the late vicar's wife. Maister Axe also directs all the profits of his "houses in Southwarke" to be divided into twelve parts, to be applied as set forth; then came marriage portions, etc., and one-twelfth to be given to the person before described to buy "drugges and plaisters".

SIR,—Could you kindly inform me whether chloroform is in some cases supposed or known to cause a skin-rash? A medical friend has had two cases lately, in which chloroform, in his opinion, was followed by an erythematous eruption. Both took the anæsthetic very well, with no subsequent sickness.—I am, yours truly,
Gower Road, near Swansea, March 9th, 1878.
D. G. P.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the Post Office do not allow letters to be addressed to initials and directed to any Post Office in the United Kingdom, but letters may be addressed to initials to the JOURNAL Office or any stated address other than a Post Office.

THE BARBER FUND.

SIR,—I beg to acknowledge the following further contributions to this fund.

Dr. Luckwell, Oxford..	..	£1 1 0
Dr. Smith, Ecclefechan, North Britain..	..	1 1 0
Dr. Fletcher, Earl Soham ..	..	1 1 0
G. Richard Pitcairn, Esq., Littleborough ..	..	1 0 0
E. G. Rendle, Esq., Sharrow, near Sheffield ..	..	5 0 0
A Friend ..	..	5 0 0

PHILIP E. HILL.

Latham House, Crickhowell, March 26th, 1878.

"DISPATCH", in making a suggestion of the kind, should append his name to the letter.

THE BRITISH MEDICAL ASSOCIATION AND THE LADY QUESTION.
SIR,—Pending the extraordinary meeting of the British Medical Association next month, I think it is only right that I should inform Dr. Markham, and others who are inclined to think as he does, and who forget that the by-laws of the Association are simply and solely for its guidance, that I have now ample legal counsel to sustain all that I have said, and my interpretation of the by-laws is in accordance with all societies' laws which have not an interpretation clause. According to civil acts, regulating such courts as our county courts, a clause of interpretation exists, so that *he* may be interpreted *she*, and the singular the plural, in case of need, etc. I deny, therefore, that *he* in our by-laws can be so construed, without the interpretation clause, as to include *she*. With these few words of explanation, your readers will see I have not entered upon the discussion without data to support even the expulsion of Mrs. Anderson and Mrs. Hoggan. It would then be for them to apply for a *mandamus* to the Court of Queen's Bench, and show their grievance and maintain what they, no doubt, call "their rights"—I am, etc.,
Northallerton, March 25th, 1878. HENRY BROWN, L.R.C.P., L.R.C.S.

MEDICAL ACTS AMENDMENT BILL.

SIR,—In the Medical Acts Amendment Bill introduced into the House of Lords last week, the registration of properly qualified dentists is sought for, and measures are indicated whereby the public may be more securely protected against the charlatanism of unqualified medical practitioners, but it contains no reference to the advisability of the registration of qualifications in public health. Does the course of medical study demanded at the present time by any of the licensing bodies include the various branches of hygiene? No. To meet this deficiency, several of our universities have recently instituted examinations in the subject. Why should the degrees or certificates obtained after such examinations not be registrable? Is it less important that local authorities should be without the means of ascertaining who have submitted successfully to an adequate examination test in matters relating to public health, than that the public should have the means of knowing who possess special diplomas in dentistry? I do not mean to insinuate that the present race of medical officers of health is incompetent. Many of them are masters in sanitary science; but the fact that they have educated themselves up to the highest pitch of excellence, is no proof that all practitioners, however eminent they may be as physicians or surgeons, are necessarily well qualified for the post of medical officer of health. Would it, then, not be advisable for the General Medical Council, or for the Committee of the British Medical Association, to again bestir themselves in this matter, and take measures whereby a clause would be introduced into the Bill to enable a degree or certificate in public health to be registered as an additional title by persons whose names are already on the *Medical Register*?—I am, Sir, yours, etc.,
JOHN CUNNINGHAM, M.B., S.Sc.Cert.Camb.

SIR,—Permit me to respectfully suggest to your Parliamentary Bills Committee the expediency of introducing into the above Bill a provision by which dentists would be restricted from employing anaesthetics without the presence of a qualified medical practitioner. I am fully aware that many dentists understand how to administer nitrous oxide; but I contend that the course of study gone through by those gentlemen who take a dental diploma does not qualify them to offer any opinion as to the existence of a "fatty heart" or other contraindication to the use of anaesthetics. It is not long since a death took place owing to nitrous oxide having been administered to a patient (a medical man) labouring under "fatty heart". If dentists are allowed to give nitrous oxide without the presence of a physician or surgeon to-day, they will venture on ether and chloroform to-morrow, the more especially as "patients from the country", foreigners, and others may confound an L.D.S., who calls himself surgeon-dentist, with the qualified surgeon who follows dentistry, and who has gone through a more extensive physiological training.—I am, Sir, yours very truly,
FRANK THORPE PORTER, L.R.C.S.I.
15, Upper Merion Street, Dublin, March 23rd, 1878.

MR. J. MARSHALL (Dover).—The subject in question is to be discussed at a special general meeting of the Association on Tuesday next, at which Mr. Marshall will be able to express his views, and where they can be discussed by those concerned.

CONSULTING PHYSICIANS AND GENERAL PRACTITIONERS.

SIR,—I should like to have your opinion on the following matter. A. and B. are medical practitioners in a large town in the south-east of England, of nearly the same age and standing, and old friends. A. is a "consulting physician", being M.D. Lond.; B. is a general practitioner. About a year ago, A. was called in for consultation on a case in the family of a regular patient of B.'s. Very recently, B. discovers that A. is, and has been for some time, attending B.'s patient *alone*, without any intimation or notice of any kind to B. Now, I ask, is such conduct right? Is it professional? Is it honest? And, I should like to ask further, is it customary in other places?—Yours truly,
H.

* * Our correspondent's letter does not contain all the data necessary for the formation of an opinion. Does A. confine himself to consulting practice? or does he also undertake private practice, as many London graduates do? Is he attending the case by the express desire of the patient or otherwise?

HYGEIA.—It is impossible, by reason of the way in which the question is put, to answer it satisfactorily.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ATTENDANCE ON THE FAMILIES OF MEMBERS OF THE PROFESSION.

SIR,—Whilst agreeing with many of the suggestions of a "Junior" in your last impression, I must take exception to the second clause having reference to attendance on medical men and their families. As one who has had considerable experience both "in giving and receiving" friendly and gratuitous service, I can conceive nothing more calculated to degrade our profession in the eye of the public than that suggested by "Junior". I cannot for a moment admit the case of clergymen paying others for preaching for them as parallel, as for the most part such services are rendered by men who, having no benefice, act as temporary substitutes. I do not, indeed, doubt that there are cases on record of rich men taking fees of poor clerical brethren; but this would, I submit, be no example to copy—not "doing as we would be done by"—and I have often wondered at the want of kindly and Christian feeling which withholds a retired clergyman from voluntarily supplying the place of a poor brother in ill health, to whom a change might be beneficial, but who cannot afford to pay a *locum tenens*. But this is not within our province to discuss, and I would fain hope that there are many, as I know there are some, honourable exceptions to this rule.

I can conceive no greater barrier to the growth of the kindly feeling which should exist between medical men than the practice of charging each other for advice. Imagine meeting your neighbour, when suffering from some slight ailment, asking him to look at your tongue, feel your pulse, and suggest a plan of treatment, and behold, next post brings a bill for 5s. or 10s., according to your friend's estimate of the value of his services. This would deprive us of what I have always considered one of the greatest pleasures of my professional life, and, I may add, of what is generally regarded as a compliment to professional opinion. So far from my experience corroborating that of "Junior", "medical men in their inmost soul object to the present system", I can truly say that no medical man who has ever attended myself or family has ever acted in any way as though he expected a fee; but, on the contrary, has expressed himself as most pleased at having been able to render the service; and I have always acted in the same manner. I have, indeed, known a bill sent for attendance on a medical man's child, but such conduct was deemed most unprofessional. Of course, the gratuitous and honorary nature of the attendance does not prevent the receiver giving a suitable *honorarium*, according to his own pecuniary capacity and the length of the service, especially in cases of confinement, troublesome attendance, and long journeys. In one instance when I was asked, but declined, to send in a bill for attendance on the child of a leading London physician, I received a present far exceeding in value any money consideration I should have claimed of an ordinary patient.

I reside in a large city, and am at the present moment suffering from slight indisposition. A medical friend comes to see me, and a short time since I attended him. One of our leading physicians also saw him in consultation, but the question of payment has never once occurred to either of us, and if offered would be declined. There are other ways of showing our appreciation of kindness than by tendering "sordid dust", which, however necessary for the maintenance of existence, is not yet, I trust, the primary object of the right-minded members of our noble profession. I feel far more happy in my friend's "unpaid" hands than I should be if he were expecting to be paid, for he is constrained by a far higher influence than "cash"—viz., "love" for a fellow-creature and his glorious art. "Junior" must have fallen upon an unfortunate, and, I hope, singular place, as he got "badly attended" gratuitously. He does not specify whether the attendance was deficient in quantity or quality. If the latter, that was not the result of non-payment; but if the former, I can only say it is contrary to my experience both as giver and receiver, for I make a point of being extra attentive in such cases, and so has every one acted towards me.

I send my card in confidence, and would not object to signing my real name, were it not for my reference to another part of "Junior's" letter—viz., respecting gratuitous advice to non-professional persons, which, I regret to say, is given here freely by men occupying good social positions—one a hospital surgeon and in good practice—and this is done in the face of three hospitals and dispensaries, provident and improvident, and special institutions innumerable. This ought not to be, and is only an indirect way of advertising.

I see no objection to an arrangement being made on an equitable scale for attending the less wealthy classes by contract, although I am afraid that the complaint of our friend "Junior", of being "very badly attended", would often be made, and lead to occasional unpleasantness and change of doctors. Who is to decide the amount of a "day's pay" or a "week's pay" in the case of small tradesmen, who are often worse off than mechanics, artisans, or clerks? But I expect "Junior" will see cause to change his mind on many of these questions before he has become "A SENIOR".

SIR,—I find a member has been placed in a similar position to myself. My case is this. My son, aged 16, resided about two years ago at a college twelve miles from my residence. He amongst others had the misfortune to suffer from an attack of measles, which was imported into the college by one of the pupils at the commencement of the term. In due time, the college and doctor's bill came to hand, and both were paid. This was not the first doctor's bill I have paid for attendance upon myself and family. From this it would appear to be the custom of some of the members of the profession to charge.—I remain, respectfully,
B. W.

SIR,—Will you permit me to make one or two remarks on the above subject? Within the last twenty-five years I have had occasion to consult for myself two surgeons and one physician, perfect strangers to me, and at their own houses. On each occasion I took care to have a fee in my pocket. All were well known in the profession and greatly esteemed. I did not present myself *inognito*. In each instance I tendered my fee, which in one case was accepted. My professional friends said it was shabby; but, on consideration, I arrived at a different conclusion. My card bore a name; it might have been stolen. My statement of being a medical man might be partly true and partly false. Why was I to intrude on the time of a brother practitioner? He could not verify my statements. I had brought no letter of introduction to say who I was. I was a casual visitor. Why was I to use *in forma pauperis* for gratuitous advice to an utter stranger? There are two classes of medical men—the credulous and the incredulous. The surgeon who took a fee was of the latter class. To him time was money. He treated me as a patient ignorant of his art, and took nothing for granted. The credulous, when they attend their medical brethren, are so afraid, from motives of delicacy, of appearing to dictate to a sick brother, that they give directions only so far; minor direction

are taken for granted as understood. When a medical man is sick, he is often very troublesome to his attendant, and requires ruling with a strong hand. Had "A Junior" been so ruled, he would not have called forth the deserved criticisms of "F.R.C.S." A medical man, then, and his family, in his own house naturally receives medical advice gratuitously; but he cannot expect the same indulgence for his family, or portions of his family, at school, at some distance, if he have not taken the trouble to ask his medical neighbour to be attentive to them, for they are not under a medical roof. The statement "I am a medical man, or the wife of one, or the child of one," requires verification, and should be known before attendance commences.

This question leads to a larger one—that of the out-patient department of hospitals, where, if verification of every patient by medical certificate were the rule, and medical men remunerated for their certificates by the hospital authorities as *bona fide* cases suitable for treatment or consultation, this overgrown department would soon be brought within reasonable limits.—I am, sir, yours truly,

March 16th, 1878.

ANOTHER MEMBER.

SIR.—Your correspondent "L.R.C.P." will find an account of my method of preparation in the appendix, to the first of my series of "Researches on the Intimate Structure of the Brain" in the *Philosophical Transactions* for 1858.—I am, sir, your obedient servant,

27, New Cavendish Street, March 18th, 1878.

J. LOCKHART CLARKE.

W. B.—Wilson's *Manual of Public Health* (Churchill), Hart's *Manual of Public Health* (Smith, Elder, and Co.), and Parkes's *Hygiene*.

The following communications have been handed to the General Manager:—Mr. E. Ramsay, Liverpool; Mr. J. H. Parry, Bristol; Mr. J. H. Thomas, Wellingborough; Mr. S. S. Carter, Leeds (with enclosure); Mr. H. W. S. Worsley Benison, London; Mr. H. J. Jupp, London; Mr. B. T. Heuston, Dunse; Dr. Oman, Wishaw; Miss King, Bath; A. B., York (with enclosure).

MEDICAL REMUNERATION.

SIR.—I am surprised at seeing so frequently letters like that of "Pilgric" inquiring about medical remuneration, and think that the very excellent *Tariff of Medical and Surgical Fees* published by the Shropshire Ethical Branch of our Association, and sold by William Wardle of Shrewsbury, is not so well known nor so widely circulated as its usefulness deserves. The fees I charge are for the most part based on this tariff; and although they are higher than those of my neighbours, and I get occasional protests, I nevertheless keep my patients, and have plenty to do. I regard agricultural labourers as almost objects of charity, and charge them as low as possible, but try to insist on cash payments from them. If bills are neglected year after year, I threaten proceedings, and if this be unavailing, I issue a summons. I never get my claim opposed, and it is frequently paid into court. I do not find this summary method injure my practice; on the contrary, I am saved the trouble of attending those who do not mean to pay, and of subsequent attempts to make them do so. I hope more medical men will send for and adopt the medico-chirurgical tariffs, for the inadequate remuneration in many country districts is disgraceful and lowering to the profession.—Yours, etc.,

A MEMBER.

MR. WILLIAMS.—The election does not take place until the first Thursday in July. Mr. Edward Lund is in every respect most eligible, and it is hoped, will respond to the proposed invitation. He is surgeon to the Manchester Royal Infirmary, and Professor of Surgery in Owens College. He was admitted a Fellow of the College by examination in June 1863.

DR. CAWLEY.—The bite of the viper is seldom fatal in this country, unless the subject is in a very bad state of health. Some years ago there was a fatal case at St. Bartholomew's Hospital, under the care of the senior surgeon Mr. Vincent.

KOUMISS.

SIR.—I shall esteem it a favour if any of your correspondents will give me detailed information as to the mode of turning milk into koumiss. I presume it is by means of some animal ferment, as in the Arabian koumiss of mare's milk.—Your obedient servant,

A PHYSICIAN.

MR. JONES.—The result was published in the JOURNAL immediately after the election in July 1871—viz., for Mr. Wells, 131; Mr. Critchett, 130; Mr. Clark, 127; and Mr. Busk, 117, who were declared duly elected. The unsuccessful candidates, Messrs. Holt and Cock, polled respectively 104 and 74.

EFFECTUAL TREATMENT OF THE HYSTERICAL PAROXYSM.

SIR.—As I was on my round of morning calls the other day, my attention was attracted by the gesticulations of a woman, who earnestly entreated me to go at once into her house to see some one who was dying, or who was dead. I could not resist her importunity; and in the back room of her house found the assistant of a neighbouring firm mutely gazing on the prostrate form of a buxom lass in a paroxysm of hysteria. I at once began to administer abundant doses of cold water externally, *secundum artem*, with some slight effect, when I rushed the "family doctor," protesting that he could bring her about directly; and, true to his word, he did, and that most effectually. Having laid hold of a tuft of hair which graced her pubes, he gave it a vigorous tug. The effect was electrical: she immediately raised a most satisfactory howl, sprang at once on to her broad stern, and cried out most lustily for help.

Whether the above remedy was quite the thing, or whether it might not be included in the category of criminal assaults, I do not know. I never saw this remedy in the books; but it acted like magic.—Yours,

AN OBSERVER.

A SUBSCRIBER.—We do not know the value of the pictures mentioned.

HAMS AND MENSTRUATION.

SIR.—A circumstance has occurred recently in my house which I find explained by the letter of "A Member" in the JOURNAL of March and. Some time ago, a pig was killed and cured, and the hams went bad. Two months afterwards, a second supply of pigs' legs was obtained, cured, and verified yesterday as perfectly good. On questioning my housekeeper, who cured both lots, I find she was menstruating on the former occasion, and not so on the latter. I also should be glad to hear of an explanation for so singular a circumstance.—I am, sir, yours truly,

March 11th.

ANOTHER MEMBER.

EXAMINATIONS IN SANITARY SCIENCE.

SIR.—In answer to your correspondent of last week respecting these examinations, I as a recent candidate would refer him for practical instruction to the hygienic laboratory of University College, London; and if he will arrange an interview with me, by addressing me at the College, I shall be pleased to give him all my experience as to necessary books, style of examination, etc.—I am, etc.,

C. D. A.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

CHRYSOPTANIC ACID STAINS.

SIR.—I read with great interest Mr. Balmanno Squire's account of the means of getting rid of the stains produced by chrysophanic acid. I had come to the conclusion, after many experiments, that the acid forms with linen a perfectly fast dye. A friend who had used the acid gave me a fine pocket-handkerchief, which was stained in many places with the acid. I did not like to destroy the texture of the handkerchief; but I submitted it to every known bleaching process, with the effect of discharging the brown purple colour, but leaving dirty yellowish stains, which are far from being perfectly bleached. I had used the powerfully bleaching process of steeping the handkerchief in a strong solution of Beaufoy's chloride of soda, and also sulphurous acid, with Condy's fluid. When I read Mr. Balmanno Squire's letter in the JOURNAL of the 16th, I hoped to have found the desired process of bleaching. I accordingly steeped the handkerchief in a fairly strong solution of chloride of lime for thirty-six hours: at the end of that time the yellowish stains were still present, and not the slightest bleaching effect has taken place upon them. I am sorry to find this failure. It is possible that the acid does not make so fast a dye with cotton as it does with linen; and if time permit, I hope to make some experiments with a view to find the reason why a process succeeds in some hands and fails in others. Possibly old stains are more difficult to deal with than those freshly made.—I am, yours truly,

WALTER FERGUS, M.D.

Marlborough College, March 21st, 1878.

H. (St. Bartholomew's).—The registration having been abolished, you will not be required to attend as heretofore at the College of Surgeons during the last ten days of March.

MR. T. BRITTON (Birmingham).—At the Battersea Provident Dispensary there are two classes of subscribers. Class A. includes those who are not earning more than 30s. a week: they pay 1d. a week. Class B. includes those earning from 30s. to 50s. a week: they pay 2d. a week. This plan was favourably noticed by Mr. T. Holmes, in his recent paper upon Provident Dispensaries (see BRITISH MEDICAL JOURNAL, March 16th), and might probably be adopted in many places with advantage.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Courant; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelson Chronicle; The Fifeshire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. James R. Lane, London; Mr. Furneaux Jordan, Birmingham; Dr. George Johnson, London; Dr. D. Ferrier, London; Mr. Vincent Griffiths, Twickenham; Dr. E. G. Levinge, Stapletoe; Dr. W. Fairlie Clarke, Southborough; Dr. M. T. Sadler, Barnsley; The Secretary of the Royal Microscopical Society; Mr. J. H. Parry, Bristol; Dr. S. R. Potter, Cullumpton; Hygeia; A Subscriber, Bristol; Mr. R. Macnamara, Dublin; Dr. Dumontpallier, Paris; Dr. J. Clement Souter, London; Mr. Thomas Letts, London; Dr. Trevor Fowler, Epping; Dr. Clifford Allbutt, Leeds; Dr. T. W. Hime, Sheffield; Mr. B. Browning, Rotherhithe; Mr. E. Prideaux, York; Mr. W. H. Michael, London; Mr. E. Ramsay, Liverpool; Dr. G. K. Poole, Anerley; Dr. Louis Lewis, London; Mr. Giles, Bristol; Mr. A. H. Benson, Dublin; Dr. Vinen, London; Dr. Corfield, London; Mr. C. Asheden, Hastings; M.D.; Dr. A. B. Erabazon, Bath; Dr. Walter Fergus, Marlborough; The Secretary of the Statistical Society; Mr. A. Doran, London; Mr. W. H. Brown, Hammersmith; The Secretary of the Clinical Society; Mr. W. W. Reeves, London; Dr. Grigg, London; The Secretary of the Obstetrical Society; Dr. F. Warner, London; M.R.C.S. Eng.; Mr. Bartlett, Birmingham; Mr. Henry Brown, Northallerton; W.; Mr. A. R. Manby, Norwich; Dr. J. B. Walker, Huddersfield; Dr. V. Poulain, London; Mr. E. L. Hussey, Oxford; F.R.C.S.; Dr. Duffey, Dublin; Mr. M. G. Biggs, Colchester; Dr. George Wyld, London; Mr. Thomas Wilson, London; Dr. Gowers, London; Mr. R. V. Skinner, Winchester; Dr. Sawyer, Birmingham; The Secretary of the Medical Society of London; Mr. Wanklyn, London; The Secretary of Apothecaries' Hall; Mr. T. Holmes, London; The Registrar-General of England; Dr. Edis, London; Dr. J. Milner Fothergill, London; The Registrar-General of Ireland; Mr. Jonathan Hutchinson, London; Mr. Eastes, London; Dr. Sieveking, London; Dr. Howard, London; Dr. Michael Foster, London; Our Edinburgh Correspondent; Mr. S. M. Bradley, Manchester; Mr. H. W. S. Worsley Benison, London; Mr. Henry Sewill, London; Mr. H. J. Jupp, London; Our Dublin Correspondent; Mr. Frank Davison, Elton; Mr. John Marshall, Dover; Mr. W. E. Saunders, Fort Widling; Dr. F. J. Brown, Chatham; Mr. J. T. Jones, Chatham; Mr. T. M. Stoe, London; Mr. G. B. Clark, London; Dr. James Gardner, Box; Mr. P. E. Hill, Crickhowell; A. B., York; Dr. T. Churton, Leeds; Dr. Oman, Wishaw; Mr. J. H. Thomas, Wellingborough; Dr. J. M. Howie, Liverpool; Mr. S. S. Carter, Leeds; Mr. William Blackburn, Upper-mill, Manchester; Right Hon. J. Stansfeld, London; Mr. Clement Hadley, Birmingham; Dr. Norman Chevers, London; Dr. Byrom Bramwell, Newcastle-on-Tyne; Mr. A. A. Napper, Cranleigh; Dr. Forbes Winslow, London; Mr. W. D. Napier, London; Dr. A. P. Stewart, London; Dr. W. T. Gairdner, Glasgow; Dr. R. J. Lee, London; Mr. W. Pugin Thornton, London; Dr. Ringrose Atkins, Waterford; etc.

THE GOULSTONIAN LECTURES ON THE LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.,

Professor of Forensic Medicine in King's College; Assistant-Physician to King's College Hospital; etc.

LECTURE II.—March 20th.

A.—LESIONS OF THE MOTOR REGIONS.

THE motor area, as determined by experiments on monkeys, includes the bases of the three frontal convolutions, with those bounding the fissure of Rolando; viz., the *ascending frontal*, or *anterior central* (Ecker); the *ascending parietal*, or *posterior central* (Ecker), with its superior continuation, termed the *postero-parietal* or *superior parietal* (Ecker) lobule; together with the internal aspect of the same, which by our French brethren is generally called the *paracentral* lobule. (See fig. 1.) The homologous regions of the brain of the monkey and man are sufficiently evident not to require my taking up valuable time with any detailed anatomical description. In this region are situated certain definable areas stimulation of which by the electric current gives rise to certain definite movements on the opposite side—viz., of the leg and hand, facial, oral, and lingual muscles; and destruction of which causes paralysis of all those movements (*exc. exc.*) if the entire region be destroyed; limited or dissociated paralysis, if individual areas only be destroyed—the paralysis in this case being confined to those movements which are excited by irritation of the same. This region is supplied by the middle cerebral or Sylvian artery by four or five branches, each of which nourishes a special area. The artery may be occluded in its main trunk or in its individual branches; and the arrangement is such, according to the researches of Duret and Heubner, that the arteries of the basal ganglia may still remain pervious though the cortical arteries are occluded by emboli. Hence it is that softening limited to the cortical grey matter and subjacent medulla may and does frequently occur, while the basal ganglia remain absolutely intact.

The lesions which invade this region we may divide into *destructive* and *irritative*, in accordance with their main symptomatic characters. But a complete practical separation is not always possible, inasmuch as lesions which result ultimately in total disintegration are not unfrequently associated at times with irritative or convulsive phenomena limited or more or less generalised: a combination which may be likened to that in *anæsthesia dolorosa*.

We have now a very considerable body of evidence to show that destructive lesions of this region invariably cause paralysis of voluntary motion; and that there is a differentiation in this part of the cortex of distinct centres, corresponding in situation to those experimentally established in the brain of the monkey, destructive lesions of which cause limited or dissociated paralysis of their respective movements or muscular combinations. It is not maintained, however, that in all cases of purely cortical paralysis anatomical lesions are demonstrable in these centres; but I am unable, after much investigation, to find any satisfactory evidence of the occurrence of a destructive lesion here *not* associated with motor paralysis. I have met with occasional statements or hypotheses as to what may or must have been, but no proof of such a lesion having actually existed without paralysis.

Truly, Samt* has recorded a case in which a cyst was found on the cortex in the motor zone; but, as Charcot and Pitres remark,† the actual destruction of the grey matter was not proved, since we know that tumours may press aside, without destroying, the tissue on which they rest. Let the subject, however, be investigated anew, with all the most modern methods, and with the utmost possible scrutiny. When a clear case of destructive lesion of the cortex in this region without motor paralysis is forthcoming, it will be time to cast aside the immense body of positive experimental and clinical evidence which we possess in favour of the thesis enunciated.

The experimental evidence in the case of monkeys is of the following nature. The brain is exposed. The application of that which is universally recognised as an excitant of nerves and nerve-centres to a certain spot is followed by a definite movement. All other conditions remaining the same, this spot is destroyed by the cautery (universally recognised as a destroyer of animal tissues), and immediately we see paralysis of the muscles formerly thrown into action by the electrical stimulus. I am describing no hypothetical experiment, but one actually performed and frequently varied. If motor function is ascribed to a nerve because on irritation the muscle contracts, and on section the muscle is paralysed, I cannot see why motor function should not be predicated of the cortical centre, seeing that the phenomena are essentially the same.

Brown-Séquard, however, thinks that, in all cases of paralysis from cortical lesion, there is some intermediate link or *tertium quid* intervening between the antecedent and the consequent: a kind of inhibitory influence exerted by the lesion on some centre or centres which are credited with the functions which are lost. It would, I think, be easy by parity of reasoning—and I say it with all due respect to the distinguished author of this theory—to make a complete *reductio ad absurdum* of the whole of experimental physiology. We should never be entitled to establish direct relationship between organ and function, but be condemned to a perpetual search after some *tertium quid*, which, like an *ignis fatuus*, would for ever elude our grasp.

It is generally considered that explanation is satisfied when we assimilate one fact or set of facts to another familiar fact or set of facts; and, if we are entitled to call a nerve motor because motion ceases when it is cut, so, it seems to me, we may call a part of the brain motor if a similar result invariably follow on its destruction.

1. *Destructive Lesions of the Motor Area.*—I will first direct your attention to destructive lesions of the motor area, and under this head consider (1) general and (2) partial lesions.

1. *General or Extensive Lesions.*—The type of general lesion of the cortical area in the monkey is paralysis of voluntary motion without affection of sensation on the opposite side of the body, and possessing all those features which characterise ordinary cerebral paralysis (*hémiplegie centrale vulgaire*, Charcot); viz., hemiplegia which, though at first absolute, gradually subsides into a condition in which there is complete paralysis of all the most volitional movements, while associated, alternating, or bilateral movements are more or less spared. Hence the hand is more paralysed than the arm, the arm more than the leg, and the lower facial movements more than the upper; while the muscles of the trunk are scarcely, if at all, affected.

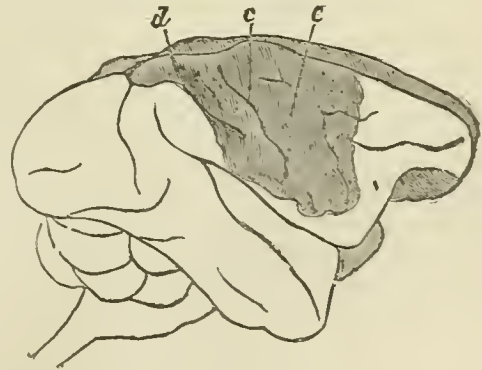


Fig. 7.

In fig. 7 is a representation of the extent of a lesion of the brain of the monkey causing complete hemiplegia of the opposite side. This was a case of encephalitis resulting from exposure, in which the phenomena in the early inflammatory stage were localised spasms on the opposite side, which gradually became general, followed by complete paralysis and flaccidity, without loss of sensation, when softening was complete.

Fig. 8 is a representation of a lesion causing* paralysis of the arm and leg of the opposite side; and fig. 9 (f) represents a lesion in a region stimulation of which caused supination and flexion of the forearm. The result was paralysis of voluntary motion limited to this movement. These will suffice to indicate the difference between general and partial lesions of the cortex under circumstances free from all com-

* Archiv für Psychiatrie, 1874.

† Revue Mensuelle, 1877.

* Also temporary blindness of opposite eye, which will be explained below in connection with lesions of the angular gyrus.

plication. The lesions of disease, however, are, as a rule, rarely so simple. I have already indicated the forms of disease which can scarcely be admitted as relevant in relation to the question of localisation, and I would further add that considerable caution requires to be

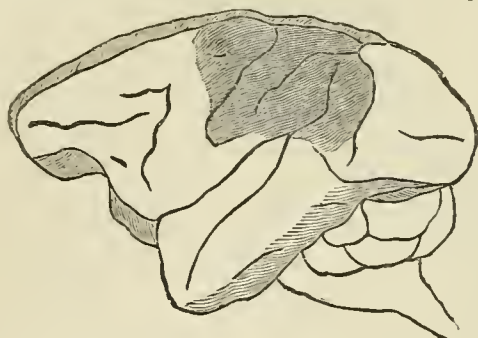


Fig. 8.

exercised in reference to traumatic lesions. These are most valuable in a negative point of view, as, for instance, in the case of the frontal lobes; but, when accompanied by positive symptoms, it is necessary that lesions of the base of the brain, which Duret shows may result from concussion and are apt to complicate the symptomatology of the local injury, should be shown to be absent.

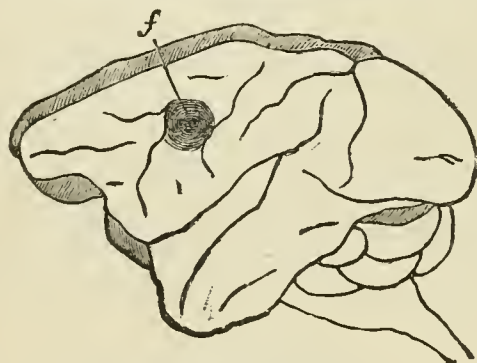


Fig. 9.

Apart from traumatic lesions, the cases of cortical disease which I proceed to quote clearly establish the fact that lesions in that part of the human brain which corresponds to the area termed motor in the brain of the monkey produce paralysis of voluntary motion on the opposite side of the body: a hemiplegia like that resulting from destructive lesion of the corpus striatum, or more particularly of the anterior part of the internal capsule (*hémiplegie centrale vulgaire*). This paralysis is frequently associated with rigidity or convulsive spasms in the paralysed parts, particularly in the early stage; and, if destruction of the cortical substance be complete, the paralysis is of permanent duration, and sooner or later is followed by late rigidity and secondary sclerosis of the motor tracts. This degeneration is traceable in the medullary fibres, crus cerebri, pons, and pyramid of the medulla oblongata on the side of the lesion; and thence mainly on the opposite side of the spinal cord in the posterior part of the lateral column (*faisceaux encéph. externes ou croisés*, Bouchard; *faisceaux latéraux*, Charcot; *Pyramiden Seitenstrangbahnen*, Flechsig); while a corresponding band of secondary degeneration frequently exists on the internal aspect of the anterior column of the same side as the lesion (*faisceaux encéph. directes ou internes*, Bouchard; *faisceaux de Türek*, Charcot; *Pyramiden Vorderstrangbahnen*, Flechsig). These are the tracts which recent researches, to which I have before alluded, have shown to be the continuations of the pyramidal strands; and the fact of the direct continuity of this degeneration with that commencing under the cortex proves, in accordance with Waller's and Türek's researches, the direct motor significance of the cortical regions to which these fibres are traced.

I have already mentioned the experiments of Albertoni and Michieli, and those of Franck and Pitres, showing that secondary degeneration occurs in the medullary fibres of the centrum ovale after destruction of the cortex in dogs; and I may also quote the experiments of Vulpian,*

* *Archiv. de Physiologie*, 1876.

and those of Carville and Duret, establishing the occurrence of secondary degeneration in the spinal cord after removal of the limb-centres—sigmoid gyrus—in this animal.

A case is reported by Glyky* of unilateral convulsions of the left side followed by complete hemiplegia without loss of sensation, in which, after death, a caseous degeneration was found involving the ascending frontal and bases of the three frontal convolutions, the ascending parietal and postero parietal lobule, and the corresponding internal aspect of this region, or paracentral lobule. (See figs. 10 and 11)

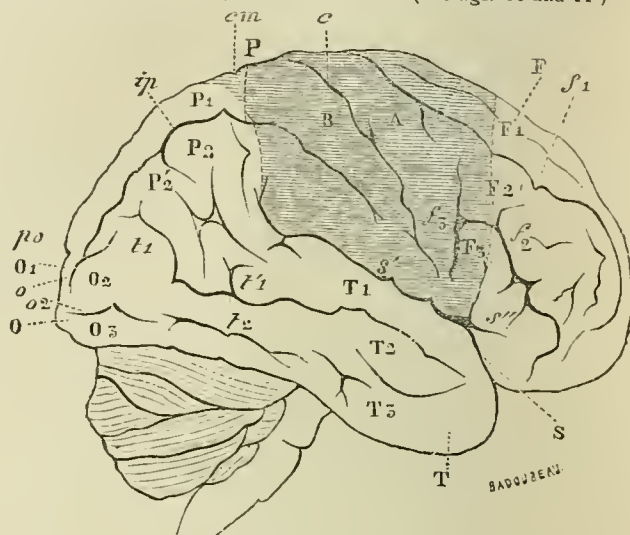


Fig. 10.

Lepinet† has recorded a case of right hemiplegia, without affection of sensation, of six years' duration, caused by yellow softening of the ascending parietal convolution in its whole extent, with partial affection of the ascending frontal, posterior digitations of the island of Reil, and

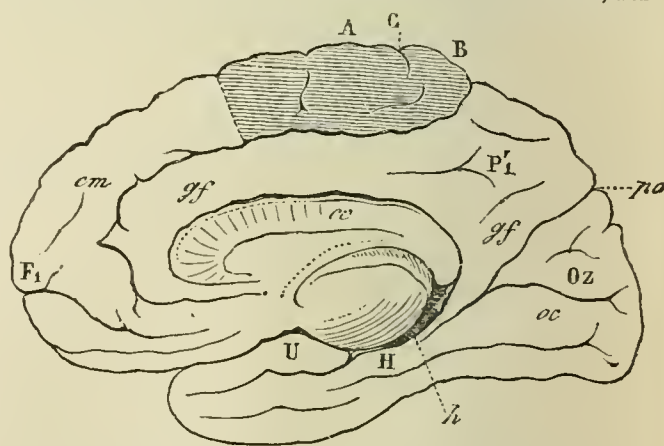


Fig. 11.

anterior part of the superior and inferior parietal lobule of the left hemisphere. The ganglia were intact. Secondary degeneration was traced in the left side of the pons Varolii and left pyramid.‡

In a case communicated by M. Brun to MM. Charcot and Pitres,§ left hemiplegia without aphasia had existed for four years, with late rigidity of the arm, and in a slighter degree of the leg. Yellow softening (*plaque jaune*) was found in the lower two-thirds of the ascending frontal, lower half of the ascending parietal, the posterior three-fourths

* *Deutsches Archiv für Klin. Medicin*, December 1875.

† *Localisations dans les Maladies Cérébrales*. Thèse d'Agrégation, 1875.

‡ A mistake occurs in the account given of this case, which has been copied by MM. Charcot and Pitres, (*op. cit.*, p. 123), the atrophy being described as being on the right of the pons instead of the left. This is corrected by M. Lepinet's own hand in the copy which I possess.

§ *Op. cit.*, p. 121.

of the *second and third frontal*, and the whole of the convolutions of the island of Reil in the right hemisphere. (Fig. 12.) The ganglia

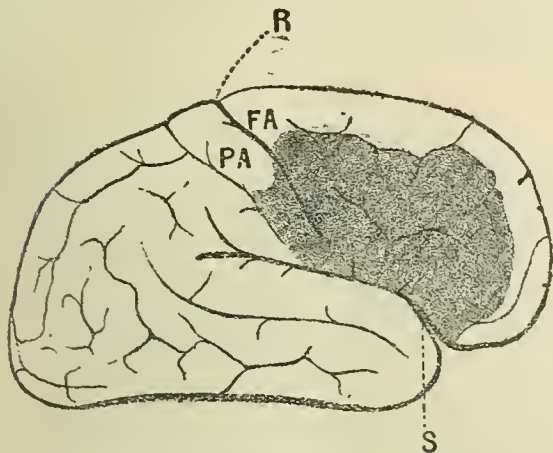


Fig. 12

were intact. No examination, however, was made in reference to secondary sclerosis in this case.

Another case is given by the same authors* of right hemiplegia, with aphasia, of one year's duration, and accompanied by late rigidity of both limbs, more particularly of the arm. A patch of yellow softening was found involving the whole of the *ascending frontal* and base of the *third frontal* convolution, the whole of the *ascending parietal*, together with the inferior parietal lobule and two posterior digitations of the island of Reil in the left hemisphere. The ganglia were normal. Secondary degeneration was evident in the crus, pons, and pyramid on the same side; but the cord was not examined.

Trousseau quotes a case which occurred in the *clinique* of M. Charcot,† in which secondary degeneration was traced in the crus, pons, and pyramid of the same side as the lesion, and in the opposite side of the spinal cord; the lesion being, softening of the *ascending frontal*, the *third frontal convolutions*, and of the island of Reil in the right hemisphere. The case was one of left hemiplegia of three months' duration; death occurring from pneumonia.

These cases, out of many on record,‡ are sufficient to show that, from purely cortical lesions, permanent paralysis may result; that, in consequence of such lesions, secondary degeneration takes place in the motor tracts, with its accompaniment late rigidity.

In the cases I have quoted, there has been more or less complete hemiplegia. In some of these, the lesion has invaded the whole of the motor area, and it only; in others, the lesion of the motor area, though extensive, has not been anatomically coextensive with this area; and in most there has also been affection of parts not considered as belonging to the motor area. Clinical cases in which a lesion should be extensive enough to involve the whole motor area, and it alone, must naturally be considered as quite exceptional. But it is not at all difficult, by a process of exclusion, to eliminate those regions, a lesion of which does not cause paralysis or secondary degeneration; and it may be stated provisionally (of which proofs will be adduced subsequently) that it is only in cases of lesion of the motor area, as above defined, that secondary degeneration occurs, and only in these that paralysis is invariably the result.

I will return to the fact of complete hemiplegia, with comparatively restricted lesions of the motor area.

But before doing so, I would call your attention to the researches of M. Pitres, who, in his recent work,§ has collected a large body of evidence to show that what is true of the lesions of the cortical substance holds also in respect to lesions in corresponding parts of the centrum ovale; a term which he extends to the whole of the medullary substance intervening between the cortex and the basal ganglia. In all future observations and pathological records, it would be advisable to follow M. Pitres' system of nomenclature of the divisions of the centrum ovale. (See plate I in M. Pitres' work.) A vertical section of the hemisphere at right angles to the long axis in the prefrontal

region gives the *prefrontal section*. The next section, carried two centimètres in advance of the fissure of Rolando, passes through the bases of the three frontal convolutions and forms the *pediculo-frontal section*, divided into a *superior*, *middle*, and *inferior pediculo-frontal fasciculus*, corresponding with the respective frontal convolutions. The next section is the *frontal*, formed by dividing the hemisphere parallel to the fissure of Rolando through the ascending frontal convolution. Here also there are three divisions—the *superior*, *middle*, and *inferior frontal fasciculi*. (In this section, the sphenoidal region is partly shown.) Next is the *parietal section*, carried in a similar manner through the ascending parietal convolutions. Three segments are also seen here; viz., the *superior*, *middle*, and *inferior parietal fasciculi*. Next is the *pediculo-parietal section*, made by dividing the hemisphere three centimètres (1.18 inches) posterior to the fissure of Rolando, and cutting the superior and inferior parietal lobules. Here we distinguish a corresponding *superior* and *inferior pediculo-parietal fasciculus*. Below is the *sphenoidal fasciculus*. Section of the occipital lobe gives the *occipital section*, in which no separate fasciculi are differentiated.

Now, it is only in certain of the medullary fasciculi so marked out, that lesions cause paralysis of motion and degeneration of the motor tracts. These regions are included in the pediculo frontal, frontal, and parietal sections, or, generally, in the *fronto-parietal area*. Lesions here have exactly the same effect as lesions of the corresponding cortical region, according as they are destructive or irritative, or according as they are limited or general. And M. Pitres has brought forward evidence of a very satisfactory kind to show (p. 100 *et seq.*) that the early rigidity and muscular spasms, which so frequently accompany hemiplegia with effusion into the lateral ventricles, are essentially due to irritation of the fronto-parietal fasciculi of the centrum ovale.

As to the occurrence of hemiplegia with recent hæmorrhage into the fronto-parietal region of the centrum ovale, without direct affection of the cortex or basal ganglia, I might quote many cases; but, though the explanation is, through other facts, rendered simple enough, they may be objected to as evidence of paralysis from direct lesion of this area. For it might be said, and not without reason, that the paralysis was due to indirect affection, by pressure, etc., of the motor ganglia and tracts.

It will be better, therefore, to restrict ourselves to cases in which this element of suddenness or of pressure is entirely absent, *i.e.*, cases in which there was mere softening or solution of continuity of the medullary fibres.

Hodgson* has related a case of right hemiplegia with aphasia, followed several months after the seizure with late rigidity of the right arm. Death occurred from chronic bronchitis more than a year after the attack. In the centrum ovale of the left hemisphere, was a cavity nearly empty, one inch and a quarter long, situated external to the lateral ventricle and between its anterior horn and the island of Reil. The rest of the brain, except the part immediately around the cavity (which was yellowish), was normal.

A similar case of right hemiplegia, but without aphasia, was recently brought before the Société Anatomique† by Landouzy. In this case, there was late rigidity and atrophy of the paralysed limbs. A slough formed in the sacrum, and death resulted six months after the attack. The lesion was a lacuna or cicatrix resulting from a hæmorrhagic effusion, situated in the centrum ovale, and extending from the base of the first frontal to the postero-parietal lobule. The form was irregularly triangular, the widest part situated posteriorly. Secondary degeneration was visible in the left crus and right side of the spinal cord, but the exact extent of the degeneration had not been minutely examined at the time the record was made.

For other similar instances, I would refer to M. Pitres' above-mentioned work.

2. *Partial Lesions of the Motor Area.*—a. *With Hemiplegia.* It would seem that, in order to cause more or less complete hemiplegia of the opposite side, it is not absolutely necessary that the anatomical lesions should be co-extensive with the whole motor area. I have already given one or two instances in which the lesion, though extensive, did not involve the whole of this region; to these I add one or two instances of hemiplegia in which the lesion was still more limited anatomically than in those already mentioned. But the area of anatomically demonstrated lesion is not necessarily the area of functional disturbance; and it is this element of uncertainty which, as I have before indicated, renders conclusions as to exact localisation, from a purely clinical point of view, always more or less doubtful.

There is, of course, no difficulty in accounting for complete hemiplegia in connection with very limited lesions of a sudden character in

* *Op. cit.*, p. 121, *et seq.*

† *Chirurgie et Pitres*, *op. cit.*, p. 123.

‡ The reader is referred to the works, among others, of Cotard (*Atrophie Partielle du Cerveau*, 1868; and Landouzy (*Convulsions et Paralytiques liées aux Ménio-Encéphalites Fronto-Pariétales*, 1876) for many similar cases.

§ *Lésions du Centre Ovale*. Paris, 1877.

* *Lancet*, 1866, vol. i, p. 397.

† October 1877. *Progrès Médical*, December 20th, 1877.

the motor area, such as hæmorrhagic extravasation or a traumatic lesion. In time, however, the symptoms generally disappear, with the exception of those attributable to the part immediately destroyed or irritated. But there are on record a few cases in which, though the lesions were of a more chronic nature and apparently anatomically circumscribed, a more extensive paralysis has existed than can be accounted for by the amount of cortex visibly destroyed.

MM. Charcot and Pitres* give a case of right hemiplegia, without aphasia, but with facial paresis and late rigidity of the limbs. The lesion was situated in the lower two-thirds of the ascending parietal

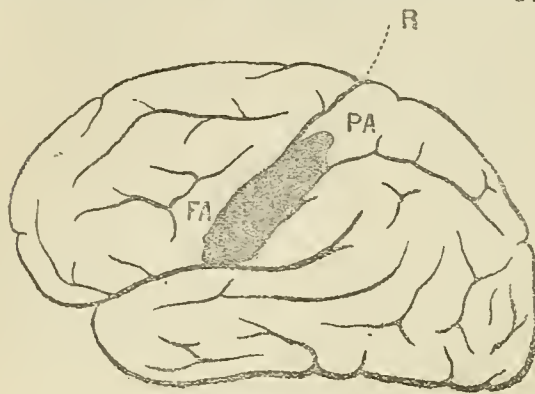


Fig. 13.

convolution of the left hemisphere (fig. 13). Secondary sclerosis existed in the motor tracts.

In another,† of right hemiplegia, without aphasia, and rigidity of the limbs (the paralysis alternating with unilateral convulsions), the chief lesion occupied the left paracentral lobule (fig. 14), which was

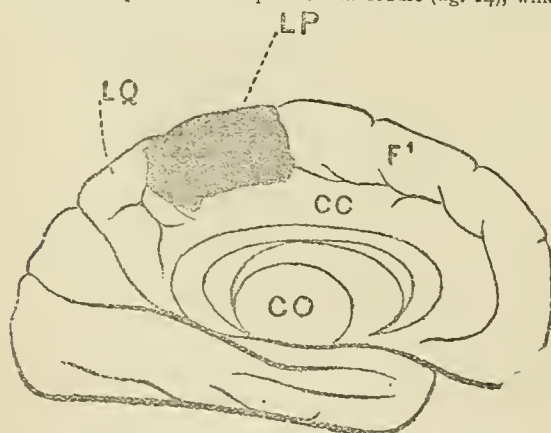


Fig. 14.

softened and atrophied. The lesion also involved the anterior third of the quadrilateral lobule and the upper extremity of the ascending frontal convolutions. In this case there were also other indications of degeneration in different parts of the hemispheres. Secondary degeneration of the motor tracts existed.

A similar case has been also reported by Pitres.‡

The first of these cases is the most difficult to account for, if the lesion were actually confined to the region indicated. The other two are more in accordance with the usual results of lesion situated at the upper extremity of the fissure of Rolando.

b. Partial Lesions and Monoplegia.—I will now proceed to lay before you some of the more carefully recorded clinical cases of limited lesions of the cortex with correspondingly limited paralysis or monoplegia of the movements governed by these parts respectively; and I hope to be able to show you that the situation of the various motor centres in the human brain closely corresponds with the position I have assigned to them on grounds of experiment and anatomical homology. But I would repeat that the observations on record are not yet sufficiently

numerous to establish by themselves, apart from the precise facts of physiological experiment, the exact situation and limits of these centres. With these facts, however, the case is altogether altered.

Unilateral Oculo-motor Monoplegia.—At the base of the first frontal, and extending partly into the second frontal convolution in the brain of the monkey, there is an area ([12] figs. 15 and 16) irritation of

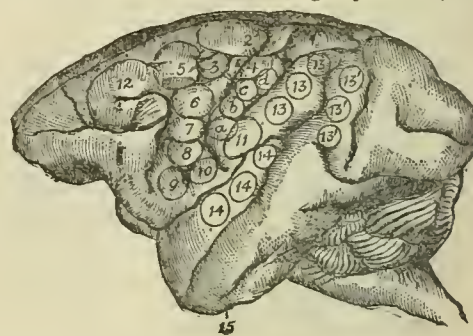


Fig. 15.

which causes elevation of the eyelids, dilatation of the pupil, conjugate deviation of the eyes, and turning of the head to the opposite side. I have placed these various reactions in the order in which they occur with slight and longer continued stimulation respectively. In the faintest form of stimulation, elevation of the eyelids is the only effect observable. Whether individual centres, incapable of sharp demarcation from each other for each of the movements indicated, exist here, has not been determined experimentally.

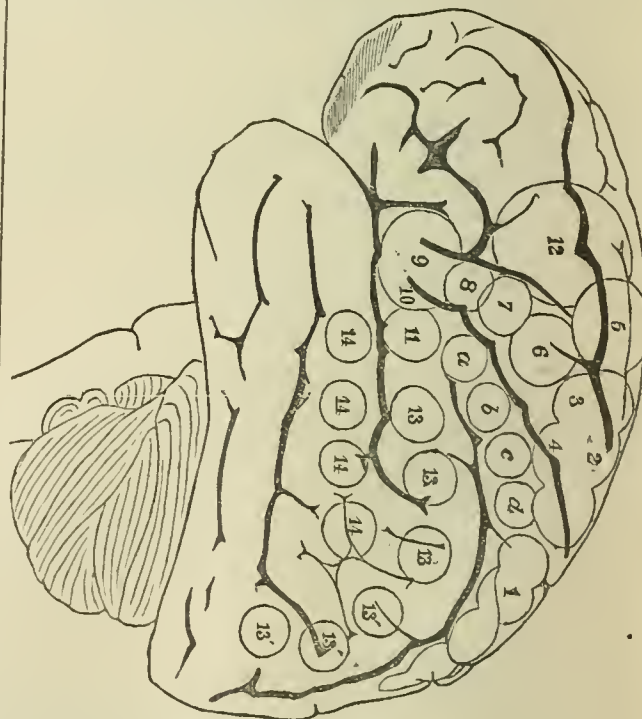


Fig. 16.

There are, however, clinical cases on record tending to show that there must be a distinct centre for the levator palpebræ superioris, inasmuch as paralysis may occur, limited to this muscle without affecting the other muscles supplied by the third nerve; an occurrence difficult to explain by peripheral affection of this nerve. Some such cases have been observed in connection with disease of the cortex, and attempts have been made, but not, I think, successful or in accordance with experimental lesions, to localise this centre in the angular gyrus.* If such a centre really exist, I should be inclined to look for it in the

* *Revue Mensuelle*, 1877, p. 191.

† *Op. cit.*, 1877, p. 193.

‡ *Le Progrès Médical*, September 19th, 1876.

* Landouzy, "Bépharoptose Cérébrale"; *Archiv. Gén. de Méd.*, August 1877.

region of which I am speaking. Still there are difficulties in the way; for affections of this region are not uncommon, and paralysis of the levator palpebræ superioris without other oculo-motor paralysis is not so, or at least has not been often observed. Hence, if the centre of this movement exist here, its escape from paralysis needs explanation. Whether this can be found in the intimate bilateral association of the oculo-motor nuclei or not, is a question on which, as we have so little to go on, I forbear at present to speculate further.

In the case, however, of the bilateral and antagonistic movements of the head and eyes, it would be natural to look for lateral distortion should the centre in one hemisphere be suddenly removed; and the distortion would be towards the side of lesion, owing to the unantagonised action of the centre which remains. This affords a sufficiently satisfactory explanation of the conjugate deviation of the head and eyes observed in the early stages of hemiplegia, whether of cortical or ganglionic origin.

Certain facts, however, exist tending to show that this lateral movement of the eyes may be paralysed singly, or thrown into spasm singly, constituting what may be termed unilateral oculo-motor monoplegia or monospasm. This, even in the absence of a necropsy, would strongly point to cortical lesion, or lesion of the medullary fibres between the centre and the corpus striatum. It is only in such conditions that dissociated paralysis or spasm finds a satisfactory explanation.

This form of paralysis or spasm is by no means common—I find only three cases on record—and the actual *post mortem* evidence is still more scanty. Two such cases have been recorded by Priestley Smith.* In one of these cases, the eyes were directed to the right, and the patient, though he possessed the convergent movements and power of accommodation, could not voluntarily move his eyes to the left. In the second, the eyes were also turned to the right, and inability to look to the left was also observed, as in the other.

Priestley Smith thinks that these cases are to be explained by either irritation of the opposite or destructive lesion on the same side of the centre I am describing. In this he is followed by Hughlings Jackson,† and with these views, I have to express myself as being in complete accordance. So far, they are perhaps speculative, as recovery took place in both cases.

The following case, however, related by Choupe,‡ which is quoted by Landouzy,§ supports this view by *post mortem* evidence. This was a case of a lad, aged 19, who showed symptoms of tubercular meningitis, in which, in addition to pain, vomiting, etc., the most remarkable symptom was a rotation of the head and eyes to the right. This could be overcome with moderate effort, but the head and eyes returned to their position when left to themselves. No other paralysis or contracture existed elsewhere. After death, a patch of disease, free from granulations and quite superficial, of the size of a franc piece, was found on the "superior part of the middle frontal convolution" in the left hemisphere. Other lesions were found in the superior and lateral part of the sphenoidal lobe of the right hemisphere, but, as will be subsequently shown, these cannot be regarded as much complicating the case. There was no other cerebral lesion. The exact situation of the lesion in the left hemisphere is not indicated more precisely than in the words quoted; but they may, I think, be taken in support of the theory that these special symptoms were due to irritative lesion of that which corresponds with the oculo-motor centre in the brain of the monkey.

Crural Monoplegia.—As there seems to be some misapprehension abroad in reference to the centres of movement of the hinder extremity, let me first call your attention to the facts of experiment. Irritation of the *postero-parietal* or *superior parietal lobule*—area 1—(fig. 15) causes flexion of the foot in the ankle, occasionally combined with flexion of the thigh on the pelvis, and extension forward of the leg as in the act of walking.

On the other hand, in my experiments on monkeys, stimulation of area 2 (fig. 15), a region which includes the upper extremity of the ascending frontal, as well as part of the ascending parietal, gave rise to more complex movements, the result of which was to bring the foot towards the middle line of the trunk, as if the animal were to scratch its abdomen or lay hold of something in this position. The area 3, near it, gave rise to movements of the tail. Below it (4), certain movements of the arm—viz., adduction and retraction—were excited.

It is a question by no means easy to answer *à priori*, how far the movements of the human leg can be compared with those of the leg-arm and foot-hand of the monkey; or what is the representative in man of the centre for the tail which, in the New World monkeys, plays the part of a hand. We must, therefore, be cautious in drawing

conclusions as to the exact position of the arm and leg centres in man from considerations merely of anatomical homology. And there is reason for exact and careful analysis of the movements which are affected, or more particularly affected, in any given case of crural monoplegia of cortical origin, for on this may depend the exact regional diagnosis.

Clinical evidence in favour of a distinct centre or centres for the leg, clearly differentiated from those of the arm, is not as yet very extensive. We have many cases on record in which the leg and arm have been paralysed together—brachio-crural monoplegia—an association easily accounted for by the close relation of the leg and arm centres to each other. Still, there are some cases in which the leg *only* has been paralysed; and in others, in which leg and arm have been ultimately conjointly affected, the paralysis has shown itself *first* in the leg. This latter fact has an important bearing on the question of a distinct leg-centre, and its exact situation. A few cases are on record of paralysis occurring in one or both legs from injury to the vertex in the parietal region; but we cannot exercise too much caution in the inferences we draw as to the seat of lesion in such cases. The researches of Duret* have shown that local and general spinal paralyses may result from bulbar and spinal lesions owing to sudden displacement downwards through the aqueduct of Sylvius of the cerebro-spinal fluid in consequence of blows on the head. A case in which, from the symptoms, this was evidently the mode of causation, is related by Guthrie.† A soldier at Waterloo was struck by a shot which caused depressed fracture of both parietal bones. On his recovering consciousness, he was found paralysed in both legs, and benumbed from the loins downwards. He recovered on being trephined ten days afterwards. It cannot be doubted that the paralysis in this case was spinal paraplegia, and easily accounted for in the manner demonstrated by Duret.

In some other cases, however, the lesion may have been cerebral; the fact of the paralysis being crossed would support this view. Hitzig‡ quotes from Löffler the following among others. A Danish corporal was struck by a shot at the *superior and posterior extremity of the left parietal bone*, close to the sagittal suture (overlying the postero-parietal lobule, see fig. 3). The right leg was immediately paralysed. The right arm became affected on the seventh day. On trephining, recovery took place—the arm first, and then the leg. This may fairly be taken as a cortical lesion, as the subsequent affection of the arm is in accordance with extension of softening to neighbouring centres; a feature so characteristic of cortical lesions. Another case of fracture of the "summit of the right parietal bone" by a shot was followed by paralysis of the left leg.

As cases of disease of the cortex with crural monoplegia, the following two (though they are not altogether precise) may be taken, quoted from Landouzy.§ One is reported by Becquerel, of paralysis limited to the left leg. The lesion in this case is described as being situated "at the upper part of the right hemisphere", consisting of granulations and adhesions (p. 211). Slight affections of the pia mater and subjacent cortex were, however, also observed in the left hemisphere. The second is recorded by Rendu. This was a case of paralysis of the right leg followed by paresis of the right arm, which gradually increased. In the *parietal convolutions* of the left hemisphere, *close to the longitudinal fissure*, was a zone of exudation and interstitial hemorrhages, affecting both the cortex and medullary substance to a considerable depth, but not extending to the basal ganglia. In the parietal convolution (exact position not stated) was found a caseous nodule of the size of a nut. It is, however, to be noted that the cerebral membranes generally in both hemispheres indicated signs of tubercular meningitis. Hence, the case is not quite free from complication.

I may here mention a case which, though one of tumour, has a considerable value in reference to the question before us. The particulars were privately communicated to me by Dr. Haddon of Manchester, and the question arose during life as to the exact locality of the tumour and the advisability of trephining. Though our diagnosis proved absolutely correct, the operation, for other reasons, was not performed. The patient began first to have tingling in the left leg, followed by paresis of this limb, gradually increasing, and continuing restricted to the left leg for five months. Then the left arm became weak. After occasional attacks of rigidity and twitching, the arm and leg became both completely paralysed. Shortly before death, signs of weakness showed themselves also in the right leg. After death, a tumour, three inches in diameter, was found growing from the dura mater, and pressing perpendicularly downwards on the region included in the *upper extremity*

* "Bilateral Deviations of the Eyes"; *Birmingham Medical Review*, 1875.

† "Ophthalmology in Relation to General Medicine"; *Lancet*, May 12th, p. 676.

‡ *Bulletin de la Soc. Anat.*, 1871, p. 380.

§ *Op. cit.*, p. 160.

* *Traumatismes Cérébraux*. Thèse (unpublished), 1878.

† Quoted by Wilks, *Guy's Hospital Reports*, 1866, p. 51.

‡ *Untersuchungen über das Gehirn*, 1874.

§ *Op. cit.*, p. 211-212.

of the *ascending frontal*, *ascending parietal*, and *postero-parietal* convolutions. The tumour had grown downwards as far as the floor of the lateral ventricle, compressing the brain-substance in its course. It also impinged on the other hemisphere. The point of origin of this tumour, and the mode of growth, warrant the conclusion that the paresis of the left leg, which was the first and for a long time the only motor symptom, was due to the affection of the cortex in the region where experiments in the monkey would lead us to localise the leg-centres.

I will mention, lastly, two cases reported by Bourneville, which, though not uncomplicated cases of crural monoplegia, yet deserve to be taken in consideration with the others. They might also be referred to as instances of partial hemiplegic epilepsy. The first of these* is quoted by Charcot and Pitres. This was the case of a girl, aged 18, who had been affected with infantile hemiplegia of the left side at the age of four. She was subject to epileptic attacks, beginning in the left leg, which was paralysed. There was no facial paralysis. After death, a patch of degeneration was found in the right hemisphere, occupying the upper half of the ascending frontal, the bases of the first and second frontal, the anterior part of the postero-parietal lobule, and the whole of the internal aspect of these regions (fig. 17). Secondary

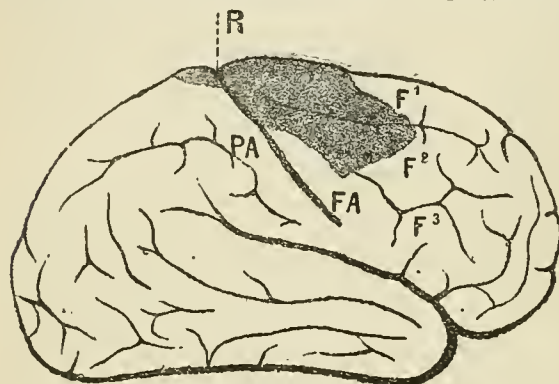


Fig. 17.

degeneration of the motor tracts of the spinal cord existed. The second case was a similar one of infantile hemiplegia, followed by partial epilepsy; the spasms being limited to the right leg, but gradually invading the right arm and the right side of the face. The position of the lesion, diagnosed during life, was the *upper extremity* of the (one *cen. in extent*) *ascending frontal and parietal convulsions*, and the internal surface corresponding, or paracentral lobule. This region was the seat of softening. No other lesion existed. In this case also, secondary degeneration was found in the right half of the spinal cord, in the postero-lateral column.

These cases, I think, suffice to prove that the lesions which have been described in connection with crural monoplegia very closely agree with the position of the centres for the movements of the leg in monkeys. In the absence of other cases of lesion serving to determine the exact position and extent of the leg-centre, M. Bourdon† has endeavoured to arrive at this by another method. The method he adopts is to examine the brain in cases of amputation or arrested development of the lower extremity, with the expectation of finding atrophy of the corresponding centre, in accordance with Luys' views. Whether these expectations are altogether justifiable may be questioned.

But, theoretical considerations apart, the practical difficulties in the way of a satisfactory solution of this problem are very great, and I do not think that, up to the present at least, they have been disposed of successfully. An important communication on this subject was recently presented to the Société de Biologie (January 5th, 1878) by M. Féré, well known for his valuable researches in cerebral topography. M. Féré shows that neither the method of ascertaining the existence of atrophy, by comparing the relative size of homologous convolutions in each hemisphere, nor that founded on the advance or recession of the fissure of Rolando (round which the motor centres are grouped) is reliable; inasmuch as in the perfectly normal brain there are great variations and want of symmetry in the convolutions and fissures in the two hemispheres, and there is no absolutely constant relation between the position of the fissure of Rolando and a certain cranial region, or in its position in the one hemisphere as compared with the other. Hence

the necessity of receiving all statements with regard to atrophy with extreme caution, unless substantiated by a thorough microscopical investigation of the parts said to be so affected.

With these considerations, I will now give the results of M. Bourdon's analysis of cases of amputation. In one of amputation of the thigh, thirty-five years before death, atrophy was said to exist at the upper extremity of the ascending frontal, at its junction with first frontal convolution of the opposite hemisphere. In a second, of amputation of the thigh, fifty-two years before death, atrophy was said to exist in exactly the same situation. In a third, of amputation of the thigh, twenty-one years before death, a linear depression was found interrupting the continuity of the second frontal convolution in the opposite hemisphere.

To these cases, which M. Bourdon quotes from M. Luys, a fourth is added, observed by M. Landouzy. This was a case of arrested development of the right leg at the age of eighteen months, death occurring at the age of forty-five. The left hemisphere was smaller than the right, and the fissures of Rolando were unsymmetrical. The left ascending parietal convolution appeared somewhat smaller than the same convolution in the right hemisphere. There was also asymmetry of the pons and medulla, the left side being the smaller.

None of these cases appear to have been investigated microscopically. If we regard them as satisfactory, which I think we are scarcely entitled to do, we do not find any more exact correspondence as regards the situation of the leg-centre, than in the cases of lesion already mentioned. I think, however, that, though the exact limits are not defined, the evidence points to a position closely in harmony with that defined in the brain of the monkey; and that the conclusion formed by M. Lucas-Championnière is well justified, viz., that, to expose the leg-centre, it is necessary to apply the crown of the trephine over the upper extremity of the fissure of Rolando.

[To be continued.]

CLINICAL OBSERVATIONS

ON A

FAILURE IN THE ANTISEPTIC MANAGEMENT OF A CASE OF EMPYEMA.

By JOHN DUNCAN,

Surgeon to the Royal Infirmary, Edinburgh.

GENTLEMEN,—On November 20th, 1877, Dr. Balfour sent to us for operation a patient who had been admitted to the medical house, suffering from empyema. The vicissitudes in her history since she came under our observation deserve your attentive consideration.

Four years ago, she had a severe attack of pleurisy, from which she never completely recovered; but she dates her present illness from exposure to cold six months before admission. Pus was three times drawn from the chest by means of a Bowditch's syringe while she was under Dr. Balfour's care; but the relief was only of temporary duration. On November 23rd, I made a free incision between the sixth and seventh ribs in the axillary line, and evacuated a quantity of pus, which my house-surgeon (Mr. Black), partly from measurement, estimated at more than three hundred ounces. Those of you who were present will remember the extraordinary force with which the matter was projected the moment the cavity was opened. For the next month, the progress of the case was all that could be desired. The temperature, which, before the operation, had varied between 99 deg. and 101 deg., fell to normal, and the highest reading recorded is 98.8 deg. The discharge rapidly diminished until only about a tablespoonful daily (probably less) of sero-purulent fluid came away by the drainage-tube.

On December 23rd, we dressed the wound under the spray from a new steam spray-producer, which we afterwards found had been discharging a carbolic solution of about one to a thousand, on account of the imperfect boring of the nozzle. You may recollect that I then speculated on the probable consequences, and it is certain that my fears were speedily realised. Next evening, the temperature stood at 100.6 deg.; and perhaps I cannot give you a more graphic description of the condition of affairs than by reading to you the morning and evening temperatures of the next few days.

	M.	E.
December 24th ...	98.4	100.6
" 25th ...	100.6	102.2
" 26th ...	100.8	103.2
" 27th ...	100.9	104.3
" 28th ...	102.4	102.4

* Gazette Médicale de Paris, December 1876.

† Recherches Cliniques sur les Centres Moteurs des Membres. Paris, 1877.

At the same time, the discharge at once became thickly purulent, and, in three days, had increased to fifteen ounces *per diem*.

I need not detain you with a further history of the case. It is the record of a struggle to perfect the drainage by elaborate washings out, by various forms of tubing, and by suction-apparatus. With it all we have only been partially successful. The patient is now doubtless recovering; but her wasted condition shows the drain upon her system made by the constant copious discharge and by the feverishness, which we have never been able entirely to subdue.

There are many points in the case to which I should like to draw your attention. I should like, for example, to compare with you the effects of great tension in this and other cases on inflammatory action and temperature, and to discuss the best methods of securing efficient drainage of these large cavities. But, for the present, I think it better to confine my remarks to one subject: the bearing of the case on Mr. Lister's method of treating wounds.

And, first, it appears to me to bear a remarkable testimony to the value of the method, and to the truth of the theory on which it is founded. Let us look at the facts. After a month of uninterrupted progress, we recognise a defect in our manipulations; are alarmed for the result, and have our fears speedily and very seriously confirmed. I cannot escape the conclusion that there was here a relationship of cause and effect, and, if so, it is a proof of the practical value of antiseptics more convincing than many records of successful cases which possibly may be paralleled under other modes of dressing. But, as if to make assurance doubly sure, on the same day, the same spray-producer was used while I excised a mamma; and in this patient also the signs of putrefaction were speedily apparent. It becomes impossible to suppose that mere coincidence could account for the double sequence. But I think our case carries us farther. Most surgeons admit that antiseptic dressings are perfectly wholesome and safe; but a curious variety of attitude is assumed with reference to the special advantages claimed for them, and the reason of their success. Some hold that carbolic acid acts by diminishing the vital activity of the textures; others that it alters, as smoking a ham does, the conditions favourable to the development of the bacteria of putrefaction. But, if it be admitted that the defective spray was, in the case before us, the cause of the evil results, what other hypothesis can be framed to account for it than that on which the antiseptic system is founded? How, for example, could the spray modify the vital actions or alter the developmental conditions of the parts within the thorax which it never reached? If bacteria and putridity came from within (and it is impossible to deny that sometimes it may be so), how could the pumping of a more or less carbolised spray outside the chest-wall affect their presence? Or, if the noxious agent came from without, what other constituent of the air than organic germs could be thus affected? In short, if the spray be of real value—and these cases seem to prove that it is so—the conclusion seems inevitable that putrescence is the chief of surgical evils; that it is the product of bacteria, and that, in the immense majority of cases, bacteria come from without.

But now, gentlemen, having looked at our case from one point of view as a striking illustration of the truth of the antiseptic system of surgery, I think we may also learn some lessons from it as an example of the failure of the system.

As a practical method, there can be no doubt that this is a weak point. Success depends on careful attention to a series of minute details, the failure of one of which vitiates the whole procedure. Like a chain, its strength is equal only to that of its weakest link. Under such circumstances, occasional mistakes are as certain to occur as occasional accidents on a railway; and, from the same causes, the deficiencies of our mechanical appliances, and especially the fallibility of the human agency concerned in the manipulations. I need hardly say that a thousand errors are no proof of the necessary falsity of the system. If, by other means, it be proved true, practical success or the reverse bears only on its application and applicability. But frequency of failure might necessitate its abandonment, or at least be a strong argument against its usefulness. It would necessitate abandonment if, in failure, the system proved injurious. It does so under certain circumstances. In compound fracture, if the injection be successful, the subsequent progress of the case is most remarkable in many ways, and singularly beautiful; if it fail, my experience is that the effect is very disastrous; and it is often a most difficult problem to determine whether or not to treat antiseptically when some hours have elapsed after the injury. But, in the vast majority of instances, no such question arises. If antiseptics do not prevent putrefaction, the worst that can be said of them is, that they are useless. Nay, I believe that, in some respects (I need not enter into details), they are absolutely beneficial to the patient, and are certainly advantageous in preserving the general amenity of the atmosphere.

But yet again, frequent failure might make antiseptics valueless in comparison with the cost, the labour, or the success of other and incompatible methods. I say incompatible, because, of course, whatever may be advantageously combined with this method ceases to be a rival to it. In this connection especially, the question of frequency arises. Men are not prone to publish their mistakes; but I believe that a statistic would be useful showing the frequency with which antiseptics fail in the hands of men of ordinary intelligence, who are determined to carry out the system on the basis of its fundamental hypothesis.

Here let me digress a little to point out to you certain difficulties which stand in the way of obtaining such a statistic. There is an indubitable difficulty in determining what are and what are not aseptic cases. There is a broad margin of doubtful ground which prejudice on this side or that is prone to arrogate to itself. Let us consider the grounds on which the distinction is to be made. It is evident that neither the general condition of the patient nor the healthiness of the wound can be accepted as criteria for such a comparison. That would simply beg the question. We must have distinct evidence that the discharges are or are not septic. Now, this is not so simple a matter as you would at first be inclined to suppose. The odour is not a reliable test, and for two reasons: one is that many aseptic cases, from chemical changes in sebaceous or other secretions, from reactions between these and the contents of the dressings, and from other causes, produce odours which, to say the least, are often exceedingly disagreeable; another is that the injurious products of putrescence, although frequently associated with disagreeable odours, do not themselves emit them, and are not their necessary concomitants. In five cases, I have failed during the past *semestre* to preserve wounds from putrescence by means of carbolic acid. In the case which affords the text for these observations, and in one other, there was no disagreeable odour whatever, although the discharge was very copious. In the mamma to which I have already referred, the most odorous butyric smell pervaded everything. In a fourth case, that horrible smell, which is attributed to indol, could not be prevented with the utmost care; and, in a fifth, yet another variety was unpleasantly perceptible. I feel tolerably certain that some odours indicate putrefaction, and I think it likely that education may do much to produce an appreciation of the differences which exist between them and others, just as it enables some men to tell with remarkable certainty the vintage of a first-growth claret. But I feel equally sure that putridity may produce its noxious results without thus manifesting its presence; and I frankly confess that, in a large proportion of our cases, I do not succeed in coming to a conclusion by the unaided sense of smell.

But you will say the microscope should enable you to put your mind at once at rest. To a certain extent, you are right; but it is not so easy as many of you might be inclined to think. There is a class of spontaneously moving bodies, in shape and appearance closely resembling bacteria, which occur, it seems to me, with equal frequency in discharges which, on other grounds, might be pronounced septic and aseptic. I think distinctions may be seen in their refraction, the character of their movements, and their uniformity of size; but I own to having at first received a shock to my beliefs in watching these bodies. I fancy, however, that we have in acetic acid a means of distinguishing them more definitely. I had heard that this method had been tried by others, and I have been pleased to find that, if you apply it to a slide on which vigorous bacteria from putrid water are disporting themselves, you only slowly arrest their movements; but, if you bring it into contact with the bodies of which I speak, they rapidly dissolve and disappear. I have not yet satisfied myself by a sufficient number of observations; but I believe this to be the case, and, if so, the microscope becomes a reliable test: only, however, negatively reliable. There are septic discharges in which you will find no bacteria. I have watched discharges daily in which they were abundant, and have frequently found that they diminish in size and number, and ultimately become completely invisible to the ordinary powers of the Hartnack's microscope. In our present patient, for example, it is only within the last few days that the field of view has not swarmed with moving rods. This is coincident in her with general improvement; and I think it corresponds usually with a return to health, a reacquisition by the tissues of that power whereby the multiplication of these low forms is prevented in them and in contact with them. But, however that may be, you will see that we cannot absolutely decide by means of the microscope between septic and aseptic cases. We must assist it by other means, of which doubtless there are many. Thus the presence of sulphuretted hydrogen may be detected by chemical measures or indicated by blackening of the protective. But it is not pathognomonic; it is not always present with bacteria, and it may be present when they are absent; and the same may be said of ammonia, on which some have laid great stress. In short, I suppose (at least until the law

against vivisection is improved away) that we have no certain, clear and easy test for the pyrogenous and phlogogenous products of the growth of bacteria, simply because we do not know them, but only their frequent concomitants.

Well, then, you can understand that, when I say it is desirable to have some idea of the frequency with which antiseptic treatment fails, I desiderate what is not easy of attainment. Having no absolute test, we attain certainty of asepticity only by ascertaining that the testimony of all the tests I have mentioned is coincident. Now, I do not think that the statistics which have been published fulfil this rigorous requirement. They have been used to show the general goodness of results under antiseptic management, and doubtless in that view they have a certain value of their own. And here let me say that the idea which appears to possess some men, that the questions which underlie the antiseptic method, or its value, can be at present determined by general and comparative statistics, seems to me curiously erroneous. In those confusingly able lectures of Dr. Burdon Sanderson lately published, much stress is laid on the abolition, in certain German clinics, of septicæmia and pyæmia. Such facts are of some value, I admit; but, when we consider the mass of septic cases that necessarily remains in every hospital, and the uncertainty, which I have just pointed out, as to the proportion of failures, it is evident that other factors (better drainage, greater cleanliness) have also been at work; and I will venture to add that antiseptic management, although I hope and believe it will enormously diminish mortality in the cases to which it is applicable, can never abolish the septic results of surgery. And so, on the other hand, for similar reasons, the demand (made, I think, by Mr. Holmes) to compare the statistics of eclectics and antiseptics can lead to no conclusion whatever, but only to confusion and error. The more limited inquiry which I suggest is, perhaps, more feasible and useful; and I hope, at some future time, to make some contribution to it. Meanwhile, I am not in a position to do so, because I have not myself invariably applied the rigid tests I have mentioned. I do not believe that the frequency of failure will be found to militate much against the usefulness of the antiseptic method. I feel assured (inasmuch as I know of only five cases in which I have not succeeded when I might fairly have hoped to succeed during the past six months) that the percentage of failures, taking into account certain dubious cases, is not greater than ten per cent.; and that, with more experience, I shall be able still farther to reduce it. There is nothing mysterious or difficult in the process; but, as I have said, it involves perpetual attention to minute details on the part, not only of the surgeon, but of his assistants; and a certain number of mistakes will, therefore, always occur, the probable proportion of which it would be well to ascertain both generally and for the varying sizes and kinds of wounds.

Hence arises also another interesting point of inquiry. To what extent may we class our failures under the heads avoidable and unavoidable? How much may be due to errors of manipulation? How much to other causes? We do not yet know whether, in the human subject, putrefaction may sometimes come from within. Most certainly, such a result must be exceedingly rare. But I have not myself the slightest doubt that there is great variation in the susceptibility to inoculation of different patients. We know, of course, that, according to the constitution of the patient and the character and locality of the lesion, the effects of the contact of putrescent material vary infinitely. In this empyema, we have seen much suffering result; in the excision of the mamma, none at all; and, in the abscess of the tibia, very little. But I think there is reason to believe that gross errors of management may sometimes be made with impunity; while, in other instances, the slightest flaw inevitably leads to putrescence; that, in short, the soil is sometimes so unfavourable, that many germs may fall upon it and die; while, in other cases, one will be sufficient to insure luxuriant growth of bacteria.

CASE OF ACUTE PHOSPHORUS-POISONING.

By W. T. MARTIN, M.D., Surgeon-Major.

R. G. B., AGED 31, servant, of active and moderately temperate habits, was admitted to the Royal Victoria Hospital, Netley, at 10.30 A.M. on December 18th, 1877. He stated that he had had liver disease in India seven years previously, when serving in the 66th Regiment; and that he had been ailing for about ten days. On admission, he was very weak, anxious, and depressed; appeared drowsy, but complained of sleeplessness. No spots were observed on the skin, which, with the conjunctivæ, was of a distinct yellow tinge. The tongue was coated with blackish fur; bowels constipated; belly tympanitic; abdomen

and right hypochondrium slightly painful on pressure; area of hepatic dulness not increased (diminished, if anything); and there was no vomiting. The condition of the respiratory system was normal; pulse 88, weak; temperature in the axilla 98 deg. He had passed urine. The case being regarded as one of blood-poisoning by bile, he was ordered pills containing calomel, scammony, and colocynth, a warm bath, turpentine fomentations, and milk diet. In the afternoon, the temperature rose to 99 deg.; but was not afterwards recorded, as, when visited in the evening, he was sleeping quietly.

December 19th, 10 A.M.—He was much worse, lying on his back in a state of stupor, with eyelids closed, pupils dilated, and insensible. The skin and conjunctivæ were more deeply jaundiced; the extremities were cold and bluish, and a rash (petechial?) was noticed on the forehead. The pulse was 84, very weak and intermittent; respirations 48, without stertor; temperature 98 deg. The tongue was coated with black fur; the lips covered with sordes; the breath was offensive; the belly was more tympanitic; the bowels were still constipated, and the bladder was slightly distended with urine, which, on withdrawal, was found to be of a smoky colour.* The patient's condition strongly reminded me of typhus. Four grains of calomel were placed on the tongue; hot turpentine fomentations were applied to the abdomen and legs; the nape of the neck and loins were freely blistered with the strong liquor ammoniæ. An enema of castor-oil, turpentine, and tincture of assafœtida brought away a considerable quantity of black pulqueous feculent matter. After a transient rally, during which he took some beef-tea and brandy, the stupor increased, and the patient died, without convulsions, at 5 P.M., having just previously vomited a quantity of black matter similar to what was afterwards found in the stomach.

The following particulars regarding the case prior to his admission to hospital have been kindly furnished by Surgeon-Major Watts.

"He applied to me on December 12th, complaining of being unable to retain anything on his stomach; that whatever he took in the way of food was at once vomited. His pulse was quiet; his tongue a little furred; and I was inclined to attribute the symptoms to the effects of spirit-drinking. I ordered him a sinapism to the epigastrium, and an effervescent mixture with hydrocyanic acid. On the 14th, he presented himself at the office, and had his medicine repeated; he still complained of vomiting after food, pain in the stomach, and of feeling altogether ill. On the morning of the 16th, I visited him in his room; he was complaining of great pain in the epigastrium, and his belly was somewhat tumid and a little tender on pressure. The vomiting, however, had subsided to a great extent, and he was able to retain food on his stomach. His pulse was a little accelerated; but there was no notable increase of temperature. On the morning of the 17th, I noticed considerable discoloration (brown to yellow tinge) of the skin; but the conjunctivæ were not yellow. The belly was tumid; tongue furred; pulse quiet. The bowels had been twice moved. He said he was better. I ordered infusion of gentian with bicarbonate of soda. In the evening, he was decidedly worse; and he complained much of thirst and insomnia. The following morning, he was moved into hospital."

A *post mortem* examination was made forty-three hours after death by Surgeon-Major Boileau, M.D., Assistant-Professor of Pathology, who has been so good as to contribute the following notes. The length of the body was sixty-six inches; the girth of the thorax thirty-five inches; weight 137 lbs. The integuments, especially those of the upper parts, were tinged yellow. There was considerable hypostatic congestion; slight rigor mortis. The pupils were dilated, and the conjunctivæ of a deep yellow. The abdomen was extremely tympanitic. There was a cicatrix on the body of the penis. The muscles were of a healthy red appearance. *Head*.—The pia mater was rather freely injected; the arachnoid presented a good deal of opacity; the brain-substance was firm and normal on section; the lateral ventricles contained a small quantity of serum. *Neck and Thorax*.—The mucous membranes of the epiglottis, larynx, trachea, and larger bronchi were of a deep purple colour. The œsophagus contained a very dark coloured tenacious fluid; its mucous membrane was pale, and presented some dark striae. The lungs were normal, except that, posteriorly, they were engorged with blood. The surface of the pericardium had an icteric tinge; its cavity contained about a drachm of fluid. The substance of the heart was fatty; its surface was pale and unhealthy looking. There were no clots in the cavities, only a small quantity of dark fluid blood in each. The endocardium of the left ventricle presented several ecchymotic patches. The valves were healthy. The weight of the heart was five thousand nine hundred and twenty grains; its bulk

* This urine was not tested; but some drawn from the bladder after death presented the same physical characters, and was found to contain blood. After boiling and filtration, Pettenkofer's and the nitric acid tests for bile were applied, with negative results.

twenty-three cubic inches; its specific gravity 1.019. *Abdomen*.—A quantity of pale yellow clear fluid was found in the peritoneal cavity. The stomach contained a black, thick, tenacious fluid, resembling a mixture of black-lead and coffee-grounds, and with a peculiar indescribable odour, suggestive of Worcestershire sauce. The mucous membrane was of a greyish cream-colour, soft, and quite devoid of vascularity and all appearance of erosion. It was smooth and felt somewhat thick, and presented a few small ill-defined dark spots. The intestines externally appeared perfectly healthy. They contained about a pint of fluid similar to that in the stomach. The mucous membrane of the whole tract was pale, soft, and devoid of vascularity. No evidence existed of congestion or inflammation. The liver was small, and did not project below the costal cartilages; its upper surface was extensively adherent to the diaphragm, and, on removal, was seen to be much roughened. Its posterior aspect presented some yellow orange-coloured patches, and others of an ecchymotic appearance were observed in the right lobe, anteriorly and inferiorly. The whole organ felt very soft and flexible. On section, the lobular structure of the viscus was very indistinct; the colour generally was a pale brown, with ill-defined patches of yellow orange. The gall-bladder was collapsed, and contained a small quantity of pale green tenacious fluid. The dimensions of the liver were 9.7 by 2.4 by 7 inches; the weight 2.7 lbs. The microscope revealed extreme fatty transformation of the whole organ; scarcely any hepatic cell-structure was to be seen. In the square hundredth part of an inch might be counted two hundred and fifty oil-globules, varying in size from the 1-1000th to the 1-5000th of an inch in diameter. The spleen was small; its substance was firm; normal on section. The kidneys were normal in size, and the calyces of both presented purplish ecchymotic patches, exactly resembling those noticed on the liver and in the heart.

Such were the clinical and pathological features of this case, which would have passed as one of "acute atrophy of the liver" had not rumours reached the authorities, just before the *post mortem* examination was made, that B. was supposed to have taken poison. In consequence, a coroner's inquest was held, and the following particulars were elicited. B. had of late been in a dejected state of mind, owing to a want of success in a love affair; he had been seen in possession of rat-poison (phosphorus paste) on December 11th, and, on that morning, he suddenly became ill, restless, excited, and wild looking, and said "he had done it"; although, when pressed, he would not tell what was the matter. A fellow-servant, fancying he had taken poison, administered a mustard emetic; but it was not until the following day (the 12th) that medical aid was sought, and then without any hint whatever being given as to the occurrences above mentioned. The county analyst reported that, in thirteen ounces of the contents of the small intestines, he estimated the presence of 2.8 grains of phosphorus, besides which there was a small quantity in the contents of the stomach. He found, moreover, that nearly the whole of the phosphorus obtained was present in the form of phosphorus acid, which accounted for the absence of luminosity.

REMARKS.—It will be noticed that the symptoms and pathological appearances observed in this case correspond in a most striking manner with those of "acute atrophy of the liver", as detailed by Murchison in the last edition of his work. In the absence of all suspicion, inquiry was only accidentally directed into the right channel, and the real nature of the case brought to light. I am tempted to publish it on account of its rarity and importance, corroborating, as it does, Wagner's opinion, quoted by Murchison, that many of the recorded instances of acute atrophy were probably cases of acute phosphorus-poisoning.

ON SOME POINTS IN THE CLINICAL HISTORY OF CHOREA.*

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[Concluded from page 449 of last number.]

III.—THE DISTRIBUTION OF HEMICHOREA.

HEMICHOREA is sometimes strictly unilateral in its distribution, affecting conspicuously the arm and the leg. Not unfrequently, however, the condition of the two legs is the same, when one arm only is affected.

1. The choreic movements may be confined to one arm, both legs being free from movement, although that in the arm is violent.

2. When the chorea affects considerably one arm and leg, although the other arm is quite free from movement, it will generally be found,

on close examination, that there is some degree of affection of the other leg.

3. Occasionally the affection of the other leg is as great as that of the leg of the side on which the arm is affected.

The distribution of the chorea may thus be unilateral in the arms, bilateral in the legs. No doubt the explanation is to be found in the anatomical relations which underlie the common joint action of the legs and separate use of the arms. The same thing may be occasionally noted in unilateral convulsions, in which, as in one case I have recorded (*Lancet*, Nov. 6th, 1875), the convulsions were the result of an unilateral meningeal hæmorrhage: the fits affected one arm and both legs equally, leaving the other arm free. This distribution of the spasm in hemichorea is thus quite in harmony with an unilateral pathological cause.

IV.—THE RELATION OF CHOREA TO CONVULSIVE SEIZURES.

If chorea depend on an unstable condition of the nerve-centres, it is not surprising to find that the affection is occasionally associated with other diseases which we ascribe to a similar instability of nerve-cells, such as hysterical and epileptoid seizures of various kinds, and even genuine epilepsy. The association is probably, in some cases, that of a common origin, in imperfect development or nutrition of the nerve-centres; but, in others, it would appear as though the morbid process, constituting the one affection, entailed an instability of tissue, which resulted in the other disorder.

The following cases illustrate the association, and one or two of them are of sufficient importance to deserve detailed narration. This applies especially to the first case, in which we have the choreoid movements, when most intense, assuming a convulsive character.

CASE IX. *Many Attacks of Choreæ: Mitral Constriction: During Choreæ, daily attacks of Loss of Consciousness, deviation of Head, and Spasm in Limbs, tonic and choreoid*.—Alice P., aged 15, was admitted into the National Hospital for Paralysis and Epilepsy, in October 1875, with general chorea, very violent in character. She had had repeated attacks of chorea during the preceding seven years, for which she had been in several hospitals. She had a very loud and marked mitral presystolic murmur. At first, the choreic movements were greater on the left side than on the right. The attack lasted four months, and then gradually lessened, almost, but not quite, ceasing for several months; and then increased so that, in October 1876, she was readmitted. There was then much mental obtuseness; the look was dull and heavy. When she was at rest in bed, the spasm was slight; on movement, it became extreme and general. The speech was difficult. The tongue was protruded and withdrawn slowly. Almost every day after her admission, she had a peculiar convulsive seizure. One of these I saw, and several were witnessed by Dr. Sturge, then resident medical officer, who made some careful notes of their character. The following is his account of one of these attacks. "Whilst I was listening to the heart, and just after she had spoken to me, she gave a sort of groan, became flushed and somewhat cyanotic; her head was turned to the right, the left sterno-mastoid being strongly contracted, and the eyes deviated to the right. There was a good deal of general movement of the limbs, at first choreic rather than convulsive. Thinking she was in pain, I asked her what was the matter, but got no answer, and she was apparently unconscious. The movements increased, and she had some degree of opisthotonos for a short time, and the character of the movements became more convulsive. The condition lasted three or four minutes and gradually went off, leaving her in a dull heavy state, and with more choreic movement than before the fit."

In another fit, which was watched from the commencement, the head again turned to the right. There was no initial pallor of face; but the countenance became more suffused than before the fit. The right arm and leg were affected with greatly increased choreic movements, while the left arm was stretched out rigidly from the side with the fingers extended, the thumb extended and drawn under the fingers. The rigidity was cataleptic in character; for the arm remained rigid wherever it was placed. The fit lasted about two minutes, and left the patient very stupid and dull. After she came to herself, the left arm was weaker than before.

A third fit, witnessed a day or two afterwards, differed in some respects from the others, although of the same general character. She was at first apparently more or less unconscious, without any movement. This condition lasted for half a minute, and then convulsion set in. The head was drawn violently to the right; the eyes remained open, the pupils rather dilated. There was some arching of the back, and tonic spasm in both arms and hands, that in the flexors preponderating, so that the elbow, wrist, and finger-joints were all strongly flexed and the arm was drawn up almost to a level with the shoulders. After a few seconds, the right arm became affected with a sort of choreic movement, the wrist and fingers remaining flexed. The left arm became

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

more flaccid, but remained motionless, while the right arm was affected with this movement. The legs were not specially noticed, but there was certainly not much movement in them. The jaws all the time were firmly closed. The whole condition lasted about two minutes, and she was left dull and stupid. The left arm did not seem weaker after the attack. A fortnight later, it was found that her left arm was weak, being helpless, although by great effort she could move it a little. Both legs were weak, but the left was weaker than the right.

Fits similar to these occurred daily for three weeks. Under hypodermic injection of morphia, the fits ceased, and the left arm became stronger, but the choreic movements in it were more considerable. She improved for a time, and then relapsed and remained stationary until placed on glycerine (half an ounce three times daily), which was followed by a very rapid and immediate improvement up to a certain point. Afterwards, with country air and zinc, all choreic movements ceased, and she has remained free from the disease: the mitral presystolic murmur persisting.

CASE X. A Single Epileptic Fit, succeeded a month afterwards by Hemichorea.—A lad aged 17 lately came under treatment for slight but characteristic hemichorea. The affection was of two months' duration, and was first discovered by objects being dropped in consequence of a "kind of catch in the hand". There was only a slight occasional twitch in the hand and on the right side of the face, but an attempt at movement was accompanied by characteristic choreic inco-ordination. The right hand was weaker than the left. (Dynamometer—right 31, left 41 kilogrammes). He had never had rheumatic fever, and there was no cardiac murmur. His mother said that about three or four years ago he had an illness, accompanied by twitchings, and occasioned by fright. Three months before the patient came under observation, and one month before the commencement of the hemichorea, he had an epileptic fit, which seemed, as far as could be ascertained, to have been general. He fell without warning, and during the fit he bit his tongue.

CASE XI. Left-sided Fits for six months, beginning in Foot: Slight Attack of General Chorea.—Eliza T., aged 22, had her first fit six months before she came under treatment. The catamenia had never appeared. She had had no food for two days before the first fit. It was the same in character as subsequent attacks. Each began with a sensation in the left foot; the left leg was then drawn up, the knee being flexed, with a series of jerks; and the foot drawn up over the other leg. The sensation then seemed to pass up her side to the top of the head, and then back again to her heart, where it caused a sort of pain, with which she lost consciousness and fell backwards. What happened during the further progress of the fit could not be ascertained; apparently some time elapsed before consciousness was recovered, and, on coming to herself, she invariably asked the time. Two or three such fits had occurred weekly. For a few weeks before admission, she had noticed a numb feeling in the left arm, and when holding an object the grasp would suddenly relax for a moment, and during about two weeks there had been involuntary movements in the arms. On admission, there were well marked choreic movements of the hands and head, slight but quite characteristic: spontaneous. There was very little inco-ordination on voluntary movement. There was no cardiac murmur. After her admission, the chorea gradually ceased in the course of six weeks and she had no fits, although she sometimes had a sensation, such as preceded a fit, commencing in the foot and passing up to the head. These sensations continued for some weeks after her discharge; but she had no severe fit during three months in which she continued to attend as an out-patient.

CASE XII. Fits from Infancy, chiefly left-sided: Chorea at Eleven, chiefly affecting Left Side.—A girl aged 16 came under treatment for epilepsy, which had existed from infancy. The first attack occurred at six months of age, during sleep. No history of rickets could be elicited. The attacks recurred at first every three months, afterwards more frequently. When eleven years of age, she had an attack of chorea, of three months' duration, succeeding an attack of some symptoms of rheumatic fever. The chorea began in the left side, and afterwards spread to the right, but throughout it was the more severe on the left side. During the chorea she had no fits, but they recommenced immediately after the cessation of the chorea. The fits were preceded by no warning; consciousness was lost. The left hand was clenched and put out, the right being kept still. The mouth was drawn towards the left. There was usually little or no jerking, but sometimes there was a good deal, and it was then confined to the left side. There was no evidence of heart-disease.

CASE XIII. Chorea, worse in the Right Side, followed immediately by Right-sided Convulsions.—George C., aged 12, presented himself with a history of a first attack of chorea, which had commenced six weeks before and had lasted a month, leaving, however, considerable weakness of the legs, that of the right being the greater, and some weakness

of the right arm. During the fortnight after the cessation of the chorea, he had had several right-sided convulsive attacks, with loss of consciousness. Under treatment, the fits became much less frequent, but did not cease; the muscular weakness, however, disappeared. The patient had no cardiac murmur, but the action of the heart was irregular.

CASE XIV. Chorea, followed by Fits, beginning in Left Foot; Mitral Constriction: Subsequently an Attack of Mania.—Kate B., aged 30, single, was admitted into the Hospital for Paralysis and Epilepsy, in January 1872, on account of convulsive seizures. A brother had died, aged 40, with what was probably general paralysis of the insane. A sister had an attack of chorea, and died four or five weeks afterwards from heart-disease. No relations had suffered from rheumatic fever. The patient herself had never suffered from rheumatic or scarlet fever. At thirteen years of age, she had a severe attack of chorea, which came on gradually without assignable cause, and lasted nine months. She believed that it affected both sides equally. Six months after the chorea, she had a fit; a second fit, three months after the first; and they had recurred at intervals of two or three months. The first and succeeding attacks were described by her as being of the same character. Each began with a sensation in the great toe of the left foot; this did not pass to the other toes, but ascended up the foot and leg to the trunk; as it was passing up the trunk, it commenced in the left forefinger. It did not go to the other fingers, but passed up the arm, and thence to the left side of the tongue, in which she had a sensation of tinglings. The sensation was accompanied by some movement of the part: a slow drawing up. She then lost consciousness, and could give no account of the subsequent phenomena. Her tongue, however, was often bitten, so it might be assumed there was severe clonic spasm. Sometimes she had a similar sensation in the right hand, passing up the arm to the side of the tongue, but never to the leg; and this sensation was never followed by loss of consciousness or any further convulsive manifestation. When she had a fit commencing in the left foot, the sensation never passed to the right side. Whilst in the hospital, she had several epileptiform fits, of which no detailed account could be obtained, and also several peculiar attacks of co-ordinated spasm, one or two of which I witnessed. They began with the same sensation as above described, and, when consciousness was lost, the eyes were turned up and to the left; the arms were not affected, but the legs were rigid and drawn up, and she tended to turn on to her back. Subsequently, the legs were drawn up and then pushed down regularly, so that, if she were on the floor, she would work, head foremost, from one side of the room to the other. The sensation preceding these attacks was slighter than that which preceded the severe seizures, and was accompanied by an unpleasant feeling at the back of the head and at the heart. The heart's apex was outside the left nipple, the impulse heaving and diffused, and at the apex was a loud rough, rather long, presystolic murmur, terminated by the first sound. The maximum point was the nipple-line; it was conducted in and out; heard on the mid axilla, but not at the angle of the scapula, where the heart-sounds were clear. The second sound was reduplicated; a brief interval occurred after the second part of the second sound, and before the presystolic murmur. The fits continued in spite of treatment, although slighter.

Nine months later, while taking ten minims of tincture of digitalis three times a day, her pulse sank to 48, and some mental symptoms came on. On omitting the digitalis, the pulse rose in twenty-four hours to 72, but the mental symptoms continued. She fancied persons were in the room speaking to her and she answered them, and asserted that she was the Holy Ghost; and under that delusion manifested some tendency to violence, so that it was necessary to send her to an asylum. She recovered after some months, and has since continued in nearly the same state, with occasional fits and the same evidence of organic heart-disease. The presystolic murmur, however, has been variable; sometimes not to be heard, sometimes distinct, as is not uncommon in cases of mitral constriction. There has been at no time albumen in the urine.

CASE XV. Severe General Chorea: Convulsive Seizures, commencing two years after the Cessation of the Chorea.—The patient was a married woman, thirty-two years of age. As far as could be ascertained, there was no family predisposition to nervous disease. She had had good health in early life. At nineteen years of age, she had an attack of chorea, occasioned by a fright, and sufficiently severe to cause her admission into a general hospital. The attack was a long one, lasting two years. Two years after the cessation of the chorea, and after some trouble, she had her first convulsive seizure. No fuller account of it could be obtained than that she was stiff and screamed, and bit her tongue. The fits continued from that time; and she said that of late, when a fit was coming on, objects looked strange to her and she saw sparks before her eyes, and sometimes an appearance as of smoke or

of "all kinds of colours". She was admitted into the hospital, and there had attacks in which, with apparent loss of consciousness, there was general tonic rigidity, but no clonic convulsion. Some of the attacks lasted several hours; others were shorter in duration, and seemed to be excited by a severe cough which troubled her.

CASE XVI. *Chorea; followed some years later by Hystero-epileptic Seizures.*—Ada S., when five years of age, was under treatment, at the Hospital for Paralysis and Epilepsy, for a well marked attack of chorea, from which she recovered, apparently completely. Three years after the chorea, when nine years of age, she became subject to "fits". These attacks commenced with jerking of the head and loss of power of speech for several hours. She was able during this time to hear quite well, but was unable to speak. Then she would suddenly lose consciousness, the jaws "champed", a noise was made in the throat, and "foam" collected in the mouth, almost choking her. There was no general convulsion. After the attack, she generally slept for some time. At one time, these attacks recurred regularly every three weeks. Under treatment, the fits became less frequent and slighter, but there was much jerking of the head after waking in the morning, lasting an hour or more. In the slighter fits she would suddenly fall, be unable to speak for a moment, and rigid; then she would scream, clutch with her hands, and foam at the mouth. There was no cardiac murmur.

CASE XVII. *Chorea in Early Life: Epilepsy in Middle Life.*—John L., aged 50. No history of family neuroses. At ten years of age, he had an attack of chorea; but he had no subsequent illness until forty years of age, when he had a fit, and since that time has had four or five fits a year, always occurring at night during sleep. He does not wake before the fit, but passes into severe clonic spasm, in which he bites his tongue. His heart is healthy to physical examination, but intermits occasionally, not regularly.

CASE XVIII. *Chorea in Early Life: Epilepsy Late in Life.*—A man aged 58 came under treatment for epilepsy of three years' duration. His family history was bad. His father had been intemperate, and his brother died from chronic alcoholic delirium. At sixteen years of age, he had an attack of chorea, of which he could only remember that it was a bad attack and affected both sides. When thirty-two, he had an attack of rheumatic fever, which had left no obvious valvular disease of heart. The commencement of the fits was attributed to insufficient food. They occurred frequently, three or four a week, both day and night, during waking and sleeping, without warning. Consciousness was lost in them, and his tongue was bitten.

These cases illustrate the frequent association of chorea and epilepsy, and they illustrate also several of the ways in which that association is produced. The possibility of a close connection between the two forms of spasmodic disorder is shown in the first case, in which paroxysmal convulsive seizures were part of a severe attack of chorea. In them, although the spasm was in part that of chorea, so intense as to assume a convulsive character, there was also loss of consciousness, and spasm of a tonic character preceding and accompanying the choreoid convulsion. The significance of this case is that the convulsion must be ascribed to the same morbid process as that which was the cause of the chorea.

In the next three cases, Cases X, XI, and XII, we have instances of chorea succeeding epileptoid seizures. In one, a single general convulsion occurred a month before hemichorea; in the other, unilateral fits for six months were succeeded by an attack of general chorea. In these two cases, then, there was no relation to be traced between the distribution of the chorea and that of the convulsion. In Case XII, however, epileptic attacks occurred during almost the whole of life, and were interrupted by an attack of chorea. Both chorea and convulsions agreed in their distribution, and were most severe on the left side. No significance can be attached to the cessation of the fits during the chorea, since it is common for attacks to cease during the course of any acute disease.

In the remaining cases, convulsive attacks succeeded chorea. In Case XIII, chorea, worse on the right side, was succeeded immediately by right-sided convulsions; and it is, therefore, highly probable that the two were the expression of the same morbid change. In Case XIV, permanent epilepsy of marked character succeeded, at intervals of six months, an attack of chorea; and in Case XV, convulsive seizures commenced two years after the termination of an attack of general chorea. In Case XVI, a similar, although rather more distant relationship, was to be observed; while in the last two cases, the interval between the chorea and the epilepsy was so long that probably the only significance is that of a common predisposition.

Several of these cases presented evidence of organic heart-disease; and it may be urged that in this there is a common condition, which

may be a cause of the two sets of symptoms. Heart-disease is common in chorea, and I have found that it is sufficiently frequent in epilepsy to make it probable that there is a causal connection between the two conditions. But such an explanation leaves unexplained the several cases in which no heart-disease could be discovered, and the remarkable association in several of the cases between the distribution of the chorea and the convulsive seizures, which point unmistakably to the origin of the two diseases in a common pathological state of the nerve-centres.

TWO UNCOMMON FORMS OF DISLOCATION.*

By A. W. MAYO ROBSON, M.R.C.S. & L.R.C.P. Lond.,

Demonstrator of Anatomy at the Leeds School of Medicine.

Of the two cases I am about to bring before your notice this evening, one is a dislocation of the jaw occurring during an attack of hysteria; the other is a dislocation of the sternal end of the clavicle upwards. The first is interesting on account of its cause; the second, on account of the rarity of the event.

I was called to see a woman aged 30, said to be in a fit. On arriving at the house, I found her in an hysterical attack, and ascertained that she had received news of a severe family trouble a few hours previously. A curious symptom in the case was, that she violently worked the jaw, and would persist in doing so despite being sharply spoken to and treated freely with cold water. Whilst I was observing her, the jaw suddenly became fixed widely open and displaced obliquely towards the right side. She instantly began to scream violently, and applied her hand to the injured part. I need scarcely say that the hysteria vanished as if by magic. I replaced the jaw in the usual manner, and applied a four-tailed bandage. After being put to bed, she had a return of the paroxysms, and again worked the jaw; but this time the bandage prevented displacement. The next day, beyond a considerable degree of stiffness, nothing abnormal was found. I then ascertained that she had never had dislocation of the jaw on any previous occasion. My reason for recording the case is, that I find no mention made of any similar one either in Hamilton on *Fractures and Dislocations* or in Holmes's, Erichsen's, or Bryant's works on surgery.

The history of the second case is as follows. I was called on September 27th, 1877, to see a grammar-school boy aged 15; the messenger telling me that he had put his shoulder out, having fallen undermost in a scrimmage at football. On arrival, I found him leaning towards the left side and supporting that arm with his right hand, any change of position giving great pain. On stripping the chest, the first sign that attracted my attention was a marked flattening of the left infraclavicular region. I then noticed a depression of the same shoulder; a very distinct prominence in front of the trachea just above the sternum; an absence of the natural projection of the left sternoclavicular articulation, its place being taken by a depression in which could be felt the empty sternal socket. The tendon of the left sternomastoid was stretched tensely like the string of a bow, and the distance between the shoulder-tip and the middle line was an inch less on the affected side than on the sound one. There was no dyspnoea, and an entire absence of crepitus. My diagnosis was dislocation of the sternal end of the clavicle upwards, as the only accidents which might have simulated it were separation of the epiphysis and fracture; the latter being negatived by the absence of crepitus, and the former by the fact that ossification does not take place in the epiphysis till the eighteenth or twentieth year. Reduction was easily effected by drawing the shoulders backwards and raising the arm. I tied a handkerchief round each arm near the shoulder, and looped them together firmly behind; placed a pad in the axilla; pressed the elbow inwards by means of a bandage round the chest, enclosing the arm; and supported the elbow and forearm in a sling; after which the symmetrical appearance of the chest returned. In the after-treatment, there was a great tendency for the sternal end of the clavicle to slip upwards, as the boy, being unusually active, always contrived to romp about and loosen the bandages as soon as his attendant's back was turned. Although the appliances were continued for three weeks, and a figure-of-eight bandage for a fortnight longer, yet at the end of that time the sternal end of the clavicle remained about half an inch above its usual level; but the functions of the limb seemed to be in no way impaired. The only cases I can find on record of a similar nature are four quoted by Malgaigne, two by Bryant, one by Dr. Rochester of Buffalo, and one by Hamilton.

* Read before the Leeds and West Riding Medico-Chirurgical Society.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

CLAPTON IDIOT ASYLUM.

CASES UNDER THE CARE OF DR. FLETCHER BEACH.

*Cases of Congenital Idiocy.**—A boy, aged 13, is both blind and deaf; he is very thin and anæsthetic; he is not epileptic, and presents no permanent muscular contractions. Automatic movements of the head and neck are almost constant, the head being bent over to each shoulder alternately. These cases are usually of very low type. Many similar cases have come under observation in this asylum, and some have improved under the method of training adopted; the present case, however, appears perfectly incapable of any improvement.

Another boy, who is almost deaf, presents in a marked degree the V-shaped high vaulted palate, which was pointed out by Dr. Langdon Down as commonly met with in cases of congenital idiocy. His speech is somewhat indistinct, but he can read and write well, can add up a few numbers, and knows all the colours. He works as a shoemaker, and has made fair progress. A girl, a congenital idiot, presents marked signs of congenital syphilis; she is almost blind, as the result of iritis and interstitial keratitis; she is almost completely deaf, and the nasal bones are destroyed; the teeth, however, do not present the characteristic shape and markings. This is the only case, among several hundred examples of idiots that have come under observation in this asylum, where distinct signs of inherited syphilis have been found. Experience shows that inherited syphilis is but rarely met with in idiots.

Diagnosis of Idiocy in Early Life.—Dr. Beach remarked that the infant idiot is unable in many cases to support the head, which hangs back in the mother's arms; there is inability of the spine to support the body; there are muscular flaccidity, and difficulty in swallowing the milk drawn from the breast; inability to notice objects, and to follow them with the eyes if they move; no notice is taken of sounds, and the child is voiceless. Later on, we compare the child's mental and physical condition with that of other children of the same age. We notice whether the fontanelles are closed; whether the head is too large, too small, or deformed; whether the palate is highly arched (a V-shaped palate, as before mentioned, being a characteristic of congenital idiocy); whether there is ability or not to grasp objects with the hands, idiots of low type being unable to do so. In these cases there will be found, too, a flow of saliva from the mouth; the fingers are flaccid and moistened with saliva; there is inability to co-ordinate the muscles; feebleness of circulation is evidenced by cold extremities; often there are epilepsy and paralysis. In cases of a higher type, although some of these points will be absent, yet the simplest rudiments of knowledge will be unattainable in the ordinary way. These children are banded about from school to school, ultimately, if fortunate enough, finding a home in an idiot asylum.

Hydrocephalic Idiocy.—A fairly intelligent boy, aged 16, is the subject of chronic hydrocephalus. The head is manifestly too large, its circumference is twenty-five inches and a half; the skull is completely ossified, but the position of the anterior fontanelle is evident. The head is less globular than in infantile cases of hydrocephalus, but is enlarged in all its diameters, and is quite devoid of squareness; there is marked increase of the distance between the eyes. His circulation is very feeble, as evidenced by blueness of the extremities and duskiness of the countenance. He has no power for any industrial occupation. In school he reads words of three letters, but cannot write; he seems to have difficulty in holding the pen; he adds up to twenty, knows all the colours, and squares and oblongs.

Hypertrophic Idiocy.—A boy aged 9 presents the somewhat rare condition of so-called "hypertrophy of the brain". He is an epileptic idiot; he is able to walk, but his gait is tottering. There is a marked prominence of the central part of each half of the frontal bone; on the right side this bulging is continued round to the fronto-temporal suture, on the left side it is less marked. The general line of the forehead is somewhat flat, thus markedly differing from the rounded temples usually met with in hydrocephalus; ossification of the skull is complete, and

no mark is left indicating the site of the anterior fontanelle. The general contour of the skull is symmetrical, the palate is vaulted, and the circulation is very feeble. Mentally, he is very dull; this appears to be due to his frequent epileptic fits. In a similar case, where necropsy proved the diagnosis, the intellect was fair, but there was no epilepsy. In the school, he has made very little progress; he knows only two letters and cannot write; he knows all the colours. Contrasting the hydrocephalic case with that of hypertrophy, it was pointed out that, in the former, there is bulging outwards of the temples, which is absent in the case of hypertrophy; in hydrocephalus, too, the distance between the eyes is increased. In cases of hypertrophy, there are prominences on the forehead above the superciliary ridges, and the circumference of the head does not increase from the base of the skull upwards. In a case of hypertrophy of the brain, in a boy aged 16, the encephalon weighed sixty-two ounces, the white matter was much increased in amount, and, on microscopical examination, Dr. Beach found an uniform granular appearance, large numbers of leucocytes, which had evidently escaped from the vessels, these being very much more numerous than in the normal brain.

Microcephalic Idiocy.—According to the definition laid down by Dr. Ireland, all cases in which the head measures less than seventeen inches in circumference should be considered microcephalic. In a case under observation, the circumference of the head measures sixteen and a half inches, the head is very narrow from ear to ear, and prognathism is well marked (*i.e.*, the forehead is shaped like the ape's; the facial plane has a decided slope backwards, instead of being vertical as in the normal head). There is no patency of the fontanelles and the sutures are closed. There is permanent contraction of the limbs, so that the child cannot stand or use his arms; the contraction is a permanent flexion, and is increased by any attempt at passive movement. He makes his wants known, and can recognise those around him; the case appears capable of some improvement.

A second case is that of a child aged $3\frac{1}{2}$, the circumference of the head measuring fourteen inches and a half. The head is in every respect very small; the forehead is extremely narrow, with a considerable slope upwards and backwards; the sutures are closed, and there is no patency of the fontanelles. The right arm is permanently contracted, and there is much muscular rigidity in all the body. The child cannot stand, and leads a purely vegetative life. The eyes frequently lose their parallelism, each eye moving separately; there is no permanent strabismus; the optic nerves of both eyes are atrophied.

Such cases may be diagnosed at the time of birth or soon afterwards, by comparing the head with that of a healthy child of the same age. The causation of this condition is somewhat obscure: by some it is supposed that the condition is due to premature ossification of the skull, hindering the growth of the brain. Dr. Beach has found some cases of microcephalic idiocy capable of much improvement, the amount of possible improvement being limited no doubt by the size and quality of the brain. In the Lancaster Idiot Asylum, there is a microcephalic idiot who is able to articulate a few monosyllabic words, can match colours, makes attempts at writing on a slate, and joins in the drilling exercises of the children.

Cretinism: Sporadic Form.—A boy aged 11 presents cretinism in a well marked form. He is of very stunted growth, being only thirty-three inches in height; his belly is very large and prominent, due principally to the development of subcutaneous fat; and the lumbar spine is arched forward, so as to preserve equilibrium in standing. His skin is mottled, of a dirty-brownish colour, and very harsh; his hands and feet are large, out of all proportion to his body. He can walk and talk, but his mental state is very passive; he is clean in his habits. His head measures nineteen inches and a half in circumference, and is flattened at the top; his nose is pug-shaped and flattened; the distance between the eyes is exaggerated; his lips are thick, and the bony palate is very flat. His neck appears short and very fat; there is absence of the thyroid gland, the thyroid cartilage and trachea being plainly felt beneath the skin. On each side of the trachea there is an egg-shaped swelling, extending backwards in the posterior triangles of the neck.

On the subject of cretinism, Dr. Beach remarked that the cause of this condition as it occurs in England is obscure. In some cases, there has been marked intemperance on the part of the father, but this is not universally the case. In three cases, in which the brain was examined by Dr. Beach, there was found to be coarseness of the convolutions, the cortical matter was thicker than normal, the nerve-cells were surrounded by larger spaces than normal, and in some no communication could be traced between the pyramidal corpuscles. The brain-structure, in fact, was very low in type, somewhat resembling that of certain of the lower animals.

In endemic cretinism, there is nearly always a goitre, and occa-

* Under this heading are included cases of microcephalic and hydrocephalic idiocy, cretins, etc.

sionally the same is seen in sporadic cretinism, but it is rare; and in those cases which, up to the present time, have been observed, the absence of the thyroid gland and the presence of pigeon-shaped fatty swellings in the posterior triangles of the neck have been almost universally observed. Writers on endemic cretinism have mentioned several causes, among which vitiated atmosphere, bad ventilation, want of sunlight, insufficient food, and excess of lime in the water may be noticed. Professor Virchow says that the primary defect is a premature synostosis of the two parts of the sphenoid bone together and with the basilar process.

Epilepsy in Idiots.—Epilepsy is of extremely common occurrence among the patients, and often presents many curious phenomena. A boy aged 12 is liable to sudden seizures as follows. He is conscious when an attack is coming on; he says he feels poorly, and complains of a pain in his head; he then becomes unconscious, jumps out of bed with a loud cry, wanders about the ward in a purposeless manner, with jactitation of his arms; he then places both hands upon the abdomen and rubs it violently. The whole is over within one minute. After the fit, he turns very pale, but there is no general convulsion of the limbs. After an attack, he shows strong sensual propensities.

An idiot of low type, now aged 11, has frequently had as many as twenty fits in a day. His intellect has gradually deteriorated, so that now his speech is limited to the words "stick" and "toss".

Paralysis following Epilepsy in an Idiot.—A boy, a congenital idiot, was able to run about till three months ago; then, without known cause, a series of strong epileptic convulsions occurred on and off for three days. This left him powerless in the left arm and leg, but he soon partially recovered. Three days ago, a strong convulsion occurred, and left him in his present condition. He can just walk with help in a tottering manner. His left arm is practically useless, and is the seat of constant spasmodic action of the flexors. On attempting to take hold of an object, he brings his arm towards it with a series of jerks, and often misses the object as if he did not know exactly where it was; but, after several unsuccessful efforts, he gets his hand to the object and seizes it. There is general trembling of the body, and his trunk leans over to the left side; there is also marked lateral oscillation of the head.

Children who have lost their mental powers, in consequence of epilepsy, are often found to improve under medical and physical treatment. In some cases, improvement follows to such an extent as to enable them to work in the house, and in other instances even to gain their own livelihood in the world. The principles of treatment adopted are: an unstimulating diet, a course of gymnastics, warm clothing; and, medically, bromide of potassium in doses of fifteen to thirty grains three times a day, according to the circumstances of the case and the age of the child. As the fits diminish in number and severity, the dose of bromide is diminished, but is still continued in diminished doses for months or years.

Imbeciles.—The term imbecility is generally used to denote a less degree of mental incapacity than that which is found in idiocy. It would be well to abolish the term idiocy and to use the term imbecility only, cases being divided primarily into congenital and acquired.

A girl aged 14 is the child of an excitable and intemperate father. A maternal uncle is epileptic. She had a few fits at the time of dentition, but appeared well till eight years of age, when she fell on her head from a swing. Epileptic fits followed, and continued for six months, when she was admitted into the asylum, now three years ago. Much mental impairment resulted, so that on admission she was sullen, obstinate, and totally ignorant. At the present time, she can read, write, and act as a housemaid; the fits ceased after two months of treatment.

Another case is that of a boy aged 16, whose father is intemperate and mother consumptive. He appeared healthy till six years of age, when he was kicked in the back; fits followed for twelve months. When admitted, he was very dull and slow. The fits have now left him. He can read and write, and is an excellent shoemaker.

J. M., aged 16, with a strong history of consumption on the mother's side, whose mother, brothers, and sisters are very "nervous", was born perfectly right. As a boy, he was somewhat soft-hearted, with a tendency to cry when spoken to harshly. As he grew up, he was employed as a page in several places. In the last, he was much teased by his fellow-servants, who were fond of playing practical jokes upon him. One of these very much frightened him, and as a result he became lost and dazed, his intellect being much impaired. When admitted, three years ago, he was very stupid and knew absolutely nothing. He has to a great extent recovered, though he is subject every now and then to recurrences of his former state. On these occasions, he will remain for a week together quite apathetic and unable to do his work as a tailor, a trade which he has learnt since his residence in the asylum. Gradually recovering, he resumes his work as before. He has made good

progress in the school, but, though he plays cricket and joins in games with the other boys, he does not enter into them with as much zest and spirit as they do. Should these recurrent attacks cease, there is every probability of his earning his livelihood in the world.

Dr. Beach remarked that, in the causation of idiocy, heredity plays a great part. Idiots are frequently born in families in whom there is a neurotic tendency, evidenced by insanity, epilepsy, etc., in the parents, brothers, or sisters of the patient. Consanguineous marriages and syphilis do not play so great a part as might be supposed. Shocks, frights, and anxiety to the mother during pregnancy, are very common causes. Intemperance of the parents indirectly plays a great part in its production, the result being a child with a weak brain, easily upset by slight causes. Some children are born with all their faculties, but, as the result of blows or falls on the head, fevers, starvation, etc., become imbeciles. In these a neurotic history is often met with; the tendency, however, not being sufficiently strong to produce a congenital idiot. The pathology of idiocy has not yet received much attention, but it is being investigated at Clapton.

Treatment.—A combination of medical, physical, moral, and intellectual treatment must be employed, the basis of all being medical. Herbert Spencer, in his work on *Education*, dilates on the last three; but the medical, in the cases of idiots and imbeciles, is the most important of all. The body must be kept in as perfect a state of health as possible; the diet should be liberal; the apartments in which the patient lives well ventilated, and the residence in a healthy situation. As much out-door exercise as possible should be obtained, and any ailment from which the patient may suffer should receive immediate attention. The physical treatment should commence with the simplest movements possible; and, to overcome the want of co-ordinating power, more complicated movements being afterwards gone through with the aid of music. His moral education must not be neglected. He has to learn that to do right will meet with a reward, to do wrong with punishment, which again is to be effected by moral means. The basis of the intellectual treatment must be objective. The concrete, not the abstract, must be taught. The patient must learn to recognise the form and qualities of objects by touch; colour, size, and shape by sight; the varieties of sound which impinge upon the ear, and his taste and smell, must be educated. He must be taught to dress and undress himself; to use his spoon, knife, and fork; and his speech must be improved by a course of tongue gymnastics, his well known faculty of imitation being utilised to the fullest extent. He should be taught the value of money, and to buy and sell. He should learn carpentering, gardening, or farming operations, tailoring or shoemaking, according to his class in life, care being taken that plenty of amusement is provided.

LONDON HOSPITAL.

TRAUMATIC ABSCESS OF THE LIVER: PUNCTURE: IRRIGATION OF THE ABSCESS-CAVITY: RECOVERY: REMARKS.

(Under the care of Dr. STEPHEN MACKENZIE.)

S. S., AGED 39, was admitted on August 4th, 1876. The patient had led a seafaring life for twenty-six years, voyaging mostly to the East and West Indies and China. He had never suffered from the effects of heat, and had never had dysentery, ague, or fever. In fact, he had always enjoyed exceedingly good health, and had had no illness until the present. About the middle of June 1876, he had a fall down the vessel's hold, a distance of about twenty-five feet. It would appear that he struck his chest in the fall, and, when he was picked up, he had pain and soreness over the right side of the chest. He also injured his left leg. In a week's time, however, he was at work again, and remained in apparently good health until a week previous to admission, when, on rising after sleeping, he felt a sharp pain at the lower margin of his right ribs. This pain caused him to look at the part, when he noticed a swelling, which was then very slight, but which gradually increased until admission. He had no rigor from the time of his injury up to the date of admission.

On admission, a globular fluctuating tumour, about the size of an orange, was found in the right hypochondrium. A small trocar and cannula were introduced into the swelling, and gave exit to a little thick healthy pus. An incision was then made into the tumour, and a little more pus came away.

The patient was transferred to my care on August 12th, when I made the following note:—"A bulging tumour in the right hypochondrium, with an incision at its most prominent point, which is immediately below the margin of the ribs. The tumour is dull on percussion, and continuous with the liver-dulness. The upper border of the latter reaches to the lower border of the fifth rib above, to the eighth rib in

the axilla, and to the ninth rib posteriorly. The lower limit cannot be accurately defined, owing to tenderness in this situation; but it appears from palpation to reach some little distance below the margin of the ribs. The tenderness extends to the ensiform cartilage, where the right lobe of the liver appears to end. A large vein is ramifying over the right side of the chest. No abnormal signs in the chest; no distension of the abdomen; no ascites; no enlargement of the spleen; no jaundice; no œdema of the feet. The patient is a very intelligent healthy looking man with dark sunburnt skin."

August 21st.—There had been a pretty free discharge of "laudable" pus since the last note; on one or two occasions, small lumps of greenish colour had come away. The wound was washed out morning and evening with tincture of iodine freely diluted. He had at first pain and tenderness over the liver, and a pain or stitch caught him on this side when he took a deep breath. These had now disappeared. He had complained of headaches, and had had nausea, but no vomiting. His temperature to-day (morning) was 101.5 deg. Fahr.; but, on the morning of the 18th, it was 104 deg. His tongue was large, coated, and slightly indented by the teeth. His appetite had not been good. His bowels had not acted since the evening of the 18th; then his motions were black and fluid.

September 4th.—There was a free discharge from the wound. The patient shivered and his teeth chattered last night at ten o'clock. His temperature rose to 100.5 deg. (it had been between 99 and 100 deg. the two preceding nights). At twelve o'clock, he began to sweat, and, after this, he felt much relieved. No changes could be detected in the thorax; no cough; no expectoration.

September 13th.—He had shivering again last night, but no chattering of the teeth. He slept pretty well. *Râles* were heard over the lung bordering on the liver. He had no pain. There was free discharge from the wound. The temperature was fluctuating, with evening exacerbations averaging 102.5 deg.; morning remissions to about 99 deg.

September 16th.—He had no more shivering. He complained to-day of great pain at the lower part of the right chest, in the vicinity of the wound; it was most severe on deep inspiration.

October 4th.—There was a free discharge every day from the wound. His appetite was pretty good. During the last few days, he had complained of severe shooting pain passing from the scrobiculus cordis, round the right side to the back. There was no friction-sound or other symptom of pleurisy; but *râles* were to be heard in the lung, at the upper hepatic border.

October 9th.—There was soft diffused swelling opposite the lower ribs, the central point of which was about five inches external to the aperture in the hypochondrium. The swelling was not circumscribed, and there was no fluctuation to be detected; but the skin over it was slightly red. He had great pain yesterday, which, he said, almost prevented him from breathing. The large vein in the axilla previously noted was more prominent.

October 20th.—There was free discharge from the wound. He vomited frequently during the night. On about the 4th instant, blood was noticed in his urine. There was no assignable cause for it. He had no œdema or pain in the loins. His temperature about this time was, perhaps irregularly, increased. The blood had now disappeared, without more marked symptoms than ushered in its advent.

November 3rd.—The patient looked and expressed himself as much better. His temperature had been normal for a fortnight. There was still a small sinus discharging a little pus daily. The abscess-cavity was very small; only a drachm or so of fluid could be injected. There was no increase of hepatic dulness, but there was still a slight tenderness over the lower ribs.

December 8th.—He was up and about. He had no pain now, except a little after tea; his dinner did not cause him any pain. Hepatic dulness was bounded above by the sixth rib in the right mammary line, by the eighth rib in the axilla, by the tenth rib in the dorsal region. Below, the dulness did not extend below the lower margin of the ribs. There was still slight tenderness in the right hypochondrium. He was discharged.

REMARKS.—Traumatic abscess of the liver is very rare, the immunity of the liver from injury being generally attributed to the effectual protection afforded by the ribs. Maclean only mentions one case within his own experience; Murchison does not mention a single case under his own observation; Budd quotes a case of Andral's (the only one out of sixty-two collected cases of hepatic abscess), but does not record a case of his own. The treatment was rational and effective. The abscess was first emptied, and its sac kept antiseptic and made to contract by irrigating the cavity with diluted iodine solution. The patient had a narrow escape, however. He had an attack of diaphragmatic pleurisy, and, later, mild septicæmia.

WEST LONDON HOSPITAL.

IMPASSABLE TRAUMATIC STRICTURE OF THE URETHRA; BOUTONNIÈRE OPERATION; RECOVERY.

(Under the care of Mr. TEEVAN.)

DAVID B., a ship's steward aged 50, was admitted into the hospital April 9th, 1877. From notes taken by Mr. R. Cumming, the House Surgeon, it appeared that, five years ago, the patient was kicked in the perinæum by a man wearing heavy sea-boots. He did not experience any pain at the time, nor was there any bleeding; but two months afterwards, a hard lump, about the size of a pigeon's egg, came in the perinæum. The stream of urine became twisted, and passed with difficulty, and he frequently had shivering fits. The lump did not go away; and two months later, both testicles began to swell, accompanied by much pain. He then came to England, and for four months remained in bed, poulticing the parts with much benefit. Shortly afterwards, he put himself under Mr. Teevan's care. At first, no instrument could be passed; but after a time, a small one was introduced, and the stricture gradually dilated to No. 18 (French), when he left for a voyage to the West Indies. He remained so well, that on his return, he immediately went for another voyage to the previous destination. On his way back, he experienced much pain and difficulty in micturating, and passed clots of blood. He, however, started on a third voyage; and during it the lump in the perinæum broke, discharged, and healed up again. This happened three or four times; and on each occasion, urine escaped from the opening.

When the patient was admitted, he was in fair health but much depressed. He could only pass his urine in drops by dint of much straining. In the perinæum, there was a mass of induration of stony hardness, as large as a hen's egg. The urine contained some phosphates, but no albumen or sugar, and its specific gravity was 1025. Considering that no instrument, soft or metal, could be passed, and that the stricture was of traumatic origin, Mr. Teevan determined to perform the boutonnière operation.

On April 17th, at 3 P.M., the patient was put under the influence of ether by Mr. T. G. Alderton, and Mr. Teevan tried to pass the smallest silver catheter into the bladder, but failed. He then introduced a full-sized straight staff, with a groove in it, as far as it would go, and opened the urethra on its point. An attempt was now made to insinuate different bougies through the stricture, and one was at last passed apparently into the bladder. Its position was then demonstrated by sliding a very fine metal catheter, open at both ends, over it, and withdrawing some urine. The stricture was now divided by running a tenotome along the groove in the metal tube, and the vesical half of the elastic catheter, described in the number for September 30th, 1876, of the BRITISH MEDICAL JOURNAL, having been slipped over the metal tube into the bladder, the penile half was passed down into the wound and screwed on to the vesical portion. The patency of the urethra having been demonstrated, the catheter was withdrawn. At 6 P.M. the same day, there was some bleeding, which was stopped by the application of ice. Temperature 99.4 deg. Two hours later, the patient was sick twice and had a little shivering.

April 18th, 10 A.M.—Had a bad night. The urine passed both ways. The tongue was covered with a dirty yellow fur. Temperature 99.8 deg. At 12.30 P.M., he had a rigor. Pulse 140; temperature 101.6 deg.

April 19th.—Had a bad night, and was feeling low.

April 20th.—Had a good night, and felt much better. Temperature 98.4 deg. No. 18 was passed from the wound into the bladder.

April 24th.—Had slept well. All urine came by the wound, which looked healthy. No. 15 was introduced.

May 1st.—He was going on well. A No. 17 catheter was passed; the wound was healing. The treatment adopted was to introduce a catheter twice a week; and by June 1st, the wound was so reduced in size that the patient was taught to draw off all his urine with a No. 16 catheter. He was able to do so efficiently, and the wound was nearly healed on June 30th, when he left the hospital at his own request. He paid one visit as an out-patient, and then discontinued his attendance. When he left, his urine was clear, acid, free from albumen, and its specific gravity 1020.

Mr. Teevan observed that traumatic strictures differed so greatly in character from organic ones, that they might be well placed in a separate category by themselves. The treatment which might be thoroughly efficient in the latter instances would very likely prove utterly futile in the former, and hence it was that traumatic strictures so often called for an operation. He had so modified the performance of the "boutonnière", that its execution was rendered easier, and the surgeon was enabled to determine with accuracy where his deep cut

should be. The operation was indicated in cases of impassable stricture, retention from the same, and in extravasation. Its great recommendation was that, by it, cause and effect were remedied at one and the same time, which was more than could be said of such temporary expedients as puncturing the bladder. When the wound was nearly healed, it was well to hasten its final closure by teaching the patient how to draw off all his urine, so that the chance of any fistula being left was reduced to a minimum. In accordance with his usual practice, he had left no catheter in the bladder after the operation.

NORTHUMBERLAND COUNTY ASYLUM.

ANOMALOUS CASE OF PNEUMONIA.

(Under the care of Dr. T. W. McDOWELL.)

J. S. was admitted on March 12th, 1873. At that time, he was sixty years of age, and had been insane ten years. He had resided with his relatives; but, as he became somewhat violent and troublesome, he was sent to the asylum. It was stated that during the first six years of his illness he had epileptic fits. His uncle had been insane.

On admission, he was a stoutly made man, fairly muscular, with grey hair, slightly bald, hazel eyes with well-marked arcus senilis, large nose, and intelligent facial expression. The teeth were dark and somewhat irregular. The head measured $22\frac{1}{4}$ inches in circumference, $13\frac{3}{4}$ from ear to ear, and $13\frac{1}{2}$ from occiput to root of nose. He appeared to be in good general health. The heart-sounds were normal; the lungs were healthy; the appetite was good; the bowels were regular. The urine was rather pale, slightly acid, of specific gravity 1015; no albumen. He was in a state of chronic mania. As a rule, he was very quiet; paced up and down the ward as if absorbed in thought; seldom spoke except when asked a question, when he answered shortly and abruptly, and passed on. At other times, he was somewhat more communicative, and said that ever since he came here his tormentors had not troubled him.

No improvement occurred in his mental condition. He continued deluded about people tormenting him at night, but on most subjects he was quite rational. He seldom did any work, but generally occupied his time in reading the newspapers, chatting with his neighbours, and so on. During his residence here, his general bodily health appeared excellent. On one or two occasions, it is noted that he was confined to bed on account of influenza and slight bronchial catarrh. Such had been his state when his fatal illness began. The following are the notes taken at the time.

December 13th. This morning he complained of slight pain in the chest, with difficulty of breathing. He thought he had again caught cold. He was transferred to the sick-ward for further observation.

December 14th. There was well-marked pneumonia of the lower half of the right lung. There was also some dulness at the base of the left lung posteriorly. It was impossible to examine the heart satisfactorily, on account of his waywardness. So far as could be made out, there was no decided hypertrophy; but the action was feeble and markedly irregular. Pulse 104, very irregular. He was ordered sago, milk, beef-tea, etc. Temperature at 7 P.M., 101.4.

December 15th, 11 A.M. Temperature 102; pulse 98, of same character; respirations 37. He complained a good deal of pain in the chest; but his cough was not particularly troublesome. Temperature at 7 P.M., 101.

December 16th, 11 A.M. Temperature 100.2; pulse 72; respirations 38.—7 P.M. Temperature 100.6.

December 17th, 11 A.M. Temperature 99.8; pulse 100, still irregular; respirations 40. He did not take much food except milk. The cough was not very troublesome; the expectoration was not very copious, but of a characteristic prune-juice colour. He was ordered four ounces of whiskey. His bowels were regular.

December 18th, 11 A.M. Temperature 98; respirations 40; pulse 104, very weak and irregular.—7 P.M. Temperature 100.4.

December 19th, 11 A.M. Temperature 100.4; respirations 40; pulse 103, of same character.—7 P.M. Temperature 100. The patient slept very little. His general condition was unchanged; but during the last day or two his face presented a peculiar pallor, difficult to describe, but very striking when seen.

December 20th, 11 A.M. Temperature 97.4; respirations 38; pulse 106, very weak and irregular.—7 P.M. Temperature 104; bowels still regular.

December 21st, 11 A.M. Temperature 96.4; respirations 40; pulse 72, of same character.—7 P.M. Temperature 97.4. He took fluid food very well. His mental state had undergone no change in the course of this attack.

December 22nd, 11 A.M. Temperature 96.4; respirations 34; pulse

64, very weak. During his present illness, he had seldom lain in bed, but had preferred to sit more or less upright, supported by pillows, as in that position he felt more comfortable and his breathing was easier. His appearance was not that of a man dying of pneumonia; it was rather that of a person in a state of collapse.

December 23rd, 11 A.M. Temperature 92.4; respirations 32; pulse about 60, but very difficult to count, it was so very small and feeble.—7 P.M. Temperature 92.2.

December 24th, 11 A.M. Temperature 91; respirations 42; pulse about 80, very feeble.—7 P.M. Temperature 97.2.

December 25th, 11 A.M. Temperature 93; respirations 38; pulse about 67, but hardly perceptible.—7 P.M. Temperature 94.2.

December 26th, 11 A.M. Temperature 93; respirations 40; pulse about 60, very weak.—7 P.M. Temperature 94.2.

December 27th. He died this morning at 12.10.

This case is a good illustration of the anomalous symptoms sometimes presented by the insane. Though the record is not complete, as no *post mortem* examination could be obtained, it appears interesting to me as being the only one of its kind that ever came under my notice. It is well known that, in the sane and insane, cases of acute phthisis, typhoid fever, etc., will run their course and the thermometer fail to indicate any considerable and persistent rise in temperature. When such occur in the insane, some vague remark is made about disease of the nervous system. In the case just recorded, all the symptoms point to failure of the heart's action, probably from fatty degeneration. Be that as it may, it has greatly puzzled me, and I report it for the benefit of those more familiar than I am with some departments of clinical medicine.

LOUGHBOROUGH INFIRMARY.

DEGENERATION OF A MOLE INTO AN EPITHELIOMA.

(Under the care of Dr. HUTCHISON.)

FOR the report of the following case we are indebted to Glynn Whittle, B.A., M.D., Resident Surgeon.

On February 19th, J. H., a labourer aged 68, was admitted into the Infirmary, under the care of Dr. Hutchison. The patient had all his life had a large mole, of the size of a florin, on the left buttock. It did not increase in size until eight months ago, when he was accidentally thrown down, a projecting object coming into sharp contact with the mole. It then began to grow rapidly larger, attended with constant pain. On the patient's admission, the tumour had the character of an obviously malignant growth. It was circular in form, with a diameter of about four inches. Towards the circumference, the surface of the tumour was callous, indurated, and raised the sixth of an inch above the level of the skin, but the central parts were mottled and ulcerated, giving rise to an offensive but not very plentiful discharge. There being no enlargement of the lymphatic glands, by a circular sweep of the knife Dr. Hutchison removed the tumour, with a margin of healthy skin. Fortunately, the cancerous roots did not penetrate deeper than the subcutaneous fat. There was no hæmorrhage.

Microscopically, the tumour was found to be composed of squamous epithelial cells of various sizes, nucleated and caudate, arranged in one or two places in globular masses of concentric lamellæ. In other parts, the epithelioma was undergoing fatty changes. No trace of alveolar stroma could be found, but the fibrous structure is generally, though I believe not invariably, absent in epithelial cancer.

LAMBETH.—Mr. Archer Farr begins his report by honestly stating that he has followed the plan adopted by his predecessors of deducting the deaths in public institutions, and of non-residents, without adding on the deaths of parishioners in the various hospitals, including those of the Asylum Board; so that the calculated death-rate is probably more than 1.5 per 1,000 inhabitants below the true number. The report is for the year ending March 30th, 1877, so that the difference cannot be accurately calculated. The population is estimated at 233,927; the birth-rate at 38.3, and the death-rate at 20.56 per 1,000, after deducting 519 deaths of non-residents, but including the deaths of 100 residents in the Small-pox Hospital. There were 32 deaths from diphtheria, some of which occurred in houses where the drains were stopped up, others where the water was contaminated with sewer-gas, and another where the rain-water pipe was defective, so that sewer-gas could escape into the bedroom of the patient. There were also 50 deaths from typhoid, as well as 7 from typhus. The small-pox epidemic commenced in March 1866, directly after the Stockwell Small-pox Hospital was reopened. A large amount of sanitary work was carried out, including the disinfection of 1,198 houses in which small-pox and fever had occurred.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 26TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

ON THE CONDITION OF THE SKIN IN *TINEA TONSURANS*.
BY GEORGE THIN, M.D.

THE paper gave an account of the appearances seen in sections through the entire thickness of the skin of a horse affected with ringworm. The author alluded to the evidence on which the identity of the disease in that animal and in man had been established, and to cases in which the trichophyton tonsurans had been transmitted from the former to the latter. The skin was examined in both the earlier and the advanced stages. The spores of the trichophyton tonsurans were found amongst the most superficial scales of the horny layer of the epidermis. They were found in the cutis only on the shaft of the hair and between the shaft and the internal root-sheath. The spores in no instance were found in the root-sheaths, the hair-root, or hair-papilla, nor in the connective tissue surrounding the hair-follicle; that is to say, the spores were never found in actual contact with living tissue, the space between the internal root-sheath and the hair-shaft being analogous to the most superficial stratum of the horny layer. The affected hair first bent, and then broke at a point usually midway between the rete mucosum and the hair-root. This the author attributed to the disintegrated hair yielding to the pressure produced by the normal growth of the hair-shaft upwards. The changes found in the tissues of the cutis and rete mucosum were sometimes extensive, and were similar to those found in inflammation from whatever cause it arose. The spaces between the bundles of connective tissue were more or less infiltrated with colourless blood-corpuscles (pus-cells); the walls and immediate neighbourhood of the blood-vessels being thickly studded with them. Retrogressive changes were found in the nuclei of the cells of the rete mucosum, and at some parts the epidermis had completely broken down, leaving the cutis denuded. In the latter case, the surface was found covered with pus-cells. Small localised abscesses were found in the external root-sheath and in the rete mucosum. The cell-infiltration descended along the veins to the deepest parts of the cutis. The author, finding these well-marked inflammatory effects in tissues which contained no vegetable organism, suggested that they were due to the irritation which is produced by the absorption of soluble matter set free during the growth of the fungus. The parasite found its pabulum amongst effete epidermic structures, and could only assimilate by decomposing them. This theory seemed to be the only reasonable one, because the effects produced were far in excess of those which might be expected to follow the pressure attending the distortion of the hair. The incapacity on the part of the fungus to exist in living animal tissues explained the *modus operandi* of the very numerous methods of curing ringworm. Many of the substances applied were simple irritants, whilst the parasitocides in common use were also irritant. Inflammation, when sufficiently acute, cured ringworm, as was shown by the fact adduced by the author, in which a simple wound through a ringworm-spot cured the whole patch. It was thus that the beneficial effect in chronic cases of a continued slight congestion was explained. The author further pointed out the probable injurious effect on the general health of the continued absorption of the irritating matters produced by the growing fungus.

Dr. F. TAYLOR said that a few months ago a child with cerebral tumour came under his care, who also had a ringworm on the left side of the neck. For two months before the child's death, no treatment was applied to the ringworm. After death, he removed a portion of the skin, and subjected it to examination; which, however, was not yet completed. So far as he had gone, he agreed with Dr. Thin as to the position of the spores. The shaft was crowded with them, but the inner and outer root-sheaths were free. As regarded secondary changes, he had seen little of them; but possibly the case would be different in a healthy child and in one the subject of diseases.—Mr. GASKOIN said that Dr. Thin's remarks tended to encourage one to attempt epilation as far as possible. All the remedies which had acquired a reputation for the cure of ringworm acted by producing irritation; he could recognise no specific action in any of them. He showed drawings of a case of foreign ringworm, in which there was a white ridge with a red border on each side.—Dr. COUPLAND asked how the spores produced an irritant fluid in growing. Was there any analogous process in the growth of other fungi?—Dr. THIN said that the yeast-plant, bacteria, etc., decomposed matter in growing, and left a residue. In regard to the preparation of the specimens, if a piece of skin were hardened in alcohol and cut, and then put in potash solution, and examined with the

microscope for a time, there would be found to be a stage at which the spores stood out well-marked, and could be distinguished from the granules in the sebaceous glands, which they much resembled.

THE RESULTS OF ONE HUNDRED CASES OF PARACENTESIS OF THE TYMPANIC MEMBRANE. BY W. LAIDLAW PURVES, M.D.

Of the different methods employed, the knife, the trephine, acids, oils, and ointments, pancreateine, and the galvano-cautery, the galvano-cautery, combined with pressure and ointments, was preferred for maintaining, or attempting to maintain, a permanent opening, but the maintenance of such was exceptional. The frequent repetition of the paracentesis caused a permanent thinning at the spot perforated, which acted to a certain extent in the same way as a perforation. Of eighty-three individuals operated on, forty-six were benefited, temporarily or permanently. In cases of tinnitus, one-fourth benefited. In acoustic affection, no improvement occurred. Of thirty-nine cases of catarrhus drums, twenty-three were improved; five out of seven relaxed drums improved. Of twenty-one paracenteses for the removal of substances from the cavity, fifteen were benefited.

Mr. DALBY said that the operation of opening the tympanic membrane was first seriously proposed in 1868 by the late Mr. James Hinton, who performed it frequently, and published the results of his practice in the *Guy's Hospital Reports* in 1869. In 1870 and 1871, Mr. Dalby saw him perform the operation many times; sometimes he did it twice or three times in a day. In 1872, he (Mr. Dalby) read a paper on the subject before the Royal Medical and Chirurgical Society, pointing out to what cases the operation should be limited. He believed that certain diseased conditions of the lining membrane of the tympanic cavity, as where it was destroyed or thickened by calcareous deposit, explained some cases of deafness. If it were so, a different explanation must be assigned to the lining membrane from that generally accepted; it must be regarded as a protective membrane and a support to the ossicles of the ear. In his experience, the operation had not been very successful except where fluid was removed from the tympanum.—Mr. C. BROOKE said that Sir A. Cooper used to perforate the membrana tympani with the sharp end of a three-sided silver probe. This operation had been performed on him (Mr. Brooke) in 1817 or 1818, with complete relief. The opening had closed long ago; he could not say when.—Dr. BRANDEIS had for some time paid attention to the subject of paracentesis of the membrana tympani. He himself had been the subject of progressive deafness; and in 1871 he had paracentesis done by Dr. Weber-Liel of Berlin. The opening could not be preserved. He had also seen Voltolini's plan of operating; and thought that the galvanic cautery was the most successful method. Dr. Purves had made no distinction between perforation of the membrane (myringotomy) and excision of a portion (myringectomy). As regarded the means of keeping the cavity open, various bougies, small cannule, laminaria-tents, etc., had been used; but foreign bodies were not well tolerated. Two years ago, Voltolini proposed a method which was attended with satisfactory results. It consisted in perforating the membrana tympani at the posterior quadrant, and introducing a short cannula with a flange at one end.—Mr. CUMBERBATCH said that the possible injury to the remaining hearing power of the patient must be borne in mind in proposing the operation. The proceeding had not been successful in his hands.—Mr. LENNOX BROWNE said that, in cases of suppuration in the tympanum causing perforation of the membrane, it was very difficult to close the opening. He agreed with Mr. Dalby, that perforation should be limited to cases where it was desired to evacuate something from the tympanic cavity.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 21ST, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Tubercular Kidney.—Dr. DE G. GRIFFITH exhibited the kidneys from a girl aged 19, who was supposed to have uterine disease, and who suffered from much irritability in the bladder and labia. She had pains in the suprapubic region. She died; and one kidney was found apparently normal, the other was the seat of tubercular pyelitis. A rupture was found at the junction of the kidney and the ureter. There was tubercle in other organs.—The PRESIDENT, Dr. FITZPATRICK, Dr. MORRIS, and Dr. C. J. HARE spoke.—Dr. MURRAY proposed that the specimen be referred to a Committee, who would report upon it to the Society.—Dr. Murray, Dr. Morris, and Dr. Griffith were then formed into a Committee.

Intestinal Obstruction.—Mr. CRIPPS LAWRENCE showed an India-rubber cup and tube for use in cases of intestinal obstruction; the cup forming a convenient receptacle for the tube, so that the instrument was

readily portable. The India-rubber was sufficiently transparent to show the fall of the water in it. If the cup were raised high enough above the patient, force sufficient to endanger the bowel might be raised.—The PRESIDENT said it was an ingenious and portable instrument.

Relations of Diabetes to Gout.—Dr. W. SQUIRE related several cases illustrating this relation. He said they not unfrequently alternated; and diabetes was common in persons of the gouty diathesis. It was not produced by change of diet. He then narrated some illustrative cases. He said the glycosuria disappeared during times of pyrexia.—Dr. WILTSHIRE spoke of a gouty diabetic patient.—Dr. FOTHERGILL referred to diabetes coming on at the finish of old-standing gout.—Dr. FITZPATRICK said that females were liable to glycosuria.—Dr. SQUIRE replied.

Precipitate Labour followed by Syncope.—Dr. ASHBURTON THOMPSON related such a case in a multipara. He said that every stage of the labour was hurried, and that the shock was not merely due to the sudden emptying of the uterus. The patient remained in syncope for three hours; it was followed by vomiting and feeling of icy coldness in the joints. At the end of twenty-five hours, she passed a clot of much firmness, forming a cast of the uterus, the vaginal end of it being almost white.—The PRESIDENT said the condition of the clot, which was exhibited, was due to the os squeezing it and driving out the red blood-corpuscles.—Drs. WILTSHIRE and GRIFFITH spoke; after which Dr. THOMPSON replied.

The Diagnosis of Abdominal Tumours.—Dr. ARTHUR EDIS read a paper on this subject, and related a series of cases illustrative of the difficulty of correct diagnosis. The first was one of spurious pregnancy. The catamenia ceased; there was morning sickness, and abdominal enlargement. Then, distinct movements were felt. At the spurious parturition, a medical man stayed with the patient from 10 P.M. to 7 A.M. Ultimately, the labour-pains disappeared. A turpentine enema brought away a quantity of flatus and faeces, and the patient reconciled herself to a barren condition. The next case was one of uterine fibroid mistaken for pregnancy. In the third, extra-uterine pregnancy was diagnosed; but the case turned out to be one of omental cancer. In a fourth, malignant disease with ascites was taken for a multilocular ovarian tumour. In a fifth case, pregnancy was mistaken for an ovarian tumour; and in a sixth, the reverse of this. Dr. Edis said the diagnosis should rest mainly upon the objective data, and but little on the subjective data or the patient's statements.—Dr. C. J. HARE said mistakes more commonly arose from carelessness than from ignorance.—Dr. FITZPATRICK said that such mistakes were readily condoned by barren married women craving for children.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 23RD, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Ovarian Tumour.—Dr. W. J. SMYLY showed a large ovarian tumour removed by Dr. Atthill, Master of the Rotunda Lying-in Hospital, on the previous day, from a patient aged 49, married thirty years, but childless. There was an abdominal swelling since Christmas 1876; but during the past few months the tumour grew apace, so that the girth three inches below the umbilicus increased from thirty-three inches last autumn to thirty-eight inches. The tumour was extremely adherent, and contained scarcely any fluid contents. The patient sank in a few hours after the operation.—The specimen was referred to a Committee to report as to its nature.

Intracapsular Fracture of Femur.—Dr. E. T. LITTLE presented three specimens illustrative of the modes of union in this injury. Case I was a woman aged 70. The accident happened long ago. The bone was light and atrophic. The cervix femoris was absorbed, so were the cartilages, and the true joint was obliterated. Slight osteophytic deposits had occurred. A new joint had formed. In Case II, that of a woman aged 54, who had met with the accident at least six years before, strong fibrous union had existed. A large gap anteriorly in the bone was filled with dense fibrous material. There were osteophytic growths also. Case III was especially interesting, for in it firm bony union had occurred. The fracture and the union were of great antiquity—the subject of the injury being a woman of advanced age. The bone was light, but cancellated tissue was thrown across the line of fracture. There were certain peculiarities in the case. Thus, the line of fracture was oblique, running down nearly to the trochanteric line, the lower fragment was laterally displaced backwards, and an osseous outgrowth passed up towards the head of the femur. There were traces of a fracture through the femoral condyles, to which second injury the abovementioned peculiarities may have been due.—The PRESIDENT suggested that the obliquity of the cervical fracture may have aided the

occurrence of bony union.—Dr. BENNETT attributed bony union to the impaction of the lower into the upper fragment.

Carcinoma of Liver.—Dr. J. W. MOORE showed a specimen of Farre's tubercle of the liver from the body of a woman aged from 45 to 50, a cook by occupation. She enjoyed good health until November 4th, 1877, when a shivering fit ushered in a protracted intermittent, or pseudo-intermittent, fever. In it the temperature at first ranged from 105 deg. to 97 deg. in a few hours. The patient had never been out of Ireland. There was no hepatic enlargement, nor was the spleen considerably or permanently enlarged. After an unsatisfactory convalescence, she noticed a fulness in the right hypochondrium, and physical examination revealed the presence of a large hepatic tumour, which was decided to be of a cancerous nature. There was never any jaundice, but towards the close of her life an extensive ascites formed. The right pleura also became so distended with fluid as to cause almost complete collapse of the right lung. This was the immediate cause of death. The liver was enormously enlarged, and studded with masses of encephaloid carcinoma, many of which presented the "cancer-navel". The peritoneum was chiefly healthy, so were the stomach, intestines, uterus, and ovaries. The mesentery and meso-colon abounded with infected glands, and the pancreas formed with the retroperitoneal glands a vast mass of disease which pushed the liver and stomach forward. The kidneys were healthy, though congested. The spleen was slightly enlarged. The gall-bladder was involved in a mass of the new growth.

Tuberculosis in a Lioness.—The Rev. Dr. HAUGHTON showed the lungs of an African lioness, which died after two months' illness in the Zoological Gardens, Phoenix Park, of what was apparently pulmonary tuberculosis. Dr. Haughton said that the animals usually died of a peculiar and limited lobular pneumonia, either primary or symptomatic of "Milzbrand", and accompanied by an extensive suppurative nephritis.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, MARCH 1ST, 1878.

ROBERT McDONNELL, M.D., F.R.S., President, in the Chair.

Rupture of the Tendon of the Gluteus Maximus.—The PRESIDENT, having temporarily vacated the chair, which was occupied by Dr. COLLES, read a paper on the above subject. The case from which his notes were taken was, he said, almost unique; rupture of this tendon being amongst the rarest accidents in surgery. M. T., aged 63, farmer, six feet two inches in height, and powerfully built, when admitted into Stevens's Hospital December 26th, 1877, gave the following history. In October last, when trying to lift a heavily laden cart, while in a crouching position, he felt as if he had been struck a severe blow with a stone in the gluteal region; hearing, at the same time, a loud snap. He fell, and was carried home, suffering much pain in the part, which was considerably ecchymosed. When he was admitted into hospital in December, the gluteus maximus was soft and flabby, and there was considerable flattening of the whole gluteal region on the affected side; the other side being firm and full. A welt was also noticed running from the great trochanter towards the linea aspera. The limb was paralysed, especially the extensor muscles, and the toe drooped, the man having to walk with the help of two sticks. The rupture had taken place at the junction of the tendon with the muscle; this, the President said, was the most usual position in which rupture of tendons took place, though there was no absolute rule. He then recounted numerous cases of rupture of other tendons which had come under his notice, viz., rupture of the tendo Achillis, of the tendons of the thumb, of the plantaris, of the long head of the biceps, and of the tendon above the patella, which latter, he said, was much more common than that of the ligamentum patellae. In one case of this kind, which came under his notice twelve weeks after the accident, the lower end of the tendon could be felt above the patella, behind which the finger could be pushed into the knee-joint. By the advice of a bone-setter, this man had been treated for twelve weeks by exercising the limb, passive motion being adopted when active became too painful. To explain the cause of the paralysis in the subject of the communication was not easy. The sciatic nerve did not seem to have been injured, for the tactile sensations and reflex movements remained perfect, and all the muscles were not equally paralysed. The most probable explanation seemed to be that it was an effort of nature to insure rest for the limb. A similar paralysis was often produced by a blow on a muscle.—Dr. CROLY thought the nerve might have been stretched or partially ruptured by the violent muscular action.—Dr. BARTON had met with a case which might throw some light on the subject. A man stepping out on a window-sill, while raising his body on the bent leg, fell. When taken

up, he felt great pain in the right gluteal region, which was flattened, and the muscle seemed to have lost its tone; there was a swelling of the size of his fist over the seat of injury. The patient could not get the gluteus maximus to act. He could flex and extend the limb, but could not rotate outwards without great pain. Dr. Barton thought that in this case some of the muscular fibres of the gluteus maximus, rather than its tendon, were ruptured; and suggested that the rotators outwards might probably also be injured. The man recovered so far as to be sent to the convalescent home.—Dr. MAPOTHER said that the President had rightly laid stress upon the unusual position in which the man was at the time; but for this the accident would not have occurred. He supposed that union of the tendon in these cases was not to be looked for.—Dr. BIGGER mentioned a case which occurred in the practice of Mr. Carmichael, where the gluteal muscles had been cut through in order to tie a wounded gluteal artery. In this case, the toe drooped for a long time, though no injury had been done to the sciatic nerve.—Dr. H. KENNEDY mentioned three cases of supposed rupture of the plantaris tendon.—Dr. BENSON related his personal experience of this accident. The sensation, he said, was as if he had been struck with a stone in the calf of the leg. From the rapidity with which he recovered—being confined to his house for only a few days—he was inclined to think that only some of the fibres of the muscle had been ruptured.—Mr. RICHARDSON confirmed the President's account of the patient's condition; after which the PRESIDENT replied.

Saws for Amputation and Excision, and for the same purposes as the Trephine and Hey's Saws.—Dr. BIGGER showed some saws for which he claimed originality.—Mr. RICHARDSON remarked that his amputation-saw was very similar to that pictured by Ambrose Paré in his book, except that Dr. Bigger's had a rotating handle, which could be fixed at any angle to the frame. His modification of Hey's saw certainly deserved credit for ingenuity, although the experiments performed by him to illustrate its action to the Society were hardly satisfactory, it being quite impossible, from its construction, to avoid wounding the subjacent tissues.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MARCH 6TH, 1878.

FREDERICK A. HEATH, M.R.C.S., President, in the Chair.

Progressive Muscular Atrophy.—Mr. CULLINGWORTH exhibited a woman aged 41, the subject of progressive muscular atrophy. There was complete wasting of the lower half of the trapezius on each side. The rhomboids had disappeared, with the exception of a few fibres attached to the middle of the spinal border of the scapula, and the latissimus dorsi on each side was completely atrophied. The clavicular portion and upper half of the middle portion of the trapezius, the levator anguli scapulae, and the serratus magnus, were intact. The gluteus maximus was atrophied; the lower erector muscles of the spine and the flexors and extensors of the thigh upon the pelvis were weakened from partial degeneration. The hands and arms, including the deltoids, were unaffected, and the muscles of the calf were so prominent as to raise a suspicion of pseudo-hypertrophy. A portion of muscle withdrawn from the calf by the muscle-trocar had been microscopically examined, and found normal. The posterior borders of the patient's scapulae projected backwards from the posterior chest-wall, leaving a deep sulcus between the scapulae of the two sides, which was still further deepened when the arms were extended horizontally forwards. The internal borders of the scapulae preserved their parallelism with the median line. The partial atrophy of the glutei caused great difficulty in rising from the sitting posture and in ascending stairs; the weakness of the flexors of the thigh rendered it impossible for the patient to lift her heel from the bed when lying with the legs fully extended; while the weakness of the extensors of the spine and thigh caused lordosis.

Fibroid Phthisis.—Dr. DRESCHFELD showed a left lung, in which the upper lobe was in a state of fibroid phthisis, the lower lobe in a state of chronic lobular pneumonia; and in which the main bronchus was almost totally obliterated by a papillomatous growth springing from the bronchial mucous membrane. During life, the left half of the thorax showed marked retraction; there were dulness on percussion, loss of fremitus and loss of breath-sounds, and marked ægophony in the left infraclavicular and intrascapular regions. Further complications of the case were pericarditis and thrombosis of left femoral and subclavian veins.

Intrathoracic Tumour.—Dr. DRESCHFELD showed a sarcomatous tumour, situated in the posterior mediastinum, surrounding the descending thoracic aorta and pushing the left lung upwards. During life, the symptoms were dulness on percussion, loss of breath-sounds, and loss of fremitus, together with marked ægophony in the left infrascapular

region. The lung itself was healthy. The tumour seemed to have sprung from the adventitia of the descending aorta; a second tumour, quite separate and distinct from the first, was found to surround a branch of the left pulmonary artery.

Impetigo Figurata.—Dr. YEATS showed a case of impetigo figurata on the cheek, of long-standing. The interest of the case lay in its simulating lupus, for which it might very readily be mistaken. The principal clinical features of the case which resembled lupus were the white cicatricial looking patches here and there apparent on the diseased surface, the thickened and elevated edges, and absence of pustules. The history of the case, however, including pustulation and incrustation, was conclusive in regard to its impetiginous nature, and throughout there were no lupus tubercles. The case was healing quickly under treatment adapted for chronic impetigo.

Urethral Brush.—Mr. WHITEHEAD exhibited an urethral brush, and detailed the method of using it in the treatment of chronic discharges.

Malignant Disease (?) of Liver in a Boy.—Dr. HUMPHREYS showed a boy aged 14, suffering apparently from malignant disease of liver. Inspection showed a marked bulging of the epigastrium and right hypochondrium, and to a less degree of the left hypochondrium, with enlargement of superficial veins. On palpation, a somewhat elastic mass could be felt with a slightly uneven surface. Leftwards, the mass reached nearly to the splenic region, but the mass could not be felt. On percussion, the dulness of the mass was continuous with that of the liver. The boy had been obliged to give up work about two months previously on account of increasing weakness and pain of a colicky nature. A little before Christmas, it was noticed that the upper part of his abdomen was bulged. He had been losing flesh very rapidly. He had no jaundice or vomiting. His bowels were somewhat confined. His father had died of phthisis; and his mother was said to be dying also of that disease. After enemata had been given, two exploratory punctures had been made by the aspirator-trochar, but nothing had been drawn out except blood. Antisyphilitic treatment was tried without effect. The diagnosis of malignant tumour was then arrived at by exclusion.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THURSDAY, JANUARY 10TH, 1878.

G. B. MORGAN, L.R.C.S.I., President, in the Chair.

Prevalent Diseases of the District.—Mr. H. E. ARMSTRONG presented a report of the cases admitted to the Newcastle-on-Tyne Fever Hospital during the month of December, showing the occurrence of three cases of typhus.

Traumatic Cerebral Hemorrhage.—Dr. J. W. BRAMWELL showed the brain of a man aged 40, who had been admitted to the Tynemouth Union Hospital in a semicomatose condition. The right pupil was large; the left small. He could not articulate plainly, and could not understand what was said to him. There was no limb paralysis. Urine and faeces were passed involuntarily. Ten days after admission, he was seized with severe convulsions, in which the right side was chiefly affected. The eyes were turned towards the right. He died the following day. A *post mortem* examination showed a fracture of the skull extending from the left zygoma upwards and backwards to the junction of the parietal bones. A large partly organised clot covered the anterior two-thirds of the left hemisphere. After death, it was ascertained that the patient had fallen downstairs seven weeks before admission.

Adenoid Tumour removed from the Groin.—Dr. HEATH showed this specimen, which weighed three pounds. A large short artery arising directly from the femoral artery entered the deeper surface of the tumour. This having been ligatured, the tumour was easily removed.

Extreme Example of a Conical Stump.—Dr. HEATH showed this specimen; also the patient, a boy, from whom it had been removed.

A Mass of Calculous Fragments.—Dr. HEATH showed this specimen. He had removed it by lithotomy from a patient aged 80. Lithotomy was preferred to crushing, because of the extremely irritable and inflamed condition of the bladder. The patient had previously undergone several "crushings" in London.

Fractured Spine, of Thirteen Years' Duration.—Mr. S. W. BROADBENT showed this specimen. The spinal canal was completely obliterated at the seat of fracture. The injury, which was caused by a fall of coal on the back, was followed by complete paraplegia and paralysis of the bladder and rectum; marked priapism continued for a month. After the acute symptoms passed off, the patient enjoyed fair health until a year before his death; he then suffered from intense pain in the

abdomen. For several months before death, he took a scruple of morphia daily. The cause of the pain was not ascertained, as a partial examination only was permitted.

Empyema in a Child.—Dr. WICKS showed a case of empyema in a child treated by free incision and drainage.

Papery.—1. Dr. E. C. ANDERSON read the notes of a case of Leucocythæmia accompanied by marked Oligopyrenæmia.

2. Dr. BYROM BRANWELL continued his paper on Intracranial Tumours, reporting two additional cases.

REVIEWS AND NOTICES.

CLINICAL RECORDS OF INJURIES AND DISEASES OF THE GENITO-URINARY ORGANS. By CHRISTOPHER FLEMING, A.M., M.D., M.R.I.A., late President and Fellow of the Royal College of Surgeons, Ireland; late Surgeon to the Richmond Hospital; Visiting Surgeon to Steevens's Hospital, Dublin; etc. Edited by WILLIAM THOMSON, A.B., M.D., Fellow and Examiner, Royal College of Surgeons, Ireland; Surgeon to the Richmond Hospital. Pp. 350. Dublin: Fannin and Co.

THIS book, which does not claim to be considered a systematic treatise, is made up chiefly of an account of, and remarks on, ninety-five cases of injury and disease of the genito-urinary organs in both sexes which have come under the author's care in hospital and private practice.

The first chapter is devoted to the pathology of the urine in its relations to surgery. The author then goes on to discuss obstructions of the urethra from injury, calculi, and other foreign bodies, and prostatic affections, each subject being illustrated by cases. Hæmaturia is next noticed. In the remaining chapters, stricture of the urethra, some diseases of the testis, scrotum, and round ligament, stone in the bladder and kidney, and the treatment of phimosis, successively receive attention; the whole concluding with remarks on morbid conditions of the urine in children.

Among the cases of obstruction of the urethra from various causes, is related one in which partial retention of urine resulted from pressure on the urethra by a three-ounce glass bottle, which had been introduced by the patient into his rectum for the purpose of relieving himself from piles, which, he imagined, had narrowed the gut and so caused constipation. This bottle was removed with great difficulty, on account of its extreme fragility. The operation was attended by much bleeding, but the patient made a good recovery.

In the chapter on stricture, Dr. FLEMING remarks that he has seldom seen an instance of contracted orifice, either acquired or congenital, in which there was not also a stricture in the region of the bulb. In such cases, it has sometimes happened to us to have searched in vain for the supposed deeper stricture after free division of the meatus.

In Chapter VIII, the author refers to an affection of the scrotum and penis which he has noticed in wine-bottlers, caused by placing the bottle between the thighs in order to drive home the cork. Irritation is thus set up, followed by an abscess, which bursts, leaving an unhealthy lupoid-looking ulcer, which is sometimes very obstinate. Passing on to the subject of stone, the author alludes to the unfrequency of lithotomy and lithotritry in Ireland, and is of opinion that the average number of operations for stone in the whole of the Irish hospitals has not exceeded twelve *per annum* during the last hundred years. Four cases of lithotritry—one of the patients being a boy three years of age—and eleven cases of lithotomy are reported, as well as a case of a woman from whom a calculus was removed by dilatation and partial section of the urethra. In the same chapter is related a case of fibro-carcinomatous tumour of the uterus, which ultimately involved the bladder, thus leading to a diagnosis of stone and consequent attempt at removal. In speaking of the treatment of phimosis by circumcision, Dr. Fleming describes an instrument which he uses for fixing the mucous membrane, so as to ensure cutting it and the skin on the same level. The drawing given of this instrument reminds us of nothing so much as of one of the Royal Humane Society's grapple.

The chromo-lithographs and other illustrations with which the book abounds are for the most part very good, though we fear the figures in Plate I will scarcely fulfil the author's intention of conveying a good idea of the appearance of the different urinary deposits as seen in the test-glass.

To conclude: though we are by no means sure that such a book as this was greatly needed, though some of the modes of treatment pursued may not be quite in accord with those most generally followed at

the present day, and though there is not much in the work that will help towards advancing our knowledge of the subjects included in it; still it is undoubtedly valuable as a record of the matured opinions and clinical practice of an eminent surgeon of very great experience, and may be read with advantage by those who take an interest in the study of disorders of the genito-urinary system.

REPORT ON THE PREVALENCE OF PHTHISIS IN VICTORIA. 1877.

THIS is a report of a Committee appointed by the Medical Society of Victoria to inquire into the vexed question of the prevalence of consumption in that Colony and its alleged increase, and it is framed with the view of testing some of the conclusions deduced by Mr. William Thomson in his various analyses of the Statistics of Phthisis in Victoria, one of which was reviewed in this JOURNAL last year (*vide* BRITISH MEDICAL JOURNAL, June 23rd, 1877).

After all that has been said of late years for and against the climates of Victoria and Melbourne by private individuals, we look with interest on any systematic inquiry into the subject, especially if carried out, as this appears to be, by a body of medical men capable of thoroughly sifting the facts; and while we submit their conclusions and Mr. Thomson's reply, with which he has kindly favoured us, to wholesome criticism, we shall hail with delight any sound deductions on a subject affecting the welfare of not only the Victorians, but of the numerous British emigrants of various classes who visit Australia in search of health or profit. The following are the conclusions of the Committee:

1. The mortality from phthisis in Victoria is little more than half of that in England.

2. The rate of mortality from phthisis in Victoria has been perceptibly less of late years.

3. That rate is especially low among persons under 15 and 20 years of age, and has been very greatly reduced between 1861 and 1871.

4. The reduction of the mortality of young persons is to be explained by a comparative immunity among those born in the colony.

5. The apparent increase of mortality among young adults is due to the influx of phthisical persons from abroad.

6. The uniformity in the rate of mortality over the whole colony for a good many years is owing to certain insanitary conditions, operating especially in Melbourne, since for the rest of the colony the rate was reduced by about one-third between 1861 and 1871.

With regard to the first conclusion, we are inclined to agree with the explanation of the report: That the low rate of mortality from phthisis in Victoria is due to, not one but many causes, *e.g.* (1) the good and abundant food enjoyed by all classes, even by the lowest; (2) to the absence of injurious trades and to the less crowded state of the population; (3) to the smaller amount of inflammatory diseases of the lung, which lead to the development of consumption.

The second, third, fourth, and fifth conclusions relate to the question of the increase or decrease of phthisis in the colony; and, while we admit that the evidence adduced by the Committee fully warrants their arriving at nearly all these conclusions, we cannot help expressing a wish that they had treated with greater caution and less appearance of partisanship the remarkable exception of the increase of phthisis mortality between the ages of 20 and 25 for the year 1871 compared with that of 1861.

Here the report only gives us hypothesis, and no facts to support its fifth conclusion; and it would have been far better if the Committee had ascertained the number of cases of phthisis arriving in the colony during that period, instead of confining themselves to the probability of the increase being "due to the influx of phthisical persons from abroad". It is true they quote from the Victorian Year-book of 1876, that of 49 patients dying of phthisis in two years after their arrival in Australia, 42 were between 15 and 35, but what we want is a distinct statistical explanation for the numbers of 1871 and not for those of 1876; and we do not wonder at Mr. Thomson, in his reply, meeting the fifth conclusion by a statement that out of 407 deaths from phthisis only 94 occurred among those who had resided in the colony under ten years.

The contrast between the mortality from phthisis at Melbourne and in the rest of the Victorian colony is very great; being, in 1871, 22.29 per 10,000 inhabitants in the former, and 7.24 per 10,000 in the latter; that is to say, the Victorian rate is about one-third of the Melbourne one, which is nevertheless below the London one (26.6).

We think this report, with its valuable tables, is very acceptable, as clearly vindicating the sanitary character of the Victorian colony, in showing that its mortality, at all times low, has been gradually diminishing of late years. It at the same time admits that the Melbourne rate has not diminished at the same rate, and that this is due to certain unsatisfactory conditions, which ought to be ascertained.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE
ALLIED SCIENCES.

TINCTURE OF CASCA.

CASCA (the bark of *Erythrophloeum Guinense*. Synonyms: "Cassa", "Gidu", "Saucy", "Sassy", "Doom", and "Ordeal Bark") has hitherto been of interest chiefly on account of its use as an ordeal poison on the Western Coast of Africa, where it is used as a test of the innocence or guilt of persons suspected of witchcraft, secret murder, and other crimes; but, recently, special pharmaceutical interest has been imparted to it by Dr. Lauder Brunton, who, in a lecture delivered at the Royal College of Physicians, London, published in the BRITISH MEDICAL JOURNAL of March 29th and 31st, 1877, gave the result of his investigations of it, and, in speaking of its physiological action, described it as "a drug which strengthens and slows the heart, contracts the arterioles, and increases the urine". The interest excited by this lecture was such, that many of the profession were desirous of availing themselves of such a valuable remedy; but, for some time, it was impossible to obtain a supply of the drug, owing, it is stated, to the precautions taken by the natives to prevent its falling into the hands of Europeans. Mr. J. S. Walton, F.C.S., to whom we are indebted for the information concerning this drug, succeeded recently, however, in obtaining, on behalf of Messrs. Gale and Co., of Bouverie Street, a consignment of casca bark; and, with a view to presenting it in the best form for administration, as well as to ascertain the dose and to separate the active principle, performed some experiments for Dr. Brunton, at whose request they are published, together with the following description of the drug, which had been derived chiefly from the writings of Proctor and others in the *American Journal of Pharmacy*. "Casca bark is obtained from *Erythrophloeum Guinense*, natural order Leguminosae, a tall tropical African tree with numerous spreading branches, which are covered with a smooth greyish bark, that of the trunk and larger branches being rough, corrugated and fissured, and of a reddish-brown colour, with light-coloured dots; the interior is generally of a deep brown colour. A smooth section of the bark exhibits numerous fawn-coloured cylindrical bodies, from half to two lines long, of a dense brittle texture, increasing in number in the older bark, and towards the inner surface. The bark has a faint odour and an astringent taste, without bitterness, leaving a slight tingling sensation. The astringency is due to tannic acid, which is present in the reddish portion, but not in the fawn-coloured spots; so rich is the bark in tannic acid, that it has been suggested that it might be advantageously used for the purpose of tanning in those parts where the tree grows naturally. The bark breaks with an abrupt fracture, and is readily powdered; but it requires great care, as the dust, when inhaled by the nose, causes violent sneezing." Proctor gives the following quotation from Bowditch's *Ashantee*

"Taking 'doom' is the infallible test when they consider the case too doubtful for human decision. The bark of that tree (viz., the 'doom plant') is put into a large calabash with water, so as to make a strong infusion; it is stirred up, when the suspected parties sip in turn. It operates immediately and convulsively as a most violent emetic and purge. Those who sip first may recover, and the dregs are frequently left designedly for the obnoxious."

A fuller and more interesting account of Casca bark, as an ordeal poison, is given by Winterbottom, in his *Sierra Leone* (vol. i, p. 129), and quoted by Proctor (*American Journal of Pharmacy*).

Chemical and Pharmaceutical Examination.—The following experiments were conducted in accordance with the suggestion of Dr. Brunton, for the purpose of ascertaining the amount of alcoholic extract, and of extractive matter, insoluble in alcohol, but soluble in water, present in the bark, and to separate the active principle.

Alcoholic Extract.—Knowing the difficulty of exhausting the bark, Mr. Walton deemed it advisable to reduce it to a very fine powder, which was attended with considerable personal inconvenience, and gave an opportunity of verifying the statement as to its action on the nose; for although he took the precaution to muffle the mortar, and to cover his nose and mouth with a cloth, yet he inhaled a sufficient quantity to produce violent paroxysms of sneezing, accompanied with a giddy feeling and oppression in the chest, as if it were contracted by means of a bandage, so as to render it difficult to draw a full breath: the eyes also assumed a glassy appearance, with a tightness in the forehead and a confused feeling in the head. Those symptoms continued for several

hours, and were also experienced, to a certain extent, by his laboratory assistant, who took part in powdering the bark.

Having obtained sixteen troy ounces of finely powdered bark, Mr. Walton packed it tightly in a strong cucumber-glass, with a perforated cork at the bottom, covered with a layer of coarsely powdered glass; the top of this percolator was fitted with a sound cork, through which was passed the end of a stout piece of glass tubing, about six feet long and one inch in diameter. With this apparatus, he proceeded to exhaust the bark, by means of column pressure, with alcohol of 56 deg., and continued to percolate until the spirit passed through colourless. The resulting tincture, on being distilled, yielded a reddish-brown extract, in the proportion of twenty-five per cent. of the bark used.

Aqueous Extract, or extractive inseparable by alcohol, was obtained by passing distilled water through the powder left in the percolator, after exhausting with alcohol; the aqueous solution, on being evaporated, left a hard extract of a deep brown colour, weighing two hundred and twenty grains.

Active Principle.—This was obtained, in small quantity, by exhausting the bark with water acidulated with sulphuric acid, neutralising with ammonia, which gave a reddish-brown precipitate, which was separated by filtration, washed with distilled water, and mixed with purified animal charcoal, and dried over a water-bath. It was then boiled with absolute alcohol, filtered, and the filter washed with more alcohol. This solution, on being concentrated, possessed a greenish fluorescence; after standing a few days, it was found to have yielded minute acicular crystals.

Having thus far completed the experiments indicated by Dr. Brunton, Mr. Walton proceeded to prepare for him solutions containing definite amounts of alcoholic extract and of aqueous extract.

In order to prevent any confusion or mistake in the nomenclature of this drug, owing to its similarity in name to cascarrilla, sometimes abbreviated "cascar.", it has been suggested that the tincture, which is the preparation recommended to be used, should be called "tinctura erythrophloeae", and the alkaloid "erythrophleine".

SELECTIONS FROM JOURNALS.

PHYSIOLOGY.

THE THEORY OF SLEEP.—A. Strumpell (Pflüger's *Archiv*) reports the case of a patient aged 16, the whole of whose cutaneous surface was completely insensible, so that the strongest stimuli applied to the skin did not excite any expression of pain. A similar anaesthesia was shown in nearly all the accessible mucous membranes of the body, and muscular sensibility was completely wanting. In addition to this, there was a complete loss of smell and taste. Finally, the right eye was amaurotic, and the left ear deaf; so that, when the left eye was bound up and the right ear stopped, there was no further avenue of stimulus to the patient's brain. When the latter experiment was actually carried out, the patient in about five minutes sank into a deep sleep, from which he could only be roused by the stimulus to the ear or by the stimulus of light; he could not be shaken only. When he was left to himself, he awoke in the course of the day, after many hours' sleep, either through internal stimuli or from the excitation of the brain through slight and unavoidable stimuli from without.

DISEASES OF CHILDREN.

PNEUMOTHORAX IN A NEW-BORN CHILD.—Dr. Carl Ruge (*Zeitschrift für Geburtshilfe und Gynäkologie*, Band ii, 1 Heft) describes the appearances found in a child which was easily delivered by the feet. At first, it was somewhat in a state of asphyxia; it afterwards cried a good deal, but died suddenly twelve hours after birth in a state of cyanosis. About twenty-four hours after death, there was found to be a swelling of the sternal portion of the left sterno-mastoid muscle, great enlargement of the suprarenal bodies by effusion of blood into their parenchyma, and pneumothorax with hæmatothorax in consequence of rupture of the pleura. Air escaped on opening the thorax; the heart was displaced to the right, quite beyond the middle line. The right auricle was distended with a large fresh blood-clot. The left lung contained air in parts only; the pleura showed ecchymoses; at the base was an emphysematous bulla as large as a pea; and on the lower and posterior lobes, passing from above downwards, was an irregularly notched rent 3 centimètres (1.2 inches) long. The author supposes that the pneumothorax was the result of violent inspiration in consequence of the obstruction of the left lung by mucus, meconium, etc.; and that the emphysema, at first alveolar and afterwards subpleural, caused rupture of the pleura, probably before birth.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 6TH, 1878.

THE SPECIAL GENERAL MEETING.

THE Special General Meeting at Birmingham of the Association on Tuesday was less largely attended than possibly many may have expected. The more generally interesting and important of the two subjects to be discussed, however, had already lost most of its temporary importance by the judicious manner in which the Committee of Council had dealt with it at their last meeting. They had already resolved to frame a by-law which should set at rest any doubts as to the valid effect of the Edinburgh vote on the admission of women; and the question was thus absolutely narrowed to the question of proceeding in respect to the two ladies who had been elected prior to that date. There is no doubt as to the powers possessed by the Association to take steps for causing a member to "cease to belong to the Association"; and it seems equally obvious that, when that step is taken avowedly for the mere reason of sex and to meet the objections raised by a large number of associates on that ground, there is no question of personal imputation involved. On the other hand, such a proceeding is, it is understood, likely to be objected to by many as savouring of illiberality, and of what must be called, for want of a better name, impoliteness. Moreover, there are preliminary points to be settled which have been raised as to the actual legal status. The final settlement of the question necessarily belongs, according to the by-laws of the Association, to the annual general meeting; and by that time some general agreement may be arrived at as to what is to be done with the two ladies. Meantime, that is a question which does not seem greatly to agitate the Association.

Hence the main honours of the meeting were reserved for the two motions of Dr. Grigg relative to Reports of Proceedings and the new business arrangements entered on by the Committee of Council. These resolutions appeared to have commended themselves in theory to a large number of members; and it was stated that they had received the support—on paper—of about 2,000 members, including many well known names in various parts of the country; while only a few score had declared dissent. But in such a case that decision only could be ultimately valid which was arrived at after the hearing of *vis à voce* statement, and which was expressed by attendance at the meeting formally called by requisition. The three hundred London members who signed the requisition for the meeting were represented in Birmingham by only three; and whatever may be the influence of absence in increasing the affections, it has not the same power of convincing the reason. Had the questions raised by Dr. Grigg as to the correctness of the estimates and wisdom of the choice of site for the new offices been raised earlier, they might have received a solution uncomplicated by the important considerations which could not fail to influence their discussion at the stage at which they came under notice; but, so raised, they came to be treated as involving a vote of confidence in the Executive Committee of the Association. That is a perfectly constitutional way of meeting such an issue at a large public meeting. It could have but one result when the question came to be fairly put and

considered. The executive can point with satisfaction to the results of the last decennium, and especially to the financial results achieved by the scheme of reorganisation of business carried out by the Committee of Council in 1871, on the recommendation of a subcommittee consisting of seven members, of whose number it is sad to remember that Sibson, Clayton, and Southam are already gone; but of the remaining members of it, Falconer, Husband, and Chadwick, are among those who most warmly endorse the present further change, which is, indeed, only the full development of what was then proposed. So far as the propositions before that Committee were adopted by them at the time, and recommended to the Committee of Council and carried, they resulted in the appointment of a permanent business officer at the London office, with a concentration of the business departments under one head, for which purpose a business manager and general secretary was appointed. The financial results of improved management at once showed themselves. A prompt collection of revenue and careful checking of business details produced an immediate surplus of revenue over expenditure, which was at first devoted to wiping off bad debts and irrecoverable arrears, which figured for large amounts in the accounts. The increase continued to grow, and incumbrances were successively cleared off. Ready-money payments admitted of further considerable economies; and not only were the payments of the year met by actual receipts, leaving a considerable balance of good assets, but, later on, realised savings began at the rate of about a thousand a year.

Meantime, much had been done to make all departments of the Association share in the advantages of this increasing prosperity. The JOURNAL was from time to time enlarged, and no reasonable means were spared to make it more suited to the exigencies of the constantly increasing number of readers, who were themselves largely contributors to the prosperity of which they enjoyed the benefit. A system of Annual Scientific Grants was commenced for the support of researches in aid of medicine, of which the amount was proportioned to the claims sent in rather than limited to any hard and fast sum; while liberal grants were made to other Committees (as, for example, £100 last year to the Joint State Medicine Committee), and so on. Nevertheless, a fund of between £2,000 and £3,000 of remaining surplus was accumulated.

It was natural at this stage to consider whether the permanent office and head-quarters of the Association might not with advantage be improved. It is well-known that these, although they have gradually expanded from a little compartment in a printer's shop and have spread into the next house, are neither convenient nor dignified; but rather the reverse.

In considering the question, the Committee reverted to a suggestion made, in the original report for the reorganisation of the business-management, to the abovenamed Subcommittee by the Editor in 1871. That report includes an estimate of the expenditure for composition by a staff of printers specially salaried by the Association, as compared with the actually then existing contract price in bulk, and it showed an apparent saving. At and up to that time, it should be explained, the Editor had for some years acted as *amicus curiæ*, and, beyond literary duties, had voluntarily given a great deal of time and attention to the development of the business resources of the JOURNAL. Subsequently to that period, and concurrently with the appointment of a permanent business officer at head-quarters, such matters passed advisedly, and according to the scheme adopted, into the hands of that officer, under the supervision of the Committee. Now that the question of improving the offices and finding more respectable rooms for the Committee meetings and for administrative purposes arose, it was natural that the question of composition, or setting up the type of the JOURNAL, by a special staff should be resumed. It was so resumed and discussed by the Committee and manager; and upon an independent report (of the

details of which we have no cognisance), it was decided that it would be economical and advantageous to take certain premises in the Strand for the purposes, and to undertake composition. The site of these premises and the details of expenditure have been now very fully discussed and unfavourably criticised by Dr. Grigg, who has recently joined the Committee of Council as a representative of the Metropolitan Counties Branch.

It would be quite beside our purpose to enter into any analysis of the criticism of Dr. Grigg; he has already expressed his views in a very ample, independent, and, we must add, a very able, manner. He maintains that the proposed change will be neither economical, on the data stated, nor efficient. He has incidentally the advantage of some special knowledge of the subject, and evidently also of a careful study *ad hoc*. It is clear, however, that here also the Committee have satisfied their own mind by an independent investigation that the course proposed is, notwithstanding the economical objections urged by Dr. Grigg, one which is worthy of adoption in the balance of considerations; and they treated this also as a question of confidence. Mr. Husband was able to show very effectively that considerable economies have been effected thus far by abolishing "middlemen" in dealing; and he is satisfied that this will be so here also, although avowedly this is a matter of greater complexity.

We shall only remark here that the business question at issue is hardly of so much final importance as might possibly be supposed from a bare perusal of the arguments. Dr. Grigg may be right in his effective statement of the actual cost when all is brought into account, of the difficulty of realising a profit in employing a special salaried staff of printers. On the other hand, many of the expenses may be set off against the comfort, convenience, and respectability of suitable business accommodation and the combination of the administrative and executive work under one roof. Even if it be granted that, in consequence of the imperfections which he alleges in any existing estimates, due allowance is not made for capital spent at the outset, yet something may be allowed for the undoubted commercial advantages of a suitable office for a journal in a locality consecrated to journalism; the capital expenditure intended will barely exceed the probable surplus of the year, and there is every reason to believe that the ultimate result will continue to show an excess of annual receipt over expenditure. A Committee which has succeeded so well in the past years in realising an annual surplus could even afford to be convicted of underestimating some of the items which Dr. Grigg skilfully impeaches.

There remains the question of providing "suitable professional apartments"; by which is apparently meant something in the nature of a permanent reading and reception room, with strangers' register and other conveniences of the kind, such as are temporarily provided at the annual meetings. This also, we think, may be looked for, possibly at no distant time, as being quite within the probabilities of the resources of the Association after the present change of business headquarters has been carried out. The Obstetrical Society of London has provided such professional headquarters for its members at no great cost; and the Association will probably, without much strain upon its increasing resources, be able to do something of the same kind, on a suitable scale, at no distant time, if Mr. Jonathan Hutchinson's plan be duly matured and find general favour amongst the members when brought forward.

MEDICAL REFORM.

TWENTY years have elapsed since the British Medical Association, then numbering about twelve hundred members, was instrumental in passing the Medical Act of 1858, which secured reciprocity in the matters of practice to the inferior corporations, but did not enjoin uniform fees or uniform examinations. An unworthy competition

downwards in the granting of licences has, therefore, continued, and, at the present day, a licentiate of any one of the medical authorities, it may be at a cost of half a guinea, it may be in one single branch of the profession, is entitled to be placed on the *Medical Register*, and is thereby constituted a regular medical practitioner, who may with impunity practise all branches of the profession when, to the detriment of the public, he may in reality be only qualified in one. The authorities in the army and navy have not relied on the efficiency of the tests to which registered medical practitioners may have been subjected, but insist on a further examination, at which examination many have been proved incompetent, before entrusting our soldiers and sailors to their care. The Poor-law authorities likewise are not content with the simple qualification which legal registration as a medical practitioner confers, but exact what is known as a double qualification before appointing a medical officer to take charge of the sick poor. The army and navy, and the so-called paupers, are, at least to some extent, protected by the responsibility attaching to the heads of each department; it is the general community alone which is not secured from falling into the hands of half-educated men when stricken by accident or illness.

In the debates on the passing of the Act of 1858, Mr. Walpole stated "that the rivalry between the colleges in conferring degrees led to nominal or worse than nominal examinations". That rivalry and that competition still exist; there is no rule, no enactment to prevent a candidate rejected by one examining board from presenting himself before another which may, on easier terms, as regards both examination and amount of fee, confer on him the right of being placed on the *Medical Register*. Such a condition of things has convinced every disinterested person conversant with the subject of the necessity of an amended Medical Act; and the Medical Reform Committee of the British Medical Association, in conjunction with the late Mr. Headlam, drafted a Bill in accordance with the principles for which the Association has unswervingly contended. The connection of the name of Mr. Headlam with medical reform; his thorough mastery of the subject in all its details; the important part he played in the passing of the Act of 1858, are confirmation strong that he would not attach the weight of his name and influence to any immature or badly conceived measure. The necessity for reform was not disputed. The Bill of the Association had Mr. Headlam's entire approval, and had certain objects.

1. The first object was admission to the General Medical Council of direct representatives of the profession in the proportion of one-fourth of the numbers of the Council. On this point, it may be simply stated that the profession of the United Kingdom, numbering upwards of twenty thousand, has no representative in the General Medical Council. The profession outside the universities and corporations is unable to influence it.

A deputation from the British Medical Association waited on the General Medical Council on June 30th, 1868, in consequence of an almost unanimous vote, at the annual meeting of the Association in Dublin in 1867, to submit "that eight members, to be elected by the registered members of the profession, should be added to the General Medical Council". That number was one-fourth of the members of the General Medical Council; but the deputation also stated that "the Association is of opinion that, if the Council should deem it advisable to recommend a diminution in the number of its present members, then a corresponding reduction may be made in the proposed number of the representatives of the profession".

The late Mr. Nunneley of Leeds, who had been for years on the Medical Reform Committee of the Association before the Medical Act of 1858 was passed, stated that "it was always intended that a portion of the Council should be elected by the profession, but difficulties had prevented this from being carried out"; the difficulty being the non-existence before the Act of any register of the profession. The late Mr. Southam, also on the Reform Committee, repeatedly stated that, in the conferences with the Committee preceding the Act, it was

understood that, when the *Register* was completed, the profession should have its representatives in the General Medical Council. The late Mr. Headlam has made similar statements. The General Medical Council to the present time have made no move in favour of this desire of the Association.

Now, if Mr. Cowper-Temple, in the debate of June 2nd, 1858, on the second reading of the Medical Act, was right in saying, "the medical practitioners throughout the country, numbering about 15,000, and who were represented by the British Medical Association, were favourable to this Bill", with far greater reason may the Association now be said to represent the profession, when it numbers upwards of seven thousand members, and when the desire for the modification of the Council has been reaffirmed at every succeeding annual meeting.

As the General Medical Council exists, we find in it, in overwhelming proportion, representatives of the very corporations whose action it is sought to reform; and thus, as before the Act of 1858, so now, the conflicting and opposing interests of the corporations constitute the chief barrier to that reform which the Association demands in the interests of the public. In the present General Medical Council, we have further the striking, the startling anomaly of a Council at variance with the body which called it into existence—a condition which is still further illustrated by the fact that a memorial for its modification, with upwards of 10,000 signatures, which emanated from Birmingham, under the auspices of the present President of the Birmingham and Midland Counties Branch, was also presented to the Council, and equally shelved and disregarded.

Is there no room for hope that the General Medical Council will yet take some steps to terminate the absurdity of a condition, in which it places itself in opposition to the voice of the members of the medical profession?

The Association, the profession, is committed by its unvarying action to the modification of the General Medical Council, and will therefore strenuously oppose any Bill which does not provide for it.

2. In moving the second reading of his Bill of 1858, Mr. Cowper-Temple said that he had in view "to raise to an uniform standard the education and qualifications of medical practitioners". To do this has been equally the object of the Association from the first dawn of its existence. An examination founded on equal requirements and equal fees, conducted by a conjoint examining board for each of the three divisions of the kingdom, was provided for by the drafted Bill of the Association. The Bill of the Government now before Parliament errs fatally in omitting this, while lauding the efforts of the English medical authorities to combine in one examining board. In Scotland, it simply permits the conjunction of two or more; but this permission is given in the Medical Act of 1858. The mischief is, that they will not avail themselves of it. So also with Ireland; voluntarily they have been unable to combine. First, the five medical authorities in Ireland tried; that was the quinary scheme, but it failed. Four then tried; the quaternary, only again to fail; and so on, a ternary, and last a binary scheme followed, with similar lamentable results; leaving the Irish authorities each acting for itself. The Association does not believe in voluntary conjunction, from which, as from the treaty of Paris, any of the parties may at any opportune moment secede; the Association believes only in compulsion, where selfish interests are to be sacrificed. Private individuals, like Quintus Curtius, may devote themselves for the public weal; corporations never.

Better no Bill than that this permissive Bill of the Government should pass, while in their strength they might worthily exact, backed as they would be by the profession, a Bill which, while settling once for all the portal to the profession, would be a boon to the public.

Medical reform has now reached a crisis; we shall return to it again and again. In the meantime, we direct attention to a report of the Medical Reform Committee which met at Birmingham on Tuesday last, and urge the members of the Association to support the Committee.

THE CHANGES IN THE ARTERIOLES IN BRIGHT'S DISEASE.

THIS subject has not received much attention until lately from continental observers, probably because the granular form of renal disease is relatively rare in most parts of Germany. We recently drew attention to Professor Thoma's elaborate descriptions and measurements of the changes in the blood-vessels, and his paper is now followed by an article from the pen of Dr. C. A. Ewald, in the January number of the same periodical (*Virchow's Archiv*). After referring to the history of the cardio-arterial changes (in which, by the way, he speaks of Bright as "John" Bright, a rather amusing instance of Malapropism), he gives the result of his observations upon the vessels of the pia mater, and states that he has found decided thickening of the muscular wall, but no evidence of the arterio-capillary fibrosis, the lymph-sheath being, as a rule, little thickened. His observations extended over fifty-one cases in which the cardio-vascular changes were looked for; of these, the first twenty-one were cases of "nephritis interstitialis" and "nephritis interstitialis et parenchymatosa", in which fifteen showed hypertrophy of the heart and small vessels, five hypertrophy of the heart only, and one hypertrophy of the vessels only; the second series consisted of sixteen cases of "nephritis parenchymatosa" in which none had hypertrophy of both heart and vessels, five had hypertrophy of the heart, and sixteen were without abnormality of these organs; finally, of twenty-four cases of other diseases, four had hypertrophy of the vessels without affection of the heart, in twelve the heart alone was hypertrophied, and eight were complicated by nephritis parenchymatosa. Of all these cases, however, he says only three were very small contracted kidneys. From these data, he concludes that "nearly all cases of nephritis interstitialis chronica granularis have hypertrophy of the muscular substance of the heart and vessels". For the heart, this rule seems to be absolute; for the vessels, some qualification is necessary. Of the mixed forms, with kidneys weighing less than 300 grammes (10½ ounces), two-thirds had cardio-vascular hypertrophy, one-third only cardiac hypertrophy, and of those over three hundred grammes in weight, all had hypertrophied hearts, and none hypertrophied vessels. Also, in rather less than a third of the cases of parenchymatous nephritis, simple hypertrophy of the heart was present. From his observations, he concludes that "secondary nephritis and enlargement of the heart, due to other causes than primary renal disease, do not lead to hypertrophy of the vessels". He argues, therefore, that, as each of these may exist independently of the other, neither can be considered the cause of the other. In discussing the probable causation of these conditions, he remarks that Johnson's theory has a basis of probability in Ludwig and Mosso's experiments upon the local effect of poisoned blood on the vessels, but it leaves out of account the action of the depressor nerve, which is excited by increased intracardiac pressure, and produces relaxation of the arterial tonus, so that a new element would have to be introduced into the hypothesis, that of paralysis of the depressor nerve. He thinks, too, that the absence of cardiac hypertrophy in amyloid and atheromatous thickening of the arterioles, and the presence of cardiac and vascular hypertrophy or simple cardiac hypertrophy in other forms of renal disease, speak against the vascular changes as causes of the heart-affection. He inclines to the older view of the obstruction being in the capillaries; for, he says, Ustimowitsch and Gruntzner found that injection of urea into the blood caused increased blood-pressure and urinary secretion with dilatation of the renal vessels, which could not be explained on any hypothesis of arterial contraction, except by supposing that, while the renal arterioles were dilated, those of the rest of the body were contracted; but this difficult conclusion is avoided if we admit the greater friction produced in the capillaries by the urea-laden blood. The secretion of urine must depend upon the pressure in the glomeruli and the flow of blood to the same, and this

pressure is only possible when the obstruction is on the farther side of the glomeruli, and the free flow of blood to them is only possible by the arteries being dilated. This explains why, when the blood-pressure is artificially raised, *the kidney whose nerves have been cut alone secretes*. In Gruntzner's experiment, he injected saltpetre solutions, and found that, if the blood-pressure were not artificially raised, and the renal nerves on one side were divided, there was copious urinary secretion from both kidneys and slight rise of blood-pressure, as the *capillary* resistance was the same in both; but when the blood-pressure was further raised by stopping respiration, the urinary secretion *sank on the side of the undivided nerves*, and rose on the other. This shows that the secretion depends not upon the general blood-pressure, but upon the pressure in the glomeruli, and gives great support to the view that the polyuria of granular kidney depends upon capillary resistance. How this resistance causes hypertrophy of the heart and vessels, is worth consideration; it is generally admitted that there is no peristaltic action in the small vessels. Ewald believes that it is quite independent of central nervous influence, and is a purely mechanical effect of the increased blood-pressure. The walls of the blood-vessels possess the power of reacting against pressure from within, and always endeavour to conserve their normal calibre; by such constant and prolonged efforts as are required by the increased pressure in this disease, their walls undergo thickening. The hypertrophy of the heart also finds its cause in the increased tension within the aorta, and he would place the series thus: 1. Increased tension in the systemic arteries; 2. Hypertrophy of the heart; 3. Hypertrophy of the arterioles. The paper concludes with a short sketch of the changes in the renal vessels, which the author regards as purely local and part of the connective tissue changes in which the vessels share, as shown by Friedländer and others.

THE COLLEGE OF PHYSICIANS AND THE GOVERNMENT MEDICAL BILL.

AT an important meeting of the Fellows of the College of Physicians, held on Tuesday last, for the purpose of considering the Bill, to which we elsewhere refer, the President made a very clear statement concerning the Bill, showing how objectionable were many of its features and how injurious it would be if passed into a law, not only to the interests of the College, but to the interests of the profession and the public. A special objection was made to the Bill, inasmuch as it would take away the privilege which the College has under its Charter and Act of Parliament, 32nd Henry VIII, chapter 40, of conferring a licence in both medicine and surgery. This is a privilege which the College is determined not to surrender. To do so would be to render more conspicuous than ever the absurdity of one body giving a licence in medicine and another body giving a licence in surgery, and thus compelling candidates to go from College to College to obtain a complete qualification. The College likewise objected to its being required to participate in the conjoint scheme for England, which would be made binding by Act of Parliament, whilst the Scotch and Irish bodies were allowed free permission to do as they pleased. Under such circumstances, the English authorities would not agree to persevere in carrying out a conjoint scheme, which is now complete, and which would secure entrance to the profession by a single portal in this country. The substitute for the conjoint scheme, namely, entire control over the regulations of the medical authorities by the Medical Council, was objected to on many grounds, but especially on the ground that the bodies which give the licences and qualifications would be altogether deprived of the control of the conditions under which such qualifications would be given. The College further objected to the roundabout way in which women would be admitted to practise under the Bill, and some of the objectors suggested that a much simpler method would be, if women were to be admitted at all, to have a separate and special examination for them, either under the control of the Government or of the Medical Council, together with a separate Register.

Other points were alluded to and objections made, but it was felt that these belonged rather perhaps to the province of the Medical Council than to that of the College of Physicians. On the whole, the Bill was regarded as very objectionable in its character, and not at all calculated to remedy or remove the evils which exist as regards the interest of the public or of the profession. The College was addressed by Dr. Paget, Dr. Quain, Dr. Barclay, and other Fellows; and it was resolved that the President, with a certain number of Fellows to be nominated by him, should be empowered to communicate with the Lord President of the Council, and ask him to receive a deputation on the subject.

PRISON DISCIPLINE AND DISEASES OF CONVICTS.

IN our issue of February 2nd, we offered some remarks upon the case, in its medical aspects, of Charles McCarthy, a Fenian prisoner, who, having been released from the Chatham Convict Prison on January 3rd, died, after attending a public meeting in Dublin, twelve days subsequently. It was alleged that the prisoner was, while in prison, improperly worked, lodged, and fed, and was neglected and otherwise maltreated, and that, consequently, his disease was either caused or aggravated and his death occasioned. At the time, the partisanship of some excited politicians was inclined to beg the question, or rather to demand the verdict, that McCarthy was subjected to special neglect and ill-treatment. Placing this idea aside, calmer minds might inquire whether, in common with his fellow-prisoners, this unfortunate man was subjected to a discipline of underfeeding and overwork, the tendency of which would be either to originate or to hurry to a fatal issue the diseased conditions of the heart and lungs of which he was the subject. By order of the Home Secretary, the case has been investigated by Sir James Ingham, chief magistrate at Bow Street, assisted by Dr. Henry Pitman, who inspected with him the cells and workrooms, heard the statements of the witnesses, and gave his opinion respecting them. The report of this inquiry does not very materially enlarge our knowledge of the case in its medical aspect. Upon this point, we have before us nothing but the statements, gathered from Sir James Ingham's report and other (newspaper) accounts, that the deceased was aged 44, and had been a prisoner for twelve years. His weight was greater when he left his last place of imprisonment than when he entered it, and it was a fair average weight for a man of his age and height. At a time not clearly specified, but which appears to have been previous to his imprisonment, he suffered from rheumatic fever, to which the origin of the heart-disease of which he died is attributed. In the winters of 1873 and 1874, he was treated in the prison hospital for bronchitis. In January 1875, it was first discovered that he was the subject of heart-disease; and in the month of June following, he had, to use the magistrate's words, "a severe attack". Periodical examination with the stethoscope showed that his heart-disease was not progressive. The books show that, although he was treated, medically, fifteen times in 1873, he did not complain once in 1876, and only twice in 1877. We have no statement of his precise outward condition of health on his release; but Mr. Owen, a surgeon whom he subsequently consulted, states that he was warned of the extreme danger of attending a public meeting in his then state of health, and raises a strong presumption that his death was hastened by the excitement of his reception in Dublin. It was found that the heart was fat or fatty and dilated, and that there was some pulmonary tuberculosis. The immediate cause of death appears to have been considerable pleuritic effusion.

In the early part of his imprisonment, McCarthy had occasionally to carry rather heavy weights; but as long ago as 1871, he was transferred to the tailor's shop, in order that he might have light work and protection from the weather. In October 1871 (if not before), directions were given that he should be treated as easily as possible con-

sistent with proper discipline. It is again to be remarked that the disease of the heart of which he died was first discovered in January 1875. It is stated that, "in addition to his employment in the tailor's shop, he had to take his share of ordinary duty once a week. It consisted in carrying, with the assistance of another man, ten yards and up two flights of twelve and thirteen steps respectively, a dinner-tray weighing about one hundred and four pounds; and in carrying, without help, a can of tea weighing about fifty pounds, for breakfast and supper, over the same distance. Once a month, he had to take his part in removing slops to a sink a few yards off upon the same landing". This was not, assuredly, proper work for a prisoner known to be the subject of heart-disease, and it is much to be regretted that the magistrate does not mention the date on which it was discontinued. It is elsewhere stated that, from October 1871 up to June 1876, "he was required, once a week, to carry a parcel weighing about twenty-one pounds from the tailor's shop to the stores (a distance of eighty yards) and he had to walk with this parcel to the height of seven feet by a gentle slope fifty feet in length". After June 19th, 1876, he did not carry anything at all.

There is nothing very terrible in the work here described, but all lifting and carrying ought to have been interdicted when heart-disease was discovered in January 1875; and, seeing that it must have been quite unnecessary, it appears to have been a pity that even such moderate labour as this should have been continued for nearly eighteen months. That this light work increased the severity of the heart-disease, or had anything whatever to do with hastening death, we do not for one moment believe; but we think it in every way advisable that, for his own sake and for the prevention of such rumours as occurred in this case, a prison-surgeon should positively forbid all hard labour immediately he decides that a prisoner is the subject of organic heart-disease.

Most professional readers of Sir J. Ingham's report will agree with us in concluding that McCarthy was neither starved, stifled, nor tormented to death, nor (unless he was allowed to carry the tray and can after 1875) that he was at all overworked. It appears to us very clear that, if this unfortunate man had not been the subject of excited political feeling, his case would never have been brought to the notice of the public and the profession.

THE Director-General of the Medical Department of the Navy, Sir Alexander Armstrong, K.C.B., has been appointed a magistrate for the County of Middlesex and the City and Liberty of Westminster.

WE are pleased to hear that the new form of infantry accoutrements (devised by Surgeon-Major Oliver) has met with such general approval that tenders have recently been issued for the equipment of two regiments in them, as a preliminary step towards their general introduction into the service.

WE are very glad to hear that another effort will be made shortly to induce the Council of the Royal Medical Benevolent College to abolish the objectionable method of canvassing for votes which is still in vogue in that charity for filling up the lists of those who receive its benefits. A memorial for this purpose is in course of signature; and those who desire to add their names to it should communicate with Mr. Jabez Hogg, 1, Bedford Square.

LORD ABERDARE presided at the annual meeting of the Charity Organisation Society on the 3rd instant, at which, upon the motion of Sir W. Gull, a resolution was passed declaring that the establishment and extension of provident dispensaries would be a most important means of developing self-reliance and improving the condition of the people, and the meeting accorded its support to the Society in its effort in that direction.

TYPHOID fever and dysentery prevail among the troops in King William's Town; ninety cases are at present in the Grey's Hospital.

THE attention of the Society of Apothecaries ought, we believe, to be directed, as a matter of discipline, to the extraordinary advertisement of one of their licentiates in Sunderland—Dr. G. A. Abrath, M.D. Heidelberg—in which, after a long rigmarole of introduction, he concludes a very unprofessional style of advertisement in the local papers by publishing at length his scale of charges. Dr. Abrath alleges in the advertisement that he is bound to do this in vindication of his professional character. If vindication of professional character is to assume such a form as this, it is difficult to understand what form the attack would assume, for certainly nothing could be more contrary to ordinary notions of professional propriety than the shape which the vindication takes.

WE mentioned a fortnight since that Dr. J. Burdon Sanderson and Mr. Callender, as members of the Hydrophobia Committee of the British Medical Association, had an opportunity afforded to them by Dr. Nicholls of Chelmsford of visiting with him a man suffering from hydrophobia, and arranging in consultation with him a method of treatment. We are glad to see it stated that this patient, who has been under treatment for three weeks at the Chelmsford Infirmary, has been discharged convalescent from that institution. We understand that Dr. Sanderson and Mr. Callender have also been invited by a medical man at Blackwater, Hampshire, to visit a patient in his charge suffering from hydrophobia, and availed themselves of that invitation last week. The case has ended fatally; and Dr. Gowers will report on the pathological conditions.

IN the last monthly report issued by Dr. Goldie, there is a somewhat graphic picture of the manner in which many of the lower classes live in Leeds. In a small court, which was not only overcrowded, but where some of the rooms were indecently occupied, many children were seen running about almost naked, the mothers admitting that they were too idle to dress them; and one boy, not six years old, was engaged in smoking a pipe. Dr. Goldie also reported on an outbreak of measles which had been spread by the infected children attending school and playing about the streets and courts. On expostulating with the mother of some of the patients about the exposure, she replied that her children's measles could do no one any harm, as they were so large. As few mothers consider measles a dangerous disease, they should be impressed with the danger to their own children, as well as to others, by premature exposure in schools or other public places.

WE call attention to a letter from Dr. Reuben J. Harvey, Professor in the Carmichael School of Medicine, concerning the teaching of physiology in Dublin. He describes an extraordinary state of things. It seems not a little remarkable that, coincidently with the course taken by Trinity College, to which we last week referred, the Council of the College should have declined to accept a course of practical physiology to meet the requirements of physiological teaching. Such a refusal carries one back thirty years, to the state of things graphically described by Professor Ludwig at the opening of the physiological laboratory in Berlin. He referred to the pre-scientific period, when physiological teaching was a sort of theoretical annex of the anatomical course, and when it was understood to mean a certain number of verbal observations illustrated by diagrams. It is a curious commentary on the retrogressive course of which Dr. Harvey complains, that, in the accepted scheme of education drawn by the conjoint medical authorities for adoption by the Conjoint Board in England, not only is a course of practical physiology compulsorily substituted for the ordinary second course of theoretical physiology belonging to a past day, but the same practical courses are insisted upon as a part of the teaching of surgery and of medicine. Dr. Harvey's application to the Council of the Irish College is in itself so reasonable, and so entirely accordant with the necessities of the improved teaching of the present day,

that he may rest assured that he will in the end succeed in having it approved and accepted; and we can only counsel him to persevere until the majority of the Council become sufficiently enlightened to accept the views which are everywhere else prevailing.

HOSPITAL SATURDAY IN BIRMINGHAM.

THE sixth Hospital Saturday collection in Birmingham, made on the 30th ult., resulted in a total of £2,141, being £84 in excess of last year. The increase is attributed to the adoption of the system of small weekly contributions by the workpeople at various establishments.

PROSECUTION UNDER THE APOTHECARIES' ACT.

At the Pontefract County Court, before Mr. Serjeant Tindal Atkinson, judge, and a jury, a case of some importance was heard, the court being filled with medical gentlemen and others interested. The Apothecaries' Company, London, were the plaintiffs in an action brought against the defendant, Thomas Johnson, of Knottingley, who had practised as an apothecary, not having duly qualified and obtained a certificate. Mr. Bond, of Leeds, appeared for the Company, and Mr. Hall, of Wakefield, for defendant. Mr. Bond, in opening the case, said the defendant had formerly been an assistant to Mr. Bywater and Mr. Percival, of Knottingley, which latter he left in June 1876, and has since been practising, it was said, as an assistant to his brother, a surgeon, at Darlaston, Staffordshire. The action was brought under the twentieth section of the Apothecaries' Act, 1815, and had been brought not only to protect the duly qualified practitioners, but also the public. There were several cases, he submitted, where defendant had prescribed as an apothecary, and no surgeon had a right to prescribe in medical cases, but in surgical operations only. After hearing the evidence, the jury retired; and, on returning into court, gave a verdict for the plaintiffs for the sum of £5.

PUBLIC HEALTH IN ENGLAND IN THE FIRST QUARTER OF 1878.

THE Registrar-General's last weekly return affords the means for summarising the mortality statistics of the more than seven millions of persons living in twenty of the largest English towns for the first quarter of this year. It thus supplies a trustworthy basis for estimating the national health during the three months ending March last. In the twenty large towns dealt with in the Registrar-General's weekly return, the annual death-rate during the past quarter was equal to 25.2 per 1,000 persons living, against 26.2 and 24.2 in the corresponding periods of 1876 and 1877. The mortality from the seven principal zymotic diseases was at the annual rate of 3.7 per 1,000 in these towns; in the two preceding corresponding quarters, it was equal to 3.8 and 3.0 per 1,000. Whooping-cough was the most fatally prevalent zymotic disease during last quarter, and caused 2,438 deaths in these towns, against 2,019 and 1,063 in the first quarters of 1876 and 1877. Whooping-cough was especially epidemic in London, Plymouth, and Liverpool. The annual death-rate from all causes showed its usual wide variations in the twenty large towns during last quarter. While it did not exceed 17.6 in Portsmouth, 18.7 in Leicester, and 20.9 in Leeds, it ranged upwards in the other towns to 23.8 in Liverpool, 29.1 in Manchester, and 32.6 in Plymouth. Portsmouth and Plymouth, therefore, both dockyard towns on the south coast, show respectively the lowest and highest death-rate among the twenty large English towns during last quarter. Such a fact is not without its interest and importance to the student of public hygiene. It is true that the excessive death-rate in Plymouth was in great measure due to the fatal epidemic of whooping-cough, the mortality from which was equal to an annual rate of 5.5 per 1,000; but the disease was also somewhat fatally prevalent in Portsmouth, although there the death-rate resulting therefrom did not exceed 1.2 per 1,000. Why was the disease so much more fatal in Plymouth than in Portsmouth? Can the difference be referred to sanitary condition? The death-rate among infants under one year of age was during last quarter more than twice as high in Plymouth as in Portsmouth. Among the most noticeable features in the recent mortality statistics of our large towns may be

mentioned continued excessive death-rates in Manchester, which generally now exceed those in Liverpool; and the conspicuous reduction in the rates which prevail in Newcastle-upon-Tyne and Leeds. The improved sanitary condition of most of our largest towns, under the advice and superintendence of medical officers of health who are not engaged in private practice, but devote themselves entirely to public hygiene, is proved beyond all question by the declining rates of mortality. The mortality statistics of these twenty large towns, situated as they are in different parts of the country, afford the means for calculating approximately the national death-rate during the past quarter, which cannot be accurately determined until the publication of the Registrar-General's quarterly return on May 1st. Assuming that the death-rate in our largest towns bore last quarter the same proportion to that in the whole country which generally prevails at this season of the year, it may be calculated that the annual death-rate in England and Wales in the first three months of this year was equal to 23.3 per 1,000, which, although 1 per 1,000 above the exceptionally low rate that prevailed in the corresponding period of last year, was 0.7 lower than the average rate in the first quarters of the ten years 1868-77. The winter of 1877-8 was nearly as mild as that of 1876-7; but, in spite of the exceptionally high temperature of the greater part of January and February, the mortality in those months, especially among elderly persons, was unusually high, and the fatality of diseases of the respiratory organs was excessive. Judged by the returns from the twenty large towns, small-pox was remarkably quiescent throughout England and Wales, excepting only its epidemic prevalence in London and a few slight outbreaks of a distinctly local character. At the end of the quarter, unfortunately, the small-pox epidemic in London showed increasing proportions, and the fatality of whooping-cough was unprecedentedly severe.

OPHTHALMIA IN SCHOOLS.

It is not always, and not perhaps often, that we are able to speak with satisfaction and applause of the prompt and judicious proceedings by boards of guardians in dealing with their sick charges. The Westminster Union Board of Guardians certainly deserve a meed of praise for the judicious promptitude with which they are taking steps to isolate and extinguish an endemic of purulent ophthalmia which has occurred in their schools on Wandsworth Common. We shall not refer to the circumstances under which this state of things originated, and by which it was allowed to extend. That is a subject on which we think the Board ought to make some inquiry, with a view to prevent the recurrence of that misfortune. Endemic purulent ophthalmia always implies defective sanitary arrangements, and its occurrence should always be the signal for careful inquiry and for the institution of remedial measures, not only with a view to cure, but also for the prevention of the recurrence of such outbreaks. The Guardians have, we believe, removed all infected children from the centre of infection to their infirmary in Poland Street, and have sanctioned the employment of the services of an ophthalmic specialist, whose advice will be taken, we trust, not only as to cure of existing patients, but also in reference to the circumstances under which the endemic originated and the means for preventing its recurrence.

THE SILENT SYSTEM IN PRISONS.

M. BURQ, in a communication to the Académie de Médecine of Paris, March 12th, 1878, states that, in 1838, Dr. Cornet wrote, in the *Annales d'Hygiène*, vol. xix, "Silence debilitates the digestive system, weakens the respiratory organs, and predisposes to phthisis". Some years later, Fourcaud maintained the same thesis, basing it on statistics which showed that, in certain central prisons where the cell-system was in operation, the mortality from phthisis amounted to half the general mortality; and even in some instances exceeded that limit, as at Poissy, where it was at the rate of 60 per cent. M. Burq has made a careful examination of official documents placed at his disposal by the French authorities, and arrives at the following results. On May 10th, 1839,

appeared a Ministerial decree, ordering the observance of the silent system in the central prisons. From that time, the death-rate, which had remained stationary for some years at about 6.25 per 100, rose progressively to 6.85, 7.95, 8.38, and finally to 9.95 per cent., notwithstanding the most praiseworthy efforts of the prison authorities to improve the diet and the hygienic condition of the prisoners. The Revolution of 1848 intervened; discipline was relaxed, the decree of 1839 became a dead letter, and the death-rate, which was 9.95 per cent. in 1847, fell to 6.96, then to 5.24 per cent., where it remained nearly stationary until the day when, after the *Coup d'Etat* in 1852, the law was again put in force. The death-rate again rose to 6.31 in 1853 to 7.01 in 1854, and during the whole time diseases of the respiratory organs were the cause of these oscillations. On the other hand, the mortality statistics of the agricultural penitentiary establishments in Corsica, where the silent system is not in force, show a general death-rate of 1 per cent. in excess of free life, and a death-rate of 6.5 per 100 from pulmonary phthisis, on the general death-rate, which is about a half less than is found in the non-criminal population of the same age. These figures lead M. Burq to the conclusion that May 10th, 1839, was a fatal date for penitentiary prisons, and that a remedy for the present state of things must be sought.

ARSENICAL POISONING IN MINING DISTRICTS.

AN action of great toxicological interest was recently brought by the owner of a valuable brood mare to recover £50 for the loss of the mare, the death of which had been, it was alleged, caused by arsenical fumes escaping from a chimney-stack belonging to the mine. The value of the mare was said to have considerably exceeded the £50 claimed, but this latter value had been put on it in order to bring the action in the County Court. The action was, at the defendant's instance, removed to the Supreme Court, and was tried at Bodmin before Sir J. F. Stephen and a special jury. According to the plaintiff's case, the mare, which had been accustomed to feed in a field in the neighbourhood of the defendant's mine, died with all the symptoms of arsenical poisoning. The evidence of Mr. S. T. Rowe, of Redruth, an operative chemist, was to the effect that he had found arsenic in the mare's entrails and in the herbage of the fields about; that the defendants raised tin and arsenic from their mines, and burnt the arsenic in furnaces which were so imperfect that a vast quantity of arsenic escaped and would spread over the plaintiff's field, which was but a short distance off. For the defence, a mass of evidence was called to show that the works were of the most perfect description; that no arsenic could escape beyond the merest trace; that the inhabitants of neighbouring houses drank water which drained off their roofs with no injurious effects, and no other animal in the neighbourhood had been poisoned. Chemists were called who stated that they had also examined the entrails of the mare, and found only a minute quantity of arsenic—in fact, no more than would be found in every man, woman, and child in the mining district. The jury found a verdict for the defendants.

NEGLECT OF VACCINATION.

AN inquest was held on Saturday last, by Dr. Hardwicke, Coroner for Central Middlesex, at the Islington coroner's court, on the body of Charlotte Rose Bell, aged 4, who died on the 27th ult. from confluent (black) small-pox, at 24, Albert Road, Upper Holloway. Joseph Atkinson Bell stated that he had four children, including the deceased. They had a short time since come up from the country, and the children were attacked with small-pox. They had not been vaccinated, as his wife and himself objected, being afraid that erysipelas would set in if improper lymph were used. The other children, aged eight, six, and three years, were seized first, and recovered. On the 14th instant, the deceased was feverish and a few spots appeared; Mr. Brooks, of Tollington Park, was called in, and attended her daily till her decease, when he gave a certificate of death from confluent small-pox. On taking the document to the registrar, that official asked him (witness)

several questions, which he, considering them out of place, did not answer. The registrar then refused to register the death, and informed him that probably an inquest would be held. He had not registered the birth of deceased, and he and his wife were alone responsible for the neglect in not having the children vaccinated. He had not of late joined any anti-vaccination society, but admitted that ten years ago he was interested in one. He had given notice of the death of deceased at the Vestry, and his house was being disinfected. Mr. R. W. T. Brooks was called to see deceased on March 14th, and found her suffering from confluent small-pox; he attended daily until death, when he gave a certificate, which was refused by the registrar. He had been told that the father of deceased objected to vaccination. He (witness) was of opinion that vaccination, in a large number of cases, prevented, and in others modified, attacks of small-pox; he was also of opinion that revaccination was nearly a perfect safeguard against fatality in small-pox. Mr. George Wight, of Liverpool Road, gave evidence of a case which he was attending of a lady at No. 18, Albert Road, in the vicinity of the house where deceased expired. She had contracted small-pox; and, being a very susceptible subject, he was of opinion that it had been contracted from an infected house in the neighbourhood. The jury, after a short deliberation, returned the following verdict: "That the deceased died from an attack of confluent small-pox, and that her life was endangered by the neglect of her father in not having her vaccinated, and his conduct deserves censure." A verdict of manslaughter would perhaps have been more to the point.

INFLUENCE OF M. PASTEUR'S DISCOVERIES ON THE PROGRESS OF SURGERY.

AT the meeting of the Paris Academy of Sciences, on March 11th, M. Sédillot spoke on this subject. He showed how the hypothesis of aerial germs afforded an explanation of phenomena which were perfectly well known, but of which the cause was in obscurity, and how, likewise, this hypothesis was verified by the application of wadding or carbolised dressings, which destroyed the germs, prevented their reaching the wound, or formed an obstacle to their multiplication. M. Sédillot cited the results obtained by Mr. Lister and by M. Guérin. He also noted that amongst the hopes raised by the application of M. Pasteur's discoveries may be reckoned the immediate union of bones in resections of joints, and their fibrous transformation without suppuration after amputation. It is, in fact, due to treatment in conformity with M. Pasteur's principles that M. Eng. Boeckel has been able to obtain four rapid cures of wounds resulting, two from amputations of the thigh, and two from excision of the mammary glands. M. Abadie, in reference to M. Sédillot's facts and theories, stated that at Mucaww'a, on the borders of the Red Sea, he had often met with that form of chronic ulcer which in those regions generally follows the least wound received below the knee, and is called the Yemen ulcer, from the district of Arabia where it was first observed. The inhabitants have a theory that, to get cured, the wound must remain open to the air. M. Abadie has had the opportunity of proving that this idea is well founded; and, if he be supported by any special observations, it must be concluded that the air of those regions does not contain any *microbes*—the generic name by which M. Sédillot designates microscopic aerial organisms.

SCOTLAND.

THERE were very heavy snow-storms in the north of Scotland at the beginning of this week. Many of the railway lines were blocked, and telegraphic communication was much interfered with.

THE directors of the Royal Infirmary of Glasgow, having resolved that no cases of cut-throat or patients afflicted with "delirium tremens" should be received into the institution, the Town Council have appointed a deputation, with a view of getting this resolution rescinded or modified.

THE Health Committee of the Glasgow Town Council are making arrangements for converting St. Mark's burying-ground of that city into an "ornamental open space".

AT the March meeting of the Faculty of Physicians and Surgeons of Glasgow, the resignation was announced of Dr. J. G. Fleming, as representative of the Faculty in the General Medical Council.

THE Medical, Law, and Theological Classes in the University of Edinburgh closed last Friday. The total number of students who have attended the University during the past session, has been about three hundred in excess of that recorded for any previous year.

THE death-rate of Edinburgh stood last week at 27 and the birth-rate at 36 per 1,000. No deaths from fever, diphtheria, or small-pox were recorded. The mortality from measles has fallen from 20 deaths to 8, all of which occurred in the Old Town.

THE Senatus Academicus of the University of Edinburgh have received a bequest of £2,000 by the late Dr. Andrew R. Cameron, of Richmond, New South Wales, "the proceeds of which are to be given in each and every year to the practitioner, a member of the medical profession, who shall be adjudged to have made the most valuable addition to practical therapeutics during the year preceding".

EDINBAIN, SKYE: THE GESTO HOSPITAL.

THIS neat and substantial, if unpretentious, building, the gift of the late Kenneth Macleod of Gestornish to the people of Skye, has been opened for the admission of patients, several of whom have already taken advantage of the benefits of the institution. The hospital is nicely situated in a sheltered spot underneath the hills, and facing an arm of the sea, where all the elements of a healthy atmosphere apparently abound.

THE GLASGOW MILK-SUPPLY.

A DEPUTATION from the Committee, recently appointed at a public meeting held in Glasgow, to consider what steps should be taken to secure a supply of pure milk for the city, waited recently on the Town Council. Among the members of the deputation were Dr. McCall Anderson and Dr. Donald Macleod. The spokesman of the deputation pointed out that the supply of pure milk was a subject next in importance to that of pure air and pure water. The present seemed a favourable opportunity for bringing the subject prominently to the front, as one hundred and sixty cases of typhoid fever had recently been traced to poisoned milk coming from a single dairy. Besides the Glasgow epidemic, there had been outbreaks of fever in London and Manchester traceable to milk-poisoning. While the deputation did not wish to dictate to the Corporation what measures should be taken to secure the end in view, they had been bound to submit some tangible scheme; and accordingly, Sheriff Spens had framed suggestions which would be laid before the Corporation Committee for consideration. Dr. McCall Anderson also spoke in favour of some measure, such as those suggested. He said that, beyond question, thousands of persons every year were seized with illness, and many of them died from infectious diseases communicated by means of poisoned milk. The Lord Provost, in reply, said that the Council recognised the importance of the subject, and already the Health Committee had been considering the matter. The Council would be glad to give the deputation every assistance in their power, in getting a Bill to lessen in measure the evils which the public were at present exposed to from contaminated milk.

IRELAND.

AT the Wicklow Assizes last week, a proposition to abolish the County Infirmary was brought forward; but, as the majority of the grand jury expressed their disapproval, no further action was taken in the matter.

THE SMALL-POX EPIDEMIC.

WE regret to state that Dublin is still suffering severely from this preventable disease. Many cases of a virulent form have appeared, and the disease is spreading among the better circumstanced classes of the community. Valuable time has been irrevocably lost by local sanitary authorities in providing accommodation for small-pox patients and convalescents, and in the isolation of cases. After three weeks' inaction, a proposal was adopted by the Guardians of the South Dublin Union, that some sheds on the workhouse grounds should be used for small-pox patients and convalescents. These sheds, it would appear, are insufficiently isolated from the main building, which contains a large number of paupers. The medical officers of the Union protested most strongly against this dangerous proposal; and, after losing another week—a month having thus elapsed since the matter was brought prominently before the guardians—the objectionable resolution has been rescinded. The guardians have now resolved to enter into an arrangement with Cork Street Hospital, and, if necessary, with some other hospital, for the reception of small-pox patients, and to provide the necessary funds for getting the increased accommodation and attendance required.

OVARIOTOMY.

THE Master of the Rotunda Hospitals, Dr. Atthill, performed ovariectomy last week. The patient was a rather delicate-looking young woman aged 25, but the case appeared to be a favourable one for operation. There were no adhesions, and the cyst was removed, under the carbolic spray, without any difficulty. Unfavourable symptoms, however, set in the following day, and she died of hæmorrhage, about thirty hours after the operation.

THE COOMBE LYING-IN HOSPITAL.

HER Grace the Duchess of Marlborough visited this hospital last Saturday, and was conducted through the institution by the Master, Dr. Kidd, and other members of the medical staff. It will be remembered that the enlarged, and in great part newly built, hospital was reopened last May by the Lord-Lieutenant and the Duchess. Since Her Grace's visit on that occasion, the hospital has been in full working order, four hundred and eighteen women having been delivered in it, in addition to those admitted into the chronic wards. Her Grace expressed herself as being greatly pleased at the excellent order and evidences of good management she found in every department of the institution; and, on leaving, made a highly complimentary entry in the visitors' book.

ARMY MEDICAL SERVICE.

IN connection with the recent communications that have been made to the authorities of the medical schools by the late Secretary of State for War, the Royal College of Surgeons in Ireland have adopted a rather remarkable procedure. Being desirous of learning the actual state of feeling now existing in the Army Medical Service, relative to the unification and regimental systems respectively, the President and Council have considered that the best way of ascertaining the same would be by ballot. A voting-paper, therefore, having on it "the regimental system" and "the unification scheme", in separate columns, has been directed to all the officers of the department serving in the United Kingdom. The officer is requested "to put a + before whichever system he considers best", and return the voting-paper in an accompanying stamped envelope, with the address of the Secretary of the Royal College of Surgeons printed thereon. Should he also desire to offer any suggestions for the improvement of the Army Medical Service, or to point out any existing abuses in it, the Council of the College state that they will be glad to receive the same; pointing out that, as such information will be anonymous, it may be given unreservedly.

AN UNFORTUNATE ERROR.

GREAT excitement has been caused in Galway by an unfortunate mistake, attended with shocking circumstances. Two paupers having died in the workhouse, the relatives claimed the body of one, and the other corpse, being unclaimed, was given over to the medical school

connected with the Queen's College. In removing the remains at night, the wrong body was taken, and was dissected before the blunder was discovered. The relatives came to have the body of their kinsman buried, but only some fragments remained, which were put into a coffin and given to them. While the funeral was proceeding, it was remarked that the coffin was light, and the lid having been removed the truth was discovered. The daughter of the deceased, in the frenzy of her exasperation, took the remains in her apron and flung them at the gate of the workhouse. The chaplain had great difficulty in allaying the excitement of the people. Bishop M'Evilly, on learning the facts, prohibited the celebration of mass in the workhouse, but has been requested by Captain O'Hara, the chairman, to withdraw the interdict, an inquiry being promised.

PHYSIOLOGICAL TEACHING AT TRINITY COLLEGE, DUBLIN.

THE following memorial, petitioning the Board of Trinity College to reconsider their decision whereby they have refused to allow any place within the University to be registered under the Cruelties to Animals Act (39 and 40 Vict., chap. 77), has been circulated among the graduates of the higher medical and surgical degrees, and has received a large number of influential signatures in a few days.

"We, the undersigned Doctors in Medicine and Masters in Surgery of the University of Dublin, beg most respectfully to petition the Board of Trinity College to reconsider their decision of March 23rd, 1878, as to the question of registering certain places within the precincts of the University, under the Act 39 and 40 Vict., chap. 77. In support of our petition, we beg to state that—

"1. By the decision in question, all original research in the domain of experimental physiology, pathology, and therapeutics is absolutely prohibited. No professor can legally make the simplest observation on any living vertebrate, if the conditions to which the animal is subjected can be supposed to give the slightest pain. Considering the very strict provisions of the Act, and that, over and above these, the board would always have full power to make whatever regulations might be deemed advisable, we cannot but regard the decision as needlessly sweeping; and we are of opinion that it will not only debar the University from the performance of a most important duty, but that it will tend to cause clandestine experimentation.

"2. While most willing to comply with the provisions of the Act, which require that no painful experiment shall, under any circumstances, be shown to a class, we are of opinion that the demonstration of certain vital phenomena, such as can be shown only on the lower animals, is of paramount importance in the teaching of physiology; and physiology we consider to be the basis of medical education. Hence, as the decision of the board puts a complete stop to all such teaching, we cannot but regard it as highly detrimental to the educational powers of the University. The effect most certainly will be that students who are thus debarred from learning their profession scientifically in the University must go elsewhere, if they are to learn it scientifically at all.

"3. We are of opinion that the decision will have the effect of deterring competent and efficient men from coming forward to fill the professorships."

MEASLES AND VACCINATION.

AN outbreak of measles was reported last week at a meeting of the guardians of Swinford Union, by Dr. Blake, in the Kilmovee portion of his district; and, in consequence, he believed that it would be unwise and dangerous to oblige a compliance with the provisions of the Compulsory Vaccination Act at present, as it would be calculated to spread the infection.

HEALTH OF BELFAST.

THE report of the Sanitary Committee brought before the Belfast Town Council, at their usual monthly meeting held last Monday, showed that, between February 27th and March 28th, ninety-seven cases of zymotic disease were reported by the medical officers of the nine subsanitary districts, which included twenty-six cases of small-pox, all of which were removed to hospital; the houses where contagious diseases had occurred being thoroughly cleansed, fumigated, and purified. Eight fatal cases of small-pox were registered between

the 2nd and 22nd ult. The fatal cases of zymotic diseases were twelve less than in February, and the general death-rate was three per thousand lower than in that month. This decrease arose partly from the diminished mortality in fever, measles, and diarrhoea. The last case of small-pox which has been reported occurred on the 25th ult., so that it may fairly be assumed that the disease has been materially checked by the prompt steps taken in having the cases removed to hospital, the premises thoroughly cleansed, and the houses fumigated and whitewashed. In all cases where the bedding and rags of clothing could not be cleansed, they were burned.

SMALL-POX IN BELFAST.

AT a meeting of the Belfast Guardians last week, Dr. Seaton Reid reported that six cases of the disease had been admitted during the week, and five patients sent into quarantine. The disease does not appear to be increasing; at all events, the mortality has been but trifling. As regards vaccination, the Local Government Board have pointed out that, as small-pox is prevalent to some extent in the town, it is of the highest importance that every exertion should be made to have the provisions of the Compulsory Vaccination Act carried out as fully and effectually as possible.

SMALL-POX IN LIMERICK.

AT the Board of Guardians last week, it was stated that the Governors of St. John's Hospital would receive small-pox cases in the event of an epidemic, and have agreed to allow the guardians the Cholera Ward in that institution for £10 a year; the board to put it in proper repair. The matter is under consideration; but it is probable that, should it be necessary, the guardians will erect a new building close to the workhouse for the reception of small-pox patients, which will isolate the convalescent cases as well as those suffering from the disease.

RATHDOWN UNION.

AT a meeting of the guardians of this union on the 27th ult., a letter was read from the Local Government Board, urging upon them the necessity of paying due attention with regard to the erection of small-pox sheds in the workhouse-grounds. It was, however, stated that there were only two small-pox patients in the isolated infirmary-wards at present, and that there was room for some eighteen others; so that there was no immediate necessity for going to the expense of erecting sheds as proposed.

FEE FOR CERTIFYING A LUNATIC.

AT a recent meeting of the Ballina Board of Guardians, an order on the board, signed by magistrates, to pay £2 to Dr. Mahon for examining a dangerous lunatic, was under consideration. The feeling of the guardians appeared to be that the fee was too high, one guinea being ample; and the board ordered the certificate to be returned to the magistrates, and the clerk was desired to state that they wished the justices would assess in such cases in proportion to the trouble and distance in each individual case, £2 being the maximum sum.

AN UNFOUNDED CHARGE.

AT a late meeting of the Westport Guardians, a communication was received from a Roman Catholic clergyman in reference to his recent complaint against the medical officer and sanitary officer of the Islandeady Dispensary District. The Committee of Management held a special meeting on February 4th, to consider the charges made, and they expressed unanimously their high opinion of Dr. Allman as medical officer, and declared their full approval of the manner in which the sanitary subofficer discharged his duties. The matter, however, was brought under the notice of the Local Government Board, and a formal inquiry demanded by the reverend gentleman, which was refused by the board, as they stated that they did not see what further object would be gained in a subject which had already received investigation at the hands both of the Board of Guardians of Westport Union and of the Committee of Management of the district.

BRITISH MEDICAL ASSOCIATION.

EXTRAORDINARY GENERAL MEETING.

AN extraordinary general meeting of the Association, called by requisition, was held at the Queen's Hotel, Birmingham, on the 2nd instant, at 3 P.M. Dr. EASON WILKINSON, President, occupied the Chair. The following members were present.

Agar, S. H., Esq., Henley-in-Arden; Anderson, Mrs. E. Garrett, M.D., London; Archer, J., Esq., Edgbaston, Birmingham; Archer, W. G., M.B., Birmingham; Arlidge, J. T., M.D., Newcastle, Staffordshire.

Baker, A., Esq., Birmingham; Barker, J., Esq., Coleshill; Bartlett, T. H., M.B., Birmingham; Bartolomé, M. M. De, M.B., Sheffield; Bassett, J., M.D., Birmingham; Bates, W., Esq., Birmingham; Batten, W. S., Esq., Bromsgrove; Bindley, P., M.B., Birmingham; Bodington, G., Esq., Sutton Coldfield; Bodington, G. F., M.D., Kingswinford; Borchardt, L., M.D., Manchester; Bracey, C. J., M.B., Birmingham; Bracey, W. A., Esq., Birmingham; Bradley, J. P., Esq., Birmingham; Brett, J., Esq., Birmingham.

Cameron, H. C., M.D., Glasgow; Carmichael, W., M.D., Edinburgh; Carpenter, A., M.D., Croydon; Carter, A. H., M.D., Birmingham; Chadwick, C., M.D., Tunbridge Wells; Chavasse, T. F., M.B., Birmingham; Clark, J., M.D., Lichfield; Clayton, W., Esq., Accrington; Clibborn, W., M.B., Birmingham; Cook, F., M.D., Cheltenham; Cornwall, J., Esq., Fairford.

Day, H., M.D., Stafford; Donovan, W., Esq., Whitwick; Dunn, G. P., Esq., Hales Owen.

Eales, H., Esq., Birmingham; Eastwood, J. W., M.D., Darlington; Edginton, R. W., M.D., Birmingham; Elkington, G., Esq., Edgbaston, Birmingham.

Falconer, R. W., M.D., Bath; Fausset, H. J., M.B., Tamworth; Flinn, D. E., Esq., Brownhills; Foster, B., M.D., Birmingham; Fox, E. Long, M.D., Clifton; Freer, A., Esq., Stourbridge.

Gamage, S., Esq., Birmingham; Garman, J. C., Esq., Wednesbury; Goulder, F. S., Esq., Dudley; Gray, F. J., Esq., Rugeley; Grigg, W. C., M.D., London; Guthrie, G., M.B., Lichfield.

Hadley, J. J., Esq., Tamworth; Harmar, J., Esq., Birmingham; Hartshorne, F. H., Esq., Broseley; Hayes, J., Esq., Stoke; Henry, A., M.D., London; Hex, H., Esq., Birmingham; Hickinbotham, J., M.D., Birmingham; Hiron, J. H., Esq., Studley; Holloway, G., Esq., Cannock; Holman, C., M.D., Reigate; Humphreys, J. R., Esq., Shrewsbury; Hunt, B., M.D., Birmingham; Hunt, J., Esq., Birmingham; Husband, W. D., Esq., York.

Jackson, A., Esq., Sheffield; Jackson, V., Esq., Wolverhampton; Johnston, J., M.B., Birmingham; Jolly, R., M.D., Birmingham; Jones, A., Esq., Dudley; Jones, G., Esq., Birmingham.

Kelty, P. M., Esq., Walsall; Ker, H. R., Esq., Dudley; Keyworth, J. A., M.D., Aston.

Lee-Strath, F. R., M.D., Birmingham; Legge, W., Esq., Derby; Lewis, H., M.D., Folkestone; Lister, J., Esq., London; Lloyd, G. J., Esq., Birmingham; Lowe, H. G., Esq., Birmingham; Luce, J. J., M.D., Stratford-on-Avon; Lund, E., Esq., Manchester.

Machin, G. S., Esq., Birmingham; McVeagh, D., Esq., Coventry; Malet, H., M.B., Birmingham; Malins, E. M.D., Birmingham; Manby, F. E., Esq., Wolverhampton; Manley, J., Esq., West Bromwich; Marriott, C., Esq., Leamington; Mason, F., Esq., Bath; May, B., Esq., Birmingham; Monckton, D. H., M.D., Rugeley; Moore, M., Esq., Coventry.

Napper, A., Esq., Cranleigh; Nason, R. B., Esq., Nuneaton; Nicholson, R. H. B., Esq., Hull; Newham, C. S., Esq., Wolverhampton.

Oakes, A., Esq., Birmingham; Owen, L., Esq., Birmingham.

Palmer, J. H., Esq., Birmingham; Parsons, C., M.D., Dover; Pemberton, O., Esq., Birmingham; Prosser, R., Esq., Bromsgrove.

Rickards, E., M.B., Birmingham; Roberts, B., M.D., Eastbourne; Rogers, J., M.D., London; Rowland, H. M., M.D., Malvern Wells; Russell, J., M.D., Birmingham.

Saundby, H., M.D., Birmingham; Savage, T., M.D., Birmingham; Sawyer, J., M.D., Birmingham; Scurrah, J. D., M.D., Birmingham; Sharp, J. H., Esq., Walsall; Shuttleworth, G. E., M.D., Lancaster; Skeate, Edwin, Esq., Bath; Smith, R., Esq., Birmingham; Smith, S., J., M.D., Bilston; Snell, Simeon, Esq., Sheffield; Solomon, J. V., Esq., Birmingham; Spanton, W. D., Esq., Hanley, Staffordshire; Sproughton, W. H., Esq., Birmingham; Suffield, C. R., Esq., Birmingham.

Tait, L., Esq., Birmingham; Terry, H., Esq., Northampton; Thomas, H. W., Esq., Birmingham; Thompson, J., M.D., Leamington; Tibbitts, J., M.D., Warwick; Totherick, J. Y., M.D., Wolverhampton.

Underhill, T., M.D., West Bromwich.

Vawdrey, T. G., Esq., Handsworth.

Wade, W. F., M.B., Birmingham; Waters, E., M.D., Chester; Welch, J. B., M.B., Birmingham; West, J. F., Esq., Birmingham; Weston, G. F., Esq., Stafford; Whitcombe, W. P., Esq., Birmingham; Wilders, J. St. S., Esq., Birmingham; Wilkinson, M. A. E., M.D., Manchester; Williams, T. W., Esq., Birmingham; Wilson, H. C., M.D., Birmingham; Wise, R. S., M.D., Banbury; Wood, J., M.B., Birmingham; Wright, M. H., Esq., Birmingham.

Yates, G., Esq., Birmingham.

The SECRETARY (MR. FRANCIS FOWKE) read the notice in the JOURNAL convening the meeting; and letters in excuse of absence were read from several members of Council. Dr. Waters, on behalf of Dr. A. P. Stewart, and Mr. A. Baker, on behalf of Mr. Wheelhouse, gave reasons for their not being present; the former in consequence of illness, the latter because of an important legal appointment.

THE REPORTS OF PROCEEDINGS OF COMMITTEE OF COUNCIL.

Dr. GRIGG proposed the first of the resolutions given in the requisition calling the meeting. Before doing so, he said that, in order to avoid repetition and digression, and to try to do justice to the rather complicated subjects which he had to bring before the meeting, he had reduced to writing what he had to say on the different points, and with their permission would read it. Before performing the duty which was incumbent upon him of moving the resolutions included in the requisition to consider which the meeting was summoned, he had, at the request of two eminent members of the Association, Dr. Barnes and Dr. Quain, to read letters which they had addressed to him for the purpose of being communicated to the meeting.

Printed copies of the letters were handed to the members present; and that of Dr. Quain was read. On Dr. Grigg's proceeding to read the letter of Dr. Barnes,

Dr. A. CARPENTER rose to order. While willing to give to Dr. Grigg the fullest liberty of expounding his views, it could not be held that the meeting should hear Dr. Grigg read the written speeches of his friends who had not come. If Dr. Grigg would address himself to the subject of his resolution, the meeting would give him a fair hearing. [Cheers.]

Dr. GRIGG bowed to the view of the meeting thus expressed, and refrained from reading the letter of Dr. Barnes. He moved:

"That this meeting is of opinion that the Reports of the Proceedings of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted."

In stating the reasons which he thought the meeting might properly consider as conclusive in support of that resolution, he said that the proposition seemed self-evidently correct. It was, however, negatived at the last meeting of Committee of Council at which he moved the resolution. He could but hope that, having had further time for consideration, his colleagues in the Committee of Council would vote as unanimously in favour of the resolution at this meeting as they voted unanimously against it on March 13th. It was perhaps, however, proper to show why he thought it necessary to pass such a resolution at all. Had the Proceedings of the Committee of Council been published adequately? Take, for instance, the Reports of Proceedings at the last two meetings of Committee of Council, officially supplied for publication in the JOURNAL. Dr. Falconer had written to the JOURNAL that, if Dr. Grigg had attended the meeting of October 10th (to which he was never summoned), he would have known of the intention to take a shop and premises in the Strand, and to make an outlay on them, and to undertake printing; this having been fully discussed then, and decided upon in principle. He had read the published Report of Proceedings in the JOURNAL. In the first place, it was not published at all till six weeks after date; and, when published, it contained positively no reference at all to this highly important business, although it involved an expenditure of about £2,000 at least, and constitutes a new departure. He thought that, to call any such report a "Report of Proceedings" was an absurdity. All of the other business transacted, and which was reported, was mere routine—mere child's play—to this. Such a report was "the play of *Hamlet* without the Prince of Denmark". So with the Report of Proceedings, which was published in reference to the meeting in January. At that meeting of Committee of Council, it was definitely ordered that the seal of the Association should be affixed to the lease of the shop in the Strand. This was published. But it was also ordered that an expenditure of £1,000 be made on the repairs of the premises, and a further expenditure, which would probably amount to more than another £1,000, on plant and fittings. Well, this report also was not published till more than a month after date; and, when it did appear, all reference to the authorised expenditure of £1,000 and the projected expenditure of another £1,000 was again omitted. [Interruption.] These omissions were not accidental, for, first, he was forbidden by the General Secretary to communicate the facts to his Branch; secondly, when he publicly asked the President of Council to correct the omissions in the JOURNAL (which he expected would readily be done), then, as all knew, the President declined to do so; thirdly, that refusal to repair these omissions was subsequently approved by a deliberate vote of the Committee of Council. In fact, except from the information which his letters in the JOURNAL conveyed, the members had had no inkling of the fact that £2,000 of their money was to be spent in this way; and, up to this time, no official notification had been made of it, and the members had no cognisance of it except from himself. [Hear, hear.] There were other important omissions, to which he had referred in the letters which he had published in the JOURNAL on the subject; but to these, for the

sake of brevity, he should not refer. It would be seen that he did not ask for the publication of anything more than a fair and adequate report of the proceedings of Committee of Council. [*Hear, hear.*] Of course, minor details, routine payments, and private details were not what he spoke of; but, in the words of the resolution already adopted by the Council of the Metropolitan Counties Branch, and approved of by nearly 2,000 members of the Association, he moved:

"That this meeting is of opinion that the Reports of the Proceedings of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted."

Dr. JOSEPH ROGERS asked the President if, in the case of his seconding the resolution *sub silentio*, he would be shut out from speaking subsequently? [*Cries of "Certainly not!"*]

The PRESIDENT ruled that Dr. Rogers or any member who seconded a resolution in silence could speak subsequently.

Dr. ROGERS thanked the President, and seconded the resolution proposed by Dr. Grigg.

Mr. SAMPSON GAMGEE (President of the Birmingham and Midland Counties Branch) said he had taken upon himself to stand before the meeting to press the view that it was necessary for the proper and successful conduct of the Association, that the question of the publication of reports of proceedings in the Committee of Council should altogether be left to the discretion of the Committee of Council. [*Cheers.*] He had to appeal to the sympathy of the meeting in moving an amendment to the resolution proposed by Dr. Grigg. He appealed to their sympathy in taking this course, for he had not had the opportunity—not having the fortune to be a metropolitan member—of a long and intimate acquaintance with the mover of the resolution, though he had had a long and intimate acquaintance with the affairs of the Association—[*hear, hear*—]—and the members would see how ingeniously Dr. Grigg had stated his case, how he had elaborated his details, how deep had been his inquiry, how well he had marshalled his facts, how great had been his deliberation, and the speaker hinted that the meeting would be as kind to him under the obviously disadvantageous circumstances in which he should labour in opposing the resolution thus placed before those present representing the Association. He objected to the resolution on its merits. The first part of it was of no very serious import either one way or the other, and this he should, with no want of respect to the mover—for it was a mere truism to say "that the reports of the proceedings"—those which the Committee of Council considered might be published—"should be published in as complete and intelligible a form as is consistent with the conduct of business". That was stating a truism to which all members might fairly assent without any violence to their feelings—[*a laugh*—]—and in saying this he begged to congratulate Dr. Grigg upon the skill with which the resolutions were drawn. He hoped that he should have an opportunity of becoming better acquainted with Dr. Grigg, so struck was the speaker with admiration at the skill with which he had drawn up his case—with the ingenuous, not to say ingenious way, in which he had put his case, positively omitting no point whatever. It would be quite impossible for any body of men to do business if their hands were to be tied, as it was proposed to tie the hands of the Committee of Council in the second part of the first resolution, to which members must give their special attention. [*Hear, hear.*] What would the members of the Association in their individual capacities say if their bankers were bound to publish all their proceedings? how would business men care to have all their transactions published for the benefit of their rivals in business? [*Hear, hear, and cheers.*] It was often necessary to hold over in the Committee of Council resolutions, and this in the private interests of the Association; and it was often expedient, in the same interests, that resolutions should not be published at all. [*Cheers.*] The members must leave such matters in the hands and at the discretion of the governing body, and if they had confidence in that governing body they would do so. He also objected to the resolution in regard to its terms, for if it should be carried it would be a declaration of alienation of confidence in the Committee of Council; and he contended that if the Association had men to conduct their business they must have confidence in them. [*Cheers.*] The laws of the Association said that the business was to be vested in the Committee of Council; that might be right or it might be wrong; but he was not aware that the profession and the Association had protested against that law. [*Cheers.*] He himself was one who, in bygone days, thought that the Committee of Council had too much power, but now, if the Committee of Council should advise that greater extension should be given it, he should congratulate the Association, because he thought it was a wise course to educate as many as possible in the business of governing. [*Cheers.*]

The meeting at Birmingham in 1856 gave full powers to the Committee of Council, and how had they exercised it? Well, in 1858, the Association had 2,000 members and £800 of debt; and who then in 1858 would have predicted that in 1878 the Association would have 7,000 members, would have given £400 in the year for scientific grants, would have had a JOURNAL of the present character, and would have had a capital sum of its own invested? [*Cheers.*] There was present Dr. Falconer, who used to manage the finances of the Association when it had no money at all. [*Laughter and cheers.*] There were very few members then who were inclined to go in and share the responsibilities of the Committee of Council. Now, however, it seemed as if there were many candidates desiring to share the honours which the Committee of Council had won. [*Hear, hear.*] He maintained that the confidence which had so long been given to the Committee of Council, which had been given to them when there was no capital, should be given now they had accumulated capital; and that the Association should be that professional brotherhood, working for each other's good, which Sir Charles Hastings, its founder, designed it should be. To limit the confidence which the Association had in the Committee of Council would be to thwart those endeavours which had hitherto been exercised so much to the advantage of the Association. [*Cheers.*] If this confidence of the Association should be thus limited, who would undertake the duties now discharged by the Committee of Council? Would commercial men, who were directors of banks or other undertakings, submit to have their governing actions thus controlled? [*Hear, hear.*] He should like to ask if the Committee of Council had any fees for their discharge of duties for the Association? [*Laughter,* and the members of the Committee of Council present answered emphatically in the negative.] Well, then, if men who had fees would refuse a position if there was an implied want of trust, how much more would gentlemen, who received no fees, feel disinclined to carry on the business of the Association under the like circumstances. [*Hear, hear, and cheers.*] He apologised for using an offensive word to professional ears—the word "business". [*Laughter.*] His excuse must be that it was a word much used in that town. A large buyer of coals in that town had his bills sent in "Mr. So-and-so to the Earl of Dudley". [*Laughter.*] One peer of the realm, who had marriage connection with the reigning Royal family, had also a son in a "tea-house"—but no doubt the metropolitan members of the Association, who knew, of course, all about the great city, could correct him if he were wrong—and these facts would show that he spoke of "business" in respectable company. In sober seriousness, the profession must not seem so to object to "business". The day when the members of the profession were looked up to as gods had passed—never to return; and the profession would have to appeal to the sympathy of their fellow-men by an intelligent discharge of their business duties. [*Hear.*] The manner of Dr. Grigg's speech had made him feel that he had not heard sufficient hitherto of Dr. Grigg; but he confessed he desired to see more of the Committee of Council's management, but he did not want to limit it. [*Hear, hear.*] There was particularly good reason why the Association should give its support to the Committee of Council at this time. It was twenty years ago since the passing of the Medical Act; and now, in 1878, Parliament was on the eve of legislation again. There were many important points in the Bill, and whether they became law would depend upon the Association, through the action of the Committee of Council. The Act of 1858, whatever might be its imperfections, was brought about by the Association in face of the opposition of some most important bodies. Now, in this year of legislation, it would be most unwise, to say nothing of the ingratitude of such a proceeding, to do anything which would seem like a limitation of the confidence in the Committee of Council, who gave the Association so much gratuitous labour. [*Cheers.*] He moved, as an amendment: "That it is necessary, for the successful transaction of the business of the Association, that the publication of reports of meetings of the Committee of Council should be left to the discretion of the Committee of Council."

Mr. WATKIN WILLIAMS, in seconding the amendment, said it gave him much pleasure in assisting to defend the action and privileges of the Committee of Council. He was not new to the business of the Association, and he was sure that it would be a fatal blow to the Association if the Committee of Council were to be hampered in respect to what they should or should not publish of their proceedings. [*Hear, hear.*] As Dr. Grigg's resolution stood, if carried, it would render it necessary upon the Committee of Council to publish all its business transactions; and, as had been said, this would be altogether contrary to prudence. The question was, Who should be the judge of what was to be published? And he held that, as the Association had grown from a few hundreds to be an Association of five thousand or six thousand members, and in a flourishing condition, the work could not

have been badly managed; and that, therefore, those who had conducted its affairs hitherto to this success were the best in which its affairs could still be left. [*Cheers.*] All that was necessary to say upon the subject had been so well put by Mr. Gamgee, that it would only be gilding refined gold to add to his words; but it must be urged that, if the Association were to continue to grow in *status*, numbers, and importance, it must change with the times, by going into the market where all men went who had to do with newspapers, and come face to face with those with whom they desired to do business—just as men desiring to trade with gunsmiths came to Birmingham. He knew nothing about the house in the Strand; but he had confidence that the Committee of Council would act honestly and fairly. [*Cheers.*] He did not say that they had never made a mistake, nor did he say they never would; but he said that fewer mistakes had been made by the Committee of Council than might have been expected, and he could give them the fullest confidence that, if any mistake should be made, it would not be because they were lax, or for the want of giving the subjects their best consideration. [*Cheers.*]

Dr. JOSEPH ROGERS said he had listened to the fervid eloquence of Mr. Gamgee, but had failed to catch much solid argument in that eloquence against the motion. Mr. Gamgee might be congratulated upon the fact that, if he stood only in the position of a "raw recruit", he had reached the head of his profession, and had so marshalled his views as to be worthy of promotion to the rank of a general officer. [*Laughter and cheers.*] Mr. Gamgee had addressed a very sympathetic audience, an audience in favour of his views. It was certainly a remarkable move to call the special meeting in Birmingham—it was more ingenious than ingenuous. Dr. Grigg had two thousand answers in support of his view that the house in the Strand should not be taken, many of the metropolitan members being amongst the number. [*Cries of "Question", "Ex parte statement", "Order", and other interruptions.*] When Dr. Grigg sent those circular letters, he appealed to unbiassed minds, by minds not to be swayed by eloquence like that of Mr. Gamgee. [*Cries of "Question".*] As to the action of the Committee of Council in regard to the house in the Strand. On October 10th, when it was first decided to take the house—

Dr. WADE rose to order. The question of the house was in the second resolution, and not in the first, then before the meeting. [*Hear, hear.*]

Dr. DAY said that Mr. Williams had not been called to order in his reference to the same subject.

Dr. ROGERS went on to say that the meeting would not have been called at Birmingham if it had not been for a purpose. [*Interruption.*]

Mr. WILLIAMS said that it had been the custom to call the meetings at Birmingham for many years.

Mr. A. BAKER believed that every special general meeting for the last fifteen years had been called at Birmingham.

Dr. ROGERS, proceeding, protested against attempts being made to shut out what he had to say. He did not want to make an attack on the Committee of Council; he did not say that the contemplated expenditure should not be made; but he maintained that, when it was contemplated to make so great an outlay, a general meeting should have been called. He knew that certain things in business matters ought to be kept back; but, when so large an amount of funds was intended to be sunk at once, it was felt by some that the Committee of Council had been led into a mistake.

Dr. EASTWOOD objected that the speech of Dr. Rogers did not bear upon the resolution before the meeting.

Mr. HUSBAND said that, if Dr. Rogers could show that something was being kept back by the Committee of Council which ought to have been made known, he had a right to do so; but he had no right at this stage to enter into the question of the propriety of taking these premises.

Dr. ROGERS said that the Committee of Council should have made their proposal to the whole body of their constituents. [*"So it was".*] Yes, six weeks after in one instance, and two months after in the other. He simply said that they were guilty of an imprudence, and one which he protested against.

A MEMBER asked if the Committee of Council, in what they had done, had exceeded their powers; and a reply in the negative was given.

Mr. HUSBAND said that, when gentlemen came to a meeting prepared to make charges, they should be very careful as to what they stated. Dr. Rogers, with the characteristic looseness of Dr. Grigg, had said that in October the Committee of Council determined upon the course they had adopted, when they had not determined upon any course at all. Dr. Rogers had spoken of the preconceived opinions of that meeting; but what was wanted was not any preconceived opinions upon the part of anyone, but a fair judgment as to the unfair attack

made upon the Committee of Council. He had facts before him which would exculpate the Committee of Council from all the charges made. In October—to give the facts—a report was made, or, rather, the subject was considered of taking premises; and this was the first time it was entered upon. It was not then determined upon. No resolution whatever was then passed. [*Hear, hear.*] The Committee of Council said: "This is a matter which requires grave and careful consideration." [*Hear.*] They said, with regard to the present offices, "We must get out of here; we are compelled to move."

A MEMBER rose to order. One question must not be mixed up with the other; and Mr. Husband was entering upon the second subject—the taking of the house. The meeting ought to be kept to the one resolution and to the amendment.

Mr. HUSBAND thought he must have been misunderstood, for he was keeping to the first question; he was not defending, then, the taking of the house, but was only showing that the Committee of Council had not suppressed anything. [*Hear, hear.*] He was speaking strictly to the purpose before the meeting, showing that the Committee of Council, at the time referred to, had nothing to conceal, for nothing was done, and the taking of the premises was another question altogether. As he was saying when interrupted, on the 10th of October last the Committee of Council considered the subject for the first time. They appointed a subcommittee, who reported to them, and it was not until the 9th of January that the lease was determined to be taken. There was some accidental delay in the arrangements, but when this delay was remedied the matter was published, so it was unjust to say that there had been any suppression. [*Hear, hear.*] As to the statement of expenditure upon the premises, there had not been a farthing yet expended, and nothing had been done but to take the building. If the Committee of Council had not taken it when they did, they would have lost it, and the action was as quickly as possible reported in the JOURNAL.

Dr. WADE said that the confusion which had arisen was owing to Dr. Grigg having put the cart before the horse in discussing a matter of secondary importance first, and it was almost impossible to touch upon one subject without touching upon the other. As to the charges of a "move" in regard to the meeting being called at Birmingham, the fact was that all the special meetings were called there, and he hoped that the result of this meeting would be a warning to members not to readily, so readily as they had in this case, sign requisitions for special general meetings. [*Hear, hear.*] Birmingham was the most suitable place for a meeting, for it was impossible for provincial men to come up to London and return in a day, whilst the majority of members could come to Birmingham and return in a day. [*Hear.*] Besides, in London there was an organised band for certain purposes, and he should be entirely opposed to a meeting to consider a requisition being held in a place where that requisition originated. [*Hear, hear.*]

Dr. GRIGG, in reply, said that, if Mr. Gamgee did not recognise him, he had pleasure in recognising Mr. Gamgee as an old and valued teacher. He complimented him on the energy and ability of his advocacy. He quite agreed that only suitable details should be published, and no minor matters. But the recent practice had been, in the official reports furnished to the JOURNAL, to omit amendments, and to omit reference to reports of Subcommittees. Now in this, more perhaps than most other Committees, the most important business was referred to and transacted by Subcommittees; and their reports, when adopted, constituted the most important parts of the proceedings, and those most necessary to be made known. His resolution only asked for a convenient and adequate report of proceedings. It could not be contended that the reports to which he referred were adequate or reasonable. The resolution seemed to be one which all parties who wished well to the Association should be willing and even eager to adopt.

A MEMBER asked whether, if the motion should be carried, the Committee of Council would take the vote as one of censure.

A chorus of voices responded, "Certainly".

Dr. GRIGG said that such was not his meaning.

Dr. BORCHARDT rejoined that in that case Dr. Grigg's words had not borne out his meaning.

The amendment was then put to the meeting and the great majority voted for it. "On the contrary" showed some ten hands. The amendment was then put as a substantive resolution, and the great majority voted for it, five hands only being held up against it. The amendment, thus taken as a substantive resolution, was declared carried, amid loud cheers.

THE NEW OFFICES OF THE ASSOCIATION.

Dr. GRIGG said: I have now to move the second resolution which stands on the paper. It is—"That this meeting desires to express its opinion that, in the selection of a house for the Association, it is desirable that the Council, Committee, and waiting-rooms should be separate from the printing and publishing offices". There are only two main grounds on which a scheme such as that the Council have in hand can be supported. The first would be that it is the best thing which can be done for the business interests of the Association; and the second is, that it would advance the professional interests of the Association. I will take first the business interests. The scheme to which the seal of the Association has been set involves, as does not appear in the reports of the Proceedings of the Committee of Council, but as the fact is, not only the renting of a shop and house in the Strand at £320 a year, on a lease of twenty-one years, but also the expenditure on these premises of a capital sum of £1,000 in repairs, and of an amount estimated at least as much as about £500 for fittings, and £500 at least, probably more, for printer's plant, together with a loss of nine months' rent, which means an expenditure of nearly £300 more, making a grand total of £2,300. Now, the avowed reason set forth in the recently published statement of the Committee of Council on this subject is, that such a proceeding will conduce first of all to a considerable economy in printing, and will further increase the income from advertisements. I have found no small difficulty in checking the calculations upon which this estimate is based, because the President of Council, Dr. Falconer, thought it right to instruct the General Secretary not to give me the detailed information which I sought, with the object to put before this meeting a perfectly authentic criticism of these estimates, in order that the basis of a fair decision might be obtained. I have, notwithstanding, enough information to enable me to put before you figures which will help us all to judge for ourselves. In the first place, how is the economy to be realised? It is to be realised, we are told, by the Association undertaking for itself what is technically known as the composition of the JOURNAL, that is, the setting it in type. When this subject was last discussed at the Committee of Council, I heard mixed up with it a good deal about savings which had been effected by purchasing our own paper, and savings which had been effected by purchasing our own stamps, and others which will still be effected by contracting for what is known as our own steam "machining", that is, the printing of the JOURNAL—a distinct thing from the composition. All these are, however, not to the point. They all arise from the fact that for some years the increasing income from the larger circulation, and consequent improvement in advertising income, has enabled us to pay cash for our paper, and contract direct for it, instead of having to let Mr. Richards buy it for us, on the strength of his credit, and charge us a profit on it, taking payment from us for it, at such times and in such a manner as we were able to make payments. Of course our earlier struggling years of impecuniosity compelled us, like many other people, to buy in a dear market, and involved a waste of money. As ready money purchasers, we have of late years been able to save that margin of profit, which was formerly impossible while we were buying on credit. (*Hear, hear.*) I really do not know, and have not been able to learn, why we have omitted for the last few years to save the like margin of profit which would have been realised if we had contracted for our own machining. So far as I can make out, there is no reason for it; it ought to have been done two or three years ago; and should be done at once. We are and have been throwing away, according to the General Secretary's calculation (no doubt on good grounds), not far short of £200 a-year by not doing it. The economy, however, now held up before our eyes is to be realised solely in the composition, by employing our own compositors, instead of contracting with a printer. Now I have seen and checked the rough calculations of the Secretary upon which this supposed economy is based, and by which the Committee of Council, I regret to say, have been misled. It was stated at the last meeting of the Committee of Council, and may possibly be stated again here to-day, that that economy would amount to between £900 and a £1,000 a-year. That statement is *prima facie* incredible, if not ridiculous, when we remember that the total cost of composition for the JOURNAL is only £1,900 a-year. It amounts to saying that we have been over-paying our present printer to the extent of £900 on an annual bill of £1,900—giving him a net profit of 90 per cent. on the composition of the JOURNAL. Such a statement would involve a profound reflection on the business management of the Association, as well as a great and most utterly unfounded reflection against our present printer—a man of the highest honour, and to whom, for a large part of twenty-five years, we have been much indebted, as Dr. Stewart could tell you, for rendering it possible even to maintain the very existence of the Association. At one period, the Association was indebted

to him above £2,500. It is well known that 12 per cent. is considered a fair printer's profit in contract work, for time and capital. Moreover, it has frequently been ascertained that Mr. Richards' contract price for composition of the JOURNAL was moderate, and even cheap. As a matter of fact, there has been no such overcharge, there is no such economy realisable; and the whole estimate is, I have convinced myself, by looking at it, and as you will convince yourselves in a few minutes, delusive and fallacious. The estimate which the Secretary has put before the Committee as promising these profits is roughly this. The actual cost of composition, as paid to Mr. Richards at the present for the JOURNAL is, *per annum*, about £1,900. Now the cost of wages of compositors, and of the services of one reader, if we were to employ our own men, would be £1,150; add 15 per cent. for replacing plant, say £75 *per annum*, and deduct this sum from that now paid in gross for composition, and the balance is £675; and this difference has been gravely put forward as a net realisable economy. A further saving of £200 a-year is calculated on machining; but that—even if the calculation be correct, which it is not—we can save, without moving, by making our own contract with the machiner. Such a calculation as the above is, I may be pardoned for saying, really childish, and would be amusing if the matter were not so serious. If the JOURNAL were to be composed in the street—if there were no cost for rent, repairs, rates, taxes, gas, fire, water, insurance, extra cost of house-cleaning and caretaking, interest, and replacement of expended capital, wear and tear of stock, or none of those minor costs which in the conduct of every business have to be added to mere wages in order to estimate what production costs, then such an estimate would be allowable. But it is obvious that all these things have to be included in our estimate, and we are going to pay very heavily indeed for the rent of our printing and publishing shop and premises. It is obvious, therefore, that the calculation of profit must be corrected by such additions of expenditure for those items as necessarily belong to the account. Now I happen accidentally to have been called upon long since to acquire a considerable acquaintance with publishing and printing matters, and I can tell you roughly at once what is the addition which has to be made to the wages of compositors, or for other charges in printing-houses where everything to be included is calculated and managed by persons of large experience on the principles of rigid economy. It is an addition of fifty per cent. For that statement I can give you the highest authority. That is to say, if you are paying, say, £22 per week for compositors' wages, you must add to that £11 a week to know what the composition has cost you. As you will see, this rule of trade works out quite accurately when we come to a detailed estimate properly drawn up. Thus, the real calculation for our JOURNAL stands in this way:

Composition and reading for JOURNAL (thirty-two pages) including advertisements (£29 a week) .	£1,508
Difference of rent, rates, and taxes (deduct £110 from £400) .	290
Repairs .	40
Water, gas, coals, and insurance .	40
Extra cost of housekeeper and cleaner .	40
Warehouseman .	75
Extra clerk .	100
Capital and interest on £1,500 outlay (taking for twenty-one years, $3\frac{1}{2}$ per cent.) .	120
Plant and renewal .	120
	<hr/> 2,333

Now that £2,333 *per annum* is what it will really cost us to print our own JOURNAL, against £1,900 which we are paying now: thus showing no profit, but a loss of about £400. I will go further than this, for, being fully convinced from some knowledge which I have on all matters in connection with printing and publishing, that the professional printer really works at a very small margin of profit, and even from his collateral sources of occupation for his men, compose a weekly journal much more cheaply and efficiently than its proprietors can do it for themselves, I wrote last Friday to Mr. Richards, asking him whether, if he had a contract for five years for the composition of the JOURNAL, instead of his present hand-to-mouth tenure, he could make any reduction in his present contract price. I will read you his answer. [A letter was here read, in which Mr. Richards said that, with a five years' contract, he would be able to make a reduction of £175 a year on the journal of sixty-four pages; or, if the Association decided to do its own machining, to provide the composition of a JOURNAL of sixty-four pages for £2,050 *per annum*.] On the other hand, if we endorse the proposition of the Committee of Council to take the Strand premises and undertake our own composition, it will cost us, as I have shown, £400 more than we are now paying, and

£600 more on the reduced "five years' contract" which Mr. Richards is willing to undertake. I may say further, as a matter of fact, that the private proprietors of journals, such as the *Saturday Review*, *The World*, and other weekly journals of the kind, although certainly not less anxious than we should be to realise an economy in composition, have all, long since, satisfied themselves that it is to their advantage to have their journals composed and printed by large printers, such as Spottiswoode, Saville and Edwards, Robson, and the like, in whose hands has been placed the great majority of weekly journals similar to our own in London. I am aware of a large music publishing firm, who, after three years' trial, found that they lost £800 a year, by printing their own music. We may be quite sure that if private business proprietors do not find it to their commercial advantage to print their weekly papers, an amateur committee of medical men are not likely to make much profit by taking it into their hands. I have obtained on this subject the experience of one of the largest newspaper proprietors and most able publishers in London. [A letter was here read, confirming Dr. Grigg's opinion on the subject.] As a matter of fact I am satisfied that the General Secretary's calculation of profit upon our composition is so absolutely inadequate, and has omitted so entirely to take into consideration many ordinary commercial costs beyond and above those of mere wages, that it is absolutely and entirely untrustworthy, and I believe this meeting may rest assured that there is not only no profit in the scheme whatever, but an actual loss. If from considerations of economy we pass to those of efficiency, it is, of course, obvious that it is of very great convenience to have at disposal the whole composing staff of a great printing firm in case of emergency. My experienced colleague in the Metropolitan Counties Branch, Dr. Alexander Henry, has informed me that he especially directed the attention of the Committee of Council to this point in a letter, which I hope will be read at this meeting. He, after twenty-five years' experience of the JOURNAL, views with the greatest alarm the proposition to rely for producing the JOURNAL upon a restricted staff of compositors in our own employment. He tells me that it has been one of the great elements of efficiency in the JOURNAL, that when a great pressure of matter has come in on the last days, the services of a large staff of well-experienced printers could always be thrown in at once for extra composition; and that, for example, when the week before last an early copy of the Medical Bill was obtained late on Wednesday, it was printed at full length in the JOURNAL the next day, and in no other. This, Dr. Henry tells me, is liable to happen at any time; and the possibility of being able to meet the pressure is of great advantage to the JOURNAL. Dr. Henry is an excellent practical authority on the matter; he looks forward with the greatest apprehension to the proposed change, and I do not think that his opinion—that the proposed arrangements will not tend to the efficiency—is to be slighted. In fact, it has self-evident common sense in support of it. So much for economy and efficiency in printing. But then it has been said in a statement put forward by the Committee of Council, and will no doubt be again said to-day, that by taking a large office in a prominent position in the Strand, we shall improve our advertising connection. (*Hear, hear.*)

So far as I understand advertising, advertisers spend their money in proportion to the circulation of a journal, and not in admiration of its premises. So long as the JOURNAL was of small size and influence, and circulating only 1,800 to 2,000 copies, which was the case ten years ago, so long the advertisements brought in only £500 or £600 a-year. In proportion as the importance, popularity, and circulation of the JOURNAL increased, so did its income from advertisements increase; and without moving its premises at all, as its circulation rose, in five years, to four thousand or five thousand copies a-week, so did its advertisements concurrently rise to about the value of £2,000. In the subsequent five years, as its circulation has risen to between eight thousand and nine thousand copies a-week, so has its advertising income risen proportionately to about £4,000 a-year. If its circulation go on increasing, we may expect its income from advertisements to go on increasing. On the other hand, if the JOURNAL were to fall off in value and in circulation, and go back to its former standard of circulation of two thousand copies, you might take Buckingham Palace as an office, and that would not prevent its income from advertisements from falling off. [*Laughter.*] So far as advertisements go, they have risen as the circulation has increased, and that is the law of advertisements. There is no reason to suppose that we, as amateurs, can make a new law for ourselves. I went into these figures with the fullest desire to find that any economy was realisable; and until I had thoroughly examined the figures, I concluded that such was the case, although I saw, when the statement was made at the last Committee meeting, that the anticipated profit of £800 or £1000 was greatly over-calculated. If it had been, I by no means, for other grounds, think

that the present costly premises in the Strand, intended to combine the sale and printing-rooms of the JOURNAL with the professional home of the Association, are at all desirable. Nevertheless, it would have been extremely satisfactory, with the view even to a separate arrangement, to have had the possibility of realising an alleged saving in the printing-office. But it is altogether an error; the estimates were crude estimates; the estimate of profit is a document which any business man would laugh to scorn, and it bears its own fallacies on the face of it to anybody who looks at it, and who knows anything whatever on the subject of printing on the one hand and the details of the Association business on the other. I cannot easily conceive how such a document could ever have been put before us, the Committee of Council, by any one professing to act as their business officer, or how we, the Committee of Council, could have been induced to accept so ridiculous a statement, and publicly to adopt it in a resolution as the result of "an exhaustive inquiry". However, I leave that responsibility to whosoever it may belong, and I conclude this part of my statement by reaffirming with the utmost confidence, and staking my reputation on the statement, that under no circumstances could the saving, which could be effected by taking the composition of the JOURNAL into our own hands, exceed a nominal sum of £200 a-year, without calculating the increased costs, which would result in a loss of from £400 to £600 a-year. It would undoubtedly greatly injure the efficiency of the printing arrangements, as Dr. Henry has pointed out, and as all practical proprietors of journals would recognise.

I pass now to the even more important question of whether it is professionally desirable to take costly premises, including a shop, in the most expensive business thoroughfare in London, and to select premises of such size in that situation as to include suitable meeting-rooms for the Committee of Council and for the Subcommittees of the Association, and waiting-rooms. I leave for the moment altogether Mr. Hutchinson's plan, warmly approved by the leading members of the Association, to whom it has been mentioned both in and out of the Metropolitan Counties Branch. He proposes to establish a writing and reception-room in the professional home of the Association, to which country members and foreign visitors can always come when they have to be in London for a day or two; to which they can have letters and telegrams addressed, and where they can obtain information as to the medical engagements of the week in London. That plan is only now in process of maturing; it was first brought before the Branch last summer, and has not yet been brought into complete shape. I may point out that if the Committee of Council had shown a desirable freedom of statement in the preliminary stages of this matter; if they had in their report to the Association in August last announced that they were contemplating taking a permanent central house or home for the Association, which should comprise its Committee and Council rooms; they would at once have necessarily been fully made aware of all the details of Mr. Hutchinson's scheme, and would probably also have received other suggestions from other quarters fully as worthy of consideration. I very much regret that this preliminary statement of their proposed novel scheme and large expenditure was not made. I think the Committee of Council probably now feel that they would have had everything to gain by taking counsel with the Association at large upon their plans, instead of proceeding to spend the money and carry out quietly their plan, and then to ask for the sanction and approval of the members of the Association at the annual meeting, when everything has been done. But leaving this aside as an extra suggestion, and dealing only with the recognised wants of the Association, I think it is plain upon the face of it, and every one will agree with me that, professionally, the proposed shop in the Strand cannot raise the status of the Association. Our Association has arrived now at a great position. It has now become a recognised factor in influencing Parliament, in the formation of public opinion, and in communicating with functionaries of all kinds, and people of high rank and station both in and out of our profession, on questions affecting all the relations of medical men to the state and to the country. When they are summoned to committees, or when they desire to confer with our committees or with our officers, they will, on this plan, find the British Medical Association treated as a mere appendage of the JOURNAL, and occupying apartments over a shop in the Strand. Supposing that our business interests require a separate printing and publishing establishment of our own, which I am sure they do not, and I hope I have convinced you that they do not, still that might be obtained in an unpretending situation, in the neighbourhood of the ordinary localities of printing and publishing shops, at a modest rental. A dozen such could be found suitable for the purpose, at an hour's notice, at a net rental of a third of what it is proposed to pay for and expend on the premises in the Strand. The balance might very properly be expended in selecting as a professional home of the Association suitable premises such as those of the Medical

Society of London, or a house situated in the centre of a professional neighbourhood, in a quiet street, suitable to the character and to the dignity of the Association. Such houses are to be had at moderate rentals, and both desiderata might be found separately at a less expense than is now proposed to incur for converting an upholsterer's shop in the Strand, which it is intended to make the future home of the British Medical Association, surrounded by shops and eating-houses. If that intention be carried out, we take our rank distinctly as an association of trading doctors. Everyone who comes upon professional business must visit the shop. He must enter by the shop, or alongside of it, through a long dark passage, and he will find somewhere upstairs the professional rooms of the Association. In fact, one of the items on which we are going to spend £1,000 is, I see, entered on the estimate, £100 for a shop-front. Now, a shop-front is all very well in its proper place, and I am the last man to attribute anything less than its proper importance to the value of the JOURNAL as the mainstay of the Association; its great propagandist agent, the great source of its prosperity and of its income. But this is no reason why we should insist on annexing ourselves to a shop. Let each thing have its due proportion. Let the central home of the Association be situated in a quiet neighbourhood, and arranged in a fashion suitable for its purposes of committee-rooms, council-room, and, I hope, reception and reading-rooms. Let me say that this is a subject on which I believe the Committee of Council will find that the members of the Association at large have a very strong feeling. And let me add also that we have an excellent example of dignity and success before us in another similar association, whose instincts might be supposed to be less fastidious in this respect, and who, nevertheless, have known how to combine commercial success with an almost professional dignity in their arrangements. I mean the Pharmaceutical Society. It also has its weekly journal, which is a commercial success. Let me add, by the great openness with which the council of that association report at the fullest possible length their proceedings and even their discussions in the *Pharmaceutical Journal*, they offer an excellent example to our Council; but, although a society of keen traders, they have recognised the facts that they can best consult economy by having their journal printed by contract with a professional printer, and their journal is actually printed a very few doors from the house of the present printer of the BRITISH MEDICAL JOURNAL. But the central home of the Pharmaceutical Society is a building of which any society may be proud. It is situated in Bloomsbury Square, as most of you know, with a museum and library attached, and, although they are not afraid of the shop, they do not think it necessary, in the semi-professional functions which they exercise, to annex the office of their society to their shop. I commend that example to this meeting. I have taken a great deal of trouble since I was led to consider this subject in investigating all its details. I have endeavoured, without sparing trouble, and as honestly as possible, to look at all sides of the question; and the conclusion to which I have arrived is that contained in the resolution which I now have the honour to submit to you, and which I will again read, in the hope that it will commend itself to your support. If it do not, I shall have no objection to the whole subject being referred to a committee for further information.

Dr. DAY (Stafford) seconded the resolution. He said that it was out of no feeling of disrespect to the Committee of Council that he took this course, for they were a body who had earned the general esteem of members. [*Cheers.*] His reasons for seconding the motion was that he thought the printing business should not be associated with the offices of the British Medical Association. The social, professional, and scientific character—the original characteristics of the Association—ought to be maintained; and it would be a misfortune, he thought, to have the commercial character imported into it, as it would be by undertaking to print the JOURNAL, and by the Association having a shop. The medical publishers, such as Churchill, did not print their own books, and what these had not thought it advisable to do the Association would not. He objected strongly to the proceedings of the Committee of Council in taking the premises.

Mr. HUSBAND: I now rise—the motion having been seconded—to state, on the part of the Committee of Council, the reasons which have led them to have—not a shop, but offices—offices which are compatible with the dignity and usefulness of the Association. I feel that I have a difficult task in having to answer a long speech read out as Dr. Grigg's has been—rapidly, and with many *ex parte* statements, letters, and such like, which no one else on this side of the table has had an opportunity of weighing. In the year 1871, the Committee of Council found that the Association was not financially prosperous—rather the reverse. Now why was this the case? The Association was not prosperous because its business was carried on in two different places—in Birmingham and in London. We had busi-

ness premises in London without superintendence, and the executive here in Birmingham, and a debt of nearly £2,000. [*Hear.*] We found that we must change our plan. I hold in my hands a report made at that time—I will read it if you desire it—it was made, after full consideration, by our editor then and our editor now, Mr. Ernest Hart. [*Cheers.*] Mr. Hart is a practical man—[*cheers*]—a man who should know something about this business; and Mr. Hart made a carefully considered report to the Committee of Council advising us to undertake the printing of our JOURNAL. Remember what was then our position. We owed our present printer, Mr. Richards, a considerable sum, we were in debt otherwise, our members were considerably fewer, so that our income was very considerably less, and yet Mr. Hart, in his report, contended that if we took upon ourselves the work of printing our paper, purchasing the material with borrowed capital, it would be advantageous to the Association. [*Cheers.*] We then said, "No, we are not going to do this on borrowed capital; we are going to make a great change, by combining all the business at one centre, by having a managing secretary; and we will see how we get on with this business first before we attempt more". [*Cheers.*] We made the change, and two or three years ago we found we could not conduct the business we have to do in our present offices, and no one who passes through the gloomy cavern of our present offices can surely say that they are compatible with the "dignity of our profession", as well as with the standing of the Association. [*Cheers, and a voice, "Admitta!"*] Well, then, when we now turn out, as we are obliged to do, we must have new offices to go to; and when this was before us, we naturally took up the consideration of being our own printers; a question pressed upon us by our editor Mr. Hart when we were in difficulties; and we weighed the matter by the light of our position that we were enabled to pay for the outlay—that we have the capital for the plant. [*Cheers.*] We had and have no personal interest in the matter [*cheers*], and Mr. Fowke, our able and painstaking secretary, had and has no interest in the matter, beyond the desire to benefit the Association; and we, the Committee of Council and Mr. Fowke, are only taking upon ourselves additional work by our endeavours to advance the interests of the Association. [*Cheers.*] If we had consulted our interests—our repose—we should have let things go on; but we have always considered the interests of the Association as standing first, and the Committee of Council have often had to come to London upon the business; they have spent their money and they have spent their time, with the single object of the good of the Association. [*Cheers.*] Now, Dr. Grigg should have known that we have considered all the details he has given us. He has given us Dr. Henry's views; but against Dr. Henry I place Mr. Ernest Hart's report made to us, proposing to extricate ourselves from difficulty by undertaking our own printing. [*Cheers.*] In Dr. Grigg's view and Dr. Henry's view, we should have two separate establishments, but Mr. Hart advised—and the wisdom of the advice was apparent and obvious—that the whole business of the Association should be done at one establishment; that the presence of the head officer of the Association was to be a source of control; and Mr. Hart's estimate—which can be read if desired—included the rent of rooms for the secretary; and Mr. Hart added that a large part of the advantage of the then proposed new arrangement would be lost if the whole establishment should not be thus combined. Reference has constantly been made to a "shop". Now it is not a "shop" which the Association wants, but offices. We want headquarters where the Committee of the Association can meet, and properly meet; and where the whole business of the Association may be done under one roof. [*Hear.*] I have here an estimate of other places, which might be had cheaper, it was said, but I defy Dr. Grigg to take whoever he may to these places, and then come to our premises without its being declared that our choice is the best in every respect—in character, in value, and in accommodation. [*Cheers.*] The architect whom we have consulted, and who has given us his opinion as to other places, says that the position is better, and that there is no comparison as to value against the other places offered. [*Hear.*] We have investigated the particulars of the other places, and have visited them; but we say that these are not places where the work of the Association could be properly carried on. There has been talk about the "shop", and about the necessity of pursuing science, but you could not have scientific grants with an empty purse; and I should like members who talk about the "scientific purposes" of the Association to give a moment's consideration to the thought of where the money for grants comes from. Unless you have a considerable balance you cannot pursue the "scientific aspects" of the Association. Your expenditure on the JOURNAL is met by your income; but if you had not had a balance, how could you have done what has been done? If you had the accounts before you, as I have them before me, you would be able to see what the Association

has been able to do now by the aid of these despised advertisements in the JOURNAL, raised, too, not by canvassers, but by Mr. Fowke and his clerks. [Cheers.] Mr. Fowke had raised the advertisement receipts to double what they were, and that fact has enabled the Association to give scientific grants, to give an improved JOURNAL, for we have paid double the amount even lately paid to contributors—nearly entirely members of the profession—and to that fact is due our being clear from debt, and to our having a balance to-day. [Cheers.] Now is not this a high position to have achieved? [Cheers.] Dr. Day says, "Let us be a scientific body", but I say we cannot, as an Association, be a scientific body, pure and simple. [Hear.] Our JOURNAL—the most ably conducted of all the medical journals—[cheers]—finds its way to the hardworking general practitioner in a way which no other journal does; and for his fee of a guinea a-year he has his membership of the Association; he has his association with a brotherhood of his profession, and he has that ably conducted JOURNAL week by week. What enables us to place before the hardworking practitioner this JOURNAL, practically for nothing, is the fact that we conduct our business in a right way, and that we have a business. [Cheers.] Now, as to the scheme of some of the London men, with respect to making a "home", as they call it, for the Association, the London men have a club where they can go, so that they should not want a club in the Association. [Cheers.] Well, then, say that you have a room where the members from the country could go, I ask, of what good would that be to men in the country? [Cheers.] When we go to London we do not want to go to reading rooms and read medical works, but to enjoy ourselves or to transact business; and, when we are tired, to go to our lodgings or hotels. [Hear.] It is nice sometimes and cheering to meet medical friends, but, as a rule, you will find that when country people go to London they would prefer to leave the "shop" at home. [Laughter and cheers.] Dr. Grigg's statements have been fairly met, and from the information we have had as to the printing, we can say that Dr. Grigg's calculations are based upon the present number of pages, while, as our editor has been urging us to give him more space, we are desirous to raise the paper to sixty-four pages in place of forty-eight, and if our calculations are correct, and we are as likely to be correct as Dr. Grigg—[cheers]—we shall give you a better journal of sixty-four pages, and we shall put £500 a year in the pockets of the Association. [Cheers.] You must remember that we are obliged to go somewhere else; our offices cannot remain in Great Queen Street; and even if we went into a back street, as recommended to us, we should not save £100 a year upon our present proposal. We have secured a building sufficient for everything; we have carefully gone through the calculations made to us; we have them here, and I would read them to you, but that I am afraid of taking up your time; but there they are (holding papers before the meeting), and I pledge myself that they have been fully, even painfully, considered. Mr. Callender, of London, went through these figures, and he was so satisfied of their correctness that he moved the adoption of the report. [Cheers.] Now this has been done in no hasty manner. It was first of all before the Committee of Council, referred by them to the subcommittee, who carefully considered the matter, and then referred it to the Finance Committee, who also considered it, and referred it to the Committee of Council. Now it would be a most extraordinary thing, if this were a foolish or absurd scheme, that there was not one dissentient voice throughout all these references of all the persons who heard the whole data, or that all these several committees should have each passed the matter unanimously. Now the Committee of Council, with a scheme which had passed through these ordeals, felt that they were going to confer a great boon upon the Association, that they were going to give a better journal at a better rate, and to be independent of the printers, and all printers are under certain influences. [Hear.] Dr. Grigg gave us the names of one or two journals printed by printers for their proprietors; but look at the other side of the picture, at the papers which are printed by their proprietors, as the *Church Times*, the *Era*, the *Builder*, the *Lancet*, the *Watchman*, the *Athenæum*, the *Guardian*, the *Horticultural Journal*, and a whole host of class papers, against his of the *Pharmaceutical Journal*. The number of papers printed at their own offices is enormous. Dr. Grigg has stated that, if we will give the present printer a contract to print for five years he will allow us £200 a year, so that the action of the Committee has resulted in an offer to lessen our payments by £1,000. [Cheers.] But still the printer would expect to make a profit, and would make a profit. [Hear.] We have considered all things, and we have data to go upon that we shall save beyond this promised reduction of £200 a year, and, besides, shall have the advantage of being in our own offices. Every one who has been to see these offices has been struck by their great capabilities, and by the possession of them you will have a building for twenty-one years which will be fully equal to the growing wants

of the Association. [Cheers.] If you do not go there, I do not know where you will go to obtain the like accommodation. I have gone with Mr. Fowke to various places, but I have not seen one building which was at once so suitable for the public business of the Association in relation to the JOURNAL and the executive business of the Association. [Cheers.] I trust you will support men who have painfully, honestly—[cheers]—and carefully weighed this matter. I have no interest but yours in the matter. [Cheers.] I will move as an amendment,

"That, in the opinion of this meeting, the arrangements contemplated by the Committee of Council in leasing the premises in the Strand are of a nature to promote the successful conduct of the business of the Association." [Cheers.]

Mr. BAKER seconded the amendment.

Dr. ROGERS said he was in a position to commend and support Dr. Grigg's motion. The Council proposed to save money by combining the two branches of the Association—the printing with the management part. Now, the question was, would this be the case, would money be saved? That certain economy had been effected in what the Council had done by having one place, he was ready to admit. [Hear, hear.] But that was not the point, nor was that the case as now put, for it was said that £800 a-year would be saved on an expenditure of £1,900—a ludicrous statement. The Committee of Council proposed to set up as printers; and Dr. Grigg appealed to practical printers to give him advice; and he showed that, instead of a saving of £900 a-year, there would be a loss of £300. The Committee of Council looked to an increase of advertisements by taking a shop. ["Office."] They might call it what they pleased; but, when they proposed to spend £100 to put in a plate-glass front, he called it a "shop". Now, the advertising power of the JOURNAL was in its circulation, and not in the position of its offices. The fact was, that the Committee of Council were going into business. [One of the Committee of Council: "We have been in business for a long time".] Mr. Cobden once mentioned to him that he had great respect for the medical profession, as the members of it understood something of their calling; "but", Mr. Cobden added, "I hardly know one who knows anything else". ["Question".] That was a fair observation directed against the Committee of Council being the men to go into business. Dr. Rogers concluded by urging the members to look before they leaped.

Dr. B. FOSTER said that no doubt Dr. Rogers's acquaintance with the late Mr. Cobden was one of the great privileges of his life, and that he could calmly suffer with others in the depreciation in which the late statesman held the business habits of the medical profession. [A laugh.] But what was Mr. Cobden's testimony and opinion, by the side of the fact that in a few years the present Committee of Council had been able to raise the Association to its present position of a powerful organisation—a position of dignity—and to save several thousand pounds—this, too, without acting in a commercial spirit, but after giving several thousand pounds to scientific purposes; and it was a proof of the business qualities of the Committee of Council that they had effected savings on all the changes they had made, so that the reflection upon the business qualities of the profession, based upon the words of the late Mr. Cobden, fell to the ground. [Cheers.] The Association had been advised to look before it made its leap; but he could assure the Association that the Committee of Council had taken a long and deliberate look before they leaped, and had well measured the distance, so that they felt they should safely land on the other side. [Cheers.] The statements—not controverted—as to the savings which the Committee of Council had been enabled to make in the working of the Association, had been the result of deliberate consideration and thought, and the experience gained it was intended to apply to the Association in future. [Cheers.] Let the members weigh the facts of the savings effected by the Committee of Council as so much testimony in favour of the views they now held in regard to their new action. [Hear.] In undertaking this greater responsibility, they were doing extraordinary service for the Association; and he desired the Association to bear in mind this fact: that the JOURNAL required to be more brought before the public; for its advertisement income at the present time bore no proportion to what it ought to be, considering its great, certain, and increasing circulation as the organ of a great and increasing Association. [Cheers.] Other journals of smaller circulation and less influence had larger advertising incomes; and the Committee of Council were taking the best steps to place the JOURNAL on a proper footing in this respect. [Cheers.] The Committee of Council were taking steps to do this; and, when it was done, they would give their best thoughts and attention to provide a "home" in London asked for by the London men, and he had no doubt that the medical club would give Dr. Grigg and every friend of Dr. Grigg a hearty welcome. [Laughter and cheers.]

Dr. HENRY said that there could be no doubt that every one in the room desired the prosperity of the Association; and each side could give the other full credit for that feeling. He must protest against the insinuation conveyed in certain expressions used by Dr. Foster and other speakers, that the metropolitan members desired special advantages for themselves. In all that they had proposed with reference to the subject under discussion, the members in London had consulted for the benefit and convenience of the country members of the Association. He quite agreed with those who desired that the Association should have a house worthy of the high position to which it had attained; but he hesitated to go with the Committee of Council in their proposal to undertake the printing of the JOURNAL. He had already expressed his views on the subject in a letter to the President of Council; pointing out especially, among other matters, certain difficulties that would probably arise in regard to having a sufficient staff of compositors and keeping them fully employed. The views which he held were in substance the same as those put forth by Dr. Grigg.

Dr. GRIGG having briefly replied,

The PRESIDENT put the amendment to the vote; and a large majority voted in favour of it, seven or eight only being against it.

It was then put as a substantive resolution, and carried, with five against.

THE PRIVILEGES OF LADY MEMBERS.

The PRESIDENT stated that this subject would be deferred until the annual meeting, as the gentleman who had intended to move a resolution on the subject was unable to be present.

Mr. OLIVER PEMBERTON moved:

"That a Subcommittee be appointed to inquire as to the privilege of lady members, with power to take counsel's opinion, and to report to the annual meeting."

Mr. LISTER thought it would conduce very much to the interests of the Association if some steps were taken in the interval between this time and the annual meeting with regard to this subject; and he seconded the motion.

Mr. GAMGEE moved as an amendment:

"That the Committee of Council be instructed to take the opinion of counsel as to the rights of the lady members, and to report to the annual meeting."

Mr. SOLOMON seconded the amendment.

Dr. WADE, Dr. EASTWOOD, Dr. BORCHARDT, Mr. LAWSON TAIT, and others spoke; and ultimately a division was taken, when there appeared: For the amendment, 40; against, 38.

It was moved by Mr. SAMPSON GAMGEE, seconded by Mr. HUSBAND, and resolved unanimously:

"That the best thanks of this meeting be given to Dr. Eason Wilkinson for his conduct in the chair."

The meeting then separated.

THE EXISTING STATE OF OUR NAVAL, INDIAN, AND ARMY MEDICAL SERVICES.

ON Monday, the 1st instant, the thirty-sixth session of the Army Medical School was opened at Netley with nineteen candidates for the British army, twenty-six for Her Majesty's Indian service, and eleven for the Royal Navy. There was a large attendance of officers and gentlemen from the neighbourhood, including Major-General Bayley, C.B., R.E.; Inspector-General Domville, C.B., R.N., Principal Medical Officer of Haslar Hospital; Colonels Stewart and Farnar, Major Bullen, R.E., and others. The Introductory Address was delivered by Surgeon-General Longmore, C.B., Professor of Military Surgery. The lecturer gave a hearty welcome to the new-comers, and assured them all the authorities at Netley were anxious that the time of their stay should be agreeably as well as profitably spent, and, with much feeling and eloquence, exhorted them to turn to the best account the means of improvement placed at their disposal. He made some highly important remarks on each of the three branches of the public service, especially with regard to the Army Medical Department, in respect to its condition for entering upon a campaign if required to do so. These remarks have been forwarded to us; and as the subject is one which has excited a good deal of attention of late, and is still doing so, we at once lay the substance of them before our readers.

The several branches of the public service in which you are destined

to apply your professional knowledge offer, each of them, a noble field for your exertions. Each branch has its special features, its special advantages; and, as there is no sphere in life in which unmixed good is to be found, I may in fairness probably add, each has its special drawbacks. In all, however, to those who are disposed and competent to turn the opportunities they offer to good account, the advantages very far outweigh the drawbacks.

In the Royal Navy, the rank and position of the medical officers, the rates of pay, and the retiring pensions have been greatly improved of late years, while personal economy can be practised in it with less self-denial than in other branches of the public service. If serving on shipboard, you may be sure, if your professional attainments are such as to command respect, and you have a disposition open to be pleased, that you will meet with no want of pleasant companions; nor, in whatever part of the world you may be stationed, can you ever be without abundant means of enlarging your views and extending your knowledge in those natural sciences which have formed part of your education, and which are so full of interest to all of us. To some persons a sea-life is distasteful; especially to those who have not become used to it in early life; and this, no doubt, is one fruitful cause, joined with the demand for medical practitioners in other directions, why more candidates do not come forward for this branch of the service; but it is not to be forgotten, in these days of steam, that ships do not remain at sea for long periods as in former years, and that medical officers of the Navy, in the course of their service, spend much of their time in hospital establishments on shore.

The Indian Medical Service offers a magnificent field for the surgeon who is fond of his profession and ambitious of gaining distinction in it, whether in its technical, tutorial, or administrative aspects. I speak not only of the higher positions that become open to you in time—such as appointments in the great medical colleges of Calcutta, Madras, Bombay, Lahore, and Hyderabad, though not a few of the professorships in these are now held by medical officers who, comparatively a few years ago, sat on the very benches you now occupy, as well as other important charges in the Presidency cities and larger stations—but I refer to the positions in which relatively juniors are placed. Even in what may be regarded as out-of-the-way and minor stations, large professional practice and distinction may be gained in India. But certain qualities must be displayed in order to secure these results. The apathetic or the unskilful surgeon will not obtain them. There must be the desire for the practice in the first instance; cases must be almost sought for at first; in the next place, confidence must be gained by the exercise of ability and skill; and then opportunities of practice will follow of their own accord. About three weeks ago, I received a printed report of the work done in 1877 at a small dispensary at Azamgarh by Mr. R. C. Sanders, who passed through this school with much credit about seven years ago. Between the 1st of January and the 26th of December last year, Mr. Sanders performed 531 surgical operations. They were followed by only 5 deaths, but 15 of the cases were still under treatment at the time the report was closed. Among them were no fewer than 523 operations for extraction of cataract, and 197 cases of iridectomy. Imagine upwards of 500 cases of cataract extraction in one year; what would the most eminent practitioner in ophthalmic surgery in our great metropolis say to such a number coming under his care in that time? And conceive the gratification to all concerned in the results: 336 with sight successfully restored, and 95 relieved, out of the number! Each successful case increased tenfold the advent of blind people from the surrounding villages. After referring to the number of applications in the month of July, the report states: "At the beginning of the year, the difficulty was to get the patients to submit to operation; now the difficulty is to keep them off the operating-table." In a letter dated February 28th of this year, written from Moradabad, in Rohilkund, Mr. Sanders asks that the amount of his practice at Azamgarh in 1877 may be mentioned to you at the beginning of the session, and I have accordingly done so; and he adds: "The field for work in this country is boundless. I have but just been transferred to this station, and have, in the first month had over 180 cases to treat, mostly cases of cataract." Any one may well be proud to belong to a service in which such opportunities of professional usefulness are to be obtained.

The medical department of the British army is also a service in which not only great opportunities of usefulness, but also many sources of gratification, are open to all who join its ranks. You may justly feel a patriotic pride in belonging to it. Its efficiency has been so persistently decried for some time past in a certain portion of the press, so much obloquy has been cast upon the officers at the head of it, that a feeling of uncertainty and distrust in regard to it has been propagated far and wide among those who have no personal acquaintance with it. It seems not improbable that these constant attacks have, in some degree,

effected the harm which they appear to have been designed to accomplish; and that they have kept many young surgeons of promising ability from seeking commissions in it. You who have had the courage to come forward, in spite of these deterring influences, are not likely to regret the step you have taken. You will find honourable employment, with remuneration above the average of what is obtained in early years in civil practice, and at the same time free from most of the difficulties and anxieties inseparable from it. You will be associated with an army which, though inferior in numbers to many others, has no superior in patriotism and fame; and that has the merit of never being employed as an instrument of aggression and injustice. A distinguished general officer, Sir Garnet Wolseley, has recently published a comparison between the state of the British army, in strength and organisation at the present time, and its state at the time of the Crimean war. He has shown the improvements which have been made in it, and how much more competent it is now to take the field, and to maintain a struggle, if called upon to do so, than it was then. It would be easy, if time allowed, to show that, what is true of the army as a whole, is equally true of the medical part of it. I will only mention a few of the most striking facts in this respect. At the time of the Crimean war, we had not even the vestige of an hospital corps. The ordinary plan for meeting the want of hospital orderlies was by abstracting effective soldiers from the ranks of regiments; and when, during the war, attempts were made to form an independent hospital corps—composed as it was at first of worn-out pensioners, and afterwards of untrained civilians—the efforts only ended in failure. Now we have a regularly trained and disciplined Army Hospital Corps, of considerable numerical strength. We had no organised system for the removal of the wounded; no trained stretcher-carriers, nor establishment for training them; no equipment nor organisation for forming dressing-stations in advance of the field-hospitals; and no fixed arrangements for the field-hospitals themselves. The bandsmen were supposed to be available for carrying the wounded away, but it was a mere supposition; they were neither taught the duty, nor were there any existing orders or means for making them do it; and, practically, when the wounded were removed, they were carried off the field by their comrades—a most objectionable proceeding. Now, we have systematically organised and trained "Bearer Companies", complete in their essentials of *matériel* and *personnel* for all the duties between the fighting lines and the field-hospitals, including those of transport as well as those of the dressing-stations. The field-hospital establishments are complete, and adapted to the exigencies of modern warfare. At the time of the Crimean war, the troops marched and fought the battle of the Alma without a single ambulance-wagon with the army; the only one that was landed was left, where I saw it, on the shore at the place of debarkation; and when, at a subsequent period, some ambulance-wagons were brought to the army before Sebastopol, they were so cumbersome, there were such difficulties in moving them, that they were abandoned as useless. Now, not only are there large stores of ambulance-wagons and other conveyances for sick and wounded soldiers available, but there is every reason for believing that there are none so perfect for their particular purposes, certainly none more so, in any army in Europe. Some British ambulance-wagons were sent to France during the war of 1870-71; one detachment of them was employed with the French, another with German troops. One of the English medical officers with the latter afterwards published the fact that, when the German surgeons wished special cases of wounds to be removed, they requested the use of the British ambulance-wagons in preference to their own—a sufficient proof of their ease of carriage: and when, after going through the trying work of the hard winter in France, they were brought back to Woolwich, all the essential parts of the vehicles were found to be as perfect as when they left it—a sufficient proof of the excellence of their construction; and there have been many improvements made in them, as well as in the other classes of ambulance conveyances, since that time. In short, in all respects—in organisation, in quality of equipment, and now, I believe, in the amount of it—if a British army be called upon to enter on active service, there is every reason for believing the medical department will be found far better adapted to meet the demands which will be made upon it, great as they now are in warfare, than it has ever been at any previous time. The majority of the medical officers, too, will be found better prepared than they had the opportunity of becoming formerly. The instruction at this school, supplemented by the Bearer-column drill at the dépôt at Aldershot, must produce this result. Sir Garnet Wolseley, in his paper before alluded to, has recalled to recollection the reply of the War Minister to a Member of the House of Commons, who brought the want of ambulance conveyances in the Crimea, during the early part of the first winter, to the notice of Parliament. The Minister asserted that the reports on the subject were devoid of truth, because he knew for a fact that there were fully a hundred hospital panniers with the army. These

are articles which have not the remotest relation to ambulance conveyances. But it can scarcely excite wonder that the Minister did not know what field-hospital panniers were, since many of the army surgeons had no idea of their nature when they first started on the expedition. How could they? They had never had occasion for their use, and the panniers had never been shown to them. Such ignorance cannot occur again. I do not mean to say there are no matters connected with the department which one could wish to be different from what they are; but there is good reason for believing that whatever defects exist of importance will be rectified before long, and, at any rate, this is not the place to discuss them. It is with regard to the efficiency of the department, which has been so much decried in certain quarters of late, that I have been led to speak; and I hope I have been able to show there is not the slightest ground for the injurious attempts which have been made to disparage it in this direction.

In conclusion, let me recommend you who have just come to Netley to make yourselves acquainted with the character of our lost colleague Dr. Parkes, whose portrait has just been placed in the map-room, and with whose fame you must be more or less familiar. As a likeness, the picture is so admirably true that, looking at it, you will see what manner of man he was while in life; but, to know how he lived and how he worked, you must look elsewhere. You will not fail to see important evidence of his great industry, his earnestness in the search after scientific truth, and of his perfect freedom from prejudice in the valuable work on practical hygiene, which will be constantly in your hands as a text-book while you are here. You will be able to learn further from any of the memoirs which have been published of him, how unselfish he was in his aims, how resolutely and indefatigably he worked for the good of humanity at large, but especially for the welfare of the officers and soldiers of the army; and what great improvements he effected, without taking credit to himself for them, and certainly with remarkably few signs of gratitude or appreciation from those who received most advantage from them. The medical officers of the United Services, however, have not been forgetful of the benefits he conferred on them by his teaching and published works, nor the position he achieved—to use one designation given to him—of "the leading hygienist in the most hygienic nation in the world"; but, in concert with a few personal friends, they have testified to their appreciation of them by subscribing enough to found the "Parkes Memorial Prize", a gold medal, and £100, to be given triennially for the best essay on Hygiene: further, to obtain the memorial portrait just placed in the officers' mess-room: still further, I am happy to add, to establish a Parkes Medal, for the candidate who sessionally exhibits the highest attainments in the hygienic work which he so long directed at this school.

Only try to imitate him in his beneficent aims, and in his honest and loyal efforts to fulfil all his duties to the best of his ability, and you may be sure that you will not only satisfy those with whom you have to deal in the business of life, but you will enjoy what is still more important, that self-satisfaction, which will be a source of happiness to you under every condition in which you may happen to be placed, as long as life itself lasts.

THE HARVEY TERCENTENARY MEMORIAL FUND.

WITH great satisfaction we recognise the extent to which the Harvey Memorial project has been noticed by the general press. All the London daily journals referred to the occurrence of the three hundredth anniversary of the birth of Harvey on Monday last; they spoke of his beneficent labours in terms of grateful admiration, and called attention to the memorial-statue about to be erected at Folkestone. There also appears in most of the papers of to-day (Thursday) an appeal to the general public for £500 or £600 more, signed by the members of the London Executive Committee of the fund. The actual centenary was commemorated at Folkestone, at which the Rev. R. C. Jenkins, Honorary Canon of Canterbury, gave a lecture on "Harvey, and his Position as a Discoverer". There was a large audience, from which subscriptions to the Memorial Fund to the extent of about thirty guineas was obtained. Other subscriptions promised to or received by the London Honorary Secretary during the last fortnight amount to £130.

At the meeting of the Fellows of the Royal College of Physicians, held on Tuesday last, the subject was introduced, and notice was given by the Senior Censor of a motion to be brought forward at the next meeting of the Fellows, that the College, recognising how much it is indebted to Harvey, should subscribe one hundred guineas to the Memorial Fund. The Council of the Obstetrical Society, at their meeting on Wednesday, also passed a resolution recommending the

next meeting of the Council to make a donation of 25 guineas. The subscriptions, exclusive of these sums, now amount to £1,100. We are requested to ask the members of the profession who have not hitherto contributed to this most interesting object to kindly send their donations at once to either of the hon. treasurers (Sir George Burrows, Bart., or Mr. Prescott Hewett), or to either of the Hon. Secretaries (Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone), or to pay them into the account of the Harvey Tercentenary Memorial Fund, at the Western Branch of the Bank of England, Burlington Gardens, London, W. Subscriptions from five shillings upwards will be very acceptable. Success is insured, if that feeling which should exist in regard to this subject should lead to practical action generally on the part of the members of our profession.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting of the College was held on April 2nd. Permission was given to Dr. Willis to publish in his life of Harvey a letter in the possession of the College written by Dr. Harvey to Dr. Baldwin Harney.

A communication was read from the Secretaries of the "Harvey Tercentenary Memorial Fund" soliciting the co-operation and assistance of the College in providing funds for a proposed statue to Harvey.

Dr. Quain gave notice of his intention to move at the next meeting a grant from the College fund for this purpose. Dr. Quain also gave notice that he would propose that a banquet should be given by the College.

The Bill introduced by the Lord President to amend the Medical Act was then considered, and the following resolution was adopted:

"That a deputation, consisting of the President of the College and the Fellows to be nominated by him, be authorised to wait on the Lord President of the Council to point out the objectionable features contained in the Bill which his Grace has introduced into the House of Lords, to seek modifications of the same, and to report to the College."

THE MEDICAL ACT AMENDMENT BILL.

THE Medical Reform Committee met on Tuesday, at the Queen's Hotel, Birmingham, when the following members were present: Dr. Edward Waters, Chairman and Convener; Dr. Wilkinson, President of the Association; Dr. Falconer, President of the Council; Dr. Chadwick, Vice-President; Dr. De Bartolomé, Vice-President; Dr. Wade, Birmingham; Dr. Balthazar Foster, Birmingham.

The action of the Committee, and its communications with the Government and with Members of Parliament, were considered, and the Bill of the Government to amend the Medical Act, 1858, was condemned—

1. For not providing for direct representation of the profession in the General Medical Council;

2. For not containing compulsory enactments, to enforce the formation of a conjoint board of examination in each division of the kingdom, on the principle of equal fees and equal examination.

It was resolved: That the Chairman should, by a communication to every member of the Association, and, as far as practicable, of the profession, endeavour to obtain an expression of his adhesion to the principles which the Association has so long struggled to realise.

FORM OF PETITION.

The following form of petition was suggested. It must be *written* and not printed.

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The humble petition of the undersigned, registered medical practitioners, residing in _____ and its neighbourhood, sheweth—

That a Bill, intituled an Act to Amend the Medical Act, 1858, has been brought into your Honourable House.

That, in that Bill, no provision is made for the introduction of direct representatives of the profession in the General Medical Council.

That the General Medical Council, as now constituted, consists of seventeen representatives of the Universities and Corporations, and of six members nominated by the Crown, together with a President, chosen by the other members of the Council.

That the representatives of the Universities and Corporations have exclusive interests to watch over, and exercise an overwhelming influence in the Council.

That the general expenses of the Medical Council are defrayed out of fees exacted from the members of the profession, and that the Universities and Corporations do not contribute to the payment of those who represent them in it.

That the medical profession, as a body distinct from the Universities and Corporations, is wholly unrepresented in the General Medical Council.

That the Bill does not provide compulsory enactments for the establishment of a conjoint board, for the examination of medical candidates in each division of the kingdom, on the principle of equal fees and equal examinations; and that such enactments are indispensable, in the interests of the public, to abolish the competition downwards in the granting of medical licenses and diplomas.

Your petitioners pray your Honourable House not to pass that, or any other Bill, unless provision be therein made for direct representation of the profession in the General Medical Council, and for the compulsory establishment of conjoint boards of examination, on the principle of equal fees and equal examinations in each division of the kingdom.

And your petitioners will ever pray, etc.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 17th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., March 25th, 1878.

WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 11th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the Use of Water desirable in Dressing Wounds?"

The Secretary requests that early notice be sent to him of the title of any communication intended to be brought forward at the meeting.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, March 16th, 1878.

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held in the Board Room of the Guardians, at Hexham, on Thursday, April 25th, at 2 o'clock P.M.

The following papers, etc., have been promised.

1. Drs. Stainthorpe and Farmer: Case of Aortic Aneurism in a boy aged 13.

2. Drs. Stainthorpe and Farmer: Case of Contracted Knee-Joint, recently operated on by division of the Tendons and Forcible Extension.

3. Dr. Byrom Bramwell: On the Differential Diagnosis of Aortic Aneurisms and other Intrathoracic Tumours, with cases and specimens.

4. Dr. E. C. Anderson: On Leucine and Tyrosine, and their Diagnostic Value in Disease, with cases.

5. Dr. James Murphy: Exhibition of Tarnier's Obstetric Forceps.

6. Dr. James Murphy: On Puerperal Convulsions.

7. Dr. Philipson: Notes of a Case of Hematuria.

Dinner at the White Hart Hotel at 4.30 P.M.; charge six shillings, exclusive of wine.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne; April 2nd, 1878.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of the Session will be held at the York House, Bath, on Thursday, April 25th, at 7.15 P.M.; HENRY MARSHALL, M.D., President.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, April 1st, 1878.

CORRESPONDENCE.

HOSPITAL FINANCE.

SIR,—You gave insertion to some valuable suggestions, in your impression of the 2nd instant, by publishing the views of Mr. Henry C. Burdett on hospital finance. He tells us "the want of method in the system of management" causes the working of our large metropolitan hospitals on unsound principles; and he gives you a sketch in his letter as an illustration of the financial operation which concludes by the sale of stock. Further, Mr. Burdett tells us that in a particular instance a successful issue has been arrived at to prevent the evil of selling stock. Now, surely, if this step in the right direction can be reached by one institution, the managers of other institutions ought to be very desirous to learn how they can in like manner help themselves. Why not, therefore, try to mature the valuable suggestions which have now been offered? An annual conference of hospital managers ought not to be at all a difficult meeting to convene. There are board-rooms at all hospitals worthy of the name, and a circular from the chairman of any one ought to ensure a full representation of the remainder.

The letter to which I am now seeking to draw further attention from your readers seems to me one that ought to have been noticed ere now by some one of many years' more hospital experience than myself; but, failing a reply at the present moment from more able hands, I venture to try to keep this so excellent idea alive before those who are evidently most interested, and also before the public who subscribe to the several charities, and who have a right to ask that every available means to save unnecessary sales of stock should at least have a full and exhaustive trial.—I am, sir, your obedient servant,

HENRY N. CUSTANCE,

Secretary Metropolitan Hospital Sunday Fund.

Mansion House, E.C., March 20th, 1878.

PHYSIOLOGICAL TEACHING IN DUBLIN.

SIR,—Misfortunes are said never to come singly; and, in the present instance, it would seem as if the fates had conspired to strangle any attempt at physiological teaching in Dublin. The decision of the Board of Trinity College as to registering places for physiological experiments, to which you have drawn attention in your leading article of to-day, is one which every well-wisher of the University, as well as every believer in physiology, must deplore. It is not, however, to this that I wish now to call attention, but to the state of affairs that exists, and is being most studiously protected, in connection with the curriculum of the Royal College of Surgeons in Ireland. The vast majority of our Dublin students seek the licence of the Irish College of Surgeons, and consequently the curriculum of this body forms the basis of the teaching in all the Dublin schools (the University excepted). This curriculum includes, amongst other things, attendance on three winter courses of systematic lectures on Practical Anatomy, Anatomy and Physiology, and Surgery, respectively. Two courses are required in Chemistry, one of which must be a winter (theoretical course); the other may be theoretical or practical. In none of the three subjects above mentioned is there more than one course of lectures, and consequently first, second, and third year's students are all taught together.

Now, sir, I doubt the advisability, to say nothing stronger, of requiring a student to attend three courses of lectures on any subject, more particularly when it is the rule, as it is here, for a student to complete his whole course and get his diploma in the space of two years and nine months. In surgery, possibly a complete course of lectures might be made to extend over three winter sessions, and still each part made reasonably intelligible to a junior student. Whether this be or be not done in the case of surgery, it certainly is not and cannot be done in the case of physiology. Physiology must necessarily be taught synthetically; a large number of subjects must be treated every year; and hence it comes that, when a student is asked to attend three courses, he is practically asked to do little; if anything, more than to attend the same course three times over.

Since my appointment as Lecturer on Physiology at the Carmichael School in 1872, I have each year given a duly advertised course of practical physiology on the type of the requirements of the English College of Surgeons. The course is, for the most part, one of histology and biological methods, and consists of thirty meetings of the class of two hours each. As, however, students going in for the diploma of the College of Surgeons have to pay for three courses of physiology, but few of them are willing to pay for another. Hence I have never had many from this source.

At the request of some students, I made application, on March 28th of last year, to the Council of the College of Surgeons that attendance on the practical course should be allowed to be substituted for attendance on one of the three winter courses. This was refused, as being contrary to the by-law. But, as I was aware that the similar by-law in the case of surgery had occasionally (if not frequently) been relaxed, so as to allow the substitution of a course of operative surgery for one of the three winter courses, I again wrote on April 19th, requesting, as an act of special grace, that three students (named) should be allowed to substitute my practical course, then about to begin, for a winter one. The reply stated that the matter was under consideration. As I received no definite answer for nearly a year, I wrote on the 4th of the present month (March), requesting a decision one way or the other, as one of the three gentlemen was about to present himself for examination. The reply stated that the Council had referred the matter to the Committee of Inspection; the Committee reported, I am told, in favour of the certificate being accepted; but, on Thursday last, the Council decided not to accept it.

These are the facts of the case, and I think they show a distinct determination not to allow the introduction of practical teaching into Dublin. I am not one to uphold the breaking of a by-law. If a by-law be bad, let it be removed; if too stringent, let it be modified. But, if by-laws are broken at all, it ought to be on some definite principle. The only difference between the case of operative surgery and practical physiology is, that the latter course is far more laborious and occupies a much longer period than the former. Yet the by-law is broken in one case and not in the other. Then, again, the by-law requiring five lectures per week in anatomy and physiology is not complied with by the school of the College of Surgeons itself, and consequently, by the strict letter of the law, the certificates ought not to be accepted.

The truth is, medical teaching in Dublin is in a very unhealthy condition; and strong influence is being used to protect "vested interests". It is quite as easy to lecture to one hundred and fifty students as one hundred; while, if one year's batch of the one hundred and fifty were allowed to take a practical course, there would be considerably more than double the work and little, if any, more pay. But surely it is the lowest aspect of trades-unionism to prevent a teacher from giving two courses instead of one, more particularly when what he offers is now universally admitted to be essential to all adequate physiological teaching. As a matter of fact, a large number of our students who signified their intention of taking out my practical class this summer, if the certificate were allowed, are now, by the resolution of the Council, deterred from so doing. I have consequently decided, with the permission of the directors of the school, not to give the course.—I am, sir, faithfully yours,

REUBEN J. HARVEY.

7, Upper Merrion Street, Dublin, March 30th, 1878.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS—Wednesday, April 3rd, 1878.

Vaccination Law Penalties Bill.—MR. PEASE having formally moved the second reading of the Vaccination Law Penalties Bill, MR. SCLATER-BOOTH explained his objections to the measure, which he said would enable those who were opposed to vaccination to free themselves from the obligation already imposed by Parliament. There had been no increased tendency to carry on cumulative prosecutions during the last twelve months, and the action of certain of the guardians had been modified by the circular note of the Local Government Board.—MR. PEASE said the Select Committee which had inquired into the subject had reported strongly against the imposition of second penalties, which did not exist in Ireland, and had never been enforced, even if they existed, in Scotland. The Bill would carry out the recommendations of the Committee, and there was less reason to oppose it if, as MR. SCLATER-BOOTH said, the prosecutions were fewer than they had been.—EARL PERCY suggested that, inasmuch as in the last outbreak of small-pox the mortality was greater than it had been since, and in view of the popular prejudice against vaccination, it was desirable to have a full inquiry into the efficacy of vaccination.—DR. LUSH objected to the way in which the law was administered, though he was convinced that vaccination was one of the greatest boons ever conferred on mankind.—MR. W. E. FORSTER supported the Bill, with a view to the question being referred to a select committee.—MR. FORSYTH, SIR J. M'KENNA, MR. MITCHELL HENRY, and MR. EVANS opposed the Bill, which was supported by SIR T. CHAMBERS, while MR. SERJEANT SPINKS expressed himself in favour of an inquiry.—MR. GLADSTONE supported the suggestion of Mr. Forster, that the Bill should be read a second

time and an inquiry held into the administration of the law, as such an investigation would be of great value, not only in satisfying the public mind as to the efficacy of vaccination, but as to the manner in which it was performed; while suggestions as to its improvement could be considered.—Lord R. CHURCHILL then moved the rejection of the Bill, and this afforded several hon. gentlemen who had already addressed the House an opportunity to speak again. In course of the discussion, Dr. PLAYFAIR characterised the Bill as seeking to legalise the sale of an 'indulgence for a breach of the law, the principle being just the same as if a person were allowed to convey some one suffering from an infectious disease in a cab a second but not a first time.—Mr. SCLATER-BOOTH said he could not support the Bill, neither could he feel justified in throwing any obstacles in the way of the second reading, and therefore he left the question to the House.—Mr. W. E. FORSTER said the Government could not leave the question as it stood, but would be bound, sooner or later, to refer it to a committee. On a division, the Bill was rejected by 271 to 82 votes.

OBITUARY.

JOHN ROBERTS, M.D., M.R.C.P.L.

It is our painful duty to record the sudden death, at the age of sixty-eight, of John Roberts, M.D., M.R.C.P.L., on the 23rd ult., at Nice. Dr. Roberts practised for some years in Paris with success. In 1849 he settled in London, and soon became a popular physician at the West End, with a large and influential *clientèle*. Six or seven years since, illness obliged him to resign the active duties of his profession, and he retired into private life at Upper Norwood, usually wintering at Nice, where he died. By his patients he was beloved for his skill and kindness, by his colleagues he was trusted and esteemed for his high moral and professional qualities.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners, on April 1st; and, when eligible, will be admitted to the pass-examination.

Messrs. T. Kay Whitehead, William Stanwell, and R. Hanson Wolstenholme, students of the Manchester School of Medicine; Robert Jones, George F. Barnes, and G. Treverno Hockin, of St. Bartholomew's Hospital; W. Eckett Fielden, G. Ryding Marsh, and W. Washington David, of Guy's Hospital; F. William Marland and G. Mills Wasse, of St. Thomas's Hospital; George Welch and Arthur Northcott, of University College; W. Aloysius Day and T. A. Perry Marsh, of the Bristol Medical School; John Palmer, of the Middlesex Hospital; George Annand, of the Melbourne Hospital; David Lowson, of the Aberdeen School; Frederick J. Laimbers, of the Liverpool School; and Ewing McG. Aitken, of the Glasgow School.

The following gentlemen passed on April 2nd.

Messrs. Sinclair Westcott, E. J. Erskine Risk, Donald D. Day, Joseph Armitage, C. H. Bedwell Shears, and Robert S. Batson, of St. Bartholomew's Hospital; Albert Wheeler, Walter Atterbury, and Ernest E. King, of the Middlesex Hospital; Richard Rice and Arthur Hooley, of the Charing Cross Hospital; Arthur H. Proffitt and Richard Vivian, of St. Mary's Hospital; Edward Coterrell, of University College; John W. Batterham, of the Westminster Hospital; H. Pearson Gilbert, of St. Thomas's Hospital; Jonathan Hutchinson, of the London Hospital; Frederick J. Driver, of the Cambridge School; and James M. Chadwick, of the Manchester School.

The following gentlemen passed on April 3rd.

Messrs. Charles P. Lukis, Alexander Haigh, and John H. Stewart, of St. Bartholomew's Hospital; Robert H. Firth, Alexander B. Voisin, and Charles D'A. Collings, of University College; Frank H. Shaw, Benjamin E. Studor, and William W. Fryn, of Guy's Hospital; William A. Duncan and Newton Bentham, of St. Thomas's Hospital; Henry F. Corbould and James Thurton, of the Charing Cross Hospital; Henry J. Minchinton and Thomas W. Scale, of the Middlesex Hospital; Ronald Volekman and Lloyd Francis, of the London Hospital; Herbert F. Parsons and Joseph Tucker, of St. Mary's Hospital; John H. Oates and Joseph Thirkhill, of the Leeds School; Charles J. Mouncey, of the Manchester School; and Ernest H. Wagstaff, of Kiog's College.

Nine candidates out of the seventy-two examined, having failed to acquit themselves to the satisfaction of the Board, were referred to their anatomical and physiological studies for three months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 28th, 1878.

Bell, William Montague, 362, Camden Road, N.W.
Fraser, Græme Bisdée, St. Mary's Hospital
Good, Frederick Thomas, of, Highbury Hill, N.
Gover, Henry John, Clapham, S.W.
Hawks, Robert Shafto, Hertford
Skelding, Henry John, Bayswater
Walter, William Henry, Sydenham

MEDICAL VACANCIES.

The following vacancies are announced:—

ALICE DALE INFIRMARY, Cape Colony—Obstetric Physician. Salary, £500 per annum, with house, servants, and horse. Applications to be made on or before May 1st to the Physicians and Surgeons of the Hospital, with copies of Diplomas.

ATHY UNION—Medical Officer of Athy Dispensary District. Salary, £130 per annum, and £15 as Sanitary Officer, together with Registration and Vaccination Fees. Applications to the 9th instant.

ASHTON-UNDER-LYNE DISTRICT INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board and lodging. Applications to be made on or before the 17th instant.

BOURNEMOUTH GENERAL DISPENSARY and COTTAGE HOSPITAL—Resident Medical Officer. Salary, £120 per annum, with rooms, coals, gas, and attendance. Applications to be made on or before the 13th instant.

BRISTOL GENERAL HOSPITAL. Physician's Assistant. Salary, £50 per annum. Applications on or before the 19th instant.

EASTERN DISPENSARY OF BATH—Resident Medical Officer. Salary, £100 per annum, with furnished apartments, coals, gas, and servants. Applications to be made on or before the 16th instant.

EAST LONDON HOSPITAL FOR CHILDREN and DISPENSARY FOR WOMEN—Resident Medical Officer. Salary, £60 per annum, with board, lodging, and washing. Applications to be made on or before the 11th instant.

ENNIS DISTRICT LUNATIC ASYLUM—Resident Pupil. Applicants must be qualified as Physician and Surgeon, and not above thirty years of age. Salary, not less than £50, or more than £60 per annum, with apartments and rations.

GERMAN HOSPITAL, Dalston—Honorary Assistant-Surgeon. Applications to be made on or before May 1st.

INGHAM INFIRMARY and SOUTH SHIELDS and WESTOE DISPENSARY—Senior House-Surgeon. Applications to be made on or before the 8th instant.

LEEDS PUBLIC DISPENSARY—Junior Resident Medical Officer. Salary, £80 per annum, with board and residence. Applications to be made on or before the 10th instant.

NARBERTH UNION—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

QUEEN'S HOSPITAL, Birmingham—Honorary Physician. Applications to be made on or before the 13th instant.

ROSCOMMON INFIRMARY—Resident Apothecary and Registrar. Salary, £60 a year, apartment, rations, fuel; or a Non-resident Apothecary to compound the medicines at £30 a year; and a Registrar at £30 yearly. Applications to the 17th instant.

ROYAL CORNWALL INFIRMARY—House-Surgeon, Secretary, and Dispenser. Salary, £200 per annum, with furnished rooms, coals, gas, and attendance. Applications to be made on or before the 24th instant.

ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington.—Pathologist and Medical Tutor. Applications to be made on or before the 5th instant.

ST. THOMAS'S HOSPITAL—Ophthalmic Surgeon. Applications to be made on or before the 6th instant.

WARNEFORD, LEAMINGTON, and SOUTH WARWICKSHIRE HOSPITAL—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before the 16th instant.

YORK DISPENSARY—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coals, and gas. Applications to be made on or before April 18th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BROWN, W. H., M.R.C.S. Eng. (late Assistant House-Surgeon to the Leeds General Infirmary), appointed House-Surgeon to the West London Hospital.

CRESSEY, G. H., M.R.C.S. E., appointed Medical Resident and Secretary to the General Infirmary, Hertford, *vice* *W. Odell, F.R.C.S. Eng., resigned.

WICKS, W. Cairns, M.B., appointed Physician to the Hospital for Sick Children, Newcastle-upon-Tyne.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

FLEMING—WALLS.—At 2, Belhaven Terrace, Glasgow, on the 2nd instant, by the Rev. T. Dobbie, William James Fleming, M.B., F.F.P.S., Lecturer on Physiology, Glasgow Royal Infirmary School of Medicine, to Annie Cole, eldest daughter of William Walls, Esq.

VACCINATION.—Mr. Daniel Gibson, Public Vaccinator for the West District of the Hull Incorporation, has received an award of £69: 14 from the Local Government Board for efficient vaccination in his district, this being the second consecutive grant that gentleman has received.

ADDRESS TO MR. G. WYNDHAM MURPHY.—An influential meeting was recently held in the Court House, Ramelton, for the purpose of presenting an address to this gentleman, who has resigned the office of medical officer to the Ramelton Dispensary District. The address, which was in book form and highly decorated, was signed by the magistrates, clergy, and leading inhabitants of the district, and was presented by his numerous friends, who wished to place on record the estimate they had formed of his professional character and personal worth.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
- TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
- THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.
- FRIDAY** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY....** St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.**—Medical Society of London, 8.30 P.M. Mr. William Rose will exhibit a Child from whom he has removed the Half of the Lower Jaw; Mr. Fisher will show Two Cases of Congenital Talipes; Dr. Sansom, "Note on some common Disorders of Children".
- TUESDAY.**—Royal Medical and Chirurgical Society, 8 P.M.: Ballot, 8.30 P.M.: Dr. Southey, "On some points in the Minute Anatomy of the Kidney which have important bearings on its Physiological Functions in Health and Disease"; Mr. Jonathan Hutchinson, "On Paralysis of the Internal Muscles of the Eye, a group of symptoms which usually indicate Diseases of the Lenticular Ganglion".
- WEDNESDAY.**—Epidemiological Society, 8.30 P.M. The President, "On the Plague and Typhus Fever in India"; Hunterian Society, 7.30 P.M.: Council Meeting, 8 P.M.: Mr. Davies-Colley, "On a Rheumatoid Affection of Joints in Women"; Dr. Galabin, "On the Treatment of Prolapsus Uteri".
- FRIDAY.**—Clinical Society of London, 8.30 P.M. Mr. Nunn, 1. "Electrolytic Treatment of Epulis"; 2. "Plantar Bunion". Dr. Semon, "Bilateral Paralysis of the Crico-arytenoidei Postici Muscles" (living specimen); 3. Dr. Barlow and Mr. Marsh, "Case of Ovariectomy in a Child Twelve Years old"; 4. Mr. Barker, "Wound of an Abnormal Obturator Artery in an operation for Femoral Hernia".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

TURPENTINE IN POST PARTUM HÆMORRHAGE.

SIR,—Having a severe case of *post partum* hæmorrhage the other day in a flabby and hydremic class of patient, I determined to try the turpentine remedy as a stimulant to the uterus. I administered two drachms beaten up with an egg, and two drachms of brandy. This I repeated in the course of twenty minutes, after which the desired effect was obtained. The nauseating mixture, I think, might be improved upon by the turpentine being enclosed in capsules, which are easily and quickly dissolved in the stomach, similar to the balsam of copaiba capsules.—I remain, yours faithfully,
Hull, March 26th, 1878. F. J. SAWOON, M.B., etc.

Will some of your correspondents kindly inform me the mode of manufacture of carbon plates for galvanic battery?
ELECTRON.

PLUGGING THE NAKES.

SIR,—I wish to inform Mr. T. T. Frankland, through the medium of your *JOURNAL*, that I have very frequently used an ordinary gum elastic catheter, threaded by means of the stylet—in fact, I keep all my used-up catheters for this purpose—but I fail to recognise the utility of two catheters, as, if the plug for the posterior nare be of sufficient or rather proper size, it will block up the passage sufficiently.—I am, etc.,
Elton, March 25th, 1878. FRANK DAVISON.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

ADVERTISERS are requested to take notice that the regulations of the *Post Office* do not allow letters to be addressed to initials and directed to any *Post Office* in the United Kingdom, but letters may be addressed to initials to the *JOURNAL Office* or any stated address other than a *Post Office*.

THE BARBER FUND.

SIR,—I beg to acknowledge the following additional contributions to this fund; and, in thanking those of my professional brethren who have so kindly responded to my appeal, permit me again to remind the profession generally that the case is an urgent one, and that further subscriptions are yet needed.

Verax	£1	0	0
Dr. Carstairs, Peel, Isle of Man	0	10	0
Dr. Lull, Hereford	2	2	0

I am, sir, your obedient servant,
Latham House, Crickhowell, April 2nd, 1878.

P.S.—Perhaps I ought to add, that the subscriptions up to this date amount to £25 3s.

SIR,—Can you or any of your readers inform me of any schools where boys are specially and successfully prepared for matriculation at the University of London? PARENT.
March 28th, 1878.

REMOVAL OF FOREIGN BODIES FROM THE AUDITORY CANAL.

SIR,—It seems to me that Dr. Grey, in the heat and hurry of writing the letter, which appears in the *JOURNAL* of this date from him, has overlooked the fact that a method can be "described" without entering into the details of the mode in which it is carried out; but as he may not be able to see how this is possible in the present instance, I shall try to show him how I have accomplished it.

In calling the method of Löwenberg the "agglutinative" method of removing foreign bodies from the ear, I claim to have "described" that method—briefly, it is true, but, withal, lucidly and literally, for the following reasons. The word "agglutinative", which I have chosen, not only denotes the method itself, but it connotes or indicates its attribute or quality, which is to cause one substance to adhere to another by means of glue. In fact, the word "agglutinate" very accurately defines this method; and as one of the meanings of the term, "to define", is "to describe accurately", I hope that I have not only shown Dr. Grey how I lay claim to have "described" the method of Dr. Löwenberg, but, at the same time, to have justified myself in doing so in the eyes of your readers, to whom Dr. Grey appeals.

If Dr. Grey went to my paper, as he seems to have done, in the expectation of finding a detailed description of the mode of procedure of the method of Löwenberg, I surely cannot be held responsible for such an expectation on his part, seeing that I only affirmed, what I have just proved, that I had "described" the method. I never spoke of describing the *procedure* at all—not even in my paper, from which he quotes; on the contrary, in it I distinctly state that the object of the paper "is not to enter into the details of the various methods in use for the removal of foreign bodies from the ear". Finally, as the paper referred to—"On the presence of Foreign Bodies in the Meatus and on their Removal" (*BRITISH MEDICAL JOURNAL*, December 26th, 1874)—was written by me to advocate the use of a simpler means of removing such bodies from the ear, and as the ten cases reported in it were, for the most part, in support of the advocacy of this simple means, it becomes apparent to your readers why, as Dr. Grey correctly says, I did not employ this method in the removal of the foreign body from the ear.—I am, sir, your most obedient servant,
Glasgow, March 16th, 1878. JAMES PATTERSON CASSELLS.

DIALYSED IRON.

SIR,—In reply to Dr. Cavafy, allow us to ask whether, practically, it is of any material importance that colloid hydrate of iron should or should not be called dialysed iron? The product is obtained by dialysis, and cannot be obtained by any other process; and by the use of the term it is not, we imagine, implied that the colloid hydrate has passed through the membrane, nor is it necessary that it should do so to make it a valuable medicament. We presume Dr. Cavafy will not dispute the fact, that all nitrogenous food is "colloid", but it is absorbed none the less; and the hydrated oxide of iron cannot, therefore, fail to be at once acted upon by the acid of the gastric juice, and rendered capable of absorption: it is, in fact, in the condition which of all others is most favourable for this process. In addition to being chemically untenable, Dr. Cavafy's objection is overthrown by actual experience. We have it on the authority of a London physician, who has prescribed the "fer Bravais" (Bravais' dialysed iron) largely in his own practice, that all the good effects of iron are obtained with remarkable rapidity by the use of this preparation; and that, after taking it, less of the metal is observed in the evacuations than when other ferric preparations are taken; whilst the flatulence, constipation, and disturbance of the digestion, which other preparations of iron so often give rise to, are avoided when dialysed iron is administered. We leave French physicians to answer for themselves, and remain, dear sir, yours obediently,
ROBT. VON GLEHN & SONS, the Agents for Raoul, Bravais & Co.

Idol Lane, Great Tower Street, London, March 22nd, 1878.

P.S.—We would further call attention to the notice which appeared in your *JOURNAL* of March 3rd, 1877, respecting Bravais' dialysed iron.

DETECTION OF STONE IN THE BLADDER.

SIR,—Will you kindly permit me to point out what to my mind is an important inaccuracy in your report of Sir Henry Thompson's reply to certain observations which I made at the meeting of the Royal Medical and Chirurgical Society on the 12th instant? You state as follows. "In reply to Mr. Napier, he said that stone in the bladder could be detected at an early state by any intelligent medical man". I am under the impression that the words used were "ought to be"; and as they convey a very different meaning, I trust (knowing your great desire to be correct in such matters) that you will excuse my troubling you with this letter. It is too well known that, even in the hands of the greatest experts, the presence of stone in the bladder, although suspected, is often left undetected; and no better proof could be adduced, than in the hands of the general practitioners very many mistakes are made, that the numerous large stones lately exhibited by Sir Henry Thompson.—I am, sir, faithfully yours,
22, George Street, Hanover Square, March 27th, 1878. WM. DONALD NAPIER.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

HOW TO EMBALM A BODY.

SIR,—In reply to "Armenia," who asks "How to Embalm a Body," I beg to send you the following description of the process, as given in Johnson's translation of Ambrose Paré's *Surgery*, which was published in 1634.

"But the body which is to be embalmed with Spices for very long continuance must first of all be imbowed, keeping the heart apart, that it may be embalmed and kept as the Kinsfolks shall think fit. Also the brain, the skull being divided with a Saw, shall be taken out. Then shall you make deep incisions along the arm, thighs, legs, back, loins and buttocks, especially where the greater Veins and Arteries run, first that by this means the blood may be pressed forth: which otherwise would putrefie and give occasion and beginning to putrefaction to the rest of the body: and then that there may be space to put in the aromatic powders the whole body shall be washed over with a Sponge dipped in *aqua vite* and strong Vinegar, wherein shall be boiled Wormwood, Aloes, Coloquintida, common Salt and Alum. Then these incisions and all the passages and open places of the body, and the three bellies (*i.e.*, the three great cavities, head, chest and abdomen) shall be stuffed with the following Spices grossly powdered. *P. Pulv. rosar. chamam. melil. balsami. mentha. anethi. salvia. lavend. rorismar. majoran. thymi. absinthii. cyperi. calami aromati. gentiane. iros florent. assa odorata. caryophyll. nucis moschat. cinnamomi. styracis. calamite. benjoini. myrrha. aloes. santal. omnitum quod sufficit.* Let the incisions be sewed up and the open spaces that nothing fall out; then forthwith let the whole body be anointed with turpentine dissolved with Oil of Roses and Camomil, adding, if you shall think it fit, some Chymical Oils of Spices, and then let it be again strewed over with the forementioned Powder; then wrap it in a linen cloth and then in Cere-cloths. Lastly, let it be put in a Coffin of Lead sure soldered and filled up with drie sweet herbs. But if there be no plenty of the forementioned Spices, as it usually happens in besieged Towns, the Surgeon shall be contented with the powder of quenched lime, common ashes made of Oak-wood. For thus the body being over and above washed in strong Vinegar or Lye, shall be kept a long time if so be that a grave dissolving heat do not bear sway, or if it be not put in a hot and moist place."

That the embalming may become the more durable, the author further directs the surgeon "to steep the bodies (being imbowed and pricked all over with sharp bodkins, that so the liquor hindring putrefaction may penetrate the deeper into them) in a wooden Tub filled with strong Vinegar of the decoction of aromatick and bitter things as Aloes, Rue, Wormwood, and Coloquintida; and there keep them for twenty days, pouring these into eleven or twelve pints of *Aqua vite*. Then taking it forth and setting it on the feet, I kept it in a clear and drie place. I have at home" (he continues) "the body of one that was hanged, which I begged of the Sheriff, embalmed after this manner; which remains sound after more than 25 years, so that you may tell all the muscles of the right side (which I have cut up even to their heads, and plucked them from those that are next them for distinctions sake, that so I may view them with mine eyes, and handle them with my hands as often as I please, that by renewing my memory I may work more certainly and surely, when as I have any more curious operation to be performed) the left side remain whole, and the Lungs, Heart, Diaphragma, Stomach, Splene, Kidnies, Beard, Hairs, yea and the Nails, which being pared, I have often observed to grow again to their form and bigness." As if to dispel any doubts as to his veracity in making this last statement, the author concludes as follows: "And let this be the bound of this our immense labour, and by God's favour, our rest; to whom: Almighty All-powerful, Immortal and Invisible, be ascribed all honour and glory for ever and ever. Amen."

In the spelling, italics, etc., I have followed the original.—I remain, yours, etc.,
12, Colebrook Row, N., March 4th, 1878. GEORGE BROWN.

WORMS IN THE OESOPHAGUS OF A DOG.

SIR,—Do the filariz travel in germ-form with the blood into the viscera? or do they migrate in fully developed state through the tissues from a first point of adhesion in the oesophagus, as the teredo does through a balk of timber? Are they checked in any way in the human subject by a daily ration of alcohol, the habitual use of salt with food, or the habit of smoking tobacco?—Yours truly,
Jo. C.

HEADACHE.

SIR,—It would appear that the headache of J. K.'s patient arises from over-stimulation of an irritable brain. First, there is the "exhilarating" effect of the air of Brighton; second, there is the stimulating influence of the kitchen-fire, to which a cook is necessarily much exposed; third, the food of "the mistress of the kitchen" is generally highly stimulating; and fourth, there are frequently much hurry and excitement in getting meals ready at the proper hour. Now, such an amount of stimulation is decidedly injurious to an irritable nervous system, and is quite sufficient to produce the obstinate and severe headache described by J. K. Sedatives (being merely strong stimulants—*i.e.*, rapid liberators of nervous energy) are decidedly contraindicated. In such cases, I have not found drugs of much avail; excepting, indeed, a gentle laxative, if necessary, every second morning. I deprive the patient, as far as possible, of all avoidable stimulants—*viz.*, tea, coffee, alcohol, and the more stimulating foods, allowing cocoa, fish, rabbit, etc. I disapprove of any food being taken within four hours from bedtime; and I advise the patient to sleep on a high pillow. In such cases, there is frequently great irritability of the heart, which on the smallest provocation sends the blood with severe and sudden force upon the tender brain. To avoid increase of the headache from this cause, I recommend all unnecessary hurry to be avoided, and especially condemn sudden getting out of bed in the morning.

I am convinced that it is only by insisting strongly upon such details that we can be of much service to such patients as that of J. K.: but this method of treatment certainly requires perseverance and self-denial.—I am, etc.,

JAMES MUIR HOWIE, M.B. Edin.

50, Rodney Street, Liverpool, March 25th, 1878.

SURGICAL OR PULSE CHRONOMETER.

SIR,—May I ask you and the profession if a watch, constructed so as to beat audibly in unison with the average healthy pulse—say seventy-five—and having a hand describing the full circle of the dial in seventy-five clear movements, in the period of one minute, would be considered an advantage? I imagine it would enable the doctor to time his eye in the light, and his ear in the dark, so accurately as to determine the slightest variations and irregularities of pulsations. At the same time it would, of course, serve the ordinary purpose of time-keeping.—Your obedient servant,
A WATCHMAKER.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

MORTALITY STATISTICS.

SIR,—In reading the weekly accounts of the mortality statistics, I have been puzzled on one or two points, which perhaps you can explain. I can make out very easily that if the mortality at A be 20 per 1000, and at Z 30 per 1000, A must be a much more healthy place than Z. But it seems to me that there is a very important factor always omitted in these estimates which is necessary to a proper understanding of the statistics—namely, the average age of the inhabitants of each of the towns. Every one must die eventually. Let us suppose that each of the towns A and Z started some years ago with a like mortality statistic, and that A, by sanitary or other effort, reduced the death-rate to the lower of the two figures, it is evident that each year there must be an increment of aged persons at A, and this constantly accruing should eventually, after a sufficient interval of low rates, in consequence of the necessary decrease of octogenarian or other aged persons, bring the mortality at A to the level of the mortality at Z.

Again, we have occasional paragraphs that the mortality-rate at particular places is one to so many inhabitants, sometimes going even to hundreds. If this calculation be taken on an area of sufficient extent, or a community sufficiently established, I submit this would show the average age the inhabitants of these places attained. Thus, if it be said that the mortality at N was one in 100, this figure would represent the average age of the inhabitants, which is absurd. I think that when those large figures are presented, it merely proves that the register of mortality has been very imperfectly kept.—Yours, etc.,
G.

Our correspondent's difficulty in comprehending the true bearing of mortality statistics is not an unusual one. The influence of the age distribution of a population upon its rate of mortality has been at the same time both overrated and misunderstood. The influence is, for all practical purposes, in actual populations, so small that it may almost be disregarded when comparing mortality statistics. The age constitution of a population depends, moreover, fully as much upon the birth-rate as on the death-rate. Our correspondent overlooks the fact that, if a death-rate decline and the birth-rate be maintained, the proportion of children and young persons in the population will increase at a greater ratio than that of the elderly persons—supposing that the birth-rate exceeds the death-rate, which is almost invariably the case.

In the second part of his letter, G. is evidently thinking of a stationary or life-table population. An annual rate of mortality equal to one in 100, or 10 per 1000, maintained throughout a generation, would undoubtedly, in a stationary population, signify a mean duration of life of one hundred years. This is, however, not the case in actual populations which are increasing populations. A death-rate in a single year so low as 10 per 1000 has no possible connection with the mean duration of life, neither does it afford any evidence that the death-register is imperfectly kept, which is now almost impossible.—ED. BRIT. MED. JOUR.

PHYSICIANS' FEES.

SIR,—The animated discussion of the proper remuneration of professional services prompts the question, Whether any scheme involving a fixed fee for every visit or consultation be fair to either the patient or the physician? If we maintained the poetic fiction that our aid, being immeasurable by pecuniary standards, was given to mankind out of pure philanthropy, and that the *honorarium* was a spontaneous testimonial of gratitude, apportioned to the patient's means, the present system might be defended from an Arcadian point of view; but in this prosaic and practical nineteenth century, the public, if not the profession, have learned to look upon medical attendance as a business affair, regarding a fee as payment for value received. In all other matters of exchange, political economy teaches that the price is regulated by the amount of service rendered: even where no barter of material commodities takes place, this rule obtains; as, for example, in the legal profession, where the charge for an opinion is proportioned to the importance or difficulty of the case. In medicine alone do men adhere to the traditional absurdity of an unvarying fee for each interview, irrespective of the thought and skill exercised therein—whether it concern the most intricate question of diagnosis, or the routine prescription of a cough-mixture. It is not an uncommon event in medical practice to be able, on the one hand, to save a life by a single visit, or, on the other hand, to have for some days under treatment a comparatively trivial ailment which neither imperils life nor taxes professional skill. In which of these cases is the larger reward fairly earned? Another objection to the system of stated charges "for each consultation or visit" (setting aside the remote possibility of a physician being so unprincipled as to yield to the temptation to multiply unnecessary visits) is, that it establishes an inverse ratio between a physician's skill and his compensation; the more speedily he cures his client, the smaller being his aggregate reward. If it were left to the patient's option, most people would cheerfully pay more to be made well in a week than to be kept ill for a month; but, under the existing plan, the doctor who is fortunate enough to cap a mistaken diagnosis with inadequate therapeutic measures makes four times as much as his clever colleague, whose work is successfully done with one-fourth of the number of visits. Even in the inner circle of consultants and specialists who enjoy great popular celebrity, errors of diagnosis and failure of treatment sometimes occur; and it may happen that a patient who has paid frequent but futile visits to one adviser, will obtain relief from one or two consultations with another. Ought the former's failure to be more profitable than the latter's success?

Unless we are willing to place ourselves on the same economic footing as the manual labourer, who is paid for his time without regard to the kind of work he does, I would suggest that we accept our modern relation to the business-like community, and make our charges proportionate to the value of the service which we render in any given case, rather than to the number of visits made. In my own practice I have been guided by this principle for some years, and have found it to work generally to the satisfaction of my patients and myself.—I am, sir, yours, etc.,
AN AMERICAN PHYSICIAN.

OLEATE OF BISMUTH.

SIR,—In 1876, an oleate of bismuth was prepared for me by Messrs. Hopkins and Williams; and subsequently I wrote a paper on its properties and uses, which was read at a meeting of the Pharmaceutical Society, and reported in their Journal (No. 357, December 9th, 1876). I now wish briefly to state that I have repeatedly employed this compound in cases of eczema and pityriasis (simplex) with sufficient success to induce me to draw attention to it in these columns, in the hope that others may give it a trial.—I am, etc.,
LOUIS LEWIS, M.D.

A CURE OF EPILEPSY.

IN connection with a letter from A. H. D., it is our duty to draw attention to the following documents, forwarded at the same time, and since to duplicate by other correspondents.

*"Fits.—Epileptic Fits or Falling Sickness—*A certain method of cure has been discovered for this distressing complaint by a physician, who is desirous that all sufferers may benefit from this providential discovery. It is never known to fail, and will cure the most hopeless case after all other means have been tried. Full particulars will be sent by post to any person free of charge.—Address—Mr. Williams, 10, Oxford Terrace, Hyde Park, London."

This is an advertisement from a weekly paper. In response to a reply to the advertisement were forwarded the following lithographed circulars.

"London.

"In accordance with the wish expressed in your favour, I am directed to send you Dr. Niblett's treatise on various diseases, in which you will find full particulars of the preparations used. A clergyman, whose son has been cured by the medicines, has published an edition of ten thousand copies of this treatise, and he has instructed me to send a copy to any one who may wish it. Should you or any of your friends require the doctor's advice, I am desirous to say he will be happy to reply to any letters free of charge.—I am, your obedient servant, W. WILLIAMS."

"London.

"Your letter has been handed to me by Mr. Williams, and I have directed him to forward you one of my treatises, which I hope you have received safely. Should it, however, by any mishap have been delayed or lost, I shall have much pleasure in sending you another by return of post, on receiving an intimation from you to that effect. I take this opportunity of enclosing you a few of my printed forms, to fill up in case you or any of your friends should desire to place yourselves under my treatment; in which case you will find it convenient to fill up one of the enclosed forms and return it to me.—I am, yours faithfully, S. BERRY NIBLETT."

There was also forwarded a copy of a pamphlet *On a Rational Method of Treating Consumption, Chronic Bronchitis, Asthma, and all Diseases of the Lungs, Liver, and Heart. Also a Treatise on Epilepsy and Fits: with Practical Observations on many Prevalent Diseases.* By S. Berry Niblett, M.D., Royal College of Physicians. One part of the pamphlet runs thus:

"Treatment of Consumption.—In recommending the following treatment, I trust that I am actuated by an earnest desire to benefit those whose cases it may serve to illustrate. My aim is to lessen human suffering and to prolong human life."

"Blessed art of healing, once again divine." The specific medicine which I have so successfully prepared for every form and variety of consumption, and all disease of the lungs and air-passages, is called *The Restorative Balm*. There is not a single symptom of consumption that this balm will not take hold of and eradicate. Its action is immediate; it will also remove chronic bronchitis, asthma, sharp pains in the chest, difficult expectoration, sore throats, coughs, and colds, also general debility. It will nourish and strengthen the vital organs by purifying the blood and removing all nervousness; it will greatly assist the digestive organs and increase the appetite; it will itself nourish the patients for weeks at a time."

On page 16 the following passages occur:—"Treatment of Epilepsy."—"Heed not the twaddling of ignorance, but listen to the voice of judgment and experience."—"After several years of experiment and research, I have been enabled to discover a certain remedy for all forms of epilepsy and fits; it is called *The Vital Renewer*. This invaluable remedy will cure the most inveterate cases, even when the fits have lasted for years. None need, therefore, despair. It is perfectly harmless; it is prepared exclusively by myself, and no cost has been spared to bring it to the specific remedy it now is."

From this the whole of the pamphlet may be inferred. In the *Medical General Register* is the following entry:—"1859, January 1st, Niblett, Stephen Berry, 10, Oxford Terrace, Hyde Park, London, W. Lic. Soc. Apoth. Lond., 1858; Lic. R. Coll. Phys. Edin. 1860; Lic. Fac. Surg. Glasg., 1861."

The profession will be interested to know whether the licensing bodies in question are disposed to allow this to pass unnoticed much longer.

MENSTRUATION AND THE CURING OF MEAT.

SIR,—The question asked by your correspondent in the JOURNAL of March 2nd has just been recalled to my mind. Last week, I ordered a pig to be killed, but the cook demurred, and made excuse about not being able to attend to the curing. My wife afterwards informed me that she objected because she was in a "certain way." The killing was therefore postponed. This was a hog pig. The next day, my men remarked that I must not think of killing the sow, as she was "bremming", and therefore would not take the salt. I have, then, in my establishment two persons firmly asserting two distinct facts—that the hams and bacon will not cure if the rubber be menstruating, and that if a sow be killed when "bremming" it will not take the salt. During the past few days, I have spoken to several matrons about the opinion, who all believe firmly in it. One person had a number of hams spoiled through the thoughtlessness of the cook; and since then she has had them rubbed by a man. I may say that this belief is not peculiar to a locality. I knew it to be held in the north and south of England. I have only heard one explanation—the moisture that is on the hands and body during the catamenial period. This matter might be decided by experiments made in lunatic asylums or prisons, under the direction of the medical officers.—Your obedient servant,

March 18th, 1878.

THE BRUSSELS DEGREE.

SIR,—In answer to the inquiries that are being made regarding this degree, permit me to give a slight sketch of the conditions on which it may be obtained and the nature of the examinations, as I have been in Brussels lately and taken the degree. The candidates must hold a diploma in medicine and surgery, and produce the same to the secretary before the first examination. He must matriculate; the fee is £8 12s. It entitles him to attend all the lectures in the Faculty of Medicine, and the clinics at the hospitals, St. Jean and St. Pierre, for the year. He must pay the examination fees, four guineas for each examination, or twelve guineas in all. Forty-eight hours after matriculation he may go up for the first examination. It consists of the following subjects, 1. Special Pathology; the examiner is Professor Croq; 2. General Pathology, Professor Desmech; 3. Pathological Anatomy, Professor Wehanel; 4. Materia Medica and Therapeutics, Professor Van den Corput. If he pass this test, he receives a certificate to that effect, and forty-eight hours afterwards he may go up for the second. The following are the names of the examiners and the subjects. Surgery and Surgical Pathology, Professor Thierry; Midwifery, Professor Pigeolet; Forensic Medicine, Professor Guillery; Hygiene, Professor Mahaux. Forty-eight hours after passing this examination, he may go up to the third and final. Clinical Medicine, Professor Croq; Clinical Surgery, Professor De Roubaix; Operative Surgery, Professor Tiriahy; Operative Midwifery, Professor Pigeolet. If a candidate fail in the first test, he is re-

funded eight guineas; if he pass the first and fail in the second, he is refunded four guineas; if he fail in the third, there is no money refunded, but by paying an extra guinea at any time within twelve months he can come back again and have another trial. Some of the professors speak English, and examine the candidates in that language, but most do so through an interpreter. The only special book that I would recommend is Parke's *Manual of Hygiene*. The ordinary text-books used do well enough. The subjects that most men are weak in are pathology, hygiene, and anatomy.

Intending candidates should write to Dr. James, 10, Rue de Luxembourg, Brussels. He is Professor of Latin, and, being an Englishman, generally acts as interpreter. He informed me that the percentage of rejections about three or four years ago was only five per cent.; during the last year, it has been about thirty-three per cent., or one in three. The examinations are public; and a gentleman who is a F.R.C.S. came over for examination, and was present during two of the days that I was being examined. He saw that the tests were more stringent than he expected, and determined to remain and read up for a week or two before going up. I took notes of all the questions asked; and if you think they would be of any use, I will forward them for publication.—I am, faithfully yours,

March 1878.

C. B. G.

THE following communications have been handed to the General Manager:—Dr. J. Smith, Dumfries; Mr. F. J. Gill, Birmingham; Mr. H. S. Worsley Benson, London; Mr. James Kirkeley, South Shields; Mr. H. S. Beaufort, Lymington; Mr. T. H. Wilson, Montrose.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton; and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Courant; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. T. Spencer Wells, London; Dr. T. Clifford Allbutt, Leeds; Dr. George Johnson, London; Mr. F. W. Lowndes, Liverpool; Dr. F. A. Mahomed, London; Mr. Pugin Thornton, London; Dr. W. B. Cheadle, London; Mr. T. H. Bartlett, Birmingham; The Secretary of Apothecaries' Hall; Dr. Edis, London; Dr. J. Milner Fothergill, London; The Secretary of the Medical Society of London; Mr. Teevan, London; The Secretary of the Epidemiological Society; Mr. Eastes, London; Mr. Durham, London; The Secretary of the Hunterian Society; Dr. W. Fairlie Clarke, Southborough; M.D.; The Registrar-General of England; Dr. C. Theodore Williams, London; Dr. Bradbury, Cambridge; The Registrar-General of Ireland; Dr. J. Smith, Dumfries; Dr. Tilbury Fox, London; Dr. J. Duncan, Edinburgh; X.; J. M. L., Mickleover; Dr. Francis Warner, London; Electron; The Secretary of the Metropolitan and National Nursing Association; Dr. J. Waltham, Ipswich; T.; Dr. W. R. Thorne, Sheffield; Mr. P. E. Hill, Crickhowell; Mr. H. N. Hardy, London; Dr. W. C. Wicks, Newcastle-upon-Tyne; Dr. Reuben Harvey, Dublin; Captain Fortescue, London; A. M. D.; Dr. Lush, M.P., London; Dr. J. B. Spence, Redhill; Mr. J. Cran, Salford; Dr. T. Churton, Leeds; Dr. Michael Foster, Huntingdon; Our Dublin Correspondent; The Honorary Secretaries of the Bath and Bristol Branch; Dr. A. B. Erabazon, Bath; Mr. T. J. E. Brown, Llanbister; Member, Lockerbie; Mr. H. W. S. Worsley Benson, London; Dr. E. M. Skerritt, Clifton; Dr. J. P. Cassells, Glasgow; W.; Mr. J. Bluett, Chesterfield; Mr. Delmard, Manchester; Mr. R. Clement Lucas, London; Mr. W. K. Treves, Margate; Mr. W. H. Michael, London; Our Edinburgh Correspondent; Dr. Tripe, London; The Secretary of the Royal Medical and Chirurgical Society; M.; Mr. Howard Marsh, London; Dr. Ferrier, London; Dr. Joseph Coats, Glasgow; Mr. F. Workman, Reading; Dr. J. C. Reid, Newbiggen-by-the-Sea; Mr. T. L. Walford, Reading; Dr. H. M. Jay, Chippenham; Mr. F. Vacher, Birkenhead; Mr. H. S. Beaufort, Lymington; Dr. M. M. Bradley, Jarrow-on-Tyne; Mr. Ramsden, Ravensthorpe; Dr. Wm. Procter, York; Mr. Robinson, Dublin; Dr. Joseph Rogers, London; M.D.Ed.; Dr. W. O. Markham, London; A Parent, Winsford; Mr. J. Gell, Birmingham; Mr. Porter, Netley; Dr. W. H. Spencer, Clifton; Dr. J. Smith, Dumfries; Mr. T. S. Sawdon, Hull; Mr. D. Griffiths, Rhyl; Dr. Sandby, Birmingham; Dr. Howard, Preston; Dr. Mackey, Brighton; Mr. Charles Arnison, Darlington; Dr. Cheadle, London; Dr. Clifford Allbutt, Leeds; etc.

BOOKS, ETC., RECEIVED.

Transactions of the International Medical Congress: Philadelphia, 1876. By John Ashhurst, Jun., A.M., M.D. 1877. Wholesale Houses. By E. Gregson Banner, C.E. London: Crosby, Lockwood, and Co. 1877. A Handbook of Therapeutics. By Sidney Ringer, M.D. Sixth Edition. London: H. K. Lewis. 1877. The Human Eye: its Optical Construction popularly explained. By R. E. Dudgeon, M.D. London: Hardwicke and Bogue. 1877. Cerebral Hyperæmia: the result of Strain or Emotional Disturbance. By Wm. A. Hammond, M.D. New York: G. P. Putnam and Son. 1877. A Manual of Nursing: prepared for the Training School for Nurses, attached to Bellevue Hospital. New York: Putnam's Sons. 1877. Transactions of the Edinburgh Obstetrical Society. Vol. iv, Sessions 1874, 1875, 1876, and 1877. Edinburgh: Oliver and Boyd. 1878. On Consumption and Certain Diseases of the Lungs and Pleura. By R. Douglas Powell, M.D. London: H. K. Lewis. 1878.

THE GOULSTONIAN LECTURES ON THE LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.,

Professor of Forensic Medicine in King's College; Assistant-Physician to King's College Hospital; etc.

LECTURE II (concluded).—March 20th.

*Brachio-Cranial Monoplegia.**—Paralysis of the leg occurs more frequently in association with paralysis of the arm than singly as the result of cortical lesions. I have already given several cases of this kind, to which the following may be added.

MM. Charcot and Pitres† give a case of paralysis with rigidity of the left limbs of three years' duration, sensibility being unimpaired. A patch of softening 5×2.5 centimètres was found at the upper extremity of the fissure of Rolando, on the convex surface of the right hemisphere. (Fig. 18.)

M. Moutard-Martin‡ reports a case of fracture of the skull and injury of the brain, causing paralysis of motion of the right arm and

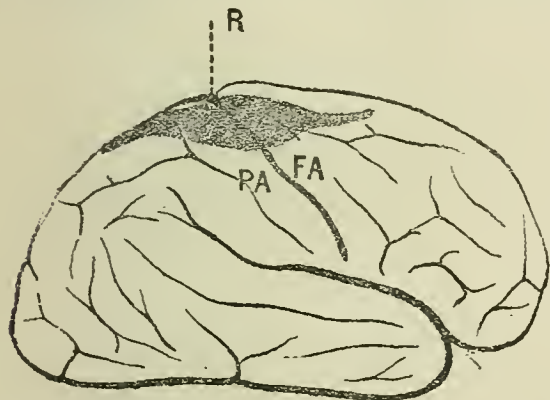


Fig. 18.

leg, for which trephining was practised without success. The cerebral lesion occupied the upper extremity of the ascending frontal, ascending parietal, and anterior two-thirds of the postero-parietal lobule, and slightly to the inner aspect of this region, or paracentral lobule.

M. Pitres§ gives a case in which the lesion affected, not the cortex, but the medullary fasciculi of the superior frontal and parietal region.

Brachial Monoplegia.—The centres for the movements of the arm and hand occupy a considerable space, as might be expected from their importance as organs of intelligence. Area [5] (figs. 15 and 16) is the centre for the forward extension of the arm and hand; area [4], for the adduction and retraction; area [6], for the supination and flexion; while the various letters (*a, b, c, d*) placed in the ascending parietal convolution indicate the portion of the various centres for the movements of the wrist and fingers. With these latter, retraction of the angle of the mouth is apt to be associated, owing to the proximity of the facial and oral centres (7, 8, 9, 10, 11, fig. 15): a proximity which serves to explain, among other things, the retraction of the angle of the mouth so commonly seen associated with powerful action of the hand. Hence also the fact that brachial monoplegia occurs less often than brachio-facial paralysis.

It is obviously highly important, in any given case of brachial monoplegia of cortical origin, to determine, if possible, which of the movements of the upper extremity are particularly affected. This has not been done with any great degree of accuracy in many of the recorded cases.

M. Maurice Raynaud|| reports a case of paralysis limited to the left

arm, and more particularly to the extensor muscles, though the flexors were also paretic. There was no diminution in sensation, nor alteration in electro-motor contractility. The lesion was situated in the ascending parietal convolution of the right hemisphere, in the position of a line drawn back from the second frontal. It was an area of softening surrounding a tubercle of the size of a millet-seed, and about a centimètre in diameter; the softening affecting the subjacent medullary fibres more than the cortex. A smaller area of softening of the size of a pea was situated near this, but within the fissure of Rolando. The whole lesion could be covered with the pulp of the finger.

M. Sabourin* records a case of sudden partial right hemiplegia without loss of consciousness, which soon disappeared, leaving paralysis of the right hand and arm, which continued till death seven days afterwards. A focus of red softening was found in the left hemisphere of the size of a two-franc piece, the centre of which, where the softening was greatest, corresponded with the junction of the ascending parietal convolution and supramarginal lobule. The softening extended halfway up the ascending parietal convolution, somewhat concealed within the fissure. The ganglia were intact.

M. Boyer† has recorded a case of sudden paralysis of the left arm and leg. After four or five days, the leg regained its power, while the left arm remained permanently paralysed. The affection happened in 1872. In 1877, the condition was rigidity of the left arm and atrophy of the muscles of the forearm. Sensation was unimpaired. The patient died of bronchopneumonia. The left hemisphere was normal. In the right hemisphere, a patch of atrophy, caused by an old yellow softening, existed in the ascending parietal and ascending frontal convolutions; and an extension of the same existed in the temporo-sphenoidal region. The position of the lesion is indicated, from a drawing sent me by M. Boyer, in the diagram before you.

M. Bourdon‡ has collected several other cases, from which I quote the following.

A case related by M. Pierret, of an apoplectic attack with early rigidity of the left arm and retraction of the right angle of the mouth, followed by partial paralysis of the left arm. Death occurred twelve days afterwards, from sudden coma and epileptic convulsions. In the right hemisphere, at the junction of the middle frontal with the ascending frontal convolution, a focus of red softening of the size of a franc-piece existed. A similar focus existed in this case in the median occipital of the same hemisphere.

Another case, observed by Darolles, is given, of cerebral affection resolving itself ultimately into paralysis of the right arm. A hæmorrhagic extravasation was found in the left hemisphere, embedded in the cortical substance, three millimètres in extent, at the upper part of the ascending parietal convolution. A patch of softening also existed in the median occipital lobe of the right hemisphere in this case.

In a third case, there was an association of aphasia with paralysis of motion of the right arm. The brachial monoplegia continued till death. After death, a small hæmorrhagic extravasation was found at the upper part of the ascending frontal convolution of the left hemisphere.

M. Bourdon also quotes an interesting case of double brachial monoplegia communicated to him by M. Vermeil. This was the result of a cranial injury. The arms only were paralysed as to motion, sensation being unimpaired. Death occurred two days after the accident. There was no depression of the skull at any part. On the surface of the brain were two small superficial hæmorrhagic extravasations of about fifteen millimètres in diameter. The one of these was situated towards the upper part of the ascending frontal in the left hemisphere. The other, in the right hemisphere, was situated at the junction of the ascending parietal with the supramarginal lobule.

Several other cases of brachial monoplegia (Raymond's, Demongéot de Confrevon's) are on record; but the characters of the lesions (tuberculo-meningeal) are not altogether such as to admit of their being quoted as exactly circumscribed. I will only refer to one other case of brachial monoplegia, respecting which there exists some doubt as to its harmony with the other facts related in reference to limited paralyses. The case is related by M. Cotard.§ A woman, who died at the age of seventy-one, had been seized with convulsions, followed by paralysis of the left arm, about the age of two years. The left arm continued paralysed and rigid. She walked with difficulty; but this was apparently due to fracture of the neck of the left femur a few years before. Formerly no difficulty was noted in this respect. The right hemisphere was smaller than the left. "Behind the upper extremity of the fissure of Rolando, there was a longitudinal depres-

* I use the term monoplegia here to indicate paralysis of a distinct group of movements, and not as meaning paralysis of a muscle or a limb.

† *Op. cit.*, p. 185.

‡ *Bulletin de la Société Anatomique*, December 8th, 1866.

§ *Op. cit.*, p. 85.

|| *Bulletin de la Société Anatomique*, July 1876.

* *Le Progrès Médical*, 1877, p. 391.

† *Bulletin de la Société Anatomique*, May 4th, 1877.

‡ *Op. cit.*

§ *Atrophie partielle du Cerveau*, p. 21.

sion of the cortex, which extended parallel with the longitudinal fissure as far as the occipital lobule, five *centimètres* in length by one *centimètre* in breadth." It is not clear in this case what extent of the ascending parietal convolution was involved, or how much of the postero-parietal lobule, if any, as it is only said that the linear depression was parallel to the longitudinal fissure. M. Charcot, in whose *clinique* the case occurred, is unable to give me further particulars as to the exact seat of the lesion. The uncertainty in this case is as regards the extent of the affection of the centre for movements of the leg, which, whether they were affected at first or not, do not seem to have been permanently so.

A somewhat similar uncertainty also exists in reference to Boyer's case already quoted, in which, though the leg was at one time paralysed, yet recovery took place, though some lesion of the leg-centre still appears to have continued. It is, therefore, a question whether the leg may regain complete power, notwithstanding the existence of partial lesion of its cortical centre. These cases would seem to indicate this, granting always that the observations were thoroughly exact and minute.

M. Charcot, in a private communication to me respecting Cotard's case, thinks that cortical lesions in infancy do not have precisely the same effect as similar ones in the adult, owing to the functions of the cortical centres not being as yet well defined. This is worthy of particular investigation, and would seem to be justified by the experiments of Solimann in reference to the development of the cortical centres in young animals.*

With the exception of Cotard's case, which must remain doubtful, the seven cases I have quoted of limited lesions with brachial monoplegia are entirely in harmony with the localisation of the head and arm centres in the monkey; for, though the lesions recorded did not occupy the same position in all, yet they were all in regions included within the area in which these centres are situated, viz., the ascending parietal and upper part of the ascending frontal convolutions.

In those in which it was noted that the hand in particular was affected, the lesion invaded the ascending parietal convolution, in accordance with the facts of experimental localisation. In others, no differentiation was made, or was possible. It would have been most interesting if this had been done in Vermeil's case of double brachial monoplegia, as the lesions occupied centres for different movements of the upper extremity.

As with the leg, so also in regard to the arm, some cases of amputation, or congenital deficiency, of the hand or arm are on record in which atrophy has been described in certain convolutions of the opposite hemisphere.

A case is reported by Chuquet† of amputation of the right arm six years before death. In the left hemisphere, there was atrophy of the upper third of the ascending parietal convolution and corresponding part of the internal surface of the hemisphere. The length of the atrophied part was two *centimètres*.

M. Boyer‡ examined the brain of a man who died at the Bicêtre, having had his left arm amputated thirty years previously. The ascending convolutions were atrophied at their superior extremity, and the ascending frontal was throughout very slender and flattish.

Dr. Gowers has kindly given me the particulars, accompanied by a photograph of the brain, of a case of congenital absence of the left hand. The middle part of the ascending parietal convolution in the right hemisphere is, as clearly shown in the photograph, much smaller than the corresponding convolution in the left. A microscopic examination had not been made at the time Dr. Gowers gave me these particulars, though he intended carrying this out.

The cases of atrophy—and of these Dr. Gowers's seems the most satisfactory, inasmuch as the lesion was congenital—if we cannot place absolute reliance on them as yet, are not opposed to the localisation of the hand and arm centres as determined by physiological experiment or the facts of disease.

Brachio-facial Monoplegia.—The combination of brachial with facial paralysis is a much more frequent occurrence than brachial or facial paralysis singly in connection with cortical disease; and very commonly, and for obvious reasons, it is associated with aphasia when the disease is in the left hemisphere. This, however, is not always the case; and I have recently seen two cases of right brachio-facial monoplegia without aphasic symptoms. Many such occur, but recover and are lost sight of. *Post mortem* examination has, however, been made in several.

Dieulafoy§ has recorded the case of a woman, aged 60, who was sud-

denly seized with paralysis of motion in the right arm and right lower facial region. Death occurred the next day from coma. The necropsy revealed a hæmorrhagic extravasation, of the size of a nut, surrounded by a zone of softening in the ascending frontal convolution of the left hemisphere. The exact position of the lesion in the ascending frontal is not given more accurately in the record.

Troisier* gives a case of a man, who died of phthisis, who had been suddenly seized with paralysis in the right arm, at first showing itself in the muscles supplied by the musculo-spiral nerve, and followed by complete paralysis of the limb, with the addition of right facial paralysis; sensation was intact. In the left hemisphere, a patch of hyperæmia and yellow granulations, of seven to eight square *centimètres* in extent, was found posterior to the third frontal convolution. The lesion was not very definite in this case, and it was further complicated by the simultaneous occurrence of granulations in the membranes behind the posterior parietal convolution.

M. Hippolyte Martin† has recorded a case of left facial paralysis, with paresis of the left arm, more particularly shown in the first three fingers. The affection had come on suddenly, without loss of consciousness or other paralysis, five or six months previously. The necropsy revealed a patch of yellow softening in the lower fifth of the ascending parietal convolution of the right hemisphere. The softening extended up the fissure of Rolando, to a level with the posterior extremity of the second frontal convolution. The softening penetrated about one *centimètre* from the surface. The basal ganglia and the rest of the brain were normal.

Crueilhier‡ gives a case, illustrated by a figure, of paralysis suddenly occurring on the right side of the face and tongue (aphasia), with paralysis and rigidity of the right arm. The lesion in this case was a patch of red softening of about 2×4 *centimètres* in extent, situated at the lower third of the fissure of Rolando, and affecting also very specially the ascending parietal convolution.

A case reported by Anton Frey§ is referred to by M. Pitres||, as showing that brachio-facial monoplegia may occur from lesions limited to the medullary fibres of the middle pediculo-frontal and frontal section. The symptoms were paresis of the left arm and left side of the face, without affection of sensation. Death occurred from gangrenous erysipelas of the face. In the right hemisphere, a small focus of hæmorrhage, formed by the juxtaposition of three minute extravasations, each of the size of a mustard-seed, was found in the medullary fibres at the junction of the middle frontal with the ascending frontal convolution.

Other similar cases are given by Pitres, which I need not, however, quote. I might cite many other instances of this form of monoplegia in connection with cortical lesions; they are not, however, all described with the degree of topographical accuracy which is desirable. I would refer the reader to M. Landouzy's work, where most of them are collected and details given, and also to Grasset's recent memoir, *Localisation dans les Maladies Cérébrales*, 1878.

A glance at the diagrams before you, and a comparison of the position of the lesion in these five cases with the situation of the hand and facial centres (areas [7] [8] [11], fig. 15), will show how close is the correspondence between them. The lesions causing brachio-facial monoplegia are all towards the middle of the ascending frontal and parietal convolutions or somewhat lower, regions which include facial and brachio-manual centres, as indicated by experimentation on monkeys.

Facial Monoplegia.—Facial paralysis of the cerebral type—*i. e.*, paralysis limited almost exclusively to the lower facial region—is not a very common occurrence by itself in connection with cortical disease. Usually, it is complicated with brachial paralysis or with aphasia; with the latter more especially when the lesion is in the left hemisphere. This is naturally to be expected from the proximity of the facial centres ([7] [8], fig. 15) to those of the arm and hand already indicated, and to the lingual and oral centres ([9] [10] [11], fig. 15).

Brown-Séquard¶ reports a number of cases of facial paralysis, "seemingly caused" by lesions in various parts of the brain, such as the frontal, occipital, and temporo-sphenoidal lobes; but as there is not even a common, to say nothing of a constant, relation between such lesions and motor paralysis of any kind, and as there seems to have been no attempt at distinction between peripheral and central facial paralysis, the facts have little or no value as regards localisation.

The cases on record in which paralysis limited to the face has been

* *Jahr. für Kinderheilk.*, Band ix.

† *Bulletin de la Société Anatomique*, November 1876.

‡ *Soc. Anat.*, April 1877.

§ *Gazette des Hôpitaux*, 1868, p. 150.

• *Bulletin de la Société Anat.*, 1872, p. 262.

† *Revue Mensuelle*, No. 3, p. 136.

‡ *Atlas*, liv. xx, pl. 4.

§ *Archiv für Psychiatrie*, 1875, p. 327.

|| *Op. cit.*, p. 76.

¶ *Lancet*, April 1877.

found in connection with localised cortical disease have been due to lesion of the right hemisphere; but in none can the lesion be said to have been accurately defined or uncomplicated. Charcot and Pitres* give a case, with a figure (fig. 19), of a lesion, extensive in one sense, but limited as regards the motor area of the brain involved. This was

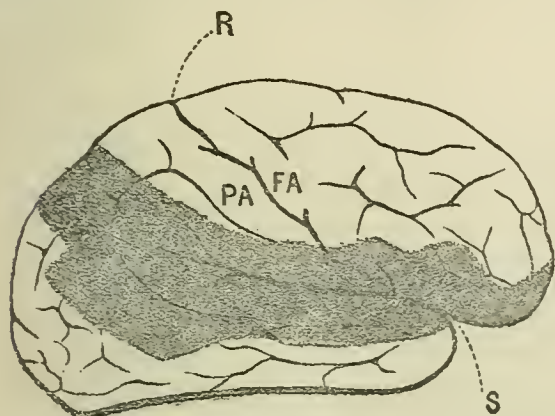


Fig. 19.

a case of apoplexy with facial paralysis and early rigidity of the limbs on the left side. The rigidity of the limbs disappeared, but the facial paralysis persisted till death. An extensive area of softening was found in the right hemisphere, invading the third frontal, the lower extremities of the ascending convolutions, and a large extent of the parietal, temporo-sphenoidal, and insular lobes.

Hitzig† relates the case of a French soldier, who, two months after a bullet-wound on the right side of the head, began to be affected with clonic spasms in the left side of the face. These were followed by transient, but complete, paralysis of the left side of the face and left side of the tongue. Clonic spasms occurred also in the left hand. After death, an abscess was found corresponding to the seat of the injury, situated in the ascending frontal convolution, between the pre-central fissure and the fissure of Rolando. It should, however, be noted that there were indications of meningeal inflammation over the whole surface of the right hemisphere, though there was no cerebral softening except in the neighbourhood of the abscess. A similar case is reported by Wernher.‡ Had the lesions been in the left instead of the right hemisphere, we should in all probability have had the symptoms of aphasia superadded, as in the following case—to select one from a host—related by Hervey.§ This was a case of right facial paralysis with aphasia. A focus of softening was found anterior to the fissure of Rolando, at the junction of the third frontal with the ascending frontal convolution of the left hemisphere.

Dr. Gowers has reported a case of left hemiplegia, which gradually recovered, with the exception of very marked paralysis of the inferior facial muscles. Under the influence of emotion, however, the muscles acted equally well on both sides. This was found to depend on a hæmorrhagic extravasation in and beneath the upper half of the pre-central sulcus, which had pressed upon the convolutions bounding it—viz., the posterior extremity of the middle and superior frontal, and corresponding part of the ascending frontal of the right hemisphere.

Aphasia—Oro-lingual Hemiparesis.—I would now make a few remarks on what may be described as an objective-subjective monoplegia; in the one aspect, oro-lingual hemiparesis; in the other, aphasia. It is not my intention to discuss the intimate pathology of aphasia, nor the relation between the objective and subjective aspects of the lesion on which this depends. Nor do I think it necessary, in the present state of clinical medicine and pathology, to take up time with the enumeration of instances of aphasia with lesions in what is termed Broca's region.

The occurrence of aphasia in the immense majority of instances in connection with disease of the left hemisphere and with disease in a region which, as you will see by reference to the diagrams, corresponds with the oral and lingual centres in the monkey ([9] [10] figs. 15 and 16), is a fact which can no longer be disputed. It is also a fact that, in the great majority of instances, aphasia is associated with a greater or less

degree of right hemiplegia or right monoplegia, of which the most common is brachio-facial or facial monoplegia.

It is necessary that those who dispute the validity of inferences as to causal relationship between the lesions indicated and aphasia, should clearly understand what is contended for by those who consider this relationship established. Aphasia, in the strictly limited sense of the term, or Broca's aphasia, does not mean speechlessness from paralysis of articulation, nor speechlessness from general cerebral disturbance, such as emotional shock, etc., but the inability to express thoughts in articulate speech, or to think in words, and all that this implies.

It is not contended that there is an absolute restriction of the speech-centre to the left hemisphere. This, though the rule, is not an absolute rule, but only an approximate generalisation, and therefore exceptions may be admitted without invalidating the localisation of the speech-centre in one side or the other, which is what is really maintained. Hence, to overturn the localisation of a speech-centre, it is not enough to bring forward a case of lesion of the left speech-centre without aphasia. This is admitted by all; and it is a very significant fact, that in several at least of the cases of aphasia with disease of the right speech-centre, the patients have been left-handed.

It is incumbent upon the opponents of this localisation to bring forward a case in which, with bilateral lesion of this centre, no aphasia occurred. But, I need scarcely say, no such evidence exists.

The effect of a bilateral lesion would be, according to the results of experimental physiology, both aphasia and anarthria, or paralysis of articulation.

A beautiful, and I believe an unique, instance of this has been put on record by Dr. Barlow.* A boy aged 10, the subject of aortic disease, of which he ultimately died, was seized with right hemiplegia, chiefly brachio-facial, and aphasia. Of this he had apparently recovered at the end of a month. Three months afterwards, he was seized with left brachio-facial monoplegia. This time there was not only aphasia, but paralysis of all voluntary movements of the mouth and tongue. Reflex deglutition, however, was unimpaired. There was no affection of sensation in the paralysed parts, either in the skin or in the mucous membranes of the palate, etc., and the muscles reacted normally to the faradic current. "To sum up the cerebral condition", says Dr. Barlow, "there appeared to be loss of voluntary motor power over the muscles concerned in deglutition and articulation." This lasted till death, while the arms improved somewhat in power. Intelligence was fair, and comprehension good. On *post mortem* examination, a lesion was found in each hemisphere, and in exactly corresponding situations. The region involved by the lesion—which was yellow softening—was

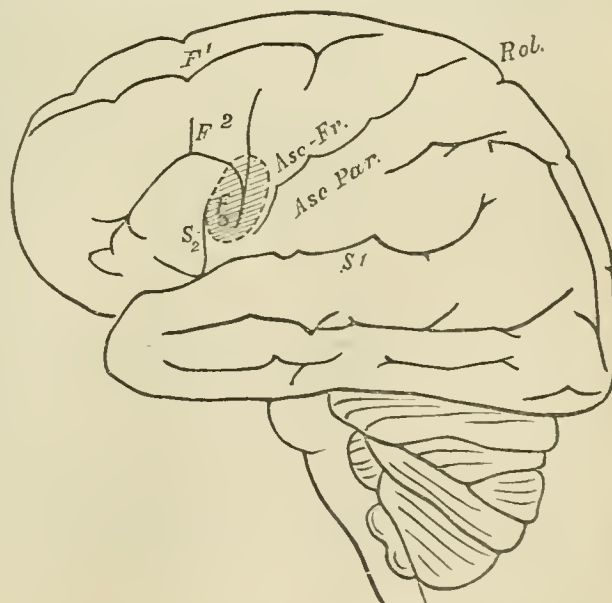


Fig.

"the lower end of the ascending frontal and the hinder end of the middle and inferior frontal convolutions". (Fig. 20.)

This case, in all its features, whether we look at it as an experiment

* *Revue Mensuelle*, 1877, p. 181

† *Archiv für Psychiatrie*, 1872, Band iii, p. 231.

‡ *Archiv für Path. Anat. und Physiologie*, Band lvi, p. 289.

§ *Bulletin de la Société Anatomique*, 1874, p. 29.

|| *Pathological Transactions*, 1876, p. 35.

of disease, approaching to the conditions of an exact and precise experimental lesion, or to the care with which it was observed and distinguished from peripheral or bulbar paralysis, is one of the most satisfactory and conclusive demonstrations of the harmony between human pathology and experimental physiology with which I am acquainted.

Some ingenious—if we cannot call them successful—attempts have been made to overthrow the causal relationship between lesions in Broca's region in the left hemisphere and aphasia, and to make it a relationship merely of co-existence.

As embolism or thrombosis of the left middle cerebral artery or one of its branches, is perhaps the most frequent cause of aphasia, it has been suggested by Jaccoud and others, that the greater frequency of aphasia with left cerebral lesion might be accounted for by the greater frequency of embolism in the left middle cerebral artery than in the right. That this is so appears to be an indisputable fact, and perhaps to be accounted for by the physical conditions of the blood-supply. Meissner* found in 38 cases of embolism, 26 in the left and 12 in the right; and Bertin found 31 cases of embolism of the left to 7 of the right middle cerebral. Aphasia, however, does not always depend on embolic softening; and if we take the relative frequency of softening due to any cause, in the right and left hemisphere respectively, we find, according to Andral's statistics, that the right hemisphere is more liable than the left. Thus out of 169 cases, 73 were in the right, 63 in the left, and 33 in both hemispheres. And in reference to diseases of the hemispheres generally, Charcot and Vulpian found the relative proportions in the two hemispheres very nearly equal. They found 58 cases of left hemiplegia with disease of the right hemisphere, to 52 cases of right hemiplegia with disease of the left. As regards the relative frequency of aphasia with right and left hemiplegia respectively, Seguin found, from an analysis of 266 cases of hemiplegia with aphasia, 243 with right hemiplegia, and 17 with left hemiplegia; i.e., a proportion of 14.3 : 1. Now, if we take Bertin's statistics as to the relative proportion of embolism of the left and right middle cerebral as 4.4 : 1, and Seguin's association of aphasia with lesion of the left hemisphere as 14.3 : 1, we have, in favour of the association of aphasia with lesion of the left hemisphere, a preponderance of 10 : 1, which cannot be accounted for by mere fortuitous collocation; and even if the arguments founded on the relative frequency of disease in the left and right hemisphere respectively, had not been thus shown to be without foundation, they would be at once disposed of by cases of aphasia resulting from traumatic lesions of the left hemisphere. Several interesting cases of this kind are on record.

Sydney Jones† gives a case of aphasia resulting from fracture of the left side of the skull by the kick of a horse. After death, an abscess of the size of a nut was found in the medullary substance of the third left frontal convolution.

Simon‡ gives a case of a healthy man who fell from horseback, and who on getting up was found by a physician who came up to be aphasic, and without any signs of paralysis. Death occurred from meningitis. A small wound with depressed fracture of the left side of the skull was found; and corresponding to this was a cerebral softening—surrounded by meningeal inflammation—of the third left frontal (in which a spiculum of bone was imbedded), the second frontal, and the island of Reil.

A similar case of aphasia from fracture of the left side of the skull, in which recovery took place on trephining, has been recorded by MM. Proust and Terillon.§

That gross anatomical lesions have not always been discovered in Broca's region in cases of aphasia may be true, but this is a fact of no value against the localisation of the speech-centre here. Perhaps they might have been discovered more frequently if careful search had been made, for on more than one occasion they have been found, when supposed absent, in the subjacent medullary fibres. Of instances of this kind several have been collected by M. Pitres.||

The clinical evidence alone is amply sufficient to establish the relation between aphasia and lesion of Broca's region as an empirical generalisation; but when we take into consideration also the facts of experimental physiology and the light they throw on the motor substrata of mind, the connection between lesion of Broca's region and aphasia is no longer a merely empirical generalisation, but a derivative law, which in my opinion is established on as firm grounds as any other fact in scientific medicine.

Diagnosis of Cortical Paralysis.—Apart from considerations as to the mode of onset, etc., of the affection, there are no features which clearly enable us to distinguish between hemiplegia depending on general destruction of the motor area of the cortex, and hemiplegia due to destructive lesions of the corpus striatum, more particularly those involving the anterior two-thirds of the internal capsule. There is the same relative affection of the different movements; those being most paralysed which are most volitional, at least after the first rude shock of the disease has subsided. The facial paralysis is seen especially in the lower facial region, or in those movements which are most independent; while the frontal and the orbicular muscles of the eye are but slightly affected. The movements of the leg are less paralysed than those of the arm, and the proximal movements of the arm less than those of the hand. In neither case is sensation affected, if the lesion be strictly limited to the cortex, or to the anterior two-thirds of the internal capsule; and in neither case is the nutrition or electric contractility of the paralysed muscles directly impaired. The same tendency exists in the development, sooner or later, of descending sclerosis of the motor tracts of the crus, pons, medulla, and spinal cord, and the appearance of late rigidity or contracture of the paralysed limbs. This late rigidity seems, according to the views of Charcot, Bouchard, Bastian, etc., to be essentially dependent on the degenerative process, and has its analogue in lateral sclerosis of protopathic origin. Hughlings Jackson, however, looks on late rigidity as a species of tonic distortion, caused by the cessation of the cerebral influence, and the consequent un-antagonised action of the cerebellar and mesencephalic centres; for, says he, "there is unimpeded cerebellar influx, and hence rigidity of the muscles which in health the cerebrum chiefly innervates".* I see serious objections to this view. If it were true, I should expect the antagonism or cerebellar influx to show itself at the beginning of the paralysis; for distortion, consequent on the cessation of an antagonist, is always most marked at the commencement, whereas, in the rigidity of hemiplegia, it is usually weeks or months before it sets in. And if it were cerebellar influx, I should further look for the rigidity in the extensor muscles of the trunk and legs, owing to the more especial relation of the cerebellum to these movements; whereas the very contrary holds, as the rigidity is most marked, and, in a large majority of cases, is confined to the arm and flexors more especially. The rigidity, in fact, seems to affect those muscles most which are most paralysed by destructive lesions of the hemispheres. If it be objected—and this seems to be the main objection—that the remittent or intermittent character of the late rigidity, in its early stages, militates against the idea of its being dependent on a permanent organic lesion, we can find analogous phenomena. The neuralgic pains which are associated with progressive sclerosis of the posterior columns of the spinal cord are not constant, but remit, intermit, or vary under different conditions, which modify the nutrition and activity of the nerve-centres. It seems to me more in accordance with all the facts to attribute, with Charcot, etc., the late rigidity to irritation set up by the process of degeneration of the motor tracts, just as in protopathic lateral sclerosis.

As regards the temperature of the paralysed limbs, in central and cortical disease respectively, there seems to be some uncertainty, and we cannot speak definitively on this point as yet. It is, however, generally stated† that there is less difference in temperature between the two sides when the paralysis depends on cortical than on central disease. It is certainly less marked than in paralysis due to mesencephalic lesions. Experiments have been made on animals, with a view to determine the question; but the results do not seem quite in harmony with each other. Eulenburg and Landois state that vaso-motor paralysis occurs in dogs, in consequence of destruction of the cortical motor centres in this animal, and in this they are supported by Hitzig. Vulpian, however, fails to detect such phenomena. And it would appear, from a preliminary communication by Küssner,‡ that, in rabbits at least, no vaso-motor paralysis occurs from cortical lesions. It may be that the representation of the vaso-motor centres in the hemispheres follows the same laws as the motor centres in different orders of animals, and that the vaso-motor paralysis, at first resulting from cortical lesions, subsides more rapidly than when the lesion is central; and this seems to me highly probable. That vaso-motor should accompany motor paralysis from cortical lesions is, I think, what might be expected, from what we know of the physiology of motor and its correlated vaso-motor innervation; and that such vaso-motor paralysis should subside more rapidly in cases of cortical lesion would, I think, be in harmony with the comparative escape of movements independently organised in lower centres. To the correlated vaso-motor disturbances, I would ascribe the subjective sensations of numbness, tingling, and the like, which so frequently

* For these various statistics I am indebted to Küssmaul, *Die Störungen der Sprache*, Ziemssen's *Handbuch*, vol. xii, Anhang, 1877.

† *Lancet*, 1873, vol. ii, p. 449.

‡ *Berliner Klinische Wochenschrift*, 1871.

§ *Acad. de Médecine*, November 1876.

|| *Op. cit.*

* *The Medical Examiner*, April 5th, 1877.

† Bastian, *Paralysis from Brain-Disease*.

‡ *Centralblatt für die Medicin. Wissenschaften*, November 10th, 1877.

usher in paralysis or spasm in connection with lesions of the motor centres, rather than look upon them as projected central sensory irritation.

Hemiplegia, complete from the first and permanent, is not, however, the most common type of paralysis depending on lesion of the cortex or subjacent medullary fibres. More frequently, paralysis of cortical origin is fractional or dissociated, or is a succession of dissociated paralyses or monoplegiae. In cortical affections, we frequently find a hemiplegia, at first complete, resolving itself into a monoplegia; or a monoplegia becoming a hemiplegia by progressive advance of the disease to other motor centres. This latter is a significant indication of cortical disease. Paralysis of voluntary motion of the arm and leg; of the arm and face, or this combined with aphasia, if the lesion be in the left hemisphere; or paralysis of the inferior facial region; of the arm alone; or of certain movements of the hand and arm; or of the leg alone; without affection of sensation, and without qualitative or quantitative changes in electrical contractility, or direct impairment of nutrition, may be looked upon as depending on lesions of the cortex or subjacent medullary fibres. Monoplegia is very often associated with monospasm or early rigidity of the paralysed limb, or of the muscles governed by the centres surrounding the lesion. Sometimes the paralysed limb may remain motionless while convulsions occur in the others. Cortical paralysis is frequently erratic and transitory, more especially in connection with superficial meningo-encephalitis; appearing and then vanishing, first on one side and then on the other. According as the lesion is superficial, or deep, and invading the whole depth of the cortex and subjacent medulla, we get transitory paralysis, or a paralysis which remains permanent, and is followed by descending sclerosis and late rigidity.

Whereas early rigidity is of frequent occurrence in cortical disease, it is rare in central cerebral disease; and then particularly, it would seem, when the medullary fasciculi of the fronto-parietal region are irritated—a condition generally found in connection with hæmorrhagic effusions into the lateral ventricles. Consciousness is less frequently lost in cases of sudden cortical lesion than when similar disease occurs in the central ganglia. This is to be accounted for by the special tendency in the latter case to sudden displacement of the cerebro-spinal fluid, and, through this, general disturbance of the cerebral circulation, in the manner indicated by Duret.

As an accessory element in the diagnosis of cortical lesions, may be taken the fact, noticed by Callender* and others, that cortical lesions are more frequently accompanied by localised pain in the head; and I have frequently observed that, even when pain is not spontaneously complained of, it may be brought out by percussion over the seat of lesion.

While we cannot be quite certain of the position or extent of a cortical lesion causing a sudden and complete hemiplegia, we may take a monoplegia of the leg, or of the arm and leg, as an indication of lesion of the upper extremity of the ascending convolutions close to the longitudinal fissure; brachial monoplegia, as a sign of lesion of the upper part of the ascending frontal convolution, or, if the paralysis affect the hand more particularly, of the ascending parietal convolution; brachio-facial monoplegia as indicating lesion of the mid-fronto-parietal region; while facial and oral monoplegia, or this combined with aphasia, indicates lesion of the lower part of the ascending frontal convolution, where the third frontal unites with it.

SURGICAL MEMORANDA.

CATGUT DRAINS.

MR. PLAYFAIR is, I have no doubt, correct in his criticism upon my views as to the physics of capillarity, and I am quite ready to accept his statement; but he will allow me to say that the experiment to which I referred was one likely to lead to the view I took of the subject. More explicitly, the experiment referred to was of the following nature. One end of a skein of catgut, not tied together, and therefore with the separate strands at some distance from one another, was placed in an urine-glass filled to the brim with water. The other end hung over the side of a second glass of the same height. In a little time, the water began to run over; but after about an hour the flow completely and finally ceased. The water in the full glass had sunk about a quarter of an inch. I do not venture to argue the physics of the question; but such are the facts. This experiment was performed in one of the wards of the infirmary, and was watched by several of the students.

S. MESSENGER BRADLEY, Manchester.

* Barth. Hospital Reports, 1869.

CLAUDE BERNARD:

A LECTURE

Delivered to the Senior Class of Physiology at the Physiological Laboratory, New Museums, Cambridge.

BY MICHAEL FOSTER, M.D., F.R.S.,

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GENTLEMEN,—It has long been a heavy burden on my conscience that, while you are receiving your instruction in physiology here, you are told but little of the history of science—that your attention is only rarely and incidentally called to the various steps by which we have reached our present outlook. I fear that such historical statements as do reach you are sadly limited to the controversies of the last decennium. The names you hear quoted are too often those of the authors of the most recent memoirs and of the last new contradiction; and I shall probably be going not far wrong when I say that, were your knowledge limited to what is uttered here, you would be almost justified in supposing that, except for the changes embodied in about the last dozen volumes of Pflüger's *Archiv*, Physiology might have been, like man, created in its present form in the Garden of Eden. This state of things, though undesirable, is, in large measure, unavoidable. Our time is so short, and the body of knowledge we have to traverse so great, that it is absolutely impossible for us to devote an hour's study to the history of our science without foregoing a corresponding quantity of the science itself; and, on the whole, we do well to choose the knowledge itself rather than the story of how we have come into possession of it. The recent death of a great physiologist, Claude Bernard, has, however, determined me to spend the whole of to-day's lecture in pointing out to how large an extent the modern doctrines of physiology have been influenced by his brilliant investigations.

It is not my purpose to dwell upon his personal history; indeed, there is happily but little to tell. Men of science are fortunate when their personal histories are uneventful; they live in their work and not in their lives. And Claude Bernard was in this sense fortunate. All I know of him is that he was born in the sunny South of France, at Saint-Julien, near Villefranche (Rhône), on July 12th, 1813; and that, when nineteen years of age, he came to Paris as an aspirant for literary fame, carrying in his pocket an unaccepted tragedy and a comedy which had enjoyed an obscure provincial success. Arrived in Paris, he was told by a judicious friend (Saint-Marc Girardin) that "poetry was a bad trade, but might be made a profitable amusement".* Other lovers of poetry in general, and of their own in particular, have at divers times received the same valuable advice. Bernard was in some respects singular, in that he obeyed that advice to the letter. The transition from dramatic poetry to the dissecting-room is great and startling, but he did not shrink from it; he became a medical student. In 1839, he became *interne des hôpitaux*. So far, he had given no token of his future eminence; but, in 1841, he was made assistant to Magendie, and then it was that he found his calling.

It is impossible to understand Bernard's life unless the character and influence of Magendie be rightly appreciated; and here, again, I fear that, save in the matter of the functions of the roots of spinal nerves, the name of Magendie conveys no particular ideas to your minds; and yet it occupies a most honourable place in the history of physiology. Magendie was born in 1783 and died in 1855, so that the lives of himself and his pupil Bernard extend over just about a century. During that century, the progress of physiology has been immense; and if I were to ask any of you what has been the distinguishing token of the physiology of this nineteenth century, you would answer "Experimental investigation, the application of chemical and physical knowledge and methods to the solution of biological problems". Now, Magendie was *par excellence* an experimentalist; his whole life was a prolonged effort to unravel physiological phenomena, by the help of chemical and physical methods, applied in a direct experimental manner. He is, in a certain sense, the father of modern experimental physiology. You must remember that, in his time, Germany did not possess the institutions and appliances of which she is now justly proud, and which

* Paul Bert, Preface to *La Science Expérimentale*, par Claude Bernard. Paris, 1878.

we equally justly envy her. In the early part of this century, there were no physiological laboratories at Leipzig or Berlin, or elsewhere. Experimental inquiry in Germany was occasional and slight; indeed, hardly more was being done then in that country than in our own. Magendie stood almost alone as a professed and systematic experimentalist; and, willing as we English always should be to acknowledge, in the fullest possible manner, the benefits which physiology has received from Germany during the last fifty years, we must at the same time not forget that France led the way. That Magendie has not left more mark than he has on the science which he cultivated, is due to two reasons. In the first place, he was to a certain extent before his time. His tools were chemistry and physics; and these had, in his time, not as yet acquired the excellence and precision necessary for his purpose. He tried to do fine work with rough instruments, and, as a matter of course, in many cases failed. Were he living now, instead of fifty years ago, with all the appliances at his command which we have at ours, his name would be in yours and everybody's mouth. In the second place, it must be admitted that, with all his brilliant talents, Magendie's mind was limited. He was essentially *doctrinaire*. Impressed with the physical and chemical aspects of vital phenomena, he did not realise the profound complexity of the molecular changes of living matter. He did not grasp the view, that the apparently simple phenomena of living beings, even if at bottom molecular phenomena, and as such subject to physical laws and capable of physical interpretation, are so transformed that they need to be studied from a stand-point of their own, as if they were phenomena *sui generis*. His sharp sceptical intellect saw through the hollowness and insufficiency of the vitalistic doctrines current in his day, but his mind was not broad enough to recognise that they were the distorted shadows of a real substance. In one word, clear and able as he was, Magendie was without genius. But what was lacking in him abounded in the young spoiled dramatic poet, who came to him first as his pupil, remained as his assistant, and finally succeeded to his chair. And this reminds me that I must return from this digression.

While assistant to Magendie, Bernard published, in 1843, his first memoir, *Recherches Anatomiques et Physiologiques sur la Corde du Tympan*, which was speedily followed by an inaugural thesis, delivered upon his becoming doctor of medicine, the title of which was *De Sac Gastric et de son Rôle dans la Nutrition*. It is suggestive that his two initial pieces of work should be in the two lines along which he was afterwards destined to labour so fruitfully. In 1854, he was appointed Professor of General Physiology in the Faculty of Sciences, a chair established on purpose that he might fill it; and, in 1855, upon the death of Magendie, he was called to the Chair of Medicine, *i. e.*, of Experimental Physiology, in the Collège de France, so long held by his master. Here for many years he laboured, receiving in due time various academic and other honours. In 1868, he quitted the Faculty of Sciences to take the place, formerly held by Flourens, of Professor of General Physiology at the Muséum d'Histoire Naturelle, succeeding Flourens also at the Académie Française. In 1869, he entered the Senate. In 1876, he received the highest scientific honour which England can bestow: the Copley Medal. Having, in the course of a life not too long, won renown in the eyes of all who love science; having come to be a prophet not without honour in his own country; having passed his days loved by all who had the happiness to know him in the flesh, he was taken with illness, in the laboratory, in the midst of his work, and died, from renal disease, on the 10th of February that has just gone by.

It is not my purpose to-day to sit, as your teacher, in judgment on the scientific character of Claude Bernard. He had his faults, and these not inconsiderable ones. I said just now that he had genius; he had also some of the failings which are proverbially said to hang on genius. When you read his writings, you will not fail to be struck with a certain rashness and want of carefulness in his statements, and indeed in his deductions. Thus, in his lectures you will come upon a statement of this kind, that the stimulation of the vagus produces arrest of the heart's beat either in systole or in diastole, according as whether the application of the stimulation takes place during systole or during diastole. Now you have all known, from your physiological infancy upwards, that this is simply an error, that cardiac arrest from stimulation of the vagus is always a diastolic arrest. And in going over Bernard's works, I might point out very many errors of as grave or even graver nature. So much so is this the case, that his books are undesirable books to put in the hands of a beginner or amateur. They always need to be read with the critical faculty alert; otherwise, they are apt to mislead, and, indeed, to do harm; for, as you well know, a writer's errors are always more readily laid hold of and obstinately clung to than his truths; and I have known hangers-on of physiology build up specious quasi-physiological doctrines on a foundation supplied

by some enticing but wholly erroneous observation of Bernard. In a smaller man, these faults would be serious matters; but in Bernard's case, they fade away like slight mists before the rays of his grand discoveries. Even in his lifetime, we were content to forget them; let it be much more so after his death. Happily, the lives of men of science are unlike those of politicians, inasmuch as the good they do lives after them; it is the evil which is interred with their bones. So let it be with Claude Bernard. We have no need to dwell on his shortcomings when we remember that it was his good fortune, amid a large quantity of slighter but still useful work, to make at least the two, we may perhaps even say the three or four, most brilliant physiological discoveries of the half century during which he lived. It is to these to which I wish to call your attention for a little while. My object to-day, indeed, is not to draw up a valuation of Bernard himself, but to point out to you the bearings of his labours.

Let me first turn to the earliest and to the least important of his capital investigations; to his work on the pancreas. Bernard's investigations into the function of the pancreas were made in the year 1846, but were not published till two years afterwards. Let me briefly point out what was the state of our knowledge previous to the appearance of his memoir.

If you read, as I trust some of you sooner or later will do, the *Elementa Physiologie* of the great Haller, you will find that Father of physiology, after a long and laborious discussion of the views of others, concluding that the great use of the pancreatic secretion is to dilute the bile and to temper the acerbity of that fluid in order that it may mingle more freely with the mass of the food along the intestine, and so promote the digestion of the rest of the food. "Hence," says he, "the pancreas of the crocodile is so very large, for the bile of that creature is, indeed, most acrid."*

If you turn to the first edition of Carpenter's *Human Physiology*, published eighty years later—1842—and which is well worthy your study as an admirable exposition of what were the advanced doctrines of physiology forty years ago, you will read on page 359, as a summary of what was known concerning the action of the pancreatic juice, the following meagre sentence. "The chyme is mingled in the duodenum with the biliary and pancreatic secretions, which effect an immediate alteration both in its sensible and chemical properties."

In point of exact knowledge, this is hardly an advance upon the teaching of Haller. In one respect, indeed, the modern doctrines had gone astray. The older writers, filled as they were with great reverence for the bile, admitted fully the importance of the intestinal digestion; the later inquirers, misled by the striking observations of Beaumont and the discovery of artificial peptic digestion, had gradually been leaning more and more to the view that stomachal digestion was all in all. You know that, in the elementary lectures, I am in the habit of insisting that peptic digestion is at the best a preparatory process, and that the great conversion of food takes place along the length of the intestine. This, the now current doctrine of digestion, dates from the publication of Bernard's memoir. It is true that Valentini† suspected, from the prominence of the pancreas in herbivora, that its secretion converted starch into sugar, and indeed Bouchardat and Sandras‡ had shown this to be the case in fowls. Leuret and Lassaigue also had come to a similar conclusion. But this most important fact cannot be said to have been fairly established, until Bernard proved that it was a constant property of pancreatic juice in all animals and under all circumstances. It is also true that Eberle had previously suggested that the pancreatic juice might have a specific effect on the fats of food; but to Bernard belongs the credit of having pointed out the emulsifying power of that fluid, and of having discovered its peculiar action in splitting up neutral fats. In this matter, as in many other points, Bernard gave way to exaggeration. He insisted that the pancreas, and the pancreas alone, was the agent for the digestion of fat, and his exaggerated views were very naturally contested by Bidder, Schmidt, and others. You know, however, that in this place, we teach that Bernard was so far at least in the right, that the pancreas must be considered as the chief digester of fats, though probably largely assisted by the bile. Lastly, it is true that Tiedemann and Gmelin§ had suggested a connection between the pancreatic juice and protein food; but their view was a fantastic and erroneous one. They thought that "the casein (alkali-albumin) of the pancreatic secretion, since it contains a large proportion of nitrogen, yields a portion of this element to the different ingredients of the alimentary substances which contain an insufficiency of nitrogen, and thus converts them into albumin, while reducing itself to their standard". Very different from this view is

* *Elementa Physiol.*, vol. vi, p. 453 (1764).

† Lehmann, *Physiol. Chem.*, Band ii, p. 91.

‡ *Compt. Rend.*, tome xx, 1845.

§ Müller's *Physiology* (Baly's translation), vol. i, p. 600, 184.

the conclusion at which Bernard arrived, that the pancreatic juice dissolves and digests the proteid matters of food, both those which have not been dissolved by the gastric juice and those which, having been thus dissolved, have been reprecipitated by the bile. In fact, before Bernard's memoir, the state of things was this. The action of pancreatic juice on starch was just beginning to be recognised, its action on fats was only just hinted at, and its action on proteids, so to speak, unknown. Bernard clearly proved the existence and pointed out the importance of all these three actions, and thereby restored intestinal digestion to its proper position. I need hardly point out to you how, by the subsequent labours of Corvisart, and especially of Kühne, our knowledge of the proteolytic action of pancreatic juice has made vast strides, and what a flood of light has thereby been thrown not on digestion (and let us hope on indigestion also) only, but on the metabolism of the whole body. The first steps of this inquiry, the ultimate worth of which it is almost impossible to exaggerate, we owe to Claude Bernard.

Far more important, however, than this pancreatic work was the next research, with the results of which Bernard startled the physiological world. I have already spoken of two at least of Bernard's discoveries as being the most important of the mid-century; one of these was his discovery of glycogen and of the glycogenic function of the liver, made known to the world in 1849.*

This discovery naturally starts from the knowledge of the presence of sugar in the blood, which, by a curious coincidence, we owe to Magendie. I need not pass in review before you the details of this great step. Suffice it to say, that the whole credit of it belonged to Bernard. Both the truth and the value of it were of course denied by some, and a long controversy, now happily forgotten, arose about it; but in the end Bernard, supported especially by Lehmann,† came out triumphant. He not only proved the glycogenic function of the liver, but was the first to extract glycogen, though this was independently, at a subsequent date, discovered by Hensen.‡ And to Bernard alone must be attributed the discovery of the diabetic puncture.§ But these matters are household words in all physiological schools; the names Bernard and glycogen are, and always will be, inseparable. You all know, too, how subsequent researches have somewhat modified the views first put forward by Bernard; at the present moment we do not, as he was at least inclined to do, regard proteid matter as the chief, much less as the only, source of glycogen. I should, however, like to spend a few moments in pointing out to you the bearings of this discovery.

Not so very long before Bernard commenced his work, physiologists almost unanimously subscribed to the dogma of Dumas, that "the plant creates, the animal only destroys". This doctrine has been in reality upset by Liebig's proof that fat was actually formed, and not merely accumulated, in the animal body; but it was a doctrine of great tenacity, capable of living in the face of obvious disproof. The discovery of glycogen may be said to have given it its *coup de grâce*. After that it could no longer hold up its head; and to you who, from the beginning of your biological studies, are indoctrinated with the view that the bodies of the complex animal and the complex plant are mere instances of the differentiation along two diverging lines of a common protoplasm, it may perchance seem strange that such a view should ever have been held. It was held though, and that most strongly; and the fact that it now belongs to past history we owe, next to Liebig, to Bernard's discovery of glycogen.

There is, moreover, a second aspect, in which this work of Bernard's acquires even greater importance. There was a time, not so far distant, when the animal body was regarded as merely a bundle, somewhat loosely tied together, of machines called organs, each of which had its special work or function; and the whole work of physiological inquiry was tacitly held to be limited to the finding out what was the function of this or that organ. Hence it came to pass, that when a "function" had been allotted to an organ, there seemed little more to be done. When, for instance, it was stated that the function of the liver was to secrete bile, it was felt that physiological inquiry had done its duty as regards that mass of tissue, and that there was nothing more to be done. Into such a view as this, the discovery of glycogen fell like a bomb-shell. That one organ should have two functions, and those so utterly different, seemed scarcely less than a scandal. And when Bernard went on to show that this same glycogenic "function" was shared by the placenta, by muscular fibres, by epithelial struc-

tures, and indeed might, under appropriate circumstances, be taken on by almost any tissue, the old mechanical theory of organ and function fell to the ground. I do not say that its downfall was not being prepared in many ways by other researches; it received a great shock when Bichat wrote on *The Tissues*; it, while retaining the old phrases, had for some years become more and more unreal; but the final death-blow was dealt by Claude Bernard. It is, I venture to think, not too much to say that if one sign of modern physiology be more hopeful than another, it is the tendency of present inquirers to attack the phenomena of living beings as the co-ordinated results of the concurrent and conflicting properties of variously differentiated living matter, and not as the mechanical outcome of a group of organic machines.

I must now pass on to Bernard's second great discovery, that which, in reality, forms the basis of our present doctrines of vaso-motor action. It is possible, that when I use the word vaso-motor, some of you may be reminded of that gourmand who grew weary of partridges when served every day for dinner. And, indeed, if we were to mark out the history of physiology into epochs, the present might fairly be called the vaso-motor epoch. You think you hear in this place a great deal of vaso-motor nerves and vaso-motor actions. I can assure you that I, for your sake, have to read a still great deal more. Hardly a number of a physiological journal is laid upon my table which does not contain what might be called a vaso-motor memoir. This being so, am I not right in speaking of that initial observation of Bernard's upon which the whole of the modern vaso-motor doctrines are based as an event of capital importance? It was in 1851 that Bernard first observed that dilatation of the blood-vessels of the head and neck followed upon the division of the cervical sympathetic. From that simple observation has sprung all the vaso-motor learning which is now poured so plenteously into your minds.

[To be continued.]

REMARKS

ON

THE RECENT OCCURRENCE OF AGUE IN YOUNG CHILDREN IN LONDON: ILLUSTRATED BY FIVE CASES.

By W. B. CHEADLE, M.D., F.R.C.P.,

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THE heavy rainfall of the last few seasons appears to have revived a disease which had been almost stamped out by the progress of modern improvement. Ague, with all its striking features fully developed in the acute and early stage of the primary disease, is rarely seen in London now-a-days. Every now and then a well marked case is admitted into the Seamen's Hospital at Greenwich; but in the General Hospitals of London proper the primary forms of intermittent fever are extremely infrequent. Relapses and the irregular recurrence of the later stages are indeed met with, but an initial attack rarely. Similarly, in private practice, a genuine unmitigated attack of ague in full blow, at any rate in the regular form of its earlier stages, is, I imagine, hardly ever encountered in London. Children are said to be less liable to the disease than adults. I have met with cases occasionally, at long intervals, in my practice at Great Ormond Street, during the last ten years; but none so severe, or presenting such striking features, as two out of the five which have come under my observation during the last twelve months.

CASE I. *Severe attack of Tertian Ague in a Child aged two years and nine months, developed five months after residence in an Ague District: Appearance of Rash simulating that of Scarlatina: Immediate Cure by Quinine.*—On February 28th last year, I was asked by one of my colleagues to see his child, a little girl two years and nine months old, who was suffering, as was supposed, from scarlatina. The patient was also seen by Dr. Mahomed and Dr. Broadbent, who kindly gave their assistance in the case, and were as much interested in it as myself. When I first saw the child, about four o'clock, it was in a state of high fever, with a pulse of 116 and temperature of 104 deg., and covered with bright red suffusion of the skin, closely resembling the rash of scarlatina. The throat, however, was not congested, and the tongue, although rather white, was not reddened or strawberry-like. The child was teething, and the gum over one of the double teeth was swollen and a little tender, but did not appear to give any pain or distress. I learnt that the illness had commenced two days before, about 9 A.M., with a sharp shivering fit; a hot-bath was given, after which a bright

* *Compt. Rend.*, t. xxvii, p. 514; t. xxxi, p. 572; *Archiv. Gén. de Méd.*, t. 18, p. 413; published in full in *Nouvelle Fonction du Foie*, 1853.

† *Bericht. Leipzig Gesellsch.*, Band iii, p. 130, 1850.

‡ *Verhandl. Würz. Gesellsch.*, Band vii, p. 216, 1860; Virchow's *Archiv.*, xi, p. 395.

§ *Compt. Rend.*, t. xxviii, p. 393; t. xxxi, p. 574; *Gaz. Méd.*, 1852, p. 72.

scarlet rash appeared all over the body, accompanied by dry burning skin, and a temperature of 102 deg. and pulse of 110. This condition continued about three hours, when the skin became freely perspiring and the febrile symptoms subsided; the rash also faded away. A dose of castor-oil was given, and the next day the child was playing about as usual, apparently well. On the succeeding day, however—i. e., about seven o'clock in the morning of the day on which I was called in—the same series of symptoms recurred, viz., shivering, followed by high fever, with a temperature of 104 deg. and pulse 116, and the appearance of a bright scarlet rash all over the body. So like was this to the eruption of scarlatina, that the case had been assumed to be certainly one of scarlet fever, and it was proposed to transfer the child at once to the Fever Hospital. The scarlet, punctate, universal rash, without doubt, looked uncommonly like that of scarlet fever; but in view of the absence of sore throat, the condition of the tongue, the anomalous onset, the remissions of the fever, and the eruption, I could not endorse the conclusion as positive, and it was decided to await further developments. Two grains of calomel were given, and the next day the symptoms had subsided. The rash had disappeared, the pulse and temperature were normal, the tongue nearly clean, and, except that the child appeared a little weak and languid, she was herself again. No more medicine was given, and the febrile seizure, although the subject of argument and conjecture, remained to a great extent unexplained.

The improvement in the patient's state was, however, only temporary; for, at 3.30 the following morning, the rigors came on afresh, followed by burning fever and delirium. At nine o'clock, Dr. Broadbent, Dr. Mahomed, and myself saw the child together. We found it with a dry harsh burning skin, a white-coated and extremely dry tongue, a temperature of 106 deg. and pulse 130. There was no distinct rash visible, but perceptible although slight hyperæmia of the skin. The attacks were now seen to be distinctly intermittent, having occurred three times on alternate days, although not with absolute regularity as to the hour, commencing in each succeeding instance a few hours earlier in the morning. The question then arose: Whether the case was one of genuine ague, or a less defined febrile condition dependent on some cause yet obscure? In view of the periodic character of the attacks, half a grain of quinine was ordered to be given every four hours, and two grains at bedtime in addition. The swollen gum was also lanced. The next day, the child was again apparently well, but this was the day of immunity. The quinine was continued; and the following night, on which the seizure would have come in regular course, passed without any other symptom than slight feverishness and restlessness; there was just enough, as the nurse said, to make her feel sure that an attack was coming on. There was, however, no further development, and the slight fever and irritability passed off by morning. On more careful inquiry, we now ascertained that, in the previous August and September, this child and another had been staying in Essex, in a place where ague occurred occasionally from time to time. During their stay there, however, which extended over two months, the children had enjoyed perfect health. These facts, together with the regularly intermittent character of the attacks, and their sudden cessation under quinine, were decisive. The treatment was continued, and the attacks did not recur. A fortnight later, the diagnosis was confirmed by the occurrence of the second case.

CASE II. Tertian Ague in a Child aged one year and nine months, brother of the patient in the preceding case, developed five months after exposure to malarial poison: Cure by Quinine.—This child had been the companion of the preceding patient in the visit to Essex; and, about a fortnight after the elder child was attacked, the second was seized with exactly the same symptoms, viz., a shivering fit, followed by burning fever, ending in profuse sweating, with a temperature of 105 deg. and pulse 120. These attacks recurred regularly every other day, for five times, and were then cured at once by quinine. In this instance, no rash was observed. Two months later, the first child had a relapse: a single fit of ague, exactly similar to those of the first series. Quinine was given as before, and there was no recurrence. The spleen was not found to be enlarged in either case.

In addition to these two typical cases of tertian ague, I have, during the last twelve months, met with three other examples of intermittent fever in children. These were less regular in form and of less pronounced features than the preceding. With regard to two of them, there cannot, however, I think, be much doubt. The third is perhaps of more questionable identity. I give the particulars of them very briefly.

CASE III. Quotidian Ague, in a Child aged four years; Enlargement of the Spleen; Cure by Quinine.—Louise S., aged four years, living in Gray's Inn Road, was admitted into the Hospital in Great Ormond Street, on April 27th, 1877. The family had lived at Sheerness for two years, and only came to London one month ago. A year ago,

while at Sheerness, the father had ague; and, seven days after their arrival in London, this child became fretful, languid, and feverish, followed by a well marked attack of shivering a few days later. The fit recurred daily, lasting from half an hour to an hour and a half, and was followed by a hot stage of some thirty minutes' duration, which ended in sweating. The attacks were ushered in and succeeded by frontal headache; they came on at first about ten o'clock in the morning, but had been gradually getting later, and now occurred about two o'clock in the afternoon. The child had taken quinine from the outset, the mother giving it "a pennyworth" a day. Another child had similar attacks, but every other day only. On examination, the spleen was found enlarged, hard, extending three fingers' breadths below the ribs. The tongue was slightly coated with white fur. The urine was free from albumen. The temperature was subnormal, 96 deg. Two days after admission, the temperature rose to 100 deg., and there was frontal headache, but no rigors or hot stage. The headache recurred once or twice, but the temperature did not again rise. No drugs were given. No further symptoms of ague were developed, and the patient was discharged on May 18th. The spleen had then returned to its normal dimensions.

CASE IV.—Intermittent Attacks of Shivering and Fever in a Child aged eight years: History of ague: Enlargement of the spleen: Cessation of the attacks without medicinal treatment.—Minnie P., aged 8, was admitted under my care at the Hospital for Sick Children November 9th, 1877. She was said to suffer from attacks of shivering and sense of extreme chilliness; this cold stage being ushered in by headache, and lasting two or three hours; it was followed by burning heat, ending in perspiration. The last stage was often accompanied by vomiting, and the attack altogether was usually of four or five hours' duration, the febrile stage preceding the perspiration generally lasting about an hour. The attacks have become less frequent and less severe than formerly, and now occur about once a month only. The exact frequency of recurrence at an earlier period could not be ascertained. In June, the child received a blow on the elbow, followed by five abscesses up the arm, which had only just got better at the time of her admission. While the abscesses were forming, the abdomen was said to have swelled to twice its natural size, accompanied by diarrhoea, which lasted three or four months, and indeed still exists intermittently.

On examination, the child was seen to be fairly well nourished, of an unusually mottled bronzed complexion, more than consonant with the darkness of her hair. The tongue was clean, pulse and temperature normal, appetite good, urine free from albumen. The abdomen was full, but resonant; it measured $23\frac{3}{4}$ inches at the umbilicus. The spleen was decidedly enlarged, being felt nearly three inches below the margin of the ribs. Her mother stated that she and her family had lived at Hendon for the last twelve years and a half; that she first contracted ague, when living in a damp locality there, in a house built on the earth without excavation beneath, some ten years ago. Her first child contracted it at the same time, and the second, with which she was then pregnant, had it when born. The present patient is her fourth child; it was born at seven months, the mother suffering from ague-fits while carrying it; and she affirms that the child shook in the womb, and had ague directly it was born, from which it nearly died. She further affirms that there have been many cases of ague in the neighbourhood. Two of the other children and the mother were examined, but no enlargement of the spleen could be found.

The patient was kept without medicine for a week; no symptoms of ague appeared. Two grains of quinine were then given three times a day, and the child continuing free, she was sent to Highgate, the spleen being still as large as on admission. The circumstantial history of a succession of attacks of ague in other members of the family, the prevalence of the disease in the district, together with the intermittent character of the seizures and the existence of enlargement of the spleen, seemed to be conclusive evidence as to the nature of the affection in this case. Further inquiry into the statements of the mother, with regard to the prevalence of ague in the neighbourhood, has not led to their confirmation. My friend Dr. Andrew of Hendon informs me that he has met with no instance of the kind during the last five years; and that, although he attended this child for some ailment last year, he had never heard that she or any of the family had had ague previous to my inquiry. The mother, however, adheres to the account she gave me, and the enlargement of the spleen is, of course, strongly corroborative evidence.

CASE V.—Intermittent Attacks of Shivering and Fever in a Child aged five years, ushered in by a rash simulating that of Scarlet Fever: No enlargement of the spleen: Cessation of the fits under treatment by quinine.—Mary Ann S., aged 5, living in Drury Lane, was admitted into the Hospital for Sick Children, Great Ormond Street, November 16th, 1877. The mother stated that the child had always enjoyed good

health until two years ago, when she complained of a feeling of heaviness and pain over the left eyebrow. This was followed by ptosis and external strabismus of that eye, which persisted for some months. About six months ago, she was seized with intense pain in the right heel and ankle, accompanied by numbness of the thigh and in the toes. Ten weeks ago, she had what was supposed to be scarlet fever, the attack commencing with a shivering-fit, which lasted from half-an-hour to an hour; this was followed by a burning heat and red rash all over, and terminated in a fit of profuse sweating. There was also severe pain across the loins, high-coloured urine, and great thirst afterwards. Similar attacks recurred about once a week, latterly only once a fortnight; the last was five days ago. There was no history or sign of congenital syphilis. No similar attacks had occurred in any others of the family, or amongst the people in the neighbourhood.

On examination, the child was seen to be anæmic, and appeared feeble, depressed, and fretful. The tongue was much furred, and rather dry. There was no albumen in the urine; the temperature was normal. Physical examination of the chest and abdomen disclosed nothing abnormal. The spleen could only just be felt on deep inspiration. On the day of admission, the child had a shivering-fit, and the nurse who saw it described her as looking cold, and that her legs trembled; the attack lasted about ten minutes. Two grains of quinine were given with ten minims of liquid extract of bark three times a day, and, there being no return of the seizures, she was discharged at the end of three weeks convalescent.

REMARKS.—The first notable point in these cases is the occurrence of the scarlet rash observed in the first and in the fifth. In the first, the eruption was so distinct, and apparently so typical, that it was at once assumed without question to be the eruption of scarlatina; and undoubtedly the occurrence of this rash, together with high fever, greatly obscured the diagnosis at the outset. In the fifth case, the original attack was set down as scarlatinal, and its possible malarial character only transpired on cross-examination afterwards. So far as I can ascertain, although there is often some flushing of the face, such general scarlet eruption does not occur in adults. I have never previously observed it in the intermittent fevers of children, nor can I discover any instance of its occurrence on record. Its development is, however, entirely consistent with what we see in children in analogous conditions. In them, the sharp pyrexia of various acute disorders is frequently attended at the outset with a cutaneous hyperæmia so well marked and so general as to be often mistaken even by experienced practitioners for the eruption of scarlatina. I have seen it in empyema; it is not uncommon in the traumatic fever which follows operations or injuries; and it is met with in various other febrile disorders. This pyrexial erythema is usually partial—not, indeed, in well-defined patches; but it is only distinct on certain parts of the body, such as the neck, chest, and abdomen, for example; and fades away insensibly into the surrounding skin. I have never seen it so bright and deep in colour, nor so uniform, as in this instance; and the pathological conditions in ague would appear to be favourable to the abnormal development of cutaneous hyperæmia. There is marked vascular disturbance, and the contraction of the cutaneous vessels during the cold fit is followed by excessive relaxation during the hot stage which succeeds it. Hyperæmia of the superficial vessels so extreme as to constitute a distinct scarlet rash appears, however, to be the exception. It was observed only in the first case, which was the most severe; and in the fifth.

Another point of much interest is the long period of latency which intervened between the exposure to the malarious poison and the first manifestation of the disease. Such lengthened incubation is by no means unknown. Attacks of remittent fever contracted in a tropical climate sometimes make their first appearance after the return of the patient to England; and similarly ague occasionally appears for the first time in a person resident in some dry healthy locality, but who visited a marshy district months before, where the disease was undoubtedly contracted. Yet this long term of quiescence of the poison after its reception, and the apparent extreme variability of its duration, are most remarkable, for they are far beyond the limits met with in any other disorder dependent upon the entry of a material poison into the body, except only that most fearful and strange disease of all—hydrophobia. In it, not months merely, but years even, may elapse between the primary infection and the development of symptoms. Ague stands in this respect between it and the contagious fevers.

I mentioned at the outset that ague had been unusually rife from the autumn of 1876 until the present time. In addition to the four cases here recorded, there has been, I believe, one other in the Children's Hospital under the care of one of my colleagues. For several years previously, I have not met with a single instance. Dr. Ralfe, Physician to the *Dreadnought* Hospital at Greenwich, informs me that it has been

exceptionally prevalent amongst seamen and the boatmen of the Lower Thames. He states, moreover, that not only have intermittent fevers of irregular character, and relapses of ague caught elsewhere, been much more numerous than common, but that cases of primary ague contracted on the Thames, which were formerly rarely seen, have of late become of comparatively common occurrence. Thus the total number of cases of ague admitted into the *Dreadnought* Hospital during the year ending October 1876 was thirty-nine; while during the succeeding twelve months ending October 1877 the number admitted under Dr. Ralfe's care alone was thirty-seven. There would probably be an equal number under the other physician, Dr. Leach; so that the total cases of ague have probably nearly doubled during the last year. Amongst the thirty-seven cases under the care of Dr. Ralfe, there were five of primary attack contracted on the Thames. The explanation of this reappearance of ague seems to lie in the excessive rainfall. The marshy lands artificially drained were deprived of their power of producing the paludal poison; the constant rains of the last two autumns have restored the lands to their former marshy condition, and malaria has temporarily developed again as in the old præ-drainage era.

THYROTOMY FOR THE REMOVAL OF GROWTHS IN THE LARYNX.

By W. PUGIN THORNTON,

Surgeon to the St. Marylebone General Dispensary.

I SHOULD be glad to have an opportunity of making some remarks on the paper relating to a case of thyrotomy for the removal of growths in the larynx, which was brought forward by Professor Lister and Dr. Burney Yeo at the meeting of the Clinical Society on February 22nd, and was reported in the *BRITISH MEDICAL JOURNAL* of the following week.

There was a point of considerable surgical interest in the treatment of Mr. Lister's case, on which no discussion took place. I refer to the method of drawing together the split halves of the thyroid cartilage by passing a silver wire not only into their substance, but completely through their walls. It was on the second or third day after the operation, on seeing the man in King's College Hospital, that I first learnt the value of such a measure, Mr. Lister very kindly explaining the case to me at the bedside of the patient, and subsequently ordering him to show how good a voice he had. I confess it was with horror that I witnessed the man's attempts to speak; for it has always been my custom, in cases of thyrotomy, to close the thyroid cartilage by passing the sutures only into the substance, taking special care that the wire should not enter the cavity of the larynx. In the twenty-seventh volume of the *Transactions* of the Pathological Society, I have related the appearance of the larynx taken from a boy three years and a quarter after thyrotomy. With this patient, aged 2½ years, owing to his constant fits of passionate crying, the divided portions of the cartilage could not be kept closely together, although the sutures were on one occasion reapplied; and, after the child's death (of general marasmus following whooping-cough, which had attacked other members of the family), they were found united by fibrous tissue, so that there was free movement between them. Doubtless, had I used a suture in Mr. Lister's manner, I should have obtained a cartilaginous union.

Mr. Lennox Browne, speaking in favour of thyrotomy, mentioned three accidents which might occur in attempts to remove laryngeal growths through the mouth, and which he had, he said, personally observed. They were as follows: 1. Spasm of the larynx, resulting from the introduction of instruments, and requiring immediate tracheotomy; 2. Removal of normal tissue, leading to ulceration; 3. Injury to the laryngeal cartilages, especially the arytenoid, resulting in paralysis, caries, and death of the patient. Mr. Browne might have added a fourth consequence which will occur in the removal of growths by forceps, if a portion of the growth is left behind—namely, acute inflammation in the larynx—and especially if the residue is large and happens to become bruised by the instrument. This *contredémpe* may necessitate tracheotomy very shortly after the operation.

The three accidents doubtless may occur in the practice of any one who uses the laryngoscope; but I feel confident that the greater the skill of the operator the less likelihood there is of their occurring, and therefore the value of the operation should be estimated by the degree of excellence and consequent ratio of result which we know may be attained. I can but remember the high degree of dexterity which I was accustomed to see displayed in the removal of laryngeal growths by forceps, and which was but rarely, in my recollection, followed by any serious conditions—certainly not in a degree sufficient to warrant

the idea that those practising in throat-diseases should think otherwise than of persevering in the carrying out of the intralaryngeal operation, so that in time the highest degree of manipulative skill may be reached which is attainable. It may be that many have not the opportunity of such constant practice in removing laryngeal neoplasms, as would be necessary to perfect themselves in the operation. I would suggest to those who feel the want of practice through the scarcity of laryngeal growths, that they can materially add to their dexterity by accustoming themselves to use a blunt-pointed right-angled probe in the larynx, touching any point previously decided upon.

The removal of growths by the mouth is necessitated in many cases for which thyrotomy would not be permissible, but in which entire relief may be given to the patient by the intralaryngeal plan of operation. Looking to the opinion of some of the best known laryngoscopists abroad, we find Dr. Fauvel of Paris, in his recent work on *Throat Diseases* (page 177), strongly supporting the removal of growths by the mouth; and Professor Bruns of Tübingen, in his work on all cases on record to the end of 1877 of the extirpation of laryngeal growths by the intralaryngeal and extralaryngeal methods, and which was referred to at the meeting by Dr. Semon, shows how great a preference ought to be given to the former operation. Neither do the statistics of Professor Bruns support the statement of Mr. Browne, in which he says, when comparing the two plans of operation, "there was a much greater tendency", after removal of laryngeal neoplasms *per vias naturales*, "to recurrence than was generally supposed; and the recovery of the voice was by no means so complete as was generally thought to be the case by those who had not had an opportunity of personally witnessing the results"; for Dr. Bruns points out that, in twenty-one out of thirty-nine cases of thyrotomy for benign growths, there was a recurrence of the neoplasms; whilst, on the other hand, out of ninety cases of the intralaryngeal operation there were thirty recurrences: again, out of thirty-nine cases favourable for thyrotomy, in only eighteen was the voice restored, whilst in the remainder it was completely lost or very slightly improved by the operation; but by the removal of benign growths by the intralaryngeal method, a very general success was attained.

If I remember rightly, when, by the invitation of Dr. Yeo, I examined his patient's larynx at the Brompton Hospital, I noticed that some portion of the tissues on the right side had been left. Whether they belonged to the ventricular band I could not say; but, this being the case, there would be some clue to the wonderful condition of the man's voice. The interior of his larynx has certainly a most striking appearance; and, if seeing were the only justification for believing, then in that man's throat there would be undeniable clinical evidence of their entire removal, supposing there was no cause to think the vocal cords had not been *in situ* before the operation. This complete enucleation of the intrinsic parts of the larynx should not, in my opinion, be resorted to on the first occasion when thyrotomy is required, unless very urgently demanded; but the opportunity should be given, as in the case of Mr. Lister's patient, for a permanent and complete restoration to an unimpeded respiration and recovery of voice, by simple evulsion of the growths, which result, it has been shown in the annals of thyrotomy, may, though very rarely, be expected. The plan of clearing out the whole of the internal laryngeal structures, which has proved so remarkably successful, may in future, doubtless, often save extirpation of the larynx.

CLINICAL MEMORANDA.

CLINICAL REMARKS ON MR. JOHN DUNCAN'S CASE OF EMPYEMA.

OF the many points of great interest and importance touched upon by Mr. Duncan, in his valuable clinical observations on the case which appeared in the *BRITISH MEDICAL JOURNAL* of April 6th, page 476, I desire to draw attention particularly to two, viz.: the unlooked-for failure of the steam spray-producer, and the later management of cases of empyema treated antiseptically.

The failure of the steam spray is, I believe, of not unfrequent occurrence; and an operator may proceed quite happily for a long time before he discovers that pure steam alone is issuing from his spray-apparatus. Again, the steam-jet may suddenly stop without giving him any warning. A properly fitted hand-ball spray-producer is not open to these objections. Dry air, instead of steam, being used to atomise the lotion, any arrest of the spray is at once detected, and, so long as it is in action, it must be of the right quality. Due warning is given to the operator if, for any reason, the spray have to be intermitted.

A somewhat remarkable case of empyema came under my observation a few months ago, which suggested what may, I think, prove an useful modification of the antiseptic treatment. The case was one of secondary empyema, inactive, and of some months' duration.* After two or three subaqueous tapplings, the pleura was thoroughly evacuated by incision, under the spray, and the usual antiseptic dressings were applied. On the second day, the dressings were renewed; and it was reported by the surgeon that, on withdrawing the tube, only a small quantity of serous fluid escaped. At my next visit, two or three days later, I found that the tube had slipped under the dressings, and, owing to a little delay in the arrival of a new tube that had been ordered, the wound closed. The temperature continuing normal, however, and the fluid that came away on the first removal of dressings having been serous, I determined to let the wound heal and to watch the result. And the result has proved most satisfactory: there has been no reaccumulation, and the free air and what fluid remained have been absorbed, vocal fremitus being now distinct all over the side.

It seems to me, therefore, well worthy of consideration whether, in many cases of empyema, after thoroughly evacuating the fluid antiseptically, and if it be found, at the second or third dressings, that but little fluid have collected, and that little be serous rather than purulent, it would not be better to remove the drainage-tube and allow the wound to heal. By this means, we should save the strength of the patient, lessen the opportunities for accidental admission of foul air to the pleura, and favour the more speedy expansion of the lung, by preventing that periodical collapse which must occur each time the wound is dressed and fresh air admitted. Experience alone can decide as to the value of this method, which has been suggested to me by a happy accident in one case. In cases in which our expectations were disappointed, there would be no difficulty or danger in repeating the operation.

R. DOUGLAS POWELL, M.D., F.R.C.P.,

Physician to the Brompton Hospital for Consumption, etc.

ACTION OF CELERY ON URINE.

THE following peculiar case happened to one of my patients lately. I should like to hear if any of my brother practitioners have ever had a similar experience.

Mrs. M. sent for me at 11 A.M. She had tried to void urine several times during the night and morning, but could not. She was not subject to this "sort of thing". I drew off a pint and a half of hysterical-looking urine, and left. She sent for me again urgently at about 3 P.M. on the same day, complaining of pain, and being unable still to pass her urine. I drew off a full pint, very light-coloured. Again at 11 P.M. I had to use the catheter, and got as much as on the occasion in the morning—clear, otherwise not remarkable. Next day, she was quite well. This woman, strong and healthy, had never been so troubled before. She had had no stimulants through the day, drinking tea and barley-water, and no large quantities of these. Her diet had been ordinary the day previous, except celery—"a whole stick"—of which she was very fond. The frost about the time had made her favourite very delicious; therefore she ate inordinately. It is traditional hereabout that celery acts upon "the water".

W. THURMAND RAMSDEN, L.R.C.P. Ed., Ravensthorpe.

THERAPEUTIC MEMORANDA.

KOUMISS IN THE TREATMENT OF OBSTINATE VOMITING.

KOUMISS has recently been spoken of favourably in the *JOURNAL* in the treatment of obstinate vomiting. I send a brief account of two cases which I treated successfully by it after the failure of other means.

CASE 1.—Miss W., aged 25, came here for the benefit of her health about six months ago, and, when I examined her chest shortly after her arrival, I found that the left lung was extensively diseased. She improved greatly till January, when violent sickness came on. Hydrocyanic acid, bismuth, and other remedies, were used without any benefit, so I determined to try what koumiss would do. I got a supply from Messrs. Chapman, and was very pleased to find that the stomach would retain small quantities of it, and from this time the patient gradually mended. I was anxious that she should take a course of koumiss, as I thought it would do her good; but, unfortunately, after taking three or four bottles, she disliked it so much that she could not continue to drink it.

* I have related this case at length in the chapter on the Treatment of Pleuritic Effusions, in my recently published work on *Consumption and Chest-Diseases*.

CASE II.—Miss G., aged 60, has suffered from a fibrous tumour of the uterus for the last ten years; but, till January of this year, she has not had any medical advice for four or five years. I was asked to see her then, as she was attacked with vomiting of a most violent kind. I found the stomach was excessively irritable, and could not retain either water or ice. Opium, hydrocyanic acid, champagne, and other things were tried, but immediately rejected. I feared she would sink from exhaustion, and, as a last resource, I determined to give koumiss a trial. It was given in very small quantities, and with the most satisfactory result, as from that time the sickness abated and gradually her stomach was able to retain other nourishment.

I may add that I have used koumiss with great advantage in several cases of phthisis; even in the advanced stages, I have found it grateful to the patient and easily assimilated. One, during the last few days of her life, took it quite greedily, drinking three bottles a day.

C. J. WORKMAN, M.D., Teignmouth.

PATHOLOGICAL MEMORANDA.

A LARGE HEART.

IN the JOURNAL of March 30th, p. 458, the *Revue Médicale de l'Est* is quoted as authority for a statement which, I think, needs correction. Referring to a case of sudden death in which the heart was found to weigh 3 lbs. 4.2 oz. av., it is pronounced that this heart "exceeded in size and weight all the recorded instances of *cor bovinum*". The late Dr. Stokes, however, exhibited, at a meeting of the Pathological Society of Dublin (*Reports*, 1868-9), a heart with adherent pericardium which weighed 4 lbs. 2 oz. av. And Dr. Hayden, in his work on the *Diseases of the Heart and Aorta*, besides quoting this case, mentions Allan Burns as adducing the authority of Lieutaud for the description of a heart which weighed five pounds.

GEORGE F. DUFFEY, M.D., Dublin.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS.

March 28th.—*Tumour of Sterno-mastoid*.—A robust man, aged 44, first observed a hard lump on his neck two months ago; the swelling had since grown larger. On examining the patient, Mr. SAVORY found that the lump the man complained of was in the substance of the left sterno mastoid muscle, involving chiefly the sternal origin. Its limits, as far as the muscle was concerned, were ill-defined; but it certainly did not extend, or adhere to adjacent anatomical structures. It was solid and very hard. The patient had a sore on the penis, followed by a rash, fourteen years previously. Mr. Savory had tried the usual antisyphilitic remedies for more than a week, without effect; the tumour was harder than most gummata, and, if it continued to grow, its removal was very advisable. Iodide of potassium might be administered for a week or two longer; but if then no good results could be observed, the growth ought to be removed. Mr. Savory determined to act on that decision, his colleagues fully concurring with him.

Necrosis of Radius.—Mr. SAVORY brought forward a lad about twelve years of age, who had injured his forearm five months previously. The entire shaft of the radius had necrosed, and there were numerous sinuses; there was good reason to believe that neither epiphysis was involved. In a similar case, where the articular ends were not diseased, Mr. Savory had removed the necrosed shaft of a radius with great success, very firm bone being produced in its place; and the patient regained the perfect use of his forearm. He thought it time to operate in the same manner in this instance, and the rest of the staff were of the same opinion.

Fracture of both Femora; Yielding of Callus.—In August 1877, a youth was admitted into Mr. Savory's accident ward, with fracture of the right femur, in the middle third. He was sent to the Highgate Convalescent Hospital after a few weeks, his fracture having united apparently firmly and in good position. But in October, he fell and broke the left femur. Soon afterwards, he was once more able to walk;

it was found that both his thigh-bones were much bent, and he had become very lame. The right femur was much deformed, and the left was almost as bad. The patient was sure that when an infant both his thighs and one leg had been broken, but his assertion could not be clearly verified. Mr. SAVORY asked the opinion of his colleagues as to the proper treatment that ought to be pursued. He believed that forcible bending under chloroform might be employed to straighten both thigh-bones, the union between fractured ends of bones never being very firm for months after the injury, particularly in this instance. —All the surgeons were in favour of forcible straightening; should that not be found practicable, subcutaneous osteotomy would be necessary.

MERCER'S HOSPITAL, DUBLIN.

CASES DISCHARGED DURING THE MONTH OF FEBRUARY.

(Under the care of Mr. E. STAMER O'GRADY.)

Intestinal Obstruction: Suspension of Symptoms: Return, with a Fatal Result.—A healthy-looking woman, aged 23, the mother of two children, was admitted, complaining of abdominal pain with vomiting. There was much tympanitic swelling, and the symptoms pointed to intestinal obstruction. The bowels, however, responded well to enema; and the patient improved greatly, being apparently convalescent on the third day of treatment, and so remained till the fifth day, when stercoraceous vomiting set in, with signs of peritonitis, to which she speedily succumbed. At the necropsy, a fold of peritoneum was found to bind down the small intestine eight inches before its termination in the cæcum. The stricture was so tense that the muscular fibres of the intestine beneath the constricting band had entirely disappeared. The cæcum contained hardened faeces, while the large intestine was empty.

Intestinal Obstruction from Adhesion to a Morbid Growth.—The patient was a female aged 28, but looked older. The bowels had been confined five days. The abdomen was large and tympanitic. The symptoms were from the first acute, and developed rapidly, with stercoraceous vomiting. There was no obstruction to the passage of the long enema-tube, which was inserted twenty-two inches; but a digital examination detected a mass of considerable size around the uterus. Abdominal section was performed the day after admission. The patient being placed under the influence of chloroform, the abdomen was laid open freely. After some search, a portion of small intestine was found deep down behind the pubes, adherent to a large morbid mass contiguous to the uterus; and it was evident that this was the mass which had been felt at the previous vaginal and rectal examinations. With some trouble, this portion of the gut was liberated, when the pent-up flatus at once passed through it. The distension of the small intestines necessitated puncture with a small trocar and cannula. The orifice was, for safety, secured with a circular ligature of carbolic catgut. The wound was then closed and dressed as is usual after ovariectomy. The patient was much prostrated before the operation, and was very low indeed at its conclusion. She, however, rallied marvellously, and for some hours matters began to look promising. The vomiting ceased, and she said she felt relieved and comfortable. The improvement, however, lasted but a short time, when sinking and collapse occurred. At the necropsy, it was seen that the obstruction had been thoroughly relieved, and that there was no other constriction of the intestine. There was a small ovarian cyst lying on the new growth, from which the gut had been detached at the operation; this contained a gangrenous abscess, the sac of which had burst and evacuated its contents into the peritoneum. The adhesion of the gut to the parietes had been very slight, and, but for the other complications, it seemed probable that the patient might have recovered.

Operation for Hare-Lip.—The patient was an infant aged nine months. The malformation, though single, was attended with cleft palate and considerable projection of the intermaxillary bones. In dealing with the bone-deformity, the internal surface of the protruding mass was made raw, as well as the internal face of the left superior maxilla; then the protruding bone was cut through above, and forced down into position, being retained in position by interosseous sutures of carbolic catgut. The edges of the cleft lip, having been pared with scissors, were united by two hare-lip needles; and a carbolic catgut suture was used at the red margin. The result was in every way thoroughly satisfactory.

Excessive Salivation stopped by curing a Ranula.—A young woman five months pregnant suffered severely from profuse salivation, which was attributed to the pressure of a large ranula on the right side. A piece of the cyst-wall of the size of a shilling was clipped out, giving vent to a considerable quantity of glairy fluid. Slight local inflamma-

tion followed, but soon subsided. The salivation then completely subsided.

Large Nævoid Growth on the Cheek: Ligature and Sutures.—An infant presented a nævus as large as a couple of walnuts nearly in the centre of the left cheek. It was congenital, of the sebaceous variety, and increasing rapidly in size. It was tied in halves subcutaneously, the ligatures being secured with running points, so as to allow of their being tightened up as requisite. A few setons were subsequently used. Suppuration was thus freely established, and then healing advanced rapidly. After remaining in the hospital a month, some of the mass remained unabsorbed, but the nævus appeared to be cured; and the subsequent account given by the mother is confirmatory of this opinion.

Compound Fracture of the Tibia: Rapid Recovery.—A girl ten years of age presented a very oblique fracture of the tibia a little below its centre, the sharp end of the upper fragment protruding through the skin. Lint steeped in blood was applied, and on this a pad soaked in friars' balsam; and the limb was placed in the ordinary fracture-box of the hospital. The wound gave no trouble. The little patient was dismissed with a perfectly sound and well-consolidated limb in twenty-five days.

Spontaneous Gangrene of Toes: Separation: Recovery.—In a man aged 42, the little toe of the right foot and the outer surface of the fourth toe were in a state of sphacelus, and the whole foot was extremely inflamed. The patient attributed the mischief to cutting his corns with too sharp a knife. The little toe sloughed off entirely at its proximal articulation. After this, the inflammation of the foot subsided; the wound became clean, and healed by cicatrisation.

Early Operation for Ruptured Perinæum.—A woman aged 25 had sustained an extensive laceration of the perinæum, opening into the anus, at her confinement, three weeks previous to the operation. On admission, the wound was but slightly healed, the greater portion of its surface on both sides was granulating freely. The operation was planned so as to make broad strips of raw surface, corresponding to each other in breadth, on the opposite sides. Where there was mucous membrane, this was dissected back and saved; but the major portion of the field of operation was in a condition of granulation, and this was dealt with by transfixing these structures with a sharp knife and shaving off the face. The very moderate hæmorrhage soon subsided, when four deep quill-sutures of strong silk and four superficial stitches of carbolic catgut were inserted. The former were removed after eight days; with the latter it was not necessary to interfere at all. The entire wound healed soundly, and primary union occurred, except a very small hole at the posterior extremity; this granulated kindly, and soon closed in. At the time of the operation, the woman was pale, anæmic, and altogether in a condition of depreciated health, a circumstance which adds to the interest of the operation, performed as it was at so exceptionally an early period after the confinement.

Hydrocele of the Neck.—This occurred in a small child, two years of age, and was complicated with further deep-seated disease. The growth occupied the right inferior triangle of the neck, and was as large as the closed fist. It was translucent, and presented the other characters of the affection named. The fluid was drawn off by a drainage-tube, and, as it came away, it was evident that a bunch of enlarged glands occupied the deeper portions of the cyst. Some days subsequently, the cavity was injected with tincture of iodine. Much suppurative action of a most unhealthy type followed, numerous abscesses formed and had to be opened, and through the apertures ill-formed pus and sometimes fragments of broken down glands extruded. The child's health was for a time much depreciated, and at one time there were symptoms of blood-poisoning. Eventually, however, respirative action became established, both locally and constitutionally. After a stay in the hospital of nearly two months, the child was allowed to return to his country home, apparently in a fair way to do well. Some of the inflammatory swelling of the matted tissues still remained, and was being slowly absorbed.

ASTON MANOR.—The population is estimated at 46,462; the birth-rate at 43.2 and the death-rate at 17.5 per 1,000 inhabitants. Mr. May having expressed his conviction that the building by-laws should be strictly enforced, an assistant-surveyor has been appointed to see them carried out. Mr. May says that this is absolutely necessary, as he has found families in rooms where the paper would not stick, and the plaster was running down with water; so that it is a wonder that the death-rate was so low. The mortality of infants under one year was 13 per cent. of the births, and the zymotic death-rate was 3.4 per 1,000. Sanitary work appears to have been actively carried out, and some new sewers have been constructed.

REVIEWS AND NOTICES.

NOTES ON THE SURGICAL TREATMENT OF AORTIC ANEURISM. By JOHN COCKLE, A.M., M.D. Pp. 43. J. and A. Churchill.

OUR profession is often twitted with the haphazard way in which its most successful weapons against disease have been discovered; and, in truth, the data for rational therapeutics have as yet scarcely emerged from their concealment in obscure or inaccurate physiology. We know this so well, that remedies suggested on physiological grounds are still looked at askance, although the time has at last come when this reproach is passing away from us. The operation of ligature of the carotid artery for aortic aneurism will not suffer discredit, however, from having been suggested by any *à priori* reasoning. No remedy in medicine or surgery has ever originated from observations less premeditated. On the one hand, the association of consolidated aortic aneurism with occluded left carotid had been more than once observed in the dead-house and the dissecting-room; on the other, ligature of the same vessel had been successfully performed for the cure of what had been erroneously diagnosed as carotid aneurism, but which proved to be an aortic sac. It is to Dr. COCKLE that the credit is undoubtedly due of having suggested to Surgery an operation which, based upon *post mortem* findings and the clinical errors of the past, has yet so far been justified by practical results. It is a good feature of the pamphlet before us that, near its commencement, the author boldly observes that he has no theory to offer us as to the exact manner in which the measure he strongly advocates brings about the consolidation of the aneurismal sac. Dr. Cockle is, indeed, not satisfied with any of the suggestions that have been offered. He does not find in the facts of cases that diversion of blood-current will suffice to explain the occlusion of the aneurism; for it would appear that the left carotid need not spring directly from, or even very near to, the aneurism, for the effect to be observed; the operation having proved useful in cases in which the disease involved the ascending or right portion of the aortic arch. And, for this same reason, it cannot be held that extension of clot downwards from the tied vessel is essential for the cure. That an influence should be transmitted to the lining membrane of the sac is a supposition sufficiently indefinite to be beyond criticism. It may be that the true *rationale* of the treatment includes all these, and, in addition to them, that absolute repose which an important surgical operation entails.

But we are for the moment assuming more than is, perhaps, yet permissible; viz., that the operation is to be commended as a method of treating aortic aneurism. And this is the very question with which the pamphlet before us deals as fully and fairly as present experience will allow. In answering this question, Dr. Cockle refers to three sets of observations: firstly, those in which the occlusion of the artery, coinciding with the formation of laminated clot, has been effected by a natural process—cases which have for the most part come to our knowledge from *post mortem* inspections; secondly, cases in which the artery has been tied for supposed carotid aneurism, which has, however, turned out to be aortic aneurism; thirdly, cases in which the vessel has been successfully tied with the definite purpose of causing consolidation of an aneurism affecting the arch of the aorta. Several cases of this latter kind have now been published. Mr. Christopher Heath first adopted the treatment at Dr. Cockle's suggestion in 1872, and has subsequently repeated it on two occasions. Mr. Holmes and Mr. Maunder and other surgeons have also more recently performed the operation. The results of this operation must, like those of any other surgical measures, be compared with those of other treatments of a disease which no pathologist can admit to be curable. The important question is, *When* is this severe measure to be adopted? Dr. Cockle is scrupulously careful in pointing out the place ligation should hold in the treatment of aneurism; viz., that of a *dernier ressort*, "last on the list of therapeutic means". But, be it remembered, this in no way sanctions the postponement of the question of operation to a period when the patient is too exhausted for its adoption. Here lies, indeed, the great practical difficulty in deciding upon this procedure. The operation itself is by no means free from dangers; secondary hæmorrhage, cerebral anæmia, and possible cardiac syncope, being those apt to arise. But the sufferings from the disease are so terrible, and the relief has in some cases proved so prompt and long enduring, that the fear is lest, as the operation becomes better known, it may be too eagerly adopted, without very careful consideration of the merits of each case, and before a fair trial has been given to other measures. A careful perusal of the pamphlet before us, however, will tend to lessen

this danger; for it is written with a full sense of responsibility, and with a due regard to those other methods of treatment which come within the province of the physician. That the aneurism be sacculated, is laid down as essential to success; that it be situated near or at the root of the carotid, as of much, but not essential, importance. The condition of the other great vessels of the neck must also be carefully looked to, in order that diversion of the left carotid blood-stream may not seriously interfere with the nutrition of the brain.

THE QUESTION OF REST FOR WOMEN DURING MENSTRUATION.

By M. PUTNAM-JACOBI, M.D. Illustrated. Pp. 232. Smith, Elder, and Co. 1878.

THIS essay, to which was awarded the Boylston Prize of Harvard University for 1876, is one well worthy of attention. The phenomena associated with menstruation are here carefully considered. In regard to it, Dr. PUTNAM-JACOBI holds the older and at the same time the newer view, that menstruation is "an excess of nutritive force in the sex upon whom devolves the greatest cost of reproduction". She rejects the theory that menstruation depends upon ovulation. The old view is upheld with some minor modifications against the "ovulation theory" distinctly formulated about 1845, which construes the menstrual hæmorrhage as a subsidiary phenomenon entirely dependent on the periodical dehiscence of ova. "Around this theory has clustered the most brilliant gynaecological literature of modern times." The dehiscence of ova, however, does not commence at puberty synchronously with the appearance of the menses, but goes back to the second or third year. "The ovule, germinal vesicle, and germinal spot have almost the same dimensions in the child as in the adult; but in the latter the number of ripe Graafian vesicles is somewhat larger than in the child. During childhood, the ripe follicles undergo a retrograde metamorphosis without bursting." Not only this, but the dehiscence of the ovule is not, in the human species, exclusively associated with menstruation. The view maintained by Dr. Putnam-Jacobi is, that there is a long gradual preparation in the woman before she becomes actually fit for positive reproduction. The dehiscence of ova has gone on for years before this stage of fitness is reached. "The woman buds as surely and as incessantly as the plant, continually generating not only the reproductive cell, but the nutritive material without which this would be useless, whether or not either be utilised in further development. Reproduction in the human female is not intermittent, but incessant; not periodical, but rhythmic; not dependent on the volitions of animal life, but as involuntary and inevitable as are all the phenomena of nutritive life." Dr. Putnam-Jacobi holds that "it is erroneous to study the menstrual flow as a process complete in itself, or to attribute it to a simple congestion or a prolonged erection. It is only the terminal change of a cycle of changes, which begin at the cessation of one menstrual flow and end with the cessation of the flow next following. There is no period of uterine rest; but the organ is ever undergoing those changes which either make it a fit receptacle for the ovum when impregnated, or which prepare it to carry off the ovum when impregnation has failed. If any one stage of the month could be appropriately called a period of uterine inactivity, it would be the bleeding period, for it is then that the mucous membrane ceases to develop and undergoes fatty degeneration." Again, "the menstrual hæmorrhage is to be regarded as the simple equivalent of an accumulation effected by a constantly rising wave of nutrition, primarily (in all probability) affecting the nervous and muscular systems through which the blood circulates. If richer blood circulates in a slightly increased quantity and under a higher pressure through the nervo-muscular organs, the nutritive movements in their tissues are accelerated, and the acceleration is marked by the increase of urea. When, in virtue of the rhythmic movement inherent in their form of nutrition, a portion of the nutritive fluids of women becomes in excess of their individual needs, this excess begins to accumulate in the circulation, until finally, the tension becoming excessive, the closed system gives way at its weakest point—the blood-vessels of the fattily degenerated uterine decidua—and hæmorrhage occurs."

So much for the phenomena of normal menstruation.

"On the hypothesis that the menstrual period represents the climax in the development of a surplus of nutritive force and material, we should expect to find a rhythmic wave of nutrition gradually rising from a minimum point just after menstruation to a maximum just before the next flow. The traces of this rhythmic wave should be measured by the consumption of oxygen, the excretion of carbonic acid and of urea, by the tension of the arterial system, the vital capacity of the lungs; possibly also by the dynamic force of muscles." Such is the preface to a series of inquiries made on six women for a lengthened period. It was found that, "during the few days preceding the men-

strual flow, the excretion of urea is generally increased above the average at intermenstrual periods. In the majority of cases, the urea fell during the flow"; but in others (a minority) it went over. The temperature rises from one- to eight-tenths of a degree during the week preceding menstruation. It falls gradually during the flow, but in the majority of cases does not even then reach the normal average. With the dynamometer test, the muscular strength was increased in seven cases during the flow, less in other seven, and exactly the same in one. A large series of sphygmographic tracings illustrate the question of the state of arterial tension. There is an increase of plenitude and tension up to the time of the flow, but after a few hours of the hæmorrhage the tension is markedly lowered. The lowest point is reached immediately after the cessation of the flow, after which the rhythmic wave of plenitude and tension rises again gradually to a maximum in the premenstrual week. "These observations, if confirmed by others more numerous, should show that in all respects the intermenstrual, and especially the premenstrual, period represents a pregnancy in miniature." From these observations, we can readily comprehend the truth of the following statement. "Now, in the majority of women, the week preceding menstruation is a period of increased vigour, consciousness of increased nervo-muscular strength"; and with some women "the increased feeling of energy begun in the premenstrual week is extended throughout the menstrual flow". The conclusion of all this is that, in typically healthy women, the week of the menstrual flow is not a special time of trial to them; and that they may work during this period with impunity.

But all women are not typically healthy women, and it may be well to see what proportion are. Accordingly, a thousand tables were sent out, asking sixteen questions bearing on the subject of menstruation. To these two hundred and sixty-eight answers were returned. Out of this number, ninety-four, or 35 per cent., suffered neither pain, discomfort, nor weakness during the menstrual flow; and twenty-eight only suffered slightly or occasionally, but not sufficient to interrupt their daily vocations. There remain, then, "one hundred and twenty-eight women, or 47 per cent. of the whole, to whom menstruation was a seriously painful, therefore morbid, process". As to whether they had so suffered long or briefly, cannot be gone into here. This is a large percentage of women to be more or less disabled during a definite period of each menstrual cycle.

We may now review the question of the effects of various forms of labour upon women during the catamenial flow, and the effects of these forms of labour upon that flow. The effects of muscular exertion upon the health of women are in accordance with the theory of the supplemental nutritive wave advocated here. The robust health of country women, who work hard out in the open air, and their freedom from catamenial troubles, are well known. It is only when the health is broken down from various causes, as excessive childbearing, that they begin to suffer from menstrual troubles, as a rule. The increased muscular development so induced furnishes a sum of nutritive material stored up in the muscles, ready at any moment to be appropriated, either for the evolution of motor force in muscular contractions, or for the development of "the supplemental wave of nutrition destined to terminate after one month in menstruation or after nine months in parturition". Muscular work, then, does not deteriorate the health of woman, but rather is an advantage to her. But when work necessitates a constrained position, and interferes with the return of blood from the pelvis, then it does affect the health of women. Celibacy, especially in the upper classes, has an injurious effect upon the health of women; so too does work which entails "forced fixity of attention" for a lengthened period. Dr. Putnam-Jacobi states frankly "that as the characteristic bodily defect of women is lack of muscular strength, so their characteristic mental deficiency, taken as a class, is lack of power of attention". If their work thoroughly excite their sympathies, then very hard work may be accomplished with ease. This is true of both men and women, but more so of the latter; and "simple continuous work which is either indifferent or repellent will, if pursued for a long time, be followed by a 'breaking down' in health. The first symptom of such breakdown is backache; the second a greater or less degree of pain at menstruation." Female teachers are notoriously subject to catamenial disturbances.

The kind of rest needed by women consists in interruptions every two or three hours, not every three or four weeks. Thus, as instanced, domestic servants have much better health than women in other employments involving long hours of attention to the same subject. In schoolgirls and young persons called upon to perform mental work to order (*i. e.*, without spontaneity), this question applies specially. In adolescence, and during the first years that the reproductive wave of nutrition is being formed, mental work exacted "in excess of the capacity of the individual may seriously derange the

nutrition." The influence of fixed attention upon the health of females is a matter calling for more general recognition than is given to it either in girls' schools or in places of business.

As to the practical inferences to be drawn from the foregoing considerations, one is, that female work should be intermittent *at short, not long intervals*. "It is useless to rest during the few days of the menstrual flux, if work be maintained strenuously during the intermenstrual period." The form of labour exercises a marked influence, muscular labour doing good, and counteracting the evil effects of fixed attention, even in perfectly healthy women. Even they "do work better and with greater safety to health when their work is frequently interrupted; but these intermittencies should be at short intervals and lasting a short time, not at long intervals and lasting longer. Finally, they are required at all times, and have no special reference to the period of the menstrual flow. It remains true, however, that in our existing social conditions 46 per cent. of women suffer more or less at menstruation; and that for a large number of these, when engaged in industrial pursuits or others, under the command of an employer, humanity dictates that rest from work during the period of pain be afforded where practicable." With this sentence the work concludes.

It is impossible to escape from the strong attractiveness of the views expounded here so vigorously, yet with such good taste and delicate perception. This view of menstruation being a supplemental wave of nutrition passing through rhythmic cycles, rather than a general state of vascular excitement dependent upon and governed by the changes going on in the ovaries, is probably true. Ovules may form in childhood, and menstruation persist for years after double ovariectomy; yet the relations of the changes in the ovaries to the general condition cannot be overlooked. If the menstrual flow be merely the natural result of a wave of nutritive material coming to its climax, how is it that it so commonly occurs before the growth is completed? How is it too that, as a rule founded upon close observation in the out-patient room, a free catamenial flow in young girls is usually found in small girls; and that well-grown girls rarely are excessively unwell until growth is completed? The influence of the ovary in determining excessive menstrual loss is surely beyond doubt; for in these cases of early menorrhagia there is usually a tender enlarged ovary. Arrest of the excessive loss by bromide of potassium not rarely results in resumed growth, until a goodly addition of stature is attained. While admitting the view advocated here as to the cause of the menstrual hæmorrhage, it must be said that the influence of the ovaries seems to be thrown too much into the background, and the association betwixt the dehiscence of the ovule and the catamenial flux is underestimated. The catamenial loss is not in many women determined, as regards its amount, by the excess of nutrition in the system, but rather keeps them in a condition of semi-starvation; and restoration of health is only attained by limiting the loss. Nevertheless, the views stated by Dr. Putnam-Jacobi are of great value as pointing out what is too little recognised; viz., that amenorrhœa is often a piece of conservative economy when the system cannot afford the loss, and that its real treatment is that of the system generally; and that the reappearance of the menses is but the evidence of the general improvement. What is further said as to the occupation, the forms of labour, and the hours of labour for women, is worthy of considerable attention.

This essay is a piece of excellent work. The facts are well arranged; the language is much above the average; the good taste all that could be wished.

NOTES ON BOOKS.

WE hail with great satisfaction the appearance of the first number of the *Journal of Physiology* (Macmillan and Co.), edited by Dr. Michael Foster of Trinity College, Cambridge, with the co-operation in England of Professor Gamgee of Manchester, Professor Rutherford of Edinburgh, Professor Burdon Sanderson of London, and in America of Professor H. B. Bowditch of Boston and Professor Martin of Baltimore. Its appearance is at once indicative of the hopeful progress in physiology which has been evident of late years in this country, and with which are especially identified the names of the four English editors—the scientific descendants of Professors Hughes Bennett and Sharpey—to whom, in this country, is due so much of the physiological impulse which has already borne good fruit. We cannot here undertake to indicate or criticise, by way of analytical review, the papers contained in this first number; we shall content ourselves now with a list of them, from which alone will be apparent the good work represented by this periodical. Its publication marks a new era in the progress of scientific medicine

in the English-speaking countries; and such is the earnestness and activity of the schools over which the editors preside, that there is little fear of any lack of material. We only hope that enough material support will be found amongst the more highly educated members of the medical profession and the more earnest students of physiology to afford to this scientific periodical a sound basis of commercial success. It must have the best wishes of every thinking member of the profession, and we hope that those wishes will translate themselves into a substantial form. It is sufficiently notable that Oxford alone of the great Universities is unrepresented in this *Journal of Physiology*, as we fear it must be content to remain but partly represented in the progress of scientific medicine generally until some great change is made in the present state of decadence and discouragement of medical study in that great University. This absence of Oxford from that sphere of scientific medicine and biological progress, in which the greatness of her resources well fit her to be foremost, is of itself hardly less eloquent than any protest which we have recently published on this subject. On the other hand, the forward position of Cambridge in the van of the scientific movement in medicine is greatly to her credit, and especially honourable to Dr. Foster, and let us add also to Professor Humphry, whose labours in founding and carrying on the *Journal of Anatomy and Physiology* were the precursors, and are still the adjutants, of the work of Dr. Foster and of the enlightened liberality of Trinity College, of which he is the Prælector of Physiology. The articles contained in this first number are: An Account of the Anatomy and Physiology of Batrachian Lymph-Hearts, by J. Priestley; Concerning the Effects on the Heart of the Alternate Stimulation of the Vagi, by A. Gamgee and J. Priestley; Note on Fechner's Law, by Trotter Coutts; Hyperplasia of the Muscular Tissue of the Lungs, by W. Stirling; Some Remarks on the Formation of Ferment in the Submaxillary Gland of the Rabbit, by J. N. Langley; Concerning the Effect on Frogs of the Arrest of Circulation, and an Explanation of the Action of Potash Salt on the Body, by Sydney Ringer and W. Murrell; The Physiology of the Salivary Secretion, by J. N. Langley; Does the Apex of the Heart contract automatically? by H. P. Bowditch; Preliminary Note of further Investigations upon the Vaso-Motor Nerves of Striated Muscle, by W. H. Gaskell; and a classified list of books and papers of physiological interest, published this year. The collaboration of the American editors is a feature of great interest. Flint, Bowditch, Otis, and many other of the younger American school show no small capacity and taste for physiological research, in which they have had good European training; and America will, we expect, contribute much valuable matter to this journal.

Mind. No. IX. London: Williams and Norgate, 1877. This number is not, especially to medical readers, so interesting as usual, although it contains some valuable contributions. The opening paper is an interesting *résumé* by Mr. Sully of the results of recent physiological research concerning Vision, with especial relation to theories of the Perception of Space. The main facts ascertained by Helmholtz and Wundt are carefully collected in the present number, and we are promised a discussion of the resulting theories in the next. The second paper is a criticism, by Mr. Croom Robertson, of Mr. G. H. Lewes's Physical Basis of Mind, discussing at length the theory of Animal Automatism and the "Reflex Theory", both of which we understand the two psychologists to reject, though in a slightly different way. But by far the most interesting paper in this number is that by Professor W. R. Clifford, on the Nature of Things in Themselves, where, in his clear and frank fashion, he throws out some very curious conclusions. The reader will find some strange words—such as "Ejects" and "social objects"—which we venture to think so clear a writer might have dispensed with; and if he believe Professor Clifford, he will come to the strange conclusion that the "Thing in Itself"—our old friend the German *Ding-an-Sich*, the despair of all metaphysicians—is really nothing else but "an elementary feeling", or, in the barbarous language of modern psychology, "*mind stuff*", and that "matter is a mental picture in which mind-stuff is the thing represented". We venture to think that this will be, to most readers, at least a novel view. Among the shorter papers at the end, will be found some good notes on the Colour-Sense, à propos of Mr. Gladstone's recent article in the *Nineteenth Century*.

Revue Philosophique. December and January. Paris: Germer Baillière et Cie. The first number of this third year of the French Review opens improvingly with a *réplica* in French of Mr. Herbert Spencer's article on Ceremonial Government, the first of a series of sociological studies which are to appear, we understand, in six languages simultaneously—a proof, at least, that Mr. Spencer has a wide audience. The other important articles are a long and polemical

paper by M. Delboeuf directed against Fechner's new book on what they are pleased to call *The Law of Psycho-physics*, and a lively account, in which our readers will probably take more interest, of two speeches relating to the sphere of the medical science in philosophical inquiry recently delivered by MM. Helmholtz and Du Bois Reymond. There will also be found among the reviews a long and appreciative article upon Mr. Grant Allen's *Physiological Aesthetics*, and other interesting papers. The December number, which is also before us, has no great interest for the mere physiological student. There is, however, a good article, following out a previous series, upon Lange, the author of the *History of Materialism*, besides an uninteresting and theoretic attempt to suggest a physiological explanation of Common Sense, by F. Pauthan. The best paper in the volume is the concluding part of an essay, by M. Scaïlles, on the Aesthetic Philosophy of von Hartmann, in which will be found his interesting criticisms on *Roméo and Juliet* and *Faust*.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 2ND, 1878.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

DISEASES OF THE LYMPHATIC SYSTEM.

THE discussion on the diseases of the lymphatic system was resumed.

Lymphadenoma.—Mr. NUNN exhibited microscopical preparations and drawings of examples of—1. Simple hypertrophy of an axillary lymphatic gland; 2. Secondary affection of a popliteal lymphatic gland, the primary disease having been large-celled sarcoma of the fibular periosteum; 3. Secondary affection of the axillary lymphatic glands, the primary disease having been cancer of the breast; 4. Secondary affection of subcutaneous lymphatic tissue, from the neighbourhood of the scar after amputation of the breast seven years previously, the primary disease having been tumour of the breast, presumably cancer. The first specimen showed an unlimited production of lymphoid corpuscles, without any tendency to arrangement in groups. The second showed an equally unlimited production of the large cells of the sarcoma, without tendency to arrangement in groups. The two last showed cells of two distinct characters, namely, the lymph-corpuscles and the epithelium-like cancer-cells; these latter being arranged in groups and surrounded by the lymphoid corpuscles. In reference to the questions raised by Dr. Wicks, Mr. Nunn said that, whatever might be the precise nature of the relation of lymphadenoma to cancer, a very suspicious companionship would be found in cancer between the cancer-cell and the adenoid growth. He thought, in respect of prognosis, that the general invasion would be found to be more rapid, and the fatal termination to occur earlier in adenosis than in cancer.

Hyperplasia of the Axillary Glands, with Leukæmia.—Dr. R. O. JONES gave an account of the case. It occurred in a man aged 50, of good family history, and who had always been healthy, except some infantile troubles. He had never had syphilis. A small lump appeared in the axilla in 1866. In 1877, he began to suffer from eczema of the face and lower extremities. He then had pain in his liver and back, a glazed tongue, diarrhoea, depression, and loss of sleep. The skin over the lump became thick, brawny, and dark; while a mass of glands enlarged so as to obscure the clavicle. In time, opiates failed to procure sleep, and he became much worse. The axillary tumour was of the size of a Seville orange, and movable. Oedematous swelling set in. The temperature rose to 100 deg. in the morning, and 102 deg. in the evening. He had chilliness rather than distinct rigors. The liver and spleen were not enlarged. There was no hæmorrhage from any of the mucous surfaces. On examination under the microscope, the white blood-corpuscles were found in great excess; in one corner of the field, there were thirteen white corpuscles to one red one. A gland behind the left angle of the jaw enlarged to the size of a hen's egg, and the skin over it was tender. The temperature then rose to 101 deg. in the morning, and 103 deg. in the evening; and the man died from loss of sleep and exhaustion. On *post mortem* examination, two tumours of the size of Seville oranges were found. One was filled with soft material like brain-tissue; while the one behind the ear was suppurating. The right lung was covered with thickened pleura. In the upper lobe of the left lung, was an old cicatrix, telling of healed vomice. The bronchial glands were not enlarged. The capsule of the liver was thickened; and the spleen, otherwise healthy, was shivelled. The rest of the viscera were natural. On microscopical examination of the tumour, there was found a hyperplasia of the gland-tissue, with large

flat irregular shaped cells, found in the largest number near the capsule of the gland. In another section, the fibrous tissue was found in excess. The case was of interest, as showing that leukæmia might occur with lymphadenoma, though this was denied by some authorities. The spleen and liver were not examined microscopically. The case was clinically striking, too, as, if the blood had not been examined, it would have been difficult to find a cause of death. The high temperature and the persisting diarrhoea were of interest too. Leukæmia was not due to these growths, but to defective formation of blood-corpuscles. In answer to a question put by the President, Dr. Jones said the tumour in the axilla did not enlarge to the end.

Intestines from a Case of Lymphadenoma.—Dr. SIDNEY COUPLAND exhibited these intestines, which came from a young woman, who suffered from uterine pain and diarrhoea, with vomiting, under which she sank. The evening temperature was high. Lymphadenoma was not suspected in life. The case was thought to be one of chronic enteritis. On *post mortem* examination, the stomach was found thickened and mammillated. In the intestine, the mucous membrane was infiltrated, especially at the upper part; this was not limited to the solitary glands or Peyer's patches. In the large intestine, there was ulceration of a superficial character; similar ulceration was found in the new material of the small bowel. The mesenteric glands were affected, but were neither softened nor caseating. Some other glands were enlarged in the cervical and inguinal regions; and one was found under the peritoneum. This condition of the intestines was uncommon. It had been figured by Cruveilhier in a case where the patient sank with chronic diarrhoea.

Splenic Leukæmia, with Carcinoma.—Dr. WHIPHAM related a case of a man aged 25, who in 1876 noticed a lump in his abdomen. He was in good health till his admission into hospital, when he began to fall away, had nausea and headache, and was shifted from the surgical to the medical wards. On examination of the blood, leucocytes were found to be more numerous than the red blood-corpuscles. The man then had giddiness, and heavy perspirations. His lungs were normal, but his respirations were 37 in the minute. His heart was natural, but his pulse was 104 per minute. In his abdomen, there was a large tumour on the left side, extending upwards nearly to the nipple and downwards to the inguinal region; it then extended over to the right side. There was albuminuria. The day before his death, he became agitated, and complained of weakness; his face was suffused; and he had great dyspnoea before he died. At the necropsy, the body was found well-nourished, with a blush over the skin, most markedly of the head and neck. The left pleura was adherent. The lungs were congested, and in some degree solidified in parts. The heart weighed fifteen ounces. Inside was a pale white clot, with pale red fluid. The vessels generally were filled with a yellow coagulum. The liver weighed one hundred and twenty-eight ounces; the kidneys, ten and eleven ounces respectively; and the spleen, seventy-eight ounces; it was hard, tough, and traversed by a white network through it. The brain and cord were normal, except that the vessels were filled with yellow coagulum. The glands were not enlarged. Microscopic sections were exhibited from this case, and drawings sent round. The liver was pale and firm, but otherwise normal to the naked eye; but, after immersion in spirit, it was found studded with nodules. On microscopic examination, these nodules were found to consist of a new growth, with large uninucleated cells. The majority of these cells were columnar. On section, the growth was seen to be composed of an alveolar stroma, irregular in shape, like that of true carcinoma. True morbid appearances were noted. At the margin of the liver, the hepatic tissue was compressed; in other parts there was a granular matrix, in which were embedded leucocytes and liver-cells, with vacant spaces. In places, the leucocytes were found near the vessels, as if they had migrated therefrom. In the spleen, there was a great amount of hardness, due to old and recent extravasations of blood. In one portion, there was a coarse reticulum of fibrous tissue. This extended mostly from the arteries, and destroyed the spleen-tissues. Blood-vessels were found, with thickened walls. The vessels of the alveolar walls of the lungs were filled and much distended by leucocytes. In the alveoli was found a semi-transparent structureless material, which had shrunk, owing to immersion in spirit, and consequently in many places presented an appearance as of vacuolation. The kidneys were natural. The muscular tissue of the heart was normal; but its vessels were full of leucocytes. With the exception of the same condition of their vessels, the brain, spinal cord, and sympathetic ganglia were healthy. An examination of the sternum was made, and its medullary spaces were found filled with leucocytes. The clot in the heart was full of leucocytes, some with two or three nuclei. The question of the relation of the leukæmia here to the carcinoma might be raised. He considered that, though many arguments might be ad-

duced as opposed to the idea of the carcinoma being a local manifestation of the blood-disease, yet the presence of multinucleated cells in the blood was certainly suggestive of a connection between the two. The leukaemia was certainly not secondary in this case; and, on the other hand, leukaemia was not found in old-standing carcinoma.

Specimens from Leukæmic Viscera.—Dr. GOODHART brought forward a series of cases as follows. A child of fourteen months old was admitted to Guy's Hospital with whooping-cough, which, after lasting for some months, terminated by the development of tubercular meningitis. At the *post mortem* examination, a large caseous mass was found in the bronchial glands, and a corresponding invasion of the adjacent lung by similar material. There was general tuberculosis. The second case was that of a girl aged 3, admitted for a local lymphadenoma on one side of the neck. This was excised by Mr. Bryant; and the patient left the hospital well. The third case was that of a boy aged 6, who was admitted under Dr. Pye-Smith for paraplegia. This patient (as also the preceding one) appeared to be in fair health; but, after some little time, he died of pneumonia. The *post mortem* examination revealed a large lymphomatous growth at the root of the neck on the right side, which infiltrated the muscle, periosteum, and adjacent textures, grew inwards to the spinal canal, and caused paraplegia by direct pressure upon the cord. But this was not all; at the root of the lung on this side was a caseous gland, the result of a bygone chronic inflammation, which suggested some local and persistent chronic stimulation to the glands in the neighbourhood, and a direct relation as cause of the old disease to the new. The fourth case was one of chronic disease of the knee leading to caseous changes in the femur and inguinal and lumbar glands of the same side, to caseation of the mediastinal, cervical, and axillary glands, and to general tuberculosis—a case of Hodgkin's disease closely allied to general scrofulosis. The next case was one of Hodgkin's disease, of which Mr. Hutchinson gave some details later in the evening; and the last was an example of general enlargement of the glands and spleen associated with leukaemia, which came under the care of Dr. Frederick Taylor, and which had been previously before the Society; the point particularly alluded to now was that the growth was generalised and infiltrating. These six cases, said Dr. Goodhart, were types which the members of the Society would all recognise as well marked examples of most of the diseases of the lymphatic glands. There was the local chronic inflammation, the local simple tumour, the local malignant tumour, and parallel with the local series ran a generalised one, the diffused chronic inflammation, the generalised simple tumour, the generalised malignant tumour; but, though these types were sufficiently distinct to give well marked clinical groups, still they each and all showed grades so fine between them that it was impossible in discussing their pathology to avoid reviewing the whole series. Allusion was then made to allied processes in other tissues, how in skin, connective tissue, or bone, we were familiar with the local irritation or inflammation merging into the simple growth, and this again into the infiltrating growth by such delicate transition that it could not be said where inflammation ended and growth began, where simple growth ended and malignancy commenced. The lung and serous membranes afforded like frequent examples of chronic irritation ending in localised tumour, and generalised also, if tubercle might be called a tumour. Additional light had been thrown upon such processes by experiments on the lower animals, which showed that, by varying the intensity of the local stimulus, the result might be made to vary from an acute abscess through caseation to chronic induration, local and general tuberculosis. To this process, the term infective had been applied by Dr. Sanderson and others; and, inasmuch as the processes of cell-growth or tumour-growth were of the same kind, if not of the same degree, Dr. Goodhart would, as had already been done by Dr. Greenfield and others, apply the term infective to lymphadenoma. The clinical history was quite in harmony with this. Most of these cases began in one or other gland-region, and gradually spread over the whole body. But, whether this were so or not, at any rate, this much was clear, that the process of all growth from inflammation to cancer was so similar in all the tissues that, without knowing anything of the lymphatic glands save that they existed, it would have been possible to predicate all the diseases now known to exist in them by the study of other tissues. The argument to be drawn from this was, that the leukaemia must be something quite independent of the process of growth; it might and probably did arise owing to its occurrence, but it was in no case more than a superadded or late and non-essential symptom. But Dr. Wilks had raised the question whether leukaemia did occur in these cases; and Drs. Wilks, Greenfield, and Gowers had all agreed upon this point, that the results of their observations were negative. His experience quite coincided with theirs. He had examined the blood in many cases of lymphadenoma, and had hardly ever had any success; but, at the same time, the original teaching of Virchow could not be forgotten, that lymphatic

leukaemia had only a moderate enlargement of the spleen or none at all, and much glandular swelling, and the white corpuscles in the blood were smaller and much more numerous. That group of symptoms, though not frequent in proportion to the other groups, still did exist, and such cases were on record. The facts were sufficient evidence of the occasional occurrence of leukaemia in glandular disease, and more might be made than had been of the *à priori* argument that physiologists were agreed that the lymph-glands elaborated and discharged white corpuscles into the blood. The fact that the spleen was enlarged did not have much weight, because the enlargement was very moderate only, such as might be expected to occur from secondary activity or overwork induced by an unusual activity of the glands, in the same way as Dr. Greenfield and others hold that the glandular swellings in splenic disease were due to stuffing of their parts with the splenic cells. But it was argued that this group of symptoms was seldom found. The reason of this was not far to seek; a large proportion of the lymphomatous growths tended to rapid caseation; another large proportion tended to fibrous induration; and yet others were so purely local after a time that they had no connection with the general glandular system. These facts were in harmony also with the occasional occurrence of leukaemia in malignant tumours of other kinds, as mentioned by Dr. Whipple, and also with the occasional occurrence of suppurative leukaemia. Some observations were mentioned on the latter head made by Dr. Moxon and Dr. Goodhart on the blood of septic fever, which went to show that a slight excess of white corpuscles was occasionally present in fever and other conditions, but never such as to satisfy the definition of leukaemia insisted on by Dr. Wilks. Turning, then, to splenic leukaemia, a case was given, sections of the viscera being exhibited under the microscope, which went to show that leukaemia in splenic diseases also was no more than a late symptom. It was that of a child aged ten months, who came under treatment at the Evelina Hospital for Children. At the first visit, and for three months afterwards, splenic enlargement and pallor were the only symptoms; and then leukaemia (two to three hundred white corpuscles in each field) supervened; and the child died not long afterwards. The specimens were exhibited under the microscope, and showed well marked changes. It had long been thought that ague might have some action in causing the leukaemia; but sufficient attention had hardly been attracted to this, because, perhaps, so large a proportion of leukaemic cases gave no history of ague. Dr. Gowers had made a most important statement on this head, which showed that 25 per cent. of all the cases had suffered from ague, but splenic enlargement other than malarial was not very uncommon, and the case narrated seemed to show that a non-specific splenic enlargement, if sufficiently prolonged, might cause leukaemia. Splenic enlargement was by no means uncommon in childhood from a variety of causes; and, being also exceedingly chronic, it might well be that some of these cases also go on and on and eventuate in leukaemia in the young adult. However this might be, chronic enlargements of the spleen, of whatever kind, if persistent, should be added to those produced by ague as possible factors in leukaemia. There were cases also, of which two such were mentioned, where the spleen was very large, and there was caseation of the glands with general tuberculosis. These have died without ever having leukaemia; yet, the distribution of the disease and the presence of tubercle showed that the two classes of cases must be closely related; and Dr. Goodhart regarded these as cases of leukaemia dying without any change in the blood. From what had been said of many cases of splenic disease, there would be, of course, no necessity for the development of the leukaemia; and fibrous induration, which was not uncommon, would show but little tendency to discharge increased corpuscles into the blood. Such discharge would be likely to occur in the more fleshy and pulpy conditions of the organ. With regard to the quantity of corpuscles to which the term leukaemia should be restricted, it was admitted that the term would unwisely be applied to only a small proportion of these corpuscles; but, bearing in mind the facts and arguments adduced, it was thought that there might be many states earlier in leukaemia than the extreme state now satisfying that term; and, if the slight excesses should be carefully recognised and recorded, we might in the future detect the earlier approach of the disease. With regard to medullary leukaemia, in two cases out of eight only had anything been observed at all like true leukaemic growth in the bones. In these, the masses were certainly pus-like in appearance and peculiar. But, in these cases, like most of those recorded by Neumann and Möller in Germany, the spleen being enlarged, the condition might have been, and according to Dr. Goodhart probably was, secondary. He did not think much would be learnt on this point from the side of cases of enlarged spleen. If any case ever came towards proving a medullary leukaemia, it must be in some such group as that of primary bone-tumour, diffused lymphoma of bones, etc., which are somewhat rare and difficult to diagnose during life. Still, by a careful

outlook, such cases might be found, and some useful observations made.

Mr. HUTCHINSON gave some particulars of the case of his to which Dr. Goodhart had referred. A lady of middle age, residing near Bath, had been the subject for many years of large glandular swellings in the neck. They never showed any tendency to suppurate, and no attention was paid to them. At length, she had an illness, attended by great pain in the back of the neck and other symptoms, which were supposed to be hysterical. When Mr. Hutchinson saw her, after five months' illness, she could scarcely walk, and her sight was very defective. The ophthalmoscope showed optic neuritis. Some enlarged glands were found in the axillæ as well. She had subsequently loss of identity, and became insensible. The necropsy showed numerous small masses of lymphadenomatous growths in the pia mater in various situations. The brain had been sent to the Royal College of Surgeons, and there examined by Dr. Goodhart. Mr. Hutchinson mentioned a second case, and showed a coloured sketch of the section, of lymphadenoma of the liver. The subject of this case was a middle-aged man, who came into the London Hospital with panophthalmitis of both eyes. No cause was assigned for this attack. Both eyes were lost, and became soft. He complained much of a feeling of tightness round his chest, and was said to have recently recovered from pleurisy. After a series of symptoms which it was very difficult to explain, he at length died. The *post mortem* examination, by Dr. Sutton, showed that he was the subject of lymphadenoma of various viscera, the liver affording a splendid specimen of that disease. It was now found that some of the external lymphatic glands were enlarged, but their enlargement had not been sufficient to attract attention during life. There was no proof of new growth in the eyes.

The PRESIDENT said other specimens would be shown at the next meeting. The exhibition had illustrated well the advantage of grouping specimens of like disorders. The present exhibition had elicited some important facts, and had helped to re-establish the distinction between leukaemia and Hodgkin's disease or lymphadenoma. In the former, there was an increase in the white blood-corpuscles; in the latter, there was not, as shown by Dr. Wilks many years ago. (In our last report, by the omission of "not", Dr. Wilks was made to say there was leukaemia in lymphadenoma.) In Dr. Greenfield's thirteen cases, only in one was there an increase in the white blood-corpuscles. In his own seven or eight cases, in none was there an increase of white corpuscles. Secondly, there was no invasion of adjacent tissues by the enlarged glands in splenic leukaemia, as was the case in lymphadenoma. Thirdly, Dr. Gowers had observed that, in a great proportion of cases of splenic leukaemia, malaria was present (in about 25 per cent.), and this coincided with his experience; but there was no such connection in lymphadenoma. It would be important to decide what amount of increase in the white blood-corpuscles constituted leukaemia. Leukaemia was a loose term. In many fevers, there was a slight increase in the number of white blood-corpuscles, and yet the condition could not be called leukaemia. Leukaemia might also occur with but little disease of the spleen, as in certain cases of erysipelas and suppuration. He would also call attention to the febrile paroxysms of intermittent type in lymphadenoma, in which the glands grew rapidly during the pyretic paroxysms, often diminishing somewhat again, but never returning to the size previous to the febrile paroxysm. These observations suggested that the disease of the glands might be of an inflammatory nature; but in the disease known as idiopathic anaemia, where there was no enlargement of the spleen or of the lymphatic glands, similar paroxysms of fever had been observed.

Idiopathic Anaemia.—Dr. DICKINSON related the *post mortem* appearances of a case, the clinical details of which were furnished by Sir William Gull, he himself not having seen the patient in life. He was tall and well made; born in 1804. He was left a widower at fifty-six. When fifty-eight, he married again, and his wife had children by him. He was in good health till his sixty-eighth year, when he grew weak and bloodless, with languor, which went on to death. There was no cough or dyspnoea. His heart was feeble, and his pulse firm, 75 to 80 per minute. The liver was not enlarged; the faeces were normal, and the urine natural. The temperature was normal. The clinical history was chiefly negative. The muscular power failed, and he died faint. All varieties of food and tonics failed to do good. Sir William Gull had said that there would be found no organic changes unless it might be in the suprarenal capsules. Other views had been taken by other physicians. The necropsy was also negative. The body was very white, like those where death had resulted from hæmorrhage. (It was the caricature of *pallida mors*.) There was a little oedema at the ankles. The body was fat, the fat in the abdomen being an inch thick. The lungs were slightly emphysematous. The heart was flabby, and the muscular tissue soft. The muscular fibrillæ contained drops of oil,

but the striæ were not obliterated. There was cardiac failure. The valves had a little fibroid thickening in them. There was a good deal of omental fat, with fat around the kidneys. The liver was normal, except a globular cyst in front of the left lobe. In the gall-bladder were found four gall-stones, not larger than marbles. The stomach and intestines were natural. The kidneys contained a few cysts, but were otherwise normal. The spleen weighed ten ounces, as a guess. It was diffident. On microscopic examination, the spleen-pulp contained a large number of nucleated cells, with red blood-corpuscles of small size and some hæmatine, not unlike the diffident spleen of febrile conditions. The suprarenal capsules were enlarged in size, but not altered in structure. Together, they weighed four drachms. The absorbent glands were quite natural. He did not see the blood in life. The blood was not leucocythæmic after death; and not more than half a dozen leucocytes could be seen in the field of the microscope. The heart contained some small *post mortem* coagula and bloody fluid. The endocardium was not blood-stained. The only disease was in the blood itself. It was a typical case; but he had seen others he should like to relate, but would not at that late hour.

Sir WILLIAM GULL said he had little to add to what was already known. Light was coming out of chaos now. It was clear that there were conditions not yet investigated. There were three great fields—anaemia, leukaemia, and Hodgkin's disease—on which we had not yet precise knowledge. The blood in leucocythæmia might contain more white corpuscles than red; the red might be some small and some large. We should not be contented with their anatomical characters, but investigate their chemical characters. Were they like the leucocytes in inflammatory affections? What was the quality of these leucocytes? Did they pass into red corpuscles? In leucocythæmia, he thought they did not take that course. Had the white corpuscles any relation to the pus-cell which contains pyine? or to the inflammatory cell? The pyrexia was remarkable; it was not high, but it was persistent, and went on from day to day. When the spleen was enlarged in malarial affections, the pyretic attacks ceased. As to the case related by Dr. Dickinson, some said there must be something; yet they could find nothing. It was a purely negative condition, like the anaemia of girls. Iron, good food, all were useless; it was "a blank" onwards. Hodgkin's disease was not, he thought, so common as some of the speakers seemed to think. It was a remarkable malady. In one case, he had seen the enlargement of the glands disappear in twelve hours during a febrile condition. The patient died rapidly; but no enlargement of the glands could be found after death. All true pathology was not to generalise, as his friend Dr. Goodhart had done, but to individualise.

Dr. WILKS said that the subject of anaemia did not quite rest now where Sir William Gull left it six years ago. Anaemia was not the same as leukaemia. The necraemia described by German writers had been confirmed by English observers. There was a death of the blood in some cases.

The PRESIDENT said the first case of leucocythæmia described by the late Dr. J. Hughes Bennett was described as a case of suppuration of the blood.

Dr. ANDREW observed that pernicious anaemia was an aggravated form of anaemia; and in that he agreed with Sir William Gull.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 22ND, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

The Application of Magnets for the Removal or Displacement of Iron and Steel Chips from within the Eye.—Mr. MACDONALD MCHARRY read notes of a case illustrative of such use of magnets. The patient, a man aged 31, came under treatment at the Royal South London Ophthalmic Hospital during July last, for an injury to his left eye, caused by a chip flying from either a steel tool or the hammer with which he was striking the tool. Twenty-four hours after the accident, there was commencing slight iritis; an altered reflex from a portion of the cornea indicated where the steel chip had impinged. Before dilatation of the pupil, no lenticular opacity could be detected, and the ophthalmoscope revealed nothing abnormal in the vitreous. Tension was normal. There was but insignificant tenderness. The eye was far easier than on the night after the accident. Atropine drops, two grains to the ounce, were prescribed. The next day, forty-eight hours after receipt of the injury, the eye was quieter. The pupil was widely dilated. Vision equalled six-twelfths. The corneal surface was almost normal. But there was a fragment of metal upon the anterior surface of the lens, occupying a situation downwards and inwards from its centre, and so placed as to be completely concealed, except when the pupil was widely dilated. The lens was seen to be perfectly transparent, except at the

small area hidden by the chip, which was a long narrow strip. From the position and shape of the chip, Mr. McHardy judged that, if left alone, it was certain sooner or later to gravitate down behind the iris and lead to destructive mischief of one or both eyes; hence, that its removal was imperative. Recognising the possibility of the lens-capsule being wounded by the chip, notwithstanding the continued transparency of the lens, possibly through the chip by its very presence plugging a laceration in the lens-capsule, and thus excluding the aqueous humour; he could not feel sure that the lens-capsule was then so damaged as to necessitate the formation of cataract. He hesitated to subject the eye to the dangers attending the extraction of a transparent lens by the scoop, and was not satisfied that such a measure would insure the removal of the chip. The use of the forceps for removal or dislodgment of the chip was undesirable, as it would almost certainly wound the lens-capsule, and, through occasioning a loss of the aqueous humour, would cancel the mydriatic action of the atropine, so as to conceal the chip from view. To meet the requirements of the case, Mr. McHardy devised a magnetic spatula, which, being inserted through a needle-puncture which it just plugged, would prevent an escape of aqueous humour and the attendant diminution of the pupil, so allowing the foreign body to be manipulated whilst fully in view. Mr. McHardy had preferred a spatula which was an electro-magnet, as he could apply such an one to the chip before calling the attractive force into play; and this power could be interrupted at pleasure, so that any undesirable position of the fragment, with reference to the spatula, might be changed; thus obviating the risk of damage to the lens capsule which would be incurred if the chip were induced to jump across, on the approach of a permanent magnet. Seventy-two hours after the accident, when the condition of the eye was that described on the previous day, his colleague Mr. Brudenell Carter suggested that, before introducing the spatula, it should be tried what, if any, influence a magnet would exert through the cornea upon the chip. Accordingly, Mr. McHardy placed the man in a chair, held before his eye a powerful electric bar magnet, with the result that, when its pole was four inches from the eye, the chip was seen to spring away from the lens to the inner surface of the cornea. On withdrawal of the magnet, the chip fell into the anterior chamber, whence it was evacuated through an ordinary iridectomy incision. As soon as the chip left the lens, it revealed a patch of opacity precisely of its own size; it was, therefore, evident that complete cataract might be anticipated. This followed, and the injured lens underwent absorption without setting up any inflammatory reaction. Atropine was continued during the absorption; and the patient, who was present, had normal distant vision with a lens of twelve dioptries, and read No. 1 of Jäger's types with a lens of fifteen dioptries—the most favourable possible issue to such a case, and one that had been attained without subjecting the eye to any danger other than that directly produced by the entrance of the chip. Mr. McHardy was indebted to Mr. Ladd for the loan of the large magnet, as well as for valuable hints respecting the battery power to be used; and to Mr. Faveaux, of the firm of Messrs. Weiss, for the great, prompt, and faithful pains he had taken in carrying out the suggestions for making the electro-magnetic spatula which was exhibited. In his concluding remarks, Mr. McHardy quoted from a paper by Dr. McKeown in the *Dublin Journal of Medical Science*, who had successfully used magnets for the removal and diagnosis of chips of steel or iron in the vitreous body; he said, that this case had so enlisted his interest in the subject, that he looked forward to carrying out investigations with a view to ascertain the most favourable conditions under which the magnetic power could be applied for these purposes.

Mr. B. CARTER had seen the case, and thought that any other mode of removal would have been dangerous to the eye; whilst, if nothing had been done, there would probably have been destructive inflammation. Any use of forceps would have injured the lens. The use of the magnet had obviated all difficulties.

On Retinitis Hemorrhagica and its suggested connection with Gout and Venous Thrombosis.—Mr. JONATHAN HUTCHINSON read a paper upon this subject. He first mentioned the characteristics of the disease known as retinitis hemorrhagica, and said that it must be carefully distinguished from cases of retinal hæmorrhage in association with evidences of kidney-disease. The latter were common enough, the former rare. He exhibited three ophthalmoscopic drawings to illustrate the malady, one copied from Jäger's *Atlas*, and two original; and remarked that they showed, as was always the case, innumerable hæmorrhages scattered over all parts of the fundus, and all of flame-shape and branching out in lines radiating from the disc. In one they were small, in the other two of considerable size. Amongst other peculiarities of the disease were mentioned the absence of any white deposits such as occur in renal retinitis, the extreme turgescence of the vena centralis, the diminution of the artery, and frequently considerable swelling of

the disc and the adjacent parts. Some statistical facts as to a group of fifteen cases were given. The author thought the disease more common in men than in women, in one eye than in both, often sudden in its onset; and he had been much impressed by the fact that most of those who had been under his care were past middle life, of somewhat plethoric habit, and frequently with definite history of gout. The extreme turgescence of the vein had led him to conjecture that the cause of the disease might not improbably be plugging of the central vein. This hypothesis would account for the sudden onset, the frequency with which one eye only was affected, and the extreme multiplicity of the hæmorrhages. He had tried in several cases since this idea had occurred to him, whether stagnation of the blood in the veins could be proved by pressure on the eyeball; and, although in most cases it was certain that the veins did empty somewhat on pressure, yet more than once it had appeared to be almost motionless. He had not had any opportunity of making a dissection. His hypothesis was that, in connection with gouty tendencies, the vein became plugged, and that from this plugging all the other conditions resulted. He had seen several cases of retinitis hemorrhagica in which no definite history of gout could be obtained, but, in almost all, the patients' state of health favoured the supposition that a gouty tendency was present. In a few of the cases, small quantities of albumen were present in the urine; but, as a rule, the cases differed much from those of renal retinitis, and their prognosis was probably somewhat less grave. In no single case had any dropsy been present. The author fully admitted that the group was not one which could be abruptly defined, and that some cases occurred in which the characters were ill-marked, and in which the conditions were mixed with those of renal retinitis. The flame-shaped peculiarity was, no doubt, to be explained by the supposition that the blood was in the innermost or nerve-fibre layer, and there was no doubt that this form was assumed by retinal hæmorrhages in many other cases, as, for instance, in optic neuritis from tumours, and in renal cases. In these, also, it was quite possible that thrombosis of branches of the vein might exist. He concluded by asking the experience of members of the Society on the points in question.

Dr. BROADBENT said that retinitis and hæmorrhages were by no means limited to one kind of kidney-disease, nor, indeed, a constant feature in any. Certainly, hæmorrhages were more common with the contracted kidney; but were they more common in gouty subjects? He would like to know some more definite characters as distinguishing those spoken of from the hæmorrhages of cerebral tumours. If due to thrombosis, the causation would be similar to that produced by obstruction in cases of tumour.—Mr. B. CARTER thought that two of the drawings did not correspond. In one, there were obliteration of the disc and flame-shaped hæmorrhages; in another, the disc was well defined, and the hæmorrhages were round. He thought Mr. Hutchinson's explanation of the shape of these hæmorrhages the true one. When they were flat and expanded, they probably lay beneath the *membrana limitans*. A distinction ought to be made between arterial and venous hæmorrhage; the latter was sometimes found in women about the turn of life, and he had seen it in the case of osteitis deformans described by Sir James Paget. He would also like a somewhat more exact definition of gout; a mere history of gout obtained from a patient was too vague to go upon, except there were well marked symptoms of the condition. There was a risk in a too hasty attempt to connect local phenomena with general states.—Mr. HOWARD MARSH alluded to the connection between gout and certain forms of phlebitis as pointed out by Mr. Prescott Hewett and Sir James Paget. In these cases, there were often both a gouty family history and a personal history of the same kind. One of the gouty phenomena described by Mr. Prescott Hewett—namely, plugging of the veins of the corpora cavernosa of the penis—had recently been redescribed in America as a new disease.—Dr. BARLOW had only seen one case of the form of hæmorrhagic retinitis described. It was interesting in connection with the other forms of hæmorrhage found with gout, as, for example, the hæmorrhages occurring into the joints, described by Drs. Hilton Fagge and Pye-Smith. His patient was a young man aged 25, the subject of the hæmorrhagic diathesis, and then suffering from renal hæmorrhage. When only twenty-one, he developed signs of gout, and when under Dr. Barlow's care he had one of those arthritic attacks, in the course of which the temperature rose to 103 deg. and 104 deg. Fahr. Sir W. Jenner had shown the cause of swelling of the joints of those of the hæmorrhagic diathesis to be the effusion of blood or serum. The case showed the connection between gout and the hæmorrhagic diathesis.—Mr. HUTCHINSON, in reply, said he was not acquainted with effusions of blood elsewhere in the body in gout. The obstruction of the veins in it he bore in mind. The apparently punctiform ecchymoses, remarked by Mr. Carter, were really linear, but small.

Cases of Effusion into the Pleural Cavity.—Dr. W. H. BROADBENT

read notes of three cases. In Case I, a gentleman aged 76, under the care of Mr. Meehan and Dr. Broadbent, unusually vigorous for his years, who had for a few days suffered from dyspnoea after exertion, was found on May 16th, 1877, to have fluid in the right side of the chest up to the level of the nipple; the heart and other lung being sound. Next day, the pleural cavity was nearly full, and on the following day quite full. The patient could not now turn in bed without serious shortness of breath. Under these circumstances, paracentesis was considered to be urgently required; and, after consultation with Sir William Jenner, was performed on May 19th. Eighty ounces of fluid were withdrawn. The fluid had almost the colour of blood, and rapidly deposited a layer of blood-corpuses nearly an inch thick. Notwithstanding this, the patient made a good recovery, and still remained well. The points worthy of remark in this case were considered to be—1. The age of the patient. Advanced age was taken by Dr. Broadbent as a reason for early operation when the pleural cavity was full of fluid. The patient was then less able to bear a long illness, and the want of elasticity of the structures rendered the pressure-effects more dangerous, and prevented the falling in of surrounding parts during resorption, should the lung fail to expand. 2. The rapid effusion of the fluid, which was unexampled in the experience of the reporter. 3. The large amount of blood, which, with the rapidity of the effusion, was suggestive of malignancy. This, however, might be considered as set aside by the recovery and present good health of the patient. Probably the cause was undue exertion.—Case II. A second illustration of recovery after paracentesis thoracis in advanced life was a case of pleurisy with effusion at the age of 73. The patient, a billiard-maker, was admitted into St. Mary's Hospital on September 24th, 1874, with all the signs of effusion into the left pleural cavity, filling it completely, and displacing the heart. On October 6th, five pints of clear fluid were drawn off; and on the 17th, he left the hospital convalescent. He resumed his occupation, and was well twelve months later, but died in 1876.—Case III. A gentleman aged 24, of a phthisical family, but personally healthy, began to suffer pain in the left side in August 1877; a fortnight later, he was compelled by shortness of breath to give up cricket and violent exercise generally, but he continued to go out up to September 24th, when Mr. Wigmore was called in; and, finding signs of fluid in the left pleural cavity, confined him to his room. On September 25th, the patient was seen by Mr. Wigmore and Dr. Broadbent in consultation, and it was agreed that paracentesis should be performed next day at 4 P.M. There had been no dyspnoea nor other urgent symptom. At 6 A.M., on waking up after a good night, he was suddenly seized with shortness of breath; and, after a struggle of two or three hours, died. A *post mortem* examination could not be obtained; but probably the cause of death was thrombosis in the veins of the compressed lung extending to the heart.

Dr. WHIPHAM referred to a case under the care of Dr. Barnes at St. George's Hospital. The patient had been in hospital a month for ulceration of the os uteri, when she had slight shivering, but nothing to indicate any pleural effusion until two hours before death, when she began to suffer from dyspnoea. He was able to make out the existence of fluid in the left pleura, and this was confirmed after death. No thrombi were found.—Dr. CAYLEY said that Dr. Broadbent's cases showed the dangerous condition of a patient with the chest full of fluid. In the case of a gentleman in this condition, who refused paracentesis, death occurred suddenly.—Dr. SYMES THOMPSON mentioned a case where rapid effusion was successfully treated by tapping.—Mr. MAUNDER said one point of interest in Dr. Broadbent's elderly patient was the origin of the blood; the only explanation offered being the possible presence of malignant disease. Probably this was not the cause, the patient being in good health, and twelve months having elapsed since the operation. He suggested that it might be accounted for as the result of congestion and oozing, from want of tone, in an elderly person, and analogous to the accumulations of blood sometimes met with in the bladders of old men, and from which they often recovered. With regard to tapping in such a case, there probably would be no two opinions upon the propriety of such a step, when a patient's life was in imminent danger from suffocation.—Mr. MARSH referred to a case of sudden death with pleural effusion in dropsy after scarlet fever.—Dr. LEES mentioned a case, spoken of by Dr. Clifford Allbutt, of a young girl suffering from pleuritic effusion, who fell down dead while walking to Addenbrooke's Hospital.—Dr. BROADBENT briefly replied.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 4TH, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Congenital Malplacement of Heart.—Dr. G. DE G. GRIFFITH showed a girl with this abnormality. She had had rheumatic fever.

There was no transposition of the other viscera.—Mr. GILES said a systolic murmur could be heard, as well as a presystolic murmur, with a thrill accompanying it.

Gouty Teeth.—Dr. W. STEWART said that, in consequence of an allusion to gouty teeth by Dr. Fothergill at the last meeting of the Society, he had taken casts of the teeth of eleven gouty patients. They were selected, not on account of their teeth, but on account of their gout and their family history of gout. The casts were exhibited. In all, the teeth were thick and solid, and worn down at the edges.—Dr. FOTHERGILL said these teeth had first been described by the late Dr. Laycock of Edinburgh. In the casts, the teeth presented a generic resemblance that was unmistakable. They were all solid teeth. The wearing down was probably due to the presence of uric acid in the saliva.—Mr. SEWILL said his attention had been drawn to gouty teeth. He should say they were not pathognomonic; but they were sufficiently pronounced to form an aid in diagnosis.—The PRESIDENT said the subject was a very interesting one.

Early Diagnosis of Stone in the Bladder.—Mr. TEEVAN read a paper on this subject. On the arrival of a stone in the bladder, it usually soon gave notice of its advent. The larger the stone was permitted to grow, the more trouble it gave in its removal. If treated when small, it could be dealt with satisfactorily. As to the amount of pain produced, a small oxalate of lime calculus would give rise to much pain, while a large smooth stone behind the prostate caused but little suffering. When the stone was small, there was often difficulty in micturition, from the stone plugging the urethral orifice. This was more apt to happen with boys than with men. The amount of pain produced by stone varied with the habits of life. Hunting often elicited early evidence of the presence of stone, and so had saved many a life. The blood passed with stone was by drops at the end of the act of micturition. Changes in the urine itself were of little value diagnostically. In children, incontinence of urine was often present with calculus; here the stone passed into the prostatic portion of the urethra, and the urine trickled past its sides. Such incontinence was of great diagnostic importance. The family history and the patient's history were often of much service. Rarely more than four of the above symptoms were found together in any one case. In stone-cases, there was little complaint at nights; while in prostatic cases the trouble at nights was usually great. Motion aggravated the symptoms and the pain in stone cases, but did not affect stricture-cases. A stiff bolster under the patient's buttocks was useful at the time of sounding. The finger in the rectum, and a short beaked sound, were of service. It was well to stand straight before the patient, and not on one side. By so doing, it was easier to bear in mind the three long prominences of the pelvis, viz., the sacrum and the tuberosities of the ischia.—The PRESIDENT referred to the late Mr. Liston's diagnosis by asking the patient to jump down from a chair. The patient emphatically refused.—Mr. GILES, Dr. STEWART, Mr. CAIRD, and Dr. WILTSHIRE took part in the discussion which followed; after which Mr. TEEVAN replied, and the meeting adjourned.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, FEBRUARY 22ND, 1878.

JAMES THOMPSON, M.D., in the Chair.

Tubal Gestation.—Dr. W. G. LOWE (Burton-on-Trent) showed a specimen, and read notes of the case. On December 6th, 1877, he was called to the wife of an engine-driver, aged 33. She had had three children, the youngest being fifteen months old. He saw her about 5 P.M.; she was lying on a couch and in a state of collapse; she was able to answer questions correctly. She complained of pain in the bowels; it had been very severe at times, but was then less acute. The abdomen was slightly distended; there was no pain on pressure. At twelve o'clock (mid-day), she was quite well, and, about that time, she went to the closet, where, during defecation, she was seized with agonising pain in the abdomen, at the lower part, and, in consequence, fainted. After a time, she rallied and returned to the kitchen, where she was found prostrate, suffering violent paroxysms of pain in the bowels, occurring every few minutes, and accompanied with sickness. Dr. Lowe ordered her stimulants and opium. At 8.30 P.M., she died, not having shown any signs of rallying. Her friends were not aware that she was pregnant. She had menstruated five weeks previously. At the *post mortem* examination, three quarts of blood were found in the abdominal cavity, and large blood-clots in the pelvis. The uterus, which was retroverted, was enlarged; its walls were hypertrophied, and it contained some mucus, but no decidua. About an inch from the uterus, the right Fallopian tube was dilated into a round smooth enlargement of the size of a walnut, looking blue and congested; and

towards its upper part were two small orifices with jagged edges, from which blood issued when the mass was squeezed. On making an incision into this mass, an embryo of the fourth or fifth week was seen floating in the liquor amnii. The walls of the enlargement were much thickened anteriorly, the embryo being attached posteriorly to the tube. The right ovary had in it no corpus luteum, but growing from it was seen a cyst containing clear fluid. The left ovary, which was much larger than the right, contained a corpus luteum.

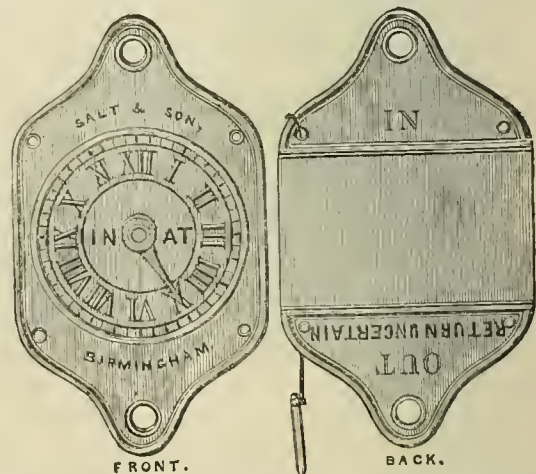
Syphilis.—Mr. BARTLEET, in opening a discussion on syphilis, pointed out that definite knowledge of this disease was of comparatively recent date; and that, while we must feel under great obligations to investigators of syphilis in times past, we must remember that their facts and statistics are not of any present value. Formerly, hard chancre, soft chancre, and gonorrhœa were all spoken of as syphilis. Present syphilographers, while, of course, recognising gonorrhœa as a venereal disease, did not look upon it as in any way syphilitic; and, moreover, considered soft chancre or chancroid as purely a local affection, while syphilis, of which hard chancre was one symptom, was held to be a disease of the system generally. While there were many points of similarity between hard and soft chancre, it must be remembered that like conditions were held between other diseases which are quite distinct. Formerly, scarlatina and rubeola, and, more recently, typhus and typhoid fevers, had been respectively held to be varieties or modifications of one disease; and, even now, some looked for constitutional symptoms as a consequence of chancroid: a result which, he believed, never really occurred. Fournier's clear definition of chancroid—"a specific malady consisting in a peculiar ulcer which secretes a virulent auto-inoculable pus; a malady purely local, never giving rise to any symptom which can be referred to a constitutional infection"—could hardly be improved; while typhus was a blood-disease caused by the absorption of a virus, and manifesting itself primarily by the appearance of a sore at the point where the virus entered, and afterwards by a succession of morbid manifestations occurring at longer or shorter intervals, and affecting all or any of the tissues of the body. The typical indurated or Hunterian chancre Mr. Bartleet held to be comparatively rare; and mistakes in the diagnosis of syphilis, and consequently erroneous opinions as to the non-systemic infection of chancroid, were very common. It must be remembered that syphilis or hard chancre was often seen with very limited induration: what had been called parchment-induration, a thin layer strictly limited to the base of the sore. Practically, the points on which the differential diagnosis was founded were these. The time of incubation of chancroid is rarely over a week; of chancre rarely under three weeks. Chancroid is often multiple; chancre is usually unique. Chancroid is always an ulcer, and having undermined edges, like an inverted funnel; chancre is often only an abrasion of an ulcer; it is funnel-shaped. Chancroid is abundantly suppurating; in chancre, there is no suppuration. Chancroid is often accompanied by suppurating bubo; chancre is rarely accompanied by suppurating bubo, always by a chain of enlarged glands. Almost all these symptoms may become less typically distinctive. A chancroid, from irritation, may acquire an oedematous sore simulating induration, and a chancre may be irritated into secreting pus. So also the indolent enlarged glands, in a scrofulous subject of chancre, may suppurate. To add to the difficulties of prognosis, cases occur where individuals have contracted both diseases at the same time, or, at all events, at the same *locale*, presenting first of all a chancroid, coming a few days after contagion, which, three or four weeks later, assumes the appearance of hard chancre, this being due to the different periods of incubation of the two diseases. Mr. Bartleet related two recent cases he had carefully observed of this condition, one of which presented the peculiarity of two indurated chancres: in his experience, a most rare condition. Experimentally, the two diseases could readily be distinguished, chancroid being indefinitely auto-inoculable, while syphilis was invariably not auto-inoculable. This test should, however, rarely be employed, and never without the precaution of immediately destroying the inoculated chancroid. As regards treatment, chancroid usually healed in a few weeks under ordinary hygiene and tonic treatment, combined with local astringents. Iodoform Mr. Bartleet had found most useful, but its pungent odour rendered it somewhat objectionable. Chancroid, if destroyed wholly and entirely by nitric acid, became an ordinary ulcer which readily healed. After recovery, the patient need have no fear of secondaries, but was liable at any time to a fresh infection. Mr. Bartleet believed that mercury was the remedy for syphilis (hard chancre). He usually employed either inunction, or gave small and frequent doses of grey powder; one grain of calomel divided into twelve pills, one each hour, would rapidly bring the patient under the influence of the drug. The slight tenderness of the gums should be kept up, not only until the sore had healed, but until all trace of induration at the site had disappeared; and it was well to continue small

doses of grey powder for some weeks after this. The local condition having been recovered from, the patient would probably never contract a chancre again, because he retained the systemic infection; this might spontaneously pass away after a long time; but Mr. Bartleet believed that the only sign of this recovery was the capability of again contracting a hard chancre. In advanced secondary or tertiary manifestations, gummata of any tissue or organ, Mr. Bartleet advocated iodide of potassium in large doses. Van Buren said there was no limit to the dose, except the production of the effect. Mr. Bartleet mentioned cases: one of gummatus ulceration of the fauces, in which the advance of ulceration was not controlled until six drachms a day of the drug were taken; a case of rupia where seven drachms a day were taken; and a case of syphilitic alopecia where no good result was evident until one ounce a day was taken. Mr. Bartleet commended Van Buren's formula as convenient for measuring the dose of the drug; viz., an ounce of iodide of potassium dissolved in an ounce of water. Each minim represented a grain of the iodide. The drug should be given well diluted, and might often be advantageously combined with carbonate of ammonia or citrate of iron. If iodism resulted, the iodides of sodium and ammonium should be substituted. Mr. Bartleet said, in these advanced cases, he had often found benefit follow the administration for five or six days of green iodide of mercury, in one-grain doses, prior to commencing the iodide of potassium. Mr. Bartleet concluded by saying that he had found good from treating many obscure cases, such as malignant-looking ulceration, as possibly syphilitic before condemning them as malignant, and the patient to operation or to a lingering death.—Mr. THOMAS CHAVASSE, who declared himself a dualist, preferred to apply the term chancre to both kinds of sores, and the term sclerosis to the constitutional affection, as on the Continent.—Mr. PALMER thought that mercury could not be commenced too soon after the diagnosis of syphilis was certain. Syphilis was a destructive disease, and he had seen the soft palate lost by delay in the administration of mercury.—Mr. WATKIN WILLIAMS thought the course which syphilis ran depended greatly on the constitution of the individual.—Dr. THOMPSON agreed with Mr. Bartleet on most points. He referred to a case where symptoms of syphilis had reappeared after fifty years' abeyance, during which time there had been no fresh inoculation.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SALT AND SON'S DIAL INDICATOR.

THIS handy little instrument is meant to prevent the errors which arise from the erratic memory of servants. The surgeon hangs it in his hall, and, as he passes out, turns the index finger to the probable hour of his



return, or reverses the indicator, and writes upon the tablet any message he may wish to leave for the information of callers. It is very useful.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

POLYURIA SUCCESSFULLY TREATED BY ERGOT OF RYE.—The polyuria in a case reported by Dr. Rendu (*France Médicale*, Feb. 27th, 1878) was accompanied by supraorbital neuralgia, vertigo with loss of consciousness, excessive thirst and hunger, with emaciation and loss of strength, although the patient consumed a considerable quantity of food. The urine contained no trace of sugar; the quantity was about ten quarts a day. The urea eliminated by this means in the twenty-four hours amounted to from about 1,250 to 1,400 grains. Before having recourse to ergot of rye, tincture of valerian was first tried for this patient, in the dose first of fifteen minims, and soon afterwards of half a drachm. Under the influence of this treatment, the urine diminished by nearly a quart. Sulphate of atropine, in the dose of one milligramme (.015 grain) at first, then two, daily, produced a similar improvement; but no advantage was found in persevering in this course, since the appetite diminished with the valerian, and the thirst increased with atropine. Ergot of rye was then tried. The success with this agent was remarkable. In eight days, the urine fell to 1,600 grammes and the urea to 15 grammes in the twenty-four hours; the emaciation was stopped; the strength returned; whilst the thirst and the excessive desire of food also disappeared. Dr. A. Costa (*New York Hospital Gazette*, Feb. 15th) reports also a case of diabetes insipidus with the excretion of ten pints of urine daily, with sugar or albumen, marked by great emaciation; and states that he treated the patient with fluid extract of ergot, which treatment had been followed by striking success; i.e., complete cure in two cases in private practice. Dr. A. Costa put the patient upon an initial dose of half a drachm of the fluid extract thrice daily, the dose to be increased gradually, first to one drachm, and then to two drachms. There was at once apparent a great reduction in the quantity of urine passed daily. From ten pints, it fell to six pints daily; then to three, where it remained. Even before reaching the present limit, he ordered the dose to be gradually reduced, first to one drachm, and then to half a drachm. Then it was stopped altogether, and mint-water substituted in its place. For the past two weeks, he had had no ergot, and might be considered permanently cured. The amount of urine daily passed varied between two and three pints.

GOA POWDER IN SKIN-DISEASES.—Goa powder has been employed with a certain amount of success by Dr. E. Besnier at the Saint Louis Hospital in Paris. In the treatment of psoriasis, it modifies the surface with rapidity, and seems to accelerate the cure of the eruption more quickly than oil of cade. A glycerole of Goa powder should be rubbed in every day. These frictions have the advantage of being odourless, but are very irritating to the eyelids, and may cause epiphora and redness of the conjunctiva. Friction with this powder has also cured eczema. Dr. H. Blanc, an Indian army surgeon, states that he has found it useful in herpes circinatus; and Dr. Champeaux, in a paper published in the *Archives de Médecine Navale*, comes to the conclusion that it is an antihæpetic.

USE OF THYMOL AS AN ANTISEPTIC.—Dr. H. Ranke of Halle, in an article in Volkmann's *Sammlung Klinischer Vorträge*, says that thymol was first used by Paquet of Lille as an antiseptic in foul suppurating sores and (by inhalation) in pulmonary gangrene, with good effect. Experiments have shown that its poisonous power on the organism is only one-tenth that of carbolic acid, and may practically be left out of account. Dr. Ranke uses the following solution: thymol, 1 part; alcohol, 10 parts; glycerine, 20 parts; water, 1,000 parts. This solution does not act on the instruments, nor the spray on the respiratory organs; it produces some burning of the skin at first, but no anæsthesia. A useful dressing is made of 1,000 parts of gauze, 500 of spermaceti, 50 of resin, and 16 of thymol. This gauze remains constantly moist, and is not irritating. If the dressing be covered with gutta percha, the smell of thymol is still perceived at the end of eight days. Dr. Ranke has used the thymol dressing in fifty-nine cases, with excellent results. Among them were four cases of amputation of the breast with clearing of the axilla, and three cases of extirpation of tumours from the breast. He says that, under the action of thymol, healing takes place sooner, the discharge from the wound is less, and the cost is less, than with carbolic acid. Dr. Fritsch (*Centralblatt für Gynäkologie*, No. 6) believes that thymol is also of great value in obstetric practice. It removes the smell from the hands in cases of putrid abortion, carcinoma uteri, etc., more quickly than any other agent, and produces no irritation. There must always be

some hesitation in entrusting midwives with carbolic acid; but thymol may be safely given to them without fear of unpleasant consequences. The solution above mentioned is likely to be specially useful for permanent irrigation, for the dressing of chronic suppurating exudations, for washing out abscess-cavities in the female genitals and in the breast, and for injections into the uterus.

HYPODERMIC INJECTIONS OF DIGITALINE.—At a recent meeting of the Paris Société de Thérapeutique, M. Gubler announced that, after having made many attempts to utilise the active principles of digitalis in subcutaneous injections, he believes that he has attained his object. He uses a solution containing 0.2 per cent. of Homolle and Quevenne's amorphous digitaline in equal parts of water and alcohol. One gramme of this solution contains two milligrammes of digitaline. He injects half of the contents of the syringe; that is to say, one milligramme of digitaline, and obtains all the effects of digitalis. These injections do not bring on any local accidents.

OPHTHALMOLOGY.

HYSTERICAL DISORDER OF THE EYES.—Dr. Schenk (*Prager Med. Wochenschrift*, Nos. 18 and 19, 1877) says that the disorders of the uterus and ovaries which give rise to hysteria may cause, by reflex action, an increased irritability of the sensory nerves of the apparatus of accommodation. At first after long exercise of the eyes, and subsequently after using them for a minute, pain is felt in and about the eyes: it differs from true neuralgia in having no typical course, and in being prevented by avoiding exertion of the eyes. Both eyes are generally affected, the right most so—in forty-six cases out of sixty observed. Depressing affections and moisture, as well as the duration of menstruation, increase the severity of the pains; during pregnancy, they are less. Vision of distant objects is not impaired. The state of refraction has no influence on the development of the malady; the extent of accommodation is unchanged; the ophthalmoscope detects nothing abnormal. In some patients, photophobia, photopsia, *malaise*, vomiting, vertigo, and even convulsions, are met with. The course of the disorder is very tedious: it ceases with the commencement of the climacteric period. Married women are most frequently attacked; even robust apparently blooming women are not exempt. It very rarely occurs in anæmic nervous men. The treatment consists in rest of the eyes, the use of moderately convex glasses, and, in cases of photopsia, smoke-coloured glasses. Castor, valerian, acetate of zinc, and atropine drops, are useless; in some cases, severe pain has been relieved by large doses of quinine.

OBSTETRICS.

INJECTION OF ERGOTIN IN POST PARTUM HÆMORRHAGE.—M. St. Philippe relates (*Gazette Médicale de Bordeaux*, Jan. 1878) a case of excessive hæmorrhage consequent on faulty insertion of the placenta. Ergot administered by the mouth was ineffectual. He then injected ergotin under the skin, employing Moutard-Martin's solution, which contains one part of ergotin to six of water and six of glycerine. He injected an ordinary subcutaneous syringe under the skin of the arm. The effect was instantaneous; scarcely a minute afterwards, the uterus firmly contracted, the hæmorrhage ceased, and the patient did well. There was a little œdema round the wound, but no inflammation. M. Chantreuil reports also (*Journal de Thérapeutique*, Feb. 25th, 1878) a case of excessive metrorrhagia preceding labour, and succeeding it after the application of forceps, with syncope and uncontracted uterus. In this case, M. Chantreuil injected, at short intervals, four small subcutaneous syringes of a solution of equal parts of Bonjean's soft ergotin and distilled water. Some of the solution was lost. He estimates altogether the quantity of ergotine injected at 21½ grains. At the end of half an hour, the uterus contracted, and remained firm all night. To counteract the acute anæmia to which such patients often succumb twelve or fifteen hours after delivery, he injected four times a syringe of ether under the skin, and gave other similar injections of brandy during the night. Under this influence, the patient revived and warmth returned. As the stomach would not tolerate anything for days, rectal injections of beef-tea, milk, and wine and water, were employed. A blister was applied over the stomach, which tended to restore its tolerance of food; and the patient recovered. Dr. Chantreuil employed, with the same success, injections of ether in four other cases of hæmorrhage, of which two were after abortion and two after accouchement. In all four, the state of the patients was so alarming that transfusion had to be considered. Hypodermic injections of ether, which do not offer the dangers of transfusion, which are easy to practise and require no preparation, appear to Dr. Chantreuil as efficacious as transfusion itself.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 13TH, 1878.

MEDICAL REFORM.

IN our last issue, under the above heading, we referred to the present Medical Bill of the Government as utterly inadequate to the needs of the public and the legitimate demands of the profession. It neither establishes uniformity in qualification on the plan of equal fees and equal examination in each division of the kingdom, nor does it concede any representation on the General Medical Council to the profession as a body distinct from the universities and corporations. In order to establish our right to speak authoritatively on the subject of medical reform, it may, perhaps, be well to place beyond controversy the part played by the Association in securing the Medical Act of 1858; for it sometimes strangely happens that the opponents of a measure beforehand hail it as in a great degree their own handiwork when once it is accomplished, just as a sovereign greedy of military glory may, through constant dwelling on the events of a campaign, work himself into the unquestioning delusion that he played an important personal part by his presence in the last decisive battle.

The Association is now in the forty-sixth year of its existence. It is not too much to say that, at the date of its formation, the profession was a chaotic mass of *disjecta membra*. The founders of the Association sought to weld this disjointed profession together, to elevate its members by enlarging their attainments, to teach them to acquire self-respect by deserving it, and to stimulate the provincial man to assert his inborn dignity, and to earn ennobling distinction by the example of the illustrious Jenner, who, in the obscurity of a provincial practice, became one of the greatest benefactors of humanity. To elevate the profession as a whole, changes in the way of reform were indispensable. From the second year of its existence, therefore, the question of medical reform constantly occupied the attention of the Association, and, by continued agitation, public interest was at length excited. Mr. Hawes, Sir James Graham, the late Mr. Wakley, and many others, attempted legislation, but in vain; and thus for years matters remained, with every conceivable qualification to practise the profession, from that granted by the Archbishop of Canterbury to that bestowed for a small fee by the Apothecaries' Hall of Ireland. The activity of the Association, however, never flagged: defeated often, discouraged never, it continued to press on the legislature and on successive governments the need for reform, and responded by renewed efforts to those ministers who, after grappling with the subject, abandoned it in despair, with the taunt that they would again attempt legislation when the profession was unanimous in its views.

This was the condition of things when a powerful deputation of the Association, supported by numerous members of Parliament of all shades of opinion, including Mr. Headlam, waited on Lord Palmerston on March 18th, 1853, to ask his support of a Bill drafted by the Association.

Sir Charles Hastings, speaking for the Association, then stated that "they (the Association) had from the first laid down broad principles of medical reform, and had never swerved from them. They were:

1. Uniformity of qualification; 2. Equal rights to practise throughout the United Kingdom; and 3. The adoption of the representative principle in the formation of the councils or other governing bodies. The Bill embraced the establishment of a medical council, of a board of examiners before whom every candidate for the right to practise must go, and of a system of registration."

Strange as it may now seem, the governing bodies of the Royal College of Physicians and of the Royal College of Surgeons of Edinburgh, in the persons of Dr. Renton and Dr. Combe, the respective secretaries, supported the Bill, and thereby committed themselves to the plan of one conjoint board of examiners. As proof of the earnestness of the Association in the cause, it may here be mentioned that, in the year 1852, with an exchequer not, as now, overflowing with funds, but showing more liabilities than assets, £200 was granted to the Medical Reform Committee on March 2nd, 1854. The Association called a meeting in London, when again the four great principles of reform were laid: 1. Uniformity of qualification; 2. Reciprocity of rights to practise; 3. Registration of qualified practitioners; 4. The governance of the profession by representative councils.

It was then sought to place eight representatives of the profession in the Council: four for England, two for Ireland, two for Scotland. In May 1855, a deputation from the Association waited on Sir George Grey, then Home Secretary, from whom they gained no encouragement. It was then arranged that the Bill should be specially confided to Mr. Headlam as a private member, with the names of Mr. Brady and Mr. Craufurd on the back of it. Other Bills were from time to time brought forward; several were before the House at the same time; Lord Elcho's Bill was supposed to be favoured by the Government, when Mr. Headlam, acting for this Association, surprised the Commons on July 1st, 1857, by carrying the second reading of his Bill by a majority of one hundred and forty-seven—the numbers for being two hundred and twenty-five against seventy-eight—a warning to all close corporations of the power to be wielded by the British Medical Association. This vote led to the Government of the day undertaking legislation; there was then no Medical Council in being, and it was to the Association that the Government applied. Mr. Cowper-Temple wrote to Sir Charles Hastings, the President of the Council of the Association, informing him that the Government intended to introduce a Bill the next session, and requesting a personal interview with him before deciding on a plan. This letter was read at the meeting of the Association in Nottingham on July 30th, 1857.

In 1858, the Medical Act passed. The foregoing narrative makes it tolerably clear that there would scarcely have been any Medical Act in 1858 but for the untiring labours of the Association.

When the action of the Association was thus recognised by the Government, it numbered about two thousand members; it now numbers considerably over seven thousand. Mr. Cowper-Temple, in debate the following year, regarded the Association as representing the profession throughout the country. With how much greater force may that be maintained now!

In 1858, the Medical Act passed. In the debate, Mr. Walpole stated "that the rivalry between the Colleges in conferring degrees led to nominal or worse than nominal examinations". These Colleges, through their representatives, exercise a preponderating influence in the General Medical Council. The rivalry for candidates still exists amongst them.

During the negotiations preceding the passing of the Act of 1858, the Medical Reform Committee of that day, in its conferences with the Government, contended for the necessity for a representation of the profession. Mr. Southam of Manchester, Mr. Nunneley of Leeds, members of that Committee, and Mr. Headlam, have stated this. The proposition was deferred until there should be a register formed of the members of the profession, when it was understood that the claims of

the profession in that respect would be granted. From that time to the present, the demand has been disregarded, though different members of the General Medical Council have expressed themselves in favour of it.

In the year 1866, when the Government and the General Medical Council were exchanging communications as to the reform of the Medical Act of 1858, the Association, at the annual meeting in Dublin in 1867, passed an almost unanimous (two dissentients only) resolution in favour of giving representatives to the profession in the proportion of one-fourth of the members of the Council. A deputation from the Association waited on the General Medical Council and requested their adhesion to the proposition. A discussion ensued, evincing divided opinion, eliciting a general opinion that the composition of the Council required modification; but the question was shelved, it was not negated. Year after year, at its annual general meetings, the Association has reiterated the demand for direct representation.

In May 1870, a special general meeting was held in London, when the general principles of reform were laid down to be—

1. Representation of the profession in the General Medical Council;
2. The establishment of an uniform conjoint scheme of examination, to be made compulsory for the kingdom.

In that year (1870), the Medical Bill promoted by the Marquis of Ripon was, as his lordship stated recently in the House of Lords, withdrawn through the opposition of the Association owing to the omission of clauses to effect the desired modification of the Council. The present Chairman of the Medical Reform Committee was then Chairman of the Direct Representation Committee. The late Mr. Graves of Liverpool was a strenuous supporter of the Committee on that occasion. He had previously called a general meeting of the profession in and around Liverpool, and ascertained that it was unanimous in its demand for direct representation in the General Medical Council. He himself brought in a Bill to effect it. Dr. Lush, M.P. for Salisbury, also called the profession in that locality together, and ascertained the existence of the one opinion only. Dr. Lush said it was the only question on which he had ever known the profession unanimous.

When the Government Bill was down for the second reading in the House of Commons, in one short week, during which it was adjourned, upwards of ten thousand members of the profession poured in petitions praying that no measure of medical reform should be passed which did not concede direct representation of the profession in the General Medical Council; and the Committee, acting in obedience to this demand, drafted amendments to that end, when the Bill ultimately was withdrawn. Mr. Forster, on behalf of the Government, then made an offer to the Committee to grant a Special Committee to investigate the composition of the Medical Council in the ensuing session, if the opposition of the Association were withdrawn; but the Committee, having been at that time specially appointed to obtain direct representation in the General Medical Council, were not in a position to accept the arrangement, which was, therefore, declined. The Government Bill was then withdrawn.

In 1873, the Committee, having been merged in a Medical Reform Committee, drafted a Bill in conjunction with Mr. Headlam, to whom the whole question of medical reform was peculiarly familiar. That Bill provides for the compulsory formation of a conjoint board of examination in each division of the kingdom. The Bill of the Government, while approving of the efforts of the English authorities to combine in one board for examination, leaves it optional for two or more of the authorities in Scotland and Ireland to do so: a condition which must prove fatal to the English authorities, which have for six long years toiled to effect conjunction, in the hope—it is to be too much feared, the vain hope—that the authorities in the sister countries would do likewise. Should this Bill be passed, there is great probability

that what Mr. Walpole said in 1858 will be justified in 1878, "That the rivalry between the Colleges in conferring degrees will still continue to maintain competition for candidates". On this ground alone the Bill of the Government must be opposed. The question of direct representation will be again considered.

COUNTY GOVERNMENT BILL.

THE County Government Bill recently introduced into the House of Commons is a remarkable document. Without preface, it plunges at once into the whole subject of the administration of county business, recognising the division of all the functions of the Court of Quarter Sessions as capable of being separated into judicial and administrative. The former, including all matters coming before the Quarter Sessions of a county in a judicial capacity, or relating to prisons or police, remains unchanged; and for administrative business, while it is still the Court of Quarter Sessions who have to transact it, a county board is instituted, which becomes the court for that purpose. This county board is to consist of two justices to be chosen, and two elective members to be elected for each petty sessional division of the county. Besides these members, if there be any boroughs wholly situate within the county having a separate commission of the peace, but not a separate Court of Quarter Sessions, and with a population of at least twenty thousand persons, then such borough is to return four members. The two justices are to be chosen by the justices in Quarter Sessions assembled out of the petty sessional divisions; the elective members of the board by the board of guardians of the several parishes situate in the petty sessional division; and the members to represent the borough by the town council. All these elections are to be for one year. It is difficult to understand, for the first time, a petty sessional division of a county—a division the boundaries of which may at any time be changed, and which as a fact are frequently changed—should be chosen for the first time as an electoral area. It represents nothing but a petty sessional division, and, so far as we know, has nothing to recommend it, except that it exists. But these divisions not only exist, but they avoid the difficulty of touching county boundaries. The only reason for adopting the unions as the area of rural sanitary districts in 1872 was a similar one. They were then ready to hand; the boards of guardians representing them, however unfit to have thrust upon them onerous sanitary duties, were already constituted, and thus the trouble was saved of reconstituting the sanitary government of the country on an uniform plan which, while it was acknowledged to be the right thing, would entail much inquiry and necessitate considerable reconstitution of boundaries and districts to make it consistent. This the government of the day were not prepared to undertake, and so we have to-day the anomalies of districts cutting districts and parishes overlapping counties, which has led to this attempted imposition of another anomalous body, to be constituted only to be destroyed when some one shall appear, willing and competent to take the necessary trouble for dealing adequately and satisfactorily with this confessedly difficult subject.

We have always and constantly urged that the reconstitution of districts and areas was at the very root of any satisfactory scheme for local government. That such reconstitution is necessary is shown from the fact that, although the union was adopted as the unit of area in the formation of rural sanitary districts, this unit, which logically should have been the one now adopted, is not only passed over, but, when suggested, is vehemently opposed by the Government. The formation of a county board as an intermediate authority, and one for the consideration and, if necessary, for the execution of joint works, and for the maintenance of joint institutions, has been always considered as the necessary outcome and inevitable necessity of local sanitary authorities: but these considerations have been entirely ignored in the present scheme of the Government, and sanitary districts as such are entirely passed by. Nor is the reason far to seek. In the various parishes of England and Wales, there are 179 unions which overlap the

boundaries of counties, with 3,147,772 acres, and a population of 1,053,423 persons. For registration purposes, these overlappings have been destroyed partially by making the returns of births and deaths correspond with union boundaries; but, for local government, an exactly opposite course must be pursued. It does not follow that this is to be an uniform process; for many of the unions which overlap are entirely rural, and it may be desirable to add the overlapping portion to the adjoining union in the next county, making all government the same within the same area, instead of the chance-medley system which now prevails. Where, however, an urban sanitary authority overlaps a county boundary, then, in almost every case, it would be necessary not only to extend the county up to, but even beyond the boundaries of the sanitary district, in order to include those parts of the county adjacent to large towns, but without their jurisdiction, which have largely grown up without proper supervision and restriction. This has been done to escape the incidence of rating; and now, when, from sanitary and other considerations, boroughs promote Bills in Parliament to extend their boundaries, so that these extra portions should be taken in, they are met by the most determined opposition on the part of ratepayers, manufacturers, and owners: an opposition in almost every case successful. To rectify boundaries is the one elementary condition of improvement in local administration, and it is the one thing which the Bill most sedulously omits. A Bill may provide machinery for this purpose; but this fundamental change in a present anomalous condition can only be effected by a commission appointed to inquire and report on the rectification of boundaries, so that unions, if such are in the future to be maintained, should be, however many there may be in a county, in the aggregate exactly co-extensive with the boundaries of the county, riding, or division of a county. Without this, the present confusion must be sanctioned and perpetrated. It is evident that, in the present Bill, sanitary districts and authorities as such are entirely ignored. We agree that there are too many; that the country has been already cut up into these lesser lights for the purpose of producing darkness; but this has been done by former legislation, and cannot now be ignored. Besides this, proper legislation at this time should tend to the remedying of these antecedently created evils.

But the real key to the consideration of this measure is to determine what is really the object intended to be accomplished. Is the present system of administering the affairs of the country considered deficient in ability or economy? The preamble is silent on this point, and we have heard no real answer to this puzzling question. Is it intended that those who spend money should represent the persons who pay the rates furnishing the funds expended? If so, does the present proposed machinery attain that object? If it do, it is by a very indirect and unsatisfactory method. All that can be said is, that the proposal dilutes the present county authority both in position and ability. It makes the landlord and the tenant for the nonce equal, and the farmer and the landowner sit down at the same table, both equally representing the county, or both equally wanting in representative power. There is, in fact, no backbone to the Bill, and nothing of reform underlying it. It weakens what exists without in any way improving it. It destroys the aristocratic, and, so far as we know, hitherto unimpeachable, and in its place substitutes what is neither democratic or representative. The form is altered in its power for good, and the matter remains the same, without suggested amendment, and with a probability of the good being weakened in the old system, without any corresponding probability of removal of evils. The whole scheme, so far as we can comprehend it, has no *raison d'être*. And, if this be all a county board is to ensure, we had better bear the evils that we know than fly to others the extent of which we can never forecast or appreciate.

The new powers to be granted to the new board are meagre in the extreme. The present administrative purposes carried out by the justices in Quarter Sessions assembled, other than those appertaining to prisons and police, are those connected with the militia, county bridges, shire halls, lunatic asylums, and other county buildings; also

the application of the District Highways Acts, 1862 and 1864, under the powers of which eight thousand or more rural parishes have been united into above four hundred highway districts, maintaining nearly seventy thousand miles of road at about £950,000 a year, or a little more than £14 a mile.

By the Bill, powers are proposed to be conferred by which any roads which are now or may hereafter be disturnpiked shall become *main* roads, and are to be repaired by contributions from areas joined together for the purpose, to which, under certain circumstances, the county board may contribute. Media of communication between great towns may be declared to be main roads, and may be repaired, as before stated; or a main road may be reconverted into a simple highway by the order of the county board. Then comes the extraordinary proposal to recur to the wasteful and harassing plan of having toll-gates erected on roads which are cut up by traffic, in order to meet the difficulty of imperial traffic not belonging to the district causing abnormal expense in repairs: a proposal which cannot be supported, and one of a most retrograde character, and which for five years is to continue to be a source of expense and annoyance to all using such road. For these and similar purposes connected with the repairs of main roads, a county road fund is to be created, to be collected by the areas which are to be joined for the purpose, and which are to be taxed in proportion to their rateable value. Such sums are to be paid by the various highway authorities upon the receipt of a precept from the county board; and, in the result, this money is to be equally contributed by the owners and occupiers of property within the highway districts. There is also power given to the county board to enforce the discharge of their duties by defaulting highway authorities within the county, and they may indict any highway authority at the assizes, in order to try the liability of any defaulting authority to repair any highways. For carrying out the purposes of the Rivers Pollution Prevention Act, 1876, the county board is to be made a sanitary authority so far as any streams within or passing through the county are concerned; and, for this purpose, the county is to be considered their district. They may also become conservators of rivers, and they may join with other counties in a scheme for removing obstructions, improving outfalls, dredging, scouring, and cleansing the beds of rivers, and improving the flow of water, and for constructing embankments, etc.; but this permissive power is, as it appears to us, valueless from a sanitary point of view, and the momentous issues of adequate and pure water-supply to districts can never be solved unless and until the appointment of a watershed area authority be determined on in every county or combination of counties, as the physical conformation of the county may require. So long as the water-supply of the county is allowed to be treated in the haphazard way which has prevailed in the past, so long shall we still have to deplore the sad condition of hundreds of parishes in England which are at the present time doomed to drink liquid sewage. The recent evidence of medical and other scientific experts in the case of the Nottingham Water Bill before Parliament showed that, while a most abundant source of exquisitely pure water was at the feet of the inhabitants of an area of some thousands of acres in the villages immediately surrounding the town of Nottingham, more than thirty thousand people were condemned to drink from a scanty supply of water, so-called, which was proved to be nothing less than liquid abomination. Can we wonder at sickness and death-rates continuing high when such things are permitted to go on unchecked and unprovided for? It is in this aspect we feel the greatest disappointment with the proposal of the Government, inasmuch as it clearly shows that no comprehensive view has been taken of the subject; and that there is no real apprehension in the minds of our statesmen as to the real wants which should be supplied by a measure for more effective county administration.

The new board, further, may frame schemes in order to provide asylums for imbecile or insane poor, and schools for training "idiotic young persons being paupers"; and they may prepare schemes for readjusting areas, and present them to the Local Government Board, and

thus, in a questionable way, they may suggest plans for carrying out the provisions of the Public Health Act, 1875, and the Divided Parishes and Poor-law Amendment Act, 1876. Those who live on to or in the next century may possibly have the gratification of seeing something effected under these cumbrous and, up to the present time, effete provisions. For registration purposes, all here so dimly shadowed out has been accomplished by earnest men at the head of a department of the state, and proper machinery, if Parliament really set itself to the task, would, in eighteen months from this date, bring our chaos of boundaries into a consistent whole for all purposes of local government. It is said that the proposal to map out the whole of England like a chess-board with uniform authorities and powers may be very philosophical, but it is impracticable. Those who have given the greatest consideration to the subject have arrived at an opposite conclusion, and maintain, and, we think rightly, that, in order to secure the greatest economy with the highest efficiency, all matters of local government should be administered by one authority with districts arranged according to the exigency of drainage, water-supply, and other local circumstances connected with administration. As a necessary complement to this is the creation of a county or other board for joint purposes common to all the districts embraced within its area. These purposes, as we have already pointed out, are altogether ignored by the present Bill. The remaining provisions of the Bill relate to the appointment of coroners by the county board: a proposal recently enunciated by one of our correspondents. Powers are given to borrow and with respect to the obtaining of provisional order. The remaining supplemental provisions of the Bill merely refer to matters regulating the election of members and the transaction of business of the county board.

WE understand that the friends of the Rev. Mr. Dodwell, acting upon the report of Dr. L. S. Forbes Winslow and Dr. J. M. Winn to the Home Secretary, of which we have already published the substance, propose to apply for a writ of error to bring Mr. Dodwell up to the Court of Queen's Bench for argument of his case.

M. A. GUÉRIN, senior surgeon to the Hôtel-Dieu, was last week in London, and spent several days in studying the methods of dressing wounds employed by Professor Lister at King's College and Mr. Callender at St. Bartholomew's. M. Guérin is well known in this country and elsewhere as the author of the cotton-wool dressing, by which means he protects his wounds from the action of floating germs in the air by the filtrating process furnished by the thick casing of cotton-wool with which he surrounds them. M. Guérin put up a case at St. Bartholomew's Hospital, employing about five pounds in weight of cotton-wool and upwards of a hundred yards of bandage for the purpose. M. Guérin affirms that he obtains excellent results by this method and antiseptic occlusion, which is, however, obviously inferior in certainty to the method of Mr. Lister, and is alleged by those surgeons in France who have employed it to give very imperfect and unreliable results, very different from those which M. Guérin alleges that he obtains from it.

ON Friday, at the Great Northern Hospital, a case of aggravated genu valgum was, at the request of Mr. John Gay and Mr. William Adams, operated on by M. Guérin by the method of forcible straitening introduced by M. Delore of Lyons, and practised since with much success by French surgeons. The patient was a girl aged 15, in whom the deformity in the right leg was very aggravated, interfering greatly with progression, and the procedure is very successful.

THE retiring members of the Council of the Royal College of Surgeons of England at the next election in July are Messrs. Barnard Holt, Henry Lee, and Erasmus Wilson. We have mentioned the probability of Mr. Lund being brought forward; and the names of Sir Henry Thompson, Mr. Callender, and Mr. Lister are also mentioned.

WE understand that notice of motion has been handed in to the Council of the Royal College of Surgeons of Ireland to amend the by-law affecting the practical teaching of physiology, of the application of which Dr. Reuben Harvey last week complained as being injurious to the progress of complete scientific teaching of that branch of knowledge in the medical schools of Dublin.

THE subject of Diseases of the Lymphatic System will be resumed at the Pathological Society of London at its meeting on Tuesday, April 16th, when the discussion will be concluded.

WE are requested to state that Mr. Anderson Critchett is not, and never has been, a candidate for the office of Ophthalmic Surgeon to St. Thomas's Hospital.

MR. WALTER PYE, late House-Surgeon at St. Bartholomew's Hospital, Lecturer on Physiology at St. Mary's Hospital, and Anatomical Assistant in the Museum of the Royal College of Surgeons, has been elected Assistant-Surgeon at St. Mary's Hospital.

A SAD death is reported of Surgeon W. C. Fergusson, B.A., M.D., who managed to escape the observation of his attendants while returning home, in a state of mental alienation, and, getting out of the port of his cabin, jumped overboard unobserved.

As the result of the recommendations of the Scottish Universities Commission, it is considered probable that the valuable collection of coins and medals in the Hunterian Museum of the Glasgow University will be sold in order to provide funds for the maintenance of the museum, for which there is at present no fund specially applicable. The coins are said to have been collected by Dr. William Hunter at a cost of upwards of £22,000, and it is believed that if sold they would realise a much larger sum. At present, they are not used in teaching, and probably not half-a-dozen people in Glasgow have ever seen them, as they are kept in a cabinet with three doors, of which the keys are in a sealed box, and it is only opened in the presence of three of the professors.

PROFESSOR YOUNG reports that the library of the University of Glasgow includes a very large collection of medical books, especially of early medical literature, and a collection of classical books which is described as being perhaps the finest in this country outside the British Museum and the Bodleian. Among them are thirteen books of Caxton's printing and a good many of Pynson and Wynkyn de Worde, and a German poem on vellum with wood-engravings by Albert Dürer. There is some talk of selling even these literary treasures. There are in the library four or five thousand duplicate volumes which might be sold without injuring the literary value of the collection.

TESTIMONIAL TO MR. JOHN SIMON.

ON Saturday last, the subscribers to the testimonial of a bust in marble to Mr. John Simon, C.B., F.R.S., late Medical Officer to the Privy Council, in recognition of his eminent services in sanitary science, met at the rooms of the Social Science Association, for the purpose of a private view of the bust, which has been executed by Mr. Thomas Woolner, R.A., and is for presentation to the Royal College of Surgeons. Sir James Paget occupied the chair, and spoke in eulogistic terms of the high character and reputation of Mr. Simon, and the great personal esteem in which he was held by the medical profession generally. Sir William Gull moved the adoption of the report of the General Committee, which thanked the donors for their contributions, and stated that the required amount had been subscribed. The thanks of the meeting were given to the General and Executive Committees, and to Dr. Farr as treasurer, and Mr. Haviland as secretary, for their services. Among those present were Dr. Russell Reynolds, Dr. Owen Rees, Dr. George Johnson, Mr. T. B. Curling, Mr. John Wood, Dr. Waller Lewis, Dr. Iliff, Dr. Hardwicke, Mr. John Gay, Mr. Farrier, Mr. Jacob, etc.

YELLOW FEVER IN BELGRAVIA.

FOR the first time, probably, in the memory of any living physician, a case of yellow fever ending fatally is reported in London. It occurred in one of the squares in Belgravia. The case was seen before death, in consultation, by Dr. Murchison; and both the symptoms before death and the anatomical conditions after death clearly establish the nature of the case. It was contracted on board a West Indian steamer in which several deaths had occurred. Under some circumstances and during periods of great heats, such an announcement might have created serious alarm; but, with the present temperature, and considering the precautions taken, there is no reason to consider it possible that any local extension of the disease should follow.

GALLANT CONDUCT OF A SURGEON.

ON the 5th instant, Mr. George Warner Bell, a young surgeon who has been in the Royal Naval Service only a few weeks, was walking on the sea-wall at Haslar Hospital, when his attention was called to an object in the water forty or fifty yards from the shore. This he thought to be a body from the unfortunate *Eurydice*. He was assured, however, that movements had been seen and cries heard coming from this spot by others who were present. Mr. Bell at once stripped and swam out, and by great exertion brought the body within ten yards of the shore, when, by reason of the cold and exhaustion consequent on his efforts, he was obliged, for the preservation of his own life, to quit the body and make his way to the shore. The lifeless body was that of Captain Charles Gray Jones, a patient at the hospital at Haslar; but there is no evidence as to how he came in the water. To the verdict of the jury who sat upon the inquisition which was held upon the remains of Captain Jones, was appended a rider in which the jury desired to record their "admiration of the gallant conduct of Mr. Bell".

REPORT OF THE LUNACY COMMISSION.

THE select Committee of the House of Commons on Lunacy Law have arrived at a conclusion which might have been anticipated beforehand, that the allegations of *mala fides* and serious abuse in respect to detention of lunatics are without foundation. They recommend further precautions against possible abuse, of the value of which we shall have something to say presently; but they are not of a very urgent or important character. The most useful suggestion they make is one for facilitating the admission into licensed houses of persons such as dipso-maniacs who are not actually under certificate. Altogether, the mountain which has travailed has brought forth a mouse. The cases of grievance put before the Commissioners at great length turned out to be moonshine, and under such circumstances no really valuable result could be expected. A great deal of time has been wasted, for which the only compensation we can see is, that the public mind may possibly be reassured from the scare which first assumed important dimensions under the skilful manipulation of Mr. Charles Reade, in his well known romance "Hard Cash".

CONFLICTING EVIDENCE.

MR. JUSTICE LINDLEY and a common jury were occupied for three days last week in an action for damages, *Fellows v. Jeffrey and Lewis*, for injuries sustained by plaintiff, a schoolmaster, from a sack of oats falling on him from a crane. The evidence of the plaintiff in every particular was traversed by that of the defendants, the negligence being denied, and the extent of the injuries, represented by Dr. Broadbent and Dr. Bastian, on Saturday, as irremediable and the result of mechanical accident, being asserted by Mr. Smith of King's College Hospital, and by Mr. Erichsen, to be such as could be recovered from in twelve months, and to be the result of organic brain-disease, not of violence. The learned judge, directing the jury that the defendants, under the circumstances of this case, were not responsible for such accidents as their use of their crane in such a place might cause, apart from negligence on their part, and that, if they had used it with reasonable care, they were not to be held as insurers of the safety of all

passers under, concisely summarised and criticised the conflicting evidence, and left to the jury—1. Were the plaintiff's symptoms caused by injuries the result of defendants' negligence? 2. Did the plaintiff contribute to the result by his own negligence? After retiring, the jury found for the plaintiff—damages, £1,250.

THE GOVERNMENT RESEARCH FUND.

AMONGST the list of grants to be paid from the Government Fund of £4,000 on the recommendation of the Royal Society, during the present year, in aid of scientific research, are the following: Dr. O. J. Lodge—For Investigations into the Effect of Light on the Residual Charge of Dielectrics; on the Conductivity of Hot Glass, and other Transparent Conductors; on Electrolytic Conduction, and other subjects, £100; Dr. W. A. Brailley—For Researches on the Causes determining the Tension of the Globe of the Eye in Man and Animals, and on the Physiological Influence on this Tension of such Substances as Atropia, Daturin, Eserine, and Pilocarpine, £25; Mr. E. A. Schäfer—For Payment of an Assistant in Continuing his Histological and Embryological Investigations, £50; Dr. C. R. A. Wright—For Continuation of Researches on Certain Points in Chemical Dynamics; on the Determination of Chemical Affinity in Terms of Electrical Magnitudes; and on some of the lesser known Alkaloids, £100; Professor W. K. Parker—For Assistance in Continuation of Researches on the Morphology of the Vertebrate Skeleton and the Relations of the Nervous to the Skeletal Structures chiefly in the Head, £300; Professor A. H. Garrod—For Aid towards Publication of the Second Fasciculus of an Exhaustive Treatise on the Anatomy of Birds, £100.

HOSPITAL PAY-WARDS.

THE Annual Report of the Hospital for Women, Soho Square, read at the annual general meeting held last week—the Earl of Shaftesbury in the chair—referred to the wards established in 1867 for patients who were able to pay for their maintenance, and stated that the efforts of the committee have been successful in this direction. Since the opening of these wards, one thousand one hundred women have been admitted into them. At the present time, when the question of provident payments in relation to the treatment of the upper classes is under active discussion, it would be interesting to have some further details of these wards, and specially to learn what have been the average payments made by these patients, from what class of society the patients have been drawn, and how far these wards have been wholly self-supporting.

VENIAL NEGLIGENCE.

A MAN named Charles Hornsey was indicted lately in the Crown Court at Exeter for the manslaughter of a woman who had consulted him about an ulcerated leg. He applied a lotion which, on analysis, appeared to be a solution of corrosive sublimate. The patient died with symptoms of mineral poisoning, and the *post mortem* examination proved death to have resulted from that cause. The prisoner alleged that he had used the lotion in similar cases for thirty years "without anything going wrong"; and the learned judge, Sir James Fitzjames Stephen, Q.C., Commissioner, held that there was no proof of culpable negligence, and withdrew the case from the jury, and the prisoner was discharged. Culpable negligence appears to be a very elastic phrase. An unlearned mind might think this would seem to be a case in which such a phrase was particularly applicable, since it was the one in which there was a large element, to say the least, according to the facts stated, of dangerous ignorance on the part of the person whose calling required him to have adequate knowledge. The ways of the law are, however, often inscrutable.

HOW TO IMPROVE HOSPITAL FUNDS.

THE Surrey County Hospital at Guildford is languishing in its funds, and various remedies are being discussed. Mr. Albert Napper, in a very sensible letter to the *Surrey Advertiser*, points out that in this,

as in many other local hospitals, the number of beds is in truth in excess of the needs of the really deserving poor of the neighbourhood; and he recommends that the number of free beds should be reduced to twenty-five, the cases to be selected on the ground of their urgency and merits; the remaining beds to be constituted a paying department, and removed from the present category. At present, they seem to be merely used as a cheap means of securing food, medicine, and attendance for the dependants of well-to-do persons, who thus secure an enormous return at their neighbours' expense, their own liberality being evinced by a small annual subscription. We see with satisfaction that the movement of reaction against hospital abuse is extending to county hospitals, which have, even more than the endowed hospitals of London, long been believed to be the strongholds of such abuse.

SCOTLAND.

THE session 1877-78 of the University of Aberdeen closed on Friday last, with the usual declaration of prizes in the various classes.

DR. ROBERT SCOTT ORR has been elected to represent the Glasgow Faculty of Physicians and Surgeons on the General Medical Council, in room of Dr. Fleming, resigned.

ON Monday last, Dr. P. H. McLaren was elected an assistant-surgeon to the Edinburgh Royal Infirmary, in succession to Mr. Chiene, appointed full surgeon.

THE rainfall in the Crieff district during the past three months was eight inches less than the average amount of the mean fall of the last twenty years, being only 5.36 inches altogether; during the month of March, only 0.41 inch fell.

IT is stated that the committee recently appointed to endeavour to come to some arrangement by which the Duke of Buccleuch might be returned unopposed as Chancellor of Glasgow University, are of opinion that they have been successful in their mission, and that the appointment of his Grace will be ratified at the first meeting of the General Council.

ON Tuesday of last week, a *post mortem* examination was made in Glasgow by Dr. Moore, one of the medico-legal examiners for the city, and Dr. J. B. Russell, the Medical Officer of Health, on the body of a young woman named Donaldson, who was supposed to have died from blood-poisoning. The deceased was employed in a hair-factory in the city, and it was imagined that her death was caused by the materials with which she worked. She is said to have been the fourth victim to this form of disease within a month. The report of the examination, which was handed in to the Procurator-Fiscal on Friday, stated that the examiners were of opinion that the girl died of blood-poisoning. An analysis of the contents of the stomach was made by Dr. Douglas MacLagan, but he reported that he found no trace of poison in it.

PUBLIC HEALTH LEGISLATION FOR SCOTLAND.

ON Wednesday, the 3rd ult., Sheriff Spens of Glasgow read a paper before the Glasgow Philosophical Society, on The Necessity of a General Measure of Legislation for Scotland with regard to Public Health. He first called attention to the present sanitary authority, the Board of Supervision, which he thought had discharged its duties fairly well. As regarded its constitution, however, it seemed to him that there was not a proper guarantee for a proper supervision of public health, and he considered that it should be amended. If the Board were to be continued, as he thought it should, for the control of the Poor-law system, a medical gentleman of eminence should be appointed to advise the Board in sanitary matters. He also advocated the ap-

pointment of a Minister of Public Health. He next referred to urban sanitary authorities, and, alluding to the smaller towns, said the carrying out of the public health provisions was pretty much a sham, because of their permissive character. With regard to the administration, or rather non-administration, of sanitary laws in rural districts, he suggested that the duties of local authorities should be entrusted to a small but practical board of men selected from a larger area than that of a parish. He also pointed out the necessity for amendment and enlargement of the executive machinery for public health purposes, and advocated the amendment of the subject matter of the present sanitary laws with regard to overcrowding, intimation of infectious diseases, prevention of evasion from vaccination, adulteration of food, and other points. A discussion followed, in which Dr. J. B. Russell pointed out that between 1865 and 1873 the death-rate had, in consequence of defective sanitary laws, increased considerably; while another medical man characterised the sanitary law of Scotland as a perfect sham, on account of its permissive character. A vote of thanks was accorded to the sheriff for his paper.

DEATH FROM FRIGHT.

A VERY extraordinary case of death from fright occurred at Blakelaw last week. A female carrier from Kelso by some means fell off her cart on the highway adjacent to Blakelaw, and sustained rather severe injuries. She was conveyed to the house of one of the hinds of that place; and the hind's wife, in the house in question, received such a shock, from seeing the bleeding and bruised condition of the woman, that she died shortly afterwards from the effect of the fright.

VITAL STATISTICS IN LEITH.

THE quarterly returns prepared by the Registrar of Leith show that during the past three months the deaths have numbered 334, being equivalent to an annual mortality of 24 per 1,000 of the population. Sixty-four new cases of typhoid fever, and 423 of measles had been reported by the medical officers. The births numbered 526, of which 25, a very small proportion for Scotland, were illegitimate. One hundred and seventy-seven new cases of measles were reported during the month of March.

IRELAND.

AT the last meeting of the Medical Society of the King and Queen's College of Physicians in Ireland, on the 3rd instant, Dr. Banks, ex-President of the College, was elected a Vice-President of the Society, in the room of the late Dr. Stokes.

CORK STREET FEVER HOSPITAL.

DR. CHRISTOPHER GUNN, Assistant-Physician to the Mater Misericordiae Hospital, has been appointed a temporary physician to this hospital. There were two other candidates for the post. The governors deserve much credit for making the appointment, and for the energetic way in which they have endeavoured to provide for the great demands upon them for accommodation during the rapidly-extending epidemic of small-pox. As it is, the beds of the patients in the acute stage of the disease, who are now in the hospital, are represented to be lying close to each other in the wards, and even laid along the passages. On the 1st instant, there were one hundred and ten cases of variola in the hospital, and this number is still very nearly kept up.

ARMY MEDICAL SERVICE.

THE Council of the Royal College of Surgeons in Ireland have received two hundred and ninety replies in answer to the circular which, as we mentioned last week, had been forwarded by their directions to the medical officers of the army serving in the United Kingdom. Tabulating the ballot papers returned, it is found that one hundred and sixty-four are for the regimental system; ninety-eight are for the unification scheme; while fourteen are for a modified regimental system; and the

same number (14) are for a modified unification scheme; the two latter implying a regimental system in time of peace, modified (as in the New Zealand campaign) to meet the requirements of war. These replies—which, although confidential, have in many instances the names of the officers sending them appended—form the basis of a report of a committee appointed by the Council of the College to draw up a reply to Mr. Hardy's inquiry as to the causes which have produced the existing difficulty in obtaining candidates for the medical department of the army. The committee have also entered into some of the causes of dissatisfaction amongst those now serving in the department. The fact that the roster as now kept has been withdrawn from public inspection, so that no officer can now tell how he stands in regard to foreign service, will, we understand, be particularly alluded to. In former times, the roster-book always lay on the table in the waiting-room at Whitehall Yard, and every officer had an opportunity of ascertaining his position on it. Very sudden and unnecessarily inconvenient, because unexpected, orders abroad are the consequence of the present system; and it also tends to leave a loop-hole for suspicion against "the office", on the grounds of favouritism and jobbing, which may or may not be warranted.

BROSNA DISPENSARY DISTRICT.

At an extraordinary meeting of the Brosna Dispensary Committee, recently held, a proposal to recommend Dr. Harold, late dispensary medical officer of the district, for a superannuation allowance of £60 a year was rejected, on the ground that, judging by his physical appearance, he had no claim for a retiring allowance. This treatment appears to us as harsh and unjust, especially when it is remembered that Dr. Harold served as medical officer for the long period of twenty-seven years, and that the small sum proposed was well earned after his long and harassing duties as a dispensary medical officer.

FEE FOR CERTIFYING A LUNATIC.

In reference to a note on this subject last week, in which the Guardians of Ballina Union objected to pay Dr. Mahon for examining a dangerous lunatic a fee of £2, we may add that, at a meeting of that Board held recently, the magistrates who signed the order returned it sealed, and also sent a note, stating that they begged to inform the Chairman and Board of Guardians of the Ballina Union, that it was not without due consideration, and taking into account the distance travelled, and the time lost by Dr. Mahon in first visiting the lunatic at her own house, and subsequently accompanying her to their respective residences, that they made an order for £2 to Dr. Mahon. They also informed the Board that they would exercise their duty independent of any resolution to which the Ballina Board of Guardians might come in ignorance of the merits of the case.

POST MORTEM INSPECTION.

In consequence of what took place recently at Galway, in reference to the burial of a pauper who died in the workhouse, and by mistake was removed to the anatomical school of the Queen's College, an inquiry was held, on the 2nd instant, by a committee appointed by the guardians; Dr. Brodie, Local Government Board Inspector, being present. After considerable discussion, the following resolution was adopted: "That the provisions of the Anatomy Act have been violated by parties connected with the College and Workhouse; that, had they been carried out, nothing of this lamentable kind, on which the committee had been called to report, could have occurred. The committee draw the attention of the county to that Act, which affords every protection to the inmates of the house, or those seeking relief in the hospital, by enabling them, by merely notifying their intention to be interred straight from the house, thereby effectually preventing any interference with their bodies after death. We do not, however, think that it would be desirable to entirely ignore the benefits that are conferred on humanity by precluding the medical school from obtaining subjects from the house of these bodies unclaimed; and we recommend that most stringent measures should be taken openly, to prevent any recurrence of irregu-

larity, by making the master responsible for the proper interment of any unclaimed pauper body which may have been, with the concurrence of the guardians, given for the good of science to the School of Anatomy." This resolution was brought before the guardians on the 5th instant, but, not meeting with the approval of the majority of the board, it was withdrawn, and the following unanimously adopted: "That in future the master be responsible for the proper interment of all persons dying in the workhouse; and that it be his duty to see that the remains of paupers that are not claimed by their friends shall be interred in the proper place, with due Christian rites, and that no remains be permitted to be removed to the dissecting school of the Queen's College." This determination of the guardians is most important in regard to the Medical School of the Queen's College; and, if they can legally withhold the bodies of unclaimed paupers, it will be of serious detriment to the College, and, we may add, to all anatomical schools in Ireland.

THE SMALL-POX EPIDEMIC.

WE noted last week the culpable loss of time of which the Board of Guardians of the South Dublin Union had been guilty in deferring, week after week, to take prompt and definite action as regards provision for the accommodation of small-pox patients and convalescents. Owing to the crowded state of the Cork Street Fever Hospital, and the time that would be occupied in building sheds on its grounds, the proposed arrangement with the governors of the hospital, to which we also referred last week, was clearly inadequate. Moreover, it did not meet the urgent need for immediate accommodation which the serious and rapid extent of the epidemic required. The Local Government Board, having ineffectually called the attention of the guardians to their responsibility in this matter and the need for energetic action on their part, wrote to them a second time last week, again calling their attention to the inadequateness of the steps they had taken to provide the requisite hospital accommodation for poor persons, and to protect the poor and the community at large from the great danger of having cases of small-pox left in the residences of the patients. The Local Government Board's communication further clearly stated that it would not suffice to refer the matter to committees, or to defer action from one weekly board day to another; and finding from former experience that it was of no use simply bringing the *lâches* of the guardians under their notice again and again, they were informed that if they separated on the day of receiving this communication without taking effectual steps to meet the emergency, the Local Government Board would consider whether a necessity had not arisen to exercise their power and dissolve the Board of Guardians, appointing paid officers to carry into execution the provisions of the Act (18th of 10th Vict. chap. 31), in cases in which, through the default of the guardians, the duties were not effectually discharged. This threat to dismiss the guardians, as it was termed, had the desired effect, and sheds were at once secured, at an expenditure of probably some £2,000, for small-pox patients. Mr. Edward H. Byrne has been appointed temporary medical officer to these sheds, at a salary of £3 a week. Sixty-six deaths from small-pox have been registered in Dublin for the seventeen weeks ending March 30th. According to a recent report of the Superintendent Medical Officer of Health, Dr. Mapother, a large proportion of the cases are of the modified form; and in these, the deaths do not probably exceed 3 per cent.; while in the unprotected, it was at least 33 per cent. It is to be regretted that in some cases the authorities allow convalescents to leave hospital while capable of spreading the disease. We are glad to see that the Public Health Committee of the Corporation have recognised this, and have urged the hospital authorities to retain such patients until all danger is past. They have also directed that the attention of the South Dublin Union Guardians be called to the powers conferred on them by the Irish Poor Relief Extension Act, which enables them to provide temporary accommodation for parties other than paupers during the disinfection of their dwellings, and that the board be requested to provide such accommodation.

THE GENERAL MEDICAL COUNCIL.

A SESSION of the General Medical Council commenced on Wednesday, April 10th, at 2 P.M.; Dr. ACLAND, President, in the chair.

New Members.—The official notices of the appointments of Dr. J. B. Pettigrew as representative of the Universities of Glasgow and St. Andrew's in the room of Dr. Allen Thomson; of Dr. R. S. Orr as representative of the Faculty of Physicians and Surgeons of Glasgow in the room of Dr. J. G. Fleming; and of Dr. Andrew Fergus as Crown representative for Scotland in the room of Mr. Lister, having been read, these gentlemen were introduced, and took their seats.

PRESIDENT'S ADDRESS.

The PRESIDENT addressed the Council as follows.

The Medical Council has this year been called together thus early in the Parliamentary Session to enable it to carry forward, and if possible to conclude for a long time to come, its deliberations on the Amendment of the Medical Acts. It may not, however, be assumed that in one sitting the Council will be able completely to fulfil its duty in this respect.

Although the business of the Council has of late increased, there is not much that demands your instant attention, except the Bills affecting the profession of medicine, actually before Parliament or in contemplation, together with questions arising out of them.

Since your last meeting, steps have been taken to make the *Medical Register* more accurate than heretofore. The volume which is now in your hands has in it several thousand corrections, besides other alterations in the typographical arrangements, and some additional prefatory matter. For these, as for other office improvements, the Council is indebted to the Registrar.

The minutes of the Executive Committee will have informed the Council of communications from the Board of Trade relating to weights and measures, and from the Registrar-General on important points connected with the relation of his office to the Medical Council.

Communications concerning the removal of names from the *Register*, and other subjects connected therewith, will, when required, be laid before you.

Acting under your instructions, the Executive Committee made applications to the various licensing bodies concerning the insufficiency of general education in many of the candidates who present themselves for professional examination. The answers from these authorities will be laid on the table. Papers written by registered practitioners have been confidentially forwarded to me as President, to show that the neglect of the practice of writing the English language, permitted by some examining boards, cannot be reprehended in too strong terms, if ordinary literary culture is to form an essential part of the training for a scientific profession.

The scheme for the Conjoint Examining Board in England has been industriously elaborated under the presidency of Sir James Paget. It may be permitted to one of the members of the Committee to say that the discussions among the representatives of the several licensing bodies have shown, when considered in connection with the recommendations of the Council, and the evidence given to it through Mr. Syme's Committee in 1868, that much remains to be done before this country can rightly claim to have settled views on the course, time, and methods indispensable for securing a sound education for the practice of medicine. It becomes more and more clear that the examining boards regulate the steps by which a student is fitted to pass an examination on a particular day. The question is, whether thus we best prepare him for the practical discharge of his life-long work. This proves the great importance—nay, the necessity—of having examining boards composed of the highest and fittest persons for the special duty of examining, that can be induced to undertake it. Another important conclusion may be drawn—so trite, indeed, as to seem almost impertinent to name it—that the opportunities for learning in different hospitals and universities are at least as diverse as the mode of testing results has ever been. As regards scientific teaching, an eminent teacher (Mr. Savory) has again lately drawn public attention to the importance of organising the means for the best scientific teaching not necessarily connected with the chief place of clinical teaching, the hospital.

A recommendation just made by the Commissioners of the Universities of Scotland, that no candidate shall be admitted to examination in Human Anatomy or Physiology, or in any purely medical subject, unless he has passed an examination in Natural Philosophy, Chemistry, Physiology, Botany, and Zoology, as constituting the second and third groups of the fifth or Natural Science department for the degree of M.A., will have an important bearing on the time and place necessary

for scientific training preparatory to medical study, and for professional study, respectively.

Considerations of this kind will force themselves on our minds whenever we discuss the nature and extent of examination rules to be made generally binding by the authority of the Medical Council.

Documents will be laid before you from various bodies affected by the Medical Acts Amendment Bill presented to the House of Lords on March 19th.

At the close of the session of last year, the Medical Council urged on the Lord President that a Bill should be brought in by the Government to amend the Medical Acts. The Lord President, acknowledging the importance of the objects which the Council presented to his view, promised his best attention to the whole matter. His Grace has fully redeemed this pledge, and, whatever be the result, deserves the warm thanks of all who are interested in the settlement of medical legislation.

Immediately after the summer recess, the Lord President personally considered all the materials which he had before him for amending the Medical Acts, whether obtained from the Council or from other sources.

The Medical Council had pressed on his Grace, and through him on the Government, the importance of an early settlement of the following five subjects, viz.:

1. The recognition of Foreign and Colonial qualifications in England.
2. The privileges of women in regard to medical qualifications.
3. The appropriation of penalties under the Medical Act.
4. To some extent, the education of midwives.
5. And, indirectly, the emendation of the law affecting certificates of lunacy.

After full consideration of these several subjects, the Lord President informed me that the Government were of opinion that it might in the end be more satisfactory to the Council, as well as to the legislature and to the country, to bring into a Bill, together with these points, certain others for which legislation had at one time or other been desired.

On all these matters, the Lord President sought from me information; and I gave him such as I believed would most nearly express the opinions of the Council. But I would not take on myself to advise his Grace to omit from a Government Bill any of the subjects relating to our profession which might be regarded as of public importance, even though on some of them the Council had not expressed a definite opinion.

There is a great temptation for your President to summon the Council on every occasion of consequence, and to throw responsibility at every turn on the Executive Committee. But both are so heavy a charge to the finances—the Committee costing nearly £50 for one afternoon, the Council £400, if summoned for one day (or an average of about £165 daily for a whole session)—that the President must often be content to bear the burden which you impose upon him, feeling sure of your support where he deserves it, and always certain of your lenient judgment.

This last winter, indeed, the task was not difficult, for the Lord President seemed to have one only desire, to know how best to legislate for the medical profession in its varied relations to the body politic, and in its own complex inner organisation. Nor can it be without interest to this Council, that, looking on this body as the appointed exponent of a great section of society, he had desired in all ways to aid and support it.

The important Society of Obstetricians had pressed repeatedly on the public mind the desirability of complete legislation concerning midwives. It is, moreover, manifest, that the vexed question of the relations of the medical profession towards women, and the fitness of women to practise the whole of medicine and the whole of surgery, or any part or parts of medicine and surgery, could not be completely decided upon without a discussion on the education and organisation of the midwives of the future.

The body of Dentists—a class in the body politic of whom, when the actual suffering which they seek to prevent and to alleviate is taken into account, one must say that it is an important and useful body—urged on the attention of Parliament their claims to better organisation, depending on and justified by a higher education and fitness.

The Lord President was little disposed to neglect the numerous persons engaged in these occupations respectively—professionally occupied as they are—through the entire country, nor to sever those classes thus growing in importance, as social organisation becomes more perfect, from the medical profession and the Medical Council.

Having decided, then, to consider all outstanding questions known to affect the profession of medicine, and through it the public at large, the Lord President could hardly have left untouched the subject of examinations, which was handled in a complete and masterly way in the

Bill so well known as Lord Ripon's Bill. Though the Council had not last year pressed on the Lord President's notice the subject of diminishing the number of ways by which the licences could be obtained, he knew well the anxious thought which the Council had long and often bestowed upon it; he was acquainted with the resolutions which the Council had passed with regard to Lord Ripon's Bill; and fully estimated the importance to the public of one uniform and satisfactory test of qualification for entry to the *Medical Register* in each branch of the United Kingdom.

The Lord President could not, therefore, but entertain the question. If a Bill was brought in, either without Lord Ripon's clauses relating to examinations, or without some modification of them, it was clear that it would have to be argued in Parliament that the existing arrangements need no alteration. Could this argument be maintained? Is the Medical Council fully agreed upon it?

It is often said that the whole profession considered, when Lord Ripon's Bill was brought before Parliament, that the mode of conducting examinations by the examining bodies was the subject that most urgently called for parliamentary revision. It is not, however, necessary now to revert to the circumstances which led to the withdrawal of the Bill.

But in this the Council will assuredly be unanimous, that it is in the interest of all persons concerned—in the interests of the public, of the Council, of medical teachers, and of students—no longer to delay a final settlement of the principles on which examinations shall be conducted in England, in Scotland, and in Ireland. Some evils have disappeared: some new difficulties have perhaps arisen. Education, examination—nay, even knowledge itself—have greatly altered within the last twenty years. Those who have attended the more than fifty conferences which have taken place in England, in the belief that they were discharging a great public duty, may fairly ask to be released if their labours be not shown to be material for the public interest, or if the apparent benefit in one division of the kingdom should be productive of other and unknown evils through any other division of the kingdom. It is clear that the matter cannot be decided without frank and full discussion both in this Council and in Parliament. The discussion here will be dispassionate, and based upon correct estimates of the present and of the past state of the several licensing bodies, and of the popular sentiment. That sentiment is certainly in favour of making it impossible that nineteen separate examining and licensing boards, with their varied qualities, should coexist. The public are convinced that there are dangers in the continuance of so many modes of entering the profession, and think the system of inspection offers only a cumbrous and fitful check to constant danger. There are not wanting signs that some, both within and without the medical profession, would prefer State-appointed examiners, or an examining board appointed by this Council, not only to the present system of many examining boards—with permissive power to combine—but would even prefer State-appointed examiners to persons appointed by the present universities and corporations in combination. It is well known that the framers of the Act of 1858 expected the permissive principle of combination, under Section 19 of the Act, to be more largely adopted than it has been.

It would ill become me to use any arguments on one side or the other, inasmuch as my function is almost limited to collecting facts for your consideration. Yet I cannot but observe in this relation that it will be a grave misfortune for our generation if it be forced to the conclusion that our ancient medical institutions, hitherto self-administered, must abdicate their functions of guiding the education of our youth. And that is the risk that is run. One Government might give to this Medical Council a task which the corporations decline to execute, namely, the making the national examining boards. Another Government might assign it not to this Council, but to a single person, who, however able, might not possess the combined judgment of the many and eminent minds brought together of necessity by a representative board.

The Lord President, as the Council is aware, has not at present elected to make the formation of a single board compulsory for each branch of the United Kingdom. It is not too much for me to say that, as his Grace hoped for discussion, and for the freest expression of opinion from all who are entitled to be heard, and having referred the Bill to this Council, the question for us to consider is whether union is expedient or requisite. The form in which the proposition is put is not perhaps of much moment for the issue. But it cannot be less acceptable to the various authorities to ask the Government, after discussion, to grant more extended power for good, than to have had to protest against unnecessary interference, and uncalled for dictation for which the Council had not applied.

I cannot help noticing, with regard to those who in 1858 first undertook the working of the Medical Act, with all its conflicting interests,

that while, during the twenty years that the Act has been in operation, in Ireland one licensing body alone has changed its representative, Scotland sends only one of its original members, England sends but two such members, and not a single original nominee of the Crown remains in the Council. It cannot be amiss, therefore, to take the sense of the existing Council in the most unfettered way on the state of the medical examinations in the country, in order that it may fairly face the work of the future.

It would waste the time of the Council if the details of the Bill that has been in the hands of all the members between two and three weeks were even enumerated. The aim of the Bill is, without doubt, to supply all the known deficiencies of the Medical Acts, and, if possible, to adjust the machinery of this Council so that it may not be distracted from its strict work, the regulation of medical education and the watchful care of a great profession, in the public interest.

The principal objects of the Bill (I quote from the Lord President's speech) "are, first, to require a person registered in the *Medical Register* to have both a medical and a surgical qualification; second, to allow the registration of foreign and colonial practitioners; third, to further restrict the assumption by unqualified persons of designations implying qualifications; fourth, to make further provision for the uniformity of the standard in the grant of qualification in the United Kingdom; fifth, to make provision for women similar to that intended to be made by 39 and 40 Vic., cap. 41, commonly called Mr. Russell Gurney's Act; sixth, to make provision for the examination and registration of dentists; seventh, to make provision for the examination and registration of midwives; eight, to make amendments in the Medical Act of 1858 as regards the registers, erasures from the *Register*, the certificates of medical practitioners under the Lunacy Acts, the qualification of medical officers in colonial ships, and other minor matters".

It was truly added by the Lord President, that this measure "deals with a subject of great importance, but one of great complexity, and which, when legislation is proposed in respect of it, requires great consideration in numerous details. The subject is one for which there should be no hasty legislation, and I should hope that by the time the Bill comes on for a second reading, we shall have the benefit of being in possession of the views of all persons in the country who may be interested in its details, and who are competent to give advice on the matter. I hope I need not add that we shall be most ready to give an attentive consideration to all suggestions which may be offered with the object of securing a good and useful measure, and one which will be satisfactory both to the medical profession and the public at large".

Before quitting the consideration of this part of the work of the session, I beg you to excuse me if I seem in any improper way, or indeed in any sense, to be the interpreter of a measure to which the Government has given much thought, which is full of delicate and difficult questions, and which deals with great institutions and important persons.

I need not say that I have no functions in the matter, except, first, to carry out as far as I can your desires; and secondly, in your absence to act to the best of my judgment on your behalf.

The grave anxiety of the Eastern Question has made it difficult to arrange the times and the mode for the introduction and the readings of the Bill in the way best calculated to carry a Bill this session, and to suit the time and convenience of the Medical Council. But that way has been sought—I trust, attained.

Let us hope that we may come to unanimous conclusions as to the changes which may be required in the Bill, and then that it may thus session become an Act with good effect.

This done, might we not hope for the consolidation of all the Medical Acts, with further power if necessary? Thus would be ended the first twenty years of combined effort towards harmonising the work of the time-honoured institutions which have nurtured in Great Britain the science and practice of medicine. Thus would the Council go forward unfettered to accomplish further work, in aid of the great demands made, in many ways, upon a profession, whose aim is so to pierce the secret of all life, that it may strengthen individual and national health, relieve all physical suffering, diminish much social evil, and soothe or avert the inevitable end.

Dr. ANDREW WOOD moved, and it was unanimously resolved: "That the President's Address be entered on the minutes."

Committees.—The following Committees were appointed: *Business*—Dr. A. Wood (Chairman); Dr. A. Smith; Dr. Leet; Dr. Haldane; and Dr. Pyle. *Finance*—Dr. Quain (Chairman); Dr. Pitman; Dr. A. Smith; and Dr. Orr.

Medical Acts Amendment Bill.—A letter was read from the Lord President of the Privy Council, accompanying copies of the Bill, and

asking the President of the Council for any observations which the General Medical Council might have to offer with regard to the Bill.

There were also read copies of a Memorandum by the Royal College of Physicians of London, and by the President and Vice-Presidents of the Royal College of Surgeons of England, stating various objections to the Bill. Appended to the Memorandum of the Royal College of Surgeons were the following resolutions, adopted by the Council of the College, at a meeting held on April 1st:

1. That the report of the President and Vice-Presidents on the Government Bill for amending the Medical Acts be approved, and be entered on the minutes of the Council.

2. That the consolidation of all present licensing authorities into conjoint boards, one for each division of the kingdom, recommended for many years past by the General Medical Council, and accepted by the House of Lords in 1870 as a principle for compulsory legislation, is an object to which the College attaches the highest importance, and for which it has long been exerting itself; that already, by taking part in the settlement of a voluntary joint scheme for England (approved by the General Medical Council), the College has shown its willingness to make all needful sacrifices for that object; that, in the opinion of the Council, the object would not only remain unpromoted, but even the progress already made towards it in this division of the United Kingdom would be seriously endangered, and in all probability be lost, if the Legislature were now to affirm that it leaves the principle of joint examinations for the option of the individual medical authorities.

That, therefore, as regards Clauses 3 and 14 of the present Bill, the College hopes it may not be called upon to surrender any of the independence which it now has in respect of its diploma and examination rules, unless such surrender be in contribution to a general system, which (so far as minimum qualifications are concerned) shall make joint-examinations compulsory for all the divisions of the United Kingdom.

That, further, as regards Clause 14, the College, while recognising the necessity of providing for supervision by the General Medical Council in all the essentials of medical education and examination, would not think it desirable to give to that body the initiative in framing examination rules, either for the respective joint boards, should such exist, or, should such not exist, for the separate authorities.

3. That, as regards Clause 23, the College recommends that the Clause be withdrawn in favour of the less centralised plan of Sir John Lubbock's Bill.

4. That, as regards Clause 24, the College recommends the withdrawal of the Clause, with a view to the subject being dealt with separately from any question of amending the Medical Acts, and mainly on a system of local, rather than of central, responsibility.

5. That, as regards the granting of qualifications to women for entering upon the medical profession, the College approves the giving to the authorities amended powers for optional exercise in this matter, but recommends that the powers be so given as to allow the authorities reasonable discretion to distinguish in their examination rules and diplomas between men and women; provided that the examinations of the two sexes be in the main equivalent for like certificates or diplomas.

6. That, as regards the remaining provisions of the Bill, the College gives general approval, but authorises the President to recommend such minor amendments as he and the Vice-Presidents may find desirable.

7. That the President and Vice-Presidents be instructed to request an interview with the Lord President in order to set before him the views of the Council on his Bill; and that it be an instruction to them, in any such interview, particularly to explain to his Grace the regret which the Council feels, on public grounds, that the Bill does not contain any provision for enforcing joint examinations in each division of the United Kingdom.

A letter to the President from the Chairman of the Medical Reform Committee of the British Medical Association, sent with a copy of the Medical Acts Amendment Bill approved by the Association, and reports of the Medical Reform Committee, and the President's reply, were read.

Dr. HUMPHRY moved the following resolution:

"In 1870, this Council passed the following resolution, by a large majority, and after much deliberation:

"That this Council is of opinion that a joint examining board should be formed in each of the three divisions of the kingdom, and that every person who desires to be registered under any of the qualifications recognised in Schedule (A) to the Medical Act shall be required, previously to such registration, to appear before one of these boards and be examined in all the subjects which may be deemed advisable by the Medical Council; the rights and privileges of the Universities and Corporations being in all other respects the same as at present.

"The Council has subsequently sanctioned a scheme for an Examining Board for England made in conformity with that resolution.

"The Council adheres to the principle of that resolution, and is of opinion that no medical legislation relating to examinations will be satisfactory which does not provide for the formation of an examining board in each of the three divisions of the kingdom, and direct that every person who desires to be registered under the Medical Act shall be required to appear before one of these boards and be examined in the subjects which may be deemed necessary by the Medical Council."

Sir JAMES PAGET seconded the motion, which was opposed by Dr. Andrew Wood and Sir Dominic Corrigan, and supported by Dr. Rolleston.

The discussion was adjourned.

On Thursday, the discussion on Dr. HUMPHRY's motion was resumed. It was supported by Dr. Rolleston, Mr. Teale, Dr. Sorrar, Dr. Quain, Sir W. Gull, and Dr. Pitman; and opposed by Sir D. Corrigan, Dr. Haldane, Mr. Turner, Dr. A. Smith, and Mr. Macnamara.—The discussion was again adjourned.

BRITISH MEDICAL ASSOCIATION.

EXTRAORDINARY GENERAL MEETING.

[In last week's JOURNAL, owing to the great length of the report, we gave only a brief summary of the proceedings of the last part of the Extraordinary General Meeting at Birmingham. We now in due course present the fuller report.]

The PRESIDENT said that, as the gentleman who had undertaken to move in relation to the question of the privileges of lady members was ill, and the hour was late, the subject would be deferred until the annual general meeting.

Mr. O. PEMBERTON stated that the decision of the President had come upon him by surprise. He contended that something should be done between this time and the annual meeting in regard to the ladies' question. He moved: "That a subcommittee be appointed to consider the question of the privileges of lady members; that such subcommittee be empowered to take counsel's opinion; and that they report to the next annual meeting."

Mr. LISTER held that it would conduce very much to the interests of the Association, if some steps could be taken in the interval between this time and the annual meeting, so as to prevent the matter from being presented before the Association, at the next annual meeting, in a crude form. He seconded the proposal of Mr. O. Pemberton.

Mr. SAMPSON GAMGEE contended that the question should be left in the hands of the Committee of Council. The meeting had just expressed their entire confidence in the Committee, and there was not the slightest reason for taking this question out of their hands. It was, he urged, very desirable that legal opinion should be taken in the matter, and he moved, as an amendment: "That the Committee of Council be requested to take legal opinion upon the subject of the privileges of lady members of the Association."

Mr. VOSE SOLOMON seconded the amendment.

Mr. PEMBERTON said that the only reason he had for objecting to the amendment was, that the Committee of Council had been hitherto very reticent in taking steps in regard to the presence in the Association of lady members, until the question was raised by the expressions of members so distinguished as Sir William Jenner, Dr. Bennett, Mr. Lister, and others. Even if he found himself in a minority, he should press his motion for an independent committee.

Dr. WADE held that the motion displayed a lack of loyalty to the Committee of Council, and he entirely repudiated the idea set forth that the Committee of Council had shown a want of energy in dealing with the question. Neither had that body committed itself to any particular side, as was indicated in the motion by the subject being taken out of their hands, as Mr. Pemberton proposed. The first lady elected to the Association (Mrs. Garrett Anderson) was elected by the Metropolitan Counties Branch, the Branch of which the gentlemen who were prominent in opposing the presence of lady members in the Association were members. [Hear, hear.] They were members of that Branch, moreover, at the time of Mrs. Anderson's election to membership. [Hear.] Some years elapsed, and no exception was taken during those years to the membership of Mrs. Anderson; nor had the Committee of Council said one word in reference to this membership—no word of abrogating it, no word in opposition to it. Thus, tacit assent was given to the action of the Metropolitan Counties Branch in electing Mrs. Anderson. [Hear.] The second lady member (Mrs. Hoggan) applied to the Committee of Council for election; and the

Committee of Council, taking into consideration the fact that the first lady member had been elected by the largest Branch in the Association, and the fact also that the election had been agreed to tacitly by the Association, elected the second lady, and he thought rightly. At the Edinburgh meeting, the question as to the presence of lady members was first raised, on the motion of Mr. Pemberton, seconded by Dr. Marshall. The result of this was, that the General Secretary was directed to take the votes of the members of the Association by circular upon the question of the admission of lady members, and to report the result to the next annual meeting. Up to the time when that vote was taken, the Committee of Council had, of course, no cognisance of the feeling and views of members; the Committee of Council could not tell in what way the vote would result, and they could not propose any by-law on the subject, as notice had to be given of any proposed new by-law. Then, too, the Committee of Council supposed that the gentlemen who had brought forward the subject, and had taken it up with much spirit, would themselves give notice of any proposed by-law which they would desire to see carried in accordance with the result of the vote. [*Hear.*] So far, therefore, from the Committee of Council showing any neglect in the matter, it was Mr. Pemberton, and his colleagues who had brought the matter forward in the first instance, who had failed in their duty in not bringing the subject before the Association at the annual meeting following the vote, and in not asking the Committee of Council to bring it forward. Mr. Pemberton and his colleagues were quite within their rights in introducing the subject at the Edinburgh meeting; but with the exercise of their right there was the duty of proceeding with the question; and, when they had obtained the vote, they should either have proposed a by-law themselves, or have asked the Committee of Council to do so. [*Hear.*] Under these circumstances, to appoint a special subcommittee to deal with the subject, and to take the matter out of the hands of the Committee of Council, would be to pass a slight upon the Committee of Council, which that body was in no way deserving; and he trusted that the amendment would be accepted.

Dr. EASTWOOD drew attention to the fact that the Committee of Council, on his proposal, seconded by Dr. Grigg, had agreed to the following resolution: "That the Committee of Council is of opinion that women should not be admitted as members of the British Medical Association, and that a by-law to that effect be submitted to the annual meeting." The present meeting had not the power to deal with the question to the extent of passing a by-law, and so the Committee of Council had referred the point to a subcommittee. Thus, the Committee of Council had not been in any way remiss in the matter, but had acted upon the subject when it was brought before them, and as soon as they had seen any necessity for action. He contended that those who had acted with the mover and seconder of the resolution at the Edinburgh meeting were responsible for not acting up to their convictions, in not bringing forward any proposal for a by-law to meet the circumstances under discussion when the vote of the members had been taken under their own proposal. They had, therefore, condemned themselves in not bringing forward the by-law, and there was no necessity for the proposed subcommittee external to the Committee of Council, as the Committee of Council had committed themselves to the framing of a by-law to meet the circumstances in which the Association was placed by the admission of the lady members.

Dr. BORCHARDT said the motion and amendment both spoke of the "privileges" of the lady members. He objected to the word "privileges"; for he conceived that the ladies, being *de facto* and *de jure* members of the Association, had rights. The legal question involved was a very immaterial one by the side of the fact that the very honour of the Association was involved in its action.

Mr. PEMBERTON rejoined that he and those with him considered that the ladies had no rights in the Association.

Dr. BORCHARDT added that Mr. Pemberton might think as he had stated; but that question had yet to be decided. Then, too, there were those who thought that, if the ladies had no legal rights in the Association, it would serve the best interests of the Association better not to attack those who had become members. The question ought to be considered in the fulness it deserved, and he should move that "rights" should be substituted for "privileges" in whatever resolution should stand first before the meeting.

Mr. S. GANGE said he would substitute the word "rights" for "privileges" in his amendment.

Mr. LAWSON TAIT submitted that it was not competent for the Association to take away the "rights" of any members, or to discuss if those rights could be taken away, and that therefore the amendment should not properly be put.

The PRESIDENT ruled that the amendment was in order.

A vote was taken by show of hands. This was not decisive; and

then a division was called for, in the midst of which many members left. The division gave 40 for the amendment, and 38 against it. The amendment was then declared to be carried.

MEDICAL TEACHING AT CAMBRIDGE.

THE Study Syndicate of the University of Cambridge lately referred to the Board of Medical Studies the important question raised in their fourth report, as to whether it is "desirable to attempt to found a complete Medical School in Cambridge, so as to make it possible for a student to complete his whole medical course here", or whether it is "better for all concerned, whilst making the teaching at Cambridge as perfect as possible in the scientific subjects which are the basis of medicine, to leave students to carry on elsewhere the greater part of their clinical studies, and most of what relates directly to the practice of medicine". They have received the reply which they append, and which they think deserves the careful consideration of the Senate.

The Board of Medical Studies have now considered the question referred to them by the Vice-Chancellor on behalf of the Studies Syndicate, and they have returned an extremely important and satisfactory reply.

They consider that it is inexpedient that students should, as a general rule, complete their whole professional education at any single medical school, and that it is therefore desirable that students should pursue their studies away from Cambridge for a year or more before commencing practice, either before or after their final M.B. examination. They believe, however, that it would be in most cases advantageous to students to carry their medical studies in Cambridge further than is usually done at present, and in some cases as far as the final M.B. examination; and they are, therefore, of opinion that the University should provide systematic instruction in all the subjects necessary for a medical degree, as is done at other Universities.

In order that this may be carried out satisfactorily, they think that the University should provide—

I. A Professor of Pathology. There seems to be no reason, they observe, why the study of pathology should not be most thoroughly and effectively carried on in Cambridge. For this purpose, the University should secure the services of the ablest man that can be obtained, who should devote his whole time and energies to his subject. To ensure this, he ought to be debarred from the private practice of medicine, though it would be most desirable that he should hold a hospital appointment. Under these circumstances, they recommend he should have a stipend of not less than £700 a year. He would ultimately require a Demonstrator.

II. A Professor of Surgery. As he need not be debarred from the private practice of surgery, they consider that a stipend of £300 a year would probably be found sufficient.

III. Systematic teaching in (1) Midwifery and the diseases peculiar to women; (2) Medical jurisprudence; (3) Sanitary science; (4) Mental diseases. This might probably, they think, be provided for £700 a year, or thereabouts; but some, at any rate, of these subjects might ultimately be represented by eminent men upon whom the University might confer the title and status of a professor.

IV. Systematic Clinical Teaching. This is already supplied to a considerable extent by the physicians and surgeons to Addenbrooke's Hospital. It is, however, not definitely connected with the University, or subject to academical regulations. The University might, they consider, with advantage appoint (1) One or more Clinical Lecturers in Medicine; (2) One or more Clinical Lecturers in Surgery; (3) An Assistant Teacher of Medicine and one of Surgery.

It would be the special duty of the two Assistant Teachers to give systematic elementary instruction in Clinical Medicine and Surgery to the younger students. Stipends of £100 a year each would probably suffice for the present for these lecturers and teachers. Other special subjects, such as Ophthalmic Surgery, ought to be provided for in a Medical School which aims at completeness. Arrangements for teaching them might, however, be trusted to grow up with the growth of the School.

This report is signed by Dr. G. E. Paget; Dr. G. M. Humphry (only as regards Nos. I and II and part (3) of No. IV); Dr. P. W. Latham; Dr. J. B. Bradbury (except provision that professor of pathology should not be allowed to practise); Dr. G. D. Liveing; Mr. Coutts Trotter; and Mr. William Garnett.

We feel sure that the profession at large will welcome this timely, thoughtful, and well-arranged scheme for bringing the University of

Cambridge into satisfactory position in respect to its duties in educating men for the great profession of medicine. It will, we trust, have the collateral effect of shaming Oxford out of its present systematic and determined neglect of that duty.

THE HARVEY TERCENTENARY MEMORIAL FUND.

WE are pleased to learn that, in response to the appeal for further donations to the above Fund, which we published a short time since, the following subscriptions have been promised or received.

£10 10s. each: Metropolitan Counties Branch of British Medical Association, Dr. Walter Moxon, and the Marquis of Tweeddale.

£5 5s. each: Mr. W. Allingham, Dr. R. L. Bowles, (second donation), Mr. S. W. Bradnack, Mr. S. Eastes (second donation), Dr. G. S. Jenks, Mr. G. M. Scholey (second donation), and Dr. Wickham Legg.

£5 each: Boxes at Canon Jenkins's lecture, Mr. R. Benyon (per Dr. Bowles), Mr. H. A. Brasse, M.P., Mr. F. D. Brockman, a Friend (per Dr. Quain), Dr. F. B. Hawkins, Miss Phillips (per Dr. Bowles), Mr. Russell Scott, and the Duke of Westminster.

£3 3s. each: The Earl of Glasgow (per Dr. Bowles), Alderman D. H. Stone, Mr. W. F. Teevan, and Dr. Hermann Weber.

£2 2s. each: Mr. C. Bader, Mr. John Ball (per Dr. Bowles), South Wales and Monmouth Branch of British Medical Association, Dr. W. C. Begley, Mr. H. B. Bradley, Dr. Michael Foster, Dr. E. Furley, Mr. John Hart, Mr. F. G. Hentiques, Canon R. C. Jenkins, Dr. T. Jervis, Mr. James Kelcey, Dr. Morell Mackenzie, Dr. W. J. K. Millard, Dr. Withers Moore, Professor W. Odling, F.R.S., Mr. E. Saunders, Dr. W. E. Springall, Mr. Frederick Symonds, Rev. C. J. Taylor, Mrs. Upton (per Dr. Bowles), Dr. G. Vaughan (per Dr. Bowles), Dr. Gerald F. Yeo.

£2: Mr. W. Deedes, M.P.

£1 1s. each: Sir J. Alderson (per Dr. Bowles), Dr. J. B. Allan, Dr. T. C. Allbutt, Dr. F. Beach, Mr. R. W. Boarer, Rev. C. Bosanquet, Dr. J. H. Bridges, Dr. Walter J. Bryant, Mr. Frank Buckland, Dr. T. Buzzard, Mr. E. Carver, Dr. W. Cholmeley, Mr. O. Clayton, Dr. W. F. Cleveland, Mr. T. Cobb, Mr. J. B. Collins, Dr. S. Coupland, Dr. T. Davies-Colley, Dr. J. Hall Davis (second donation), Miss Day (per Dr. Bowles), Dr. J. B. Ditchfield, Dr. Allan Duke, Mr. C. F. Du Pasquier, Mr. F. Eastes, Dr. John Easton, Dr. R. Farquharson, Dr. W. Farr, F.R.S., Mr. John Fitz (second donation), Dr. T. B. E. Fletcher, Dr. J. G. Glover, Mrs. James Green, Mr. J. Hackney, Dr. T. Hawksley, Miss Hunter (per Dr. Bowles), Rev. E. Husband, Mr. Sydney Jones, Mr. W. H. Lamb, Dr. J. C. Langmore, Mr. W. B. Langmore, Mr. E. H. Lushington, Mrs. Joseph Maudslay, Dr. R. McDonnell, Dr. A. Meadows, Dr. A. G. Medwin, Mr. A. Medwin, Mr. J. C. Merriman, Dr. S. Mitchell, Dr. T. Moffatt, Mr. John Morgan, Dr. T. Morton, Mr. Albert Napper, Miss Ogilvie, Hon. G. Pepys, Mr. C. J. Pinching, Dr. W. L. Purves, Mr. J. Reid (per Dr. Bowles), Dr. F. T. Roberts, Dr. C. Royston, Mr. J. Rushforth, Lord Arthur Russell, M.P., Dr. H. J. Sanderson, Dr. G. H. Savage, Mr. L. Simon, sen. (per Dr. Bowles), Mr. Thomas Spencer, Mr. N. H. Stevens, Dr. J. Sherwood Stocker, Mr. H. S. Taylor, Dr. G. D. P. Thomas, Mr. R. C. F. Thomas, Mr. W. P. Thornton, Dr. J. C. Thorowgood, Mr. F. Toulmin, Dr. T. W. Trend, Dr. J. Underwood, Mr. R. E. Unthank, Mr. Francis Vacher, Mr. Osman Vincent, Mr. W. W. Wagstaffe, Dr. T. Whipple, Dr. H. C. Wildash, Dr. C. T. Williams, Dr. E. Williams, Dr. A. Wiltshire, Mr. G. L. Wood, and Madame Zaffé.

£1 each: Captain H. Alcock, Mr. John Dugdale, and Mr. E. Lowdell.

10s. 6d. each: Dr. G. M. Bacon, Mr. G. Brown, Mr. T. M. Butler, Dr. R. K. Casley, Mr. C. W. Chaldecott, Mr. G. Fisher, Mr. D. J. Francis, Dr. John Jackson, Dr. Norman Kerr, Dr. H. G. Knaggs, Dr. John Morton, Mr. A. A. Napper, Mr. R. J. Pye-Smith, Mr. T. J. Schollick, Mr. C. J. Sells, Dr. J. R. Stedman, Mr. J. H. Sutcliffe, Dr. W. H. Taylor, and Dr. T. J. Walker.

10s. each: Dr. H. Harris, Mr. J. M. Hind, Mr. J. W. Howard, Mr. A. E. T. Longhurst, Mr. G. F. Naylor, Mr. R. Paramore, Mr. James Rose, Dr. J. C. Steele, Mr. Samuel Watson, and Mr. J. G. Westmacott.

During the past week, the new subscriptions promised to or received by the London honorary secretary amount to just £100. The Councils of the medical societies have further recommended their respective Societies to contribute to the Fund; but this cannot of course be done until the next meetings in either case. We learn that the Earl of Radnor has kindly expressed his readiness to grant a site of land at Folkestone for the purposes of the statue. All things point, in fact, to an early realisation of the wishes of those who have the project at heart. But in order to accomplish their purpose they cannot relax their efforts to obtain further funds; and they ask us again to request the members of the profession who have not hitherto contributed to this object to kindly send their donations at once to either of the hon. treasurers (Sir George Burrows, Bart., or Mr. Prescott Hewett), or to either of the hon. secretaries (Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone), or to pay them into the account of the Harvey Tercentenary Memorial Fund, at the Western Branch of the Bank of England, Burlington Gardens, London, W. Subscriptions from five shillings upwards will be very acceptable.

NOSOLOGICAL RELATION OF PROGRESSIVE PERNICIOUS ANÆMIA.
—A. Wernich (*Deutsches Archiv für Klin. Med.*, Band xx) comments on the great similarity in the symptoms and pathological changes in progressive pernicious anæmia and beriberi, and comes to the conclusion that progressive pernicious anæmia, cachectic dropsy, beriberi, scurvy, and chlorosis belong to a family of constitutional diseases of nutrition.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 17th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., March 25th, 1878.

SOUTHERN BRANCH: DORSET DISTRICT.

THE next meeting will be held at Bournemouth, on Wednesday, April 17th, 1878.

The business meeting will be held at the Criterion Hotel, at 4 P.M.

Subject for Discussion: *Post Partum* Hæmorrhage and the Means of Preventing it.

Dinner at 6 P.M. Charge 5s. each, exclusive of wine.

Members intending to be present are requested to notify the same to Mr. NUNN, Maplestead, Bournemouth, on or before April 13th.

WM. VAWDREY LUSH, M.D., Weymouth, } *Hon. Secretaries.*
C. H. WATTS PARKINSON, Wimborne, }

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held in the Board Room of the Guardians, at Hexham, on Thursday, April 25th, at 2 o'clock P.M. The following papers, etc., have been promised.

1. Drs. Stainthorpe and Farmer: Case of Aortic Aneurism in a boy aged 13.

2. Drs. Stainthorpe and Farmer: Case of Contracted Knee-Joint, recently operated on by division of the Tendons and Forcible Extension.

3. Dr. Byrom Bramwell: On the Differential Diagnosis of Aortic Aneurisms and other Intrathoracic Tumours, with cases and specimens.

4. Dr. E. C. Anderson: On Leucine and Tyrosine, and their Diagnostic Value in Disease, with cases.

5. Dr. James Murphy: Exhibition of Tarnier's Obstetric Forceps.

6. Dr. James Murphy: On Puerperal Convulsions.

7. Dr. Philipson: Notes of a Case of Hæmaturia.

Dr. J. C. Murray: Case of Difficult Instrumental Labour for Deformed Pelvis.

Dr. M. McW. Bradley: *Post Partum* Hæmorrhage; with notes of three cases successfully treated by compression of the Abdominal Aorta.

Dinner at the White Hart Hotel at 4.30 P.M.; charge six shillings, exclusive of wine.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, April 2nd, 1878.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of the Session will be held at the York House, Bath, on Thursday, April 25th, at 7.15 P.M.; HENRY MARSHALL, M.D., President.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, April 1st, 1878.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

THE second and last meeting of the twenty-first session, 1877-78, was held at Rochester on March 19th; Dr. BURNS, R.N., in the Chair.

The *Honorary Secretary* was re-elected.

Meetings.—No place of meeting for next session was appointed, but permission was accorded the *Honorary Secretary* to ascertain the views of members respecting evening meetings for discussion of medical subjects and one afternoon meeting and dinner annually.

New Members.—Two gentlemen were elected to the Association, viz.: Dr. Veale, Surgeon-Major, Chatham; and William C. Gasteen, M.B., Surgeon Army Medical Department, Chatham.

The late Mr. Fry.—The death of Frederick Fry, Esq., F.R.C.S., of Maidstone, was announced by the Honorary Secretary, and sorrow was expressed by the members present. Mr. Fry was one of the promoters of the district meetings.

Medico-Ethical Committee.—Mr. R. I. Nisbett of Gravesend was elected a member of the Medico-Ethical Committee, *vice* Mr. C. J. Pinching, resigned.

The Balance of Subscriptions existing in May 1870, when the Branch undertook to pay the district expenses, was ordered to be retained by the Honorary Secretary until further directions.

Papers.—The following papers were read. 1. A series of six cases of Acute Necrosis. By A. W. NANKIVELL, F.R.C.S. 1. Boy aged 9; July 16th, 1873; necrosis of both tibiae, of five months' duration; cause—wet by snow; recovery after operation. 2. Girl aged 13; May 1874; necrosis of right fibula, of two weeks' duration; cause—fall; recovery after operation. 3. Boy aged 15; July 25th, 1877; necrosis of right radius, of three months' duration; cause—erysipelas, so-called; recovery after operation. 4. Boy aged 13; November 14th, 1877; necrosis of left leg and knee, of three weeks' duration; cause—fall; amputation for knee-joint disease: recovery. 5. Boy aged 7; January 30th, 1878; necrosis of left tibia, of two months' duration; cause—fall; recovery after operation. 6. Boy aged 9; January 16th, 1878; necrosis of right femur, of seven weeks' duration; cause—wet; recovery after operation, but some dead bone remains for future interference. Mr. Nankivell insisted on the necessity of early diagnosis and of free deep incisions in the first stage.

2. A case of Disruption of the Sacro-Iliac Synchondrosis with Displacement of the Sacrum forwards without Fracture, was read by J. THORESBY JONES, Esq.

Dinner.—Twelve members and visitors adjourned to dinner at the Bull Hotel.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE sixty-sixth meeting was held in the Council Chamber at Dover on March 21st, 1878; present, Dr. ROBINSON in the chair, and twenty-five members.

Communications.—1. Mr. CLEMENT WALTER communicated a case of Hydrophobia.

2. Mr. TEEVAN (London) read a paper on the Importance of an Early Diagnosis of Stone in the Bladder.

3. Mr. WACHER brought forward a case of Foreign Body in the Female Bladder.

4. Mr. COKE related a case of Compound Displacement of the Shaft of the Tibia from its Lower Epiphysis.

Dinner.—The members (twenty-four in number) afterwards dined together.

YORKSHIRE BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Infirmary, Rotherham, on Wednesday, March 27th, 1878.

Communications.—The following communications were read.

1. Dr. SHANN: A Case of Tumour of the Brain.
2. Dr. CLIFFORD ALBUTT: Cases of Pernicious Anæmia; Case of Pill swallowed into Left Bronchus.
3. Dr. EDDISON: Treatment of Hydatid Cysts.
4. Mr. SNELL: A Case of a Foreign Body imbedded in the Fundus Oculi; Case of a Foreign Body in an Eye for Twenty-nine Years.
5. Dr. THOMAS: A Case of Diphtheria.
6. Mr. KNIGHT: A Case of Tumour of the Fore-arm.
7. Dr. BRAITHWAITE: Two Cases of Inversion of the Uterus; Case of Relaxation of the Pubic Symphysis.

Dinner.—After the meeting, thirty-three members dined at the Ship Hotel.

SOUTH OF IRELAND BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held in the Royal Cork Institution, on Saturday, March 30th: the President in the Chair.

The Secretary.—The following resolutions were passed unanimously.

1. Proposed by Dr. O'FLYNN and seconded by Dr. A. O'CONNOR: "That, in consequence of the removal of Dr. Ringrose Atkins, our present Secretary, to Waterford, Dr. P. J. Cremen be appointed to act as joint Secretary with him for the Cork district."

2. Proposed by Dr. H. M. JONES and seconded by Dr. P. J. CREMEN: "That the thanks of the Branch be conveyed to Dr. Ringrose Atkins for the services he has rendered to it in his capacity as Secre-

tary, and for the able manner in which he has discharged the duties of his office; and while we congratulate Dr. Atkins on his well deserved promotion, we desire to express to him our regret at his departure from this city, though we are happy to find that he still retains his connection as Secretary of our Branch."

Admission of Women to the British Medical Association.—After a discussion on the subject, a general opinion was expressed adverse to the admission of women to the Association, and to their presence at its meetings.

METROPOLITAN COUNTIES BRANCH: GENERAL MEETING.

AN adjourned general meeting of the Metropolitan Counties Branch was held at the house of the Medical Society of London, 11, Chandos Street, W., on Wednesday, March 27th, at 8 P.M.: S. W. SIBLEY, Esq., President, in the chair.

The Harvey Tercentenary Fund.—A letter was read from the Committee of the Harvey Tercentenary Fund, asking for the support of the Branch. The PRESIDENT announced that the Council had just voted £10 10s. from the funds of the Branch; and he hoped that the members generally would add their names to the subscription-list.

PROVIDENT DISPENSARIES.

The discussion on Mr. Holmes's paper on Provident Dispensaries, adjourned from the meeting held on February 27th, was resumed.

The PRESIDENT gave a brief summary of the proceedings of the previous meeting; remarking that what was most desired was information as to the practical working of provident dispensaries.

Mr. HOLMES moved the following resolutions:—

"1. That, in the opinion of this meeting, no patients ought to be admitted gratuitously at the out-patient departments of hospitals, except for medical reasons, shown by the recommendation of the patient by some medical authority.

"2. That the wage-earning classes, who are above the necessity of gratuitous out-patient relief under the Poor-law, would obtain more efficient medical attendance by paying the proper subscription to a provident dispensary than they now have at the free out-patient departments of hospitals.

"3. That, if freed from the competition of the free hospitals and dispensaries, provident dispensaries might be founded in London, on principles fair both to the patients and to their medical attendants.

"4. That the out-patient departments of public hospitals might be connected with the institutions charged with the medical care of the working classes, with great advantage to the public health and to medical education."

He said that what was wanted was not so much a discussion on general principles, regarding which there was much agreement, as information with regard to the practical working of the dispensaries, and to any amendments that might be necessary.

Dr. GRIGG seconded the resolutions.

Dr. BURNEY YEO proposed as an amendment to the first, second, and fourth resolutions—

"That this meeting is of opinion that, in hospitals to which medical schools are attached, the cases of all applicants for admission as out-patients should be submitted to a preliminary investigation by a competent medical authority, who should determine, exclusively on medical grounds, whether the cases were suitable for admission to the out-patient department of the hospital in question or whether they should be referred to a poor-law or a provident dispensary."

He agreed with much that had been said by Mr. Holmes in his paper, and was not opposed to the formation of provident dispensaries; but he objected to their proposed relation to the hospitals and medical schools. How was it that the gentlemen engaged in the out-patient departments of the hospitals had not been found willing to co-operate in the provident dispensary movement? The answer was not difficult. There had been a tendency to exaggerated statements as to the way in which the out-patient work was done. Mr. Holmes had spoken of the advice given in the out-patient departments as being hurried and worthless. Dr. Gairdner of Glasgow had stated that, in some hospitals in London, five, three, or two minutes was all the time that could be given to the investigation of a serious case. He could not help thinking that such erroneous statements had been gathered from the publications of the promoters of provident dispensaries. He had been for some years engaged in out-patient work, and, from the observations which he had made, he believed the statements of Dr. Gairdner and Mr. Holmes to be quite inconsistent with fact. Could it be supposed that the medical officers of the out-patient departments were men

capable of making blind guesses and writing useless prescriptions? No men in the profession did their work more conscientiously. Another exaggeration was as to the class of patients who attended the out-patient rooms. He could not comprehend the statements which had been made, that ladies went to the hospitals in their servants' dresses in order to get advice, this advice being declared to be worthless. Where was the information gained? Supposing that some persons who could possibly pay for medical advice did attend the hospitals, the circumstances to which they would have to submit must be considered—having, for instance, their chests percussed by several athletic students. The proposed connection of provident dispensaries with the general hospitals was impracticable. Either the out-patient departments must be made into provident dispensaries; or the lay and medical managers of the hospitals must be asked to allow an important department to be under the direction of persons over whom they had no control. Mr. Holmes had said that the connection of provident dispensaries with the hospitals would give the students opportunities of visiting the patients at their own homes. But they would not do so unless compelled to do so by the regulations of the examining boards. Very great difficulty was found in getting students to attend midwifery cases beyond the number required for their certificates. In every hospital, there should be a well qualified paid medical officer who should examine all applicants, selecting those fit for the out-patient department, and directing those who were unfit as to the manner in which they might obtain advice at provident or poor-law dispensaries.

Mr. S. S. ALFORD seconded the amendment *pro forma*. He had had twenty-eight years' experience of the working of provident dispensaries, and would give the results of his observations. At Haverstock Hill, there was a successful provident dispensary which had been established thirteen years, numbering nearly five thousand members. Four medical officers were now connected with it. The management was in the hands of a committee elected from the honorary subscribers, and including the medical officers *ex officio*. The free members paid 4d. a week for a family including husband and wife and all children under fourteen, with another 1d. a week for all above fourteen. For each confinement, 15s. was paid, to which 5s. was added from the honorary fund. Wives might join with their families if their husbands belonged to a club for 3d. a week; widows and single women paid 1d. a week; single men above eighteen 1½d. a week. No free members could obtain medical treatment until three months after admission, unless they paid an entrance fee of 5s. and three months' subscriptions. The resident dispenser also acted as assistant-secretary, receiving the payments and keeping the books. The honorary fund, amounting to about £230 a year, paid for the rent, dispensers' and porters' salary, printing, and all incidental expenses. The payments of the free members, which amounted in 1877 to £732, including £107 for midwifery, were devoted to the payment of the drugs, the remainder being divided amongst the medical officers. It was intended to pay for quinine and cod-liver oil from the honorary fund; but it had not been sufficient. In 1876, £575, and in 1877, £648, was divided amongst the then three medical men, besides £8 to the midwife. The working classes largely availed themselves of the dispensary. Mr. Alford gave a short history of the origin of provident dispensaries in his neighbourhood. In 1849, a dispensary was established with the assistance of the late Mr. Smith of Southam, the father of provident dispensaries; but it failed through the opposition of the supporters of a free dispensary in the neighbourhood, and from the secession of several of the medical attendants. In 1865, a provident dispensary was again started, and its success justified the expectations formed. Last year, one of the medical men received £275 as his share. Efficient management was very important; correctness in receiving the numerous small payments, and keeping a close supervision on these payments, was essential to success. How far provident dispensaries and hospitals could be got to work together, by sending the worst and most marked cases to the hospital in these days of intelligent general practitioners, it was difficult to see. He was sure that well managed provident dispensaries were certain to succeed. They would have an elevating influence on the working classes; and would well pay the medical man. With proper care, none need be allowed to join who ought not to do so, and thus the general practitioner would not be injured; certainly, his books would be freed somewhat from bad debts. In the Haverstock Hill Provident Dispensary, the free members were limited to persons receiving less than 30s. a week; this had since been raised to 40s. in consideration of the increased price of provisions, etc. By the establishment of provident dispensaries, the working classes would secure prompt and efficient medical attendance; good drugs; no time would be wasted by waiting at hospitals; they would suffer no degradation in taking what they could well pay for; and above all, would have no long doctors' bills and county court summonses and judgments hang-

ing over their heads. Therefore, as a real benefit to the working classes, and no loss, but a positive gain, to the medical profession, he strongly recommended the establishment of provident dispensaries.

SIR CHARLES TREVELYAN wished to make a few observations. The out-patient departments of hospitals had been formed in order to provide for the medical treatment of the people. He understood, however, that the increased attendance led to expenditure of the strength of the patients through delay in the waiting-rooms, the communication of infectious diseases, and want of sufficient time to attend properly to each case. The congestion of the department must be diminished; and it had to be considered on what principle this should be done. The first idea was that a classification should be made according to the pecuniary circumstances of the applicants; but further consideration showed that it must be on medical grounds. Hospitals were intended for serious cases; while less severe illness should be provided against by persons as a part of their ordinary expenditure, so that they might be attended at provident dispensaries in their neighbourhood, or at their own homes, where ample time could be given for investigation and they might select their medical attendants. The beneficial influence of the presence of medical men in the homes of the people would be inestimable. There had been a movement in favour of trained nurses. This might become only another means of pauperising; but if the nurses were connected with provident dispensaries, the work could be done efficiently without leading to pauperism. A provident dispensary was like an assurance institution, except that the advantages were received during life instead of after death. Their advantages to medical men were that small accounts were avoided, and no bad debts contracted. As to actual payments, they were very liberal at Northampton, Derby, and some other places; at Camberwell, in 1876, they amounted to £819; at Haverstock Hill to £648 in 1877; at the Royal Pimlico Dispensary to £369 in 1876. If the system had fair play, the amount would be much greater. The clubs were an imperfect and crude form of provident dispensaries; they excluded women and children, who required care of their health even more than the men. The most perfect example of the junction of the provident system with a general hospital was presented by the Royal Albert Hospital at Devonport. Dr. Nankivell had succeeded in getting the provident system adopted in the Torbay Infirmary; and the same thing had been done in West Bromwich, Guildford, and other towns. In London, there were three provident dispensaries in the neighbourhood of St. George's Hospital. Each hospital in London should be the centre of a system of provident dispensaries, sending to them the trivial cases and receiving in return the more important ones. The medical officers of each general hospital should be the consulting officers to all provident dispensaries in the district. It was not necessary that the hospitals and the dispensaries should interfere with each other; they might work in co-operation. With regard to the charge of exaggeration raised by Dr. Yeo, numerous medical men had expressed dissatisfaction at being obliged to attend to the patients in a perfunctory way. He had also been long ago informed of cases in which persons who could well afford to pay attended the out-patient departments. He thought Dr. Yeo's amendment unnecessary.

Dr. JOSEPH ROGERS said that Dr. Yeo's statement as to the manner in which the duties of the medical officers were performed could not be correct, if the figures given each year as representing the number of patients attended in the hospitals were to be relied on.

SIR RUTHERFORD ALCOCK said that the subject under discussion was one in which he had taken much interest. Dr. Yeo's statements had been very effectually met. As to provident dispensaries, there were two great difficulties. There was the danger of receiving patients who could pay their medical men; and, on the other hand, many went to gratuitous dispensaries who ought to go to provident dispensaries. It was difficult to steer between these two difficulties. The amount of wages was a very uncertain guide. A man earning thirty shillings a week, and having a sick wife, was as much an object of charity as one who had twenty shillings without such incumbrance. The great question was, whether the out-patient departments of hospitals were overcrowded, and whether the poor had proper attendance in the hospitals. He must say that the argument was much against the present hospital system. It was not possible to attend to a patient in one or two minutes. There was a general complaint that the number of patients was too great for the medical officers. He did not think that the medical officers of hospitals ought to be expected to spend their time in seeing fifty or more trivial cases in a day. The medical profession had a strong interest in having the system readjusted on a better principle. Instead of the hospitals and provident dispensaries being antagonistic, their co-operation would conduce to the benefit of the patients.

Mr. H. C. BURDETT spoke of the sums divided among the medical

officers at some of the provident dispensaries. In Manchester, in 1874, fifty medical men divided £2,000 raised from 100,000 members. In Northampton—where the limitation of the staff created some dissatisfaction among other members of the profession—nearly £2,000 had been divided in one year among three medical men, one of them receiving as much as £1,200. As to Dr. Gairdner's statements, no doubt he had a foundation for them. At St. Thomas's Hospital, under a system of selection, the number of cases in a year had been in three years reduced from 60,000 to 20,000. His view was that the additional 40,000 must be put down as trivial cases, or casualties. At Guy's Hospital, the applicants were examined first by the house-surgeon, and this year one-half of those applying as out-patients had been rejected. Would it not be possible to combine the resolutions and the amendment? Without unanimity, it would be impossible to get a system that would work. He would suggest a conference of the representatives of provident dispensaries and of hospitals, and the appointment of a joint-committee from both sides, who might consider Mr. Holmes's proposals. The plan which had been followed in Manchester since 1873 was a valuable one. Severe cases were sent from the provident dispensaries to the infirmary; and, instead of the provident dispensaries interfering with clinical teaching, the Manchester School of Medicine had risen to the first place among the provincial schools. He wished that the provident dispensaries could altogether wipe out the free dispensaries; the latter encouraged improvidence by the way in which tickets were issued.

Dr. SHRIMPTON thought that the object of the nursing association had not been understood. He believed that it was capable of rendering great service to the provident dispensaries, by supplying nurses who could be called on by the medical men to attend the patients of these institutions just as in the case of private patients. The promoters of the nursing association were anxious to act with all existing institutions, and to enable the nurses to live on their own resources.

Mr. JABEZ HOGG thought that the abuse of the out-patient departments must be admitted by all who had had experience of it. It was impossible for the medical officers to do their duty; and the reason why so few of them acted with the promoters of provident dispensaries was that, if they did so, they rendered themselves obnoxious to the managing bodies of the hospitals. In twenty-seven years' practice at an ophthalmic hospital, he had often met with patients who were able to pay: for example, an owner of house property and the manager of a provincial bank. In the Dispensary for Skin-diseases, managed for many years by Mr. Hunt, the patients never objected to pay one or two shillings.

Dr. R. LEE said that an important question was the extent to which the interests of general practitioners would be affected by the provident dispensaries. The only speaker on this subject had been Mr. Alford, who was strongly in favour of provident dispensaries.

Dr. MORTON said that, unless care were taken, the provident dispensaries might do serious injury to general practitioners. This, however, might be obviated by care. His experience in the working of a provident dispensary had been not so successful as that of Mr. Alford: the dispensary had been successful; but this was due mainly to the honorary subscriptions. Unless it were self-supporting, there would be great difficulties.

Mr. G. BROWN considered the provident dispensary system worthy of the support of general practitioners.

Mr. PARAMORE had been told by a friend, that he had suffered injury through the establishment of the provident system in the Royal Albert Hospital at Devonport.

Mr. HOLMES having replied, Dr. YEO withdrew his amendment, and the original resolutions were passed *nem. con.*

CORRESPONDENCE.

DO MEDICAL MEN PROMOTE INTEMPERANCE?

SIR,—Permit me to invite the attention of the profession to a charge which is being persistently brought against us by temperance advocates in their speeches. I take an interest in the Church of England Temperance Society, and have, on several occasions, been present at meetings intended to forward its objects in my own immediate neighbourhood and elsewhere.

At such meetings, I have heard speakers—men of station, education, and influence—attack the medical profession, without limitation, as promoters of intemperance among the poor by the reckless prescription of alcoholic stimulants for trifling ailments. While recently on a visit to some friends in a western county, I was requested by the parish clergyman to attend a meeting of his parishioners convened to establish

a branch of the Church of England Temperance Society. The meeting was well attended by all ranks, and was considered a success by those who organised it. But, as usual, "the doctors" came in for censure as promoters of intemperance. I said what occurred to me on the spur of the moment in defence of my profession, and, on the following day, in letters addressed to the principal speakers, I challenged the accuracy of their imputations. I pointed out that the use of alcohol in disease is one of the most difficult and delicate questions in a difficult and delicate art; that it is not to be settled by platform jokes and cheap sneers, which, however adapted to raise ignorant laughter and applause, are not likely to influence the practice of medical men; further, that the speakers have not, in the course of daily duty, to stand at the bedside, finger on a faltering pulse, to decide the often life or death question of stimulants or no stimulants. And I ventured to dwell on the impolicy of causing irritation in the minds of medical men by such unqualified attacks, thus running the risk of disgusting them, and preventing them from supporting a movement directed against a vice better known to them in its terrible results than to any other class in the community. My remonstrances were taken in good part; but, while they did not deny that alcohol might be judiciously used in the treatment of disease, my correspondents firmly but courteously insisted that many practitioners do largely encourage intemperance by the thoughtless manner in which they order stimulants, giving me the assurance that, in numerous instances within their own knowledge, reclaimed drunkards were in this way led to return to their old habits.

I was led, in consequence, on my return home, to put myself in communication with many earnest workers among the intemperate, and found that one and all of them, rightly or wrongly, make the same complaint. We all know that, among people far removed from the poor in station and circumstances, we meet with intemperate men and women, who, when remonstrated with by their friends, do often most falsely blame their doctors for their excesses. I have had abundant evidence of this at home and abroad; and there is much reason to believe that the same excuse is often just as falsely pleaded by the poor. Making due allowance for a reasonable proportion of such cases, is there still ground for this serious charge, so persistently made against a not inconsiderable number of practitioners of unintentionally, but not less certainly, promoting intemperance in the manner indicated above? I cannot answer the question. But I think it is time an answer should be forthcoming; for the charge is being daily made. Once more, I invite attention to the fact that the charge comes not always from vulgar and intemperate fanatics, but, as I can testify, from men of station, intelligence, and experience, who say of us that we are responsible for this evil.—I am, sir, your obedient servant,

Netley, April 5th, 1878.

W. C. MACLEAN, M.D.

HOSPITAL FINANCE.

SIR,—I notice with great pleasure a suggestion in the JOURNAL of April 6th from Mr. Custance for a conference of hospital managers. I trust this suggestion will attract the attention it deserves. Mr. Custance is thinking mainly, if not exclusively, of the question of hospital finance. But there are other subjects also which such a conference would be peculiarly well employed in discussing, such as the out-patient question, which is now engaging the attention of a committee of the Association, of which I am chairman. We are continually met by the difficulty that the reform which we believe to be wanted in that direction cannot be made without the co-operation both of the lay and medical members of hospital administrations. Now, these two elements have hitherto been kept far too much apart. There are questions, such as that of medical teaching, which, though of the greatest public importance, are relegated entirely to the medical man; and others, such as the finance and general administration of the hospital, which, though of the greatest medical importance, are regarded as the exclusive province of laymen. If there were some general body in which both could freely mingle, and where all hospitals, great and small, with schools and without, would be represented, I am persuaded that more enlightened views would prevail on subjects of hospital management as well as on that of hospital finance. Meanwhile, the general question of the uses and abuses of hospitals, and of the application of the great revenues spent on hospitals, is coming more and more into public notice, and the idea of a formal inquiry into the whole matter either by a Royal or Parliamentary Commission is becoming familiar to people's minds. In such a contingency also, a common deliberative body which would in some degree secure the adequate representation of all the interests affected would be most useful.—I am, sir, yours, etc.,

T. HOLMES.

18, Great Cumberland Place, Hyde Park, W., April 9th, 1878.

TEACHING OF PHYSIOLOGY IN DUBLIN.

SIR,—Your remarks on Dr. Harvey's letter show that the whole facts were not before you, and, as a member of the College of Surgeons' Council, who opposed the acceptance of his certificate for practical physiology, I feel bound to supply them. The by-law enacts that the lectures on anatomy and physiology shall be given during the winter session and on five days weekly, and surely a certificate of thirty meetings of the class during summer was clearly inadmissible under it.

Up to 1874, a course of operative surgery was occasionally taken instead of a third course of lectures, the candidate showing that he was unable to present a certificate for the latter. This was done by special vote of council, which any one member could have nullified. Since the performance of operations on the subject is required of every pupil during the surgical courses, and of every candidate for the diploma, I believe the substitution referred to has not been allowed. The Council is certain to seek the permission of the Secretary of State to modify the by-law so as to require only two courses of physiology and less than five lectures weekly, which number was fixed when anatomy formed much of the business.

For the teaching of physiology, lectures on three days and a meeting of the class for practical instruction on a fourth, during each of twenty-one weeks, seem to me sufficient, if a few days at the end of the session be also devoted to the work of the students themselves.

During the second winter's course, some new matter will surely be introduced, and the rest will be impressed on those who have attended before. Besides, in a large class, there will always be many who, from want of previous training, or from unavoidable occasional absence, have missed much instruction during the first session.

The principles of the science can be most advantageously taught during the same session, with the practical work of which histology forms the greater part. To carry on the latter in summer exclusively would leave the winter's talk about physiology dull and profitless indeed. According to the *Medical Directory*, 1878, practical physiology is exclusively a winter course in all the great English and Scotch schools, except the University of Glasgow.

Dr. Harvey's assertions that the Council of the College "show a distinct determination not to allow the introduction of practical teaching into Dublin", and that "medical teaching in Dublin is in a very unhealthy condition", are regarded as unfounded and unbecoming, and deserving of much stronger terms, if the object of his communication were to represent that the courses of instruction in the other schools were inferior to those given in the school of which he is one of the owners.—Yours faithfully,

E. D. MAPOTHER.

6, Merrion Square N., April 8th, 1878.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

VACCINATION.—Mr. R. Bryden of Uffculme, Devon, has received £9:10 from the Local Government Board for successful vaccination. This is the second grant which has been awarded to him.

POOR-LAW GUARDIANS AND MEDICAL OFFICERS.

SIR,—As a general thing, it is better for all parties concerned that the Boards of Guardians and the Poor-law medical officers should work in harmony with each other. Only thus can the work of the Guardians, in as far as the medical care of their poor is concerned, be efficiently performed. But if many such cases arise as that described by your correspondent signing himself "Ruffled" in the *BRITISH MEDICAL JOURNAL* of March 23rd, then we say distinctly that the much-to-be desired harmony is at an end. As your correspondent justly observes, "Breach of faith towards medical officers makes all public (medical) services unpopular." We go further: it tends to put an end to them altogether. But there are certain well understood conditions on which a Poor-law medical officer acts, which distinctly form part of the engagement entered into betwixt the Guardians and him when he agrees to attend the Board's poor. One of these conditions is, that the usual "extras" be paid by the Board; and to this that body is as much bound as he is to attend its poor, properly sent to him with the usual order, as soon as possible in reasonable hours. The question comes to be, What are those "extras" to be so paid for by the Board? Flooding, as complicating labour, with the fetus at any stage of development, is clearly one of those "extras", provided the patient attended is a pauper. In the interest of humanity such cases are attended at once, the person procuring the order (on the faith of getting which the doctor attends) after the danger has been attended to. And this brings us to the question, Who is a pauper? Now, in point of fact, all our agricultural population are, even when in receipt of full wages, so treated by the Boards in ordinary cases of illness, when the Boards have nothing extra to pay to their medical officers; and that fact constitutes them paupers should the necessity for medical attendance arise, when the "extra" fee falls to be paid. Thus, if the patient attended by your correspondent have been previously sent to him as a pauper, presumably at the Board's direction and with its full knowledge, then the Board itself has established the fact of his being a pauper, and the medical officer is entitled to any extra fee that may fall due. He

is equally so entitled should the patient belong to the class usually sent as paupers; or if—the circumstances of the patient remaining the same—the medical man be called on at a later date to treat him on the Guardians' account. Further, it is not your correspondent's duty to provide a pessary, otherwise than at the Board's expense. The poor are the Board's special charge, not his. He might as well be called on to provide wine or beef-tea.

Lastly, no contract violating the law of the land is other than faulty. The Boards could scarcely be allowed to "be a law unto themselves"; they are simply parties to a contract made under certain conditions—one of which is, that good faith shall be observed.—I am, etc.,

F.R.C.S.Ed.

PUBLIC HEALTH MEDICAL APPOINTMENTS.

*WILSON, Thomas, M.R.C.S.Eng., appointed Medical Officer of Health for the Wallsend-on-Tyne Urban Sanitary District.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

CHAILEY.—The birth-rate in this rural district in 1877 was calculated at 34 and the death-rate only 15 per 1,000 inhabitants. Small-pox was introduced by a tramp, who was taken into the workhouse infirmary, where he died. Five cases occurred almost simultaneously amongst the inmates of an adjoining ward, and is supposed by Mr. Gravely to have been "conveyed through the medium of the chimney-flues". Other cases occurred in a cottage; but the disease did not spread, as the sick were strictly isolated. As several deaths from hydrophobia occurred in the district, the medical officer advised his authority to publish such information as was likely to check its spread.

EPPING.—There were 644 births and 351 deaths registered during the year, the birth-rate being equal to 29.1 and the death-rate 15.8 per 1,000. The zymotic death-rate was 1.4 per 1,000. Mr. Fowler says that several cases of small-pox were brought into the district; but the disease did not spread, except in Loughton. The infantile mortality was moderate, viz., 11.3 per 100 births for the whole district; but in Epping it was only 8.4, whilst it was 17.7 in Harlow and 13.4 in Chigwell. Sanitary work was fairly carried out, as the sanitary inspectors made 861 and Mr. Fowler 50 inspections during the year. Erysipelas has been prevalent, especially in Loughton.

MILITARY AND NAVAL MEDICAL SERVICES.

THE ARMY MEDICAL SERVICE.

SIR,—I have read with pleasure your statement of the grievances affecting the officers of the Army Medical Department. They may be summarised as treatment unjust, inconsiderate, and exceptional. It is an error to imagine that a service can be rendered popular by holding out alluring baits to recruits in the shape of bounty. Contentment or discontent percolates, slowly but surely, from the seniors downwards, and stamps with the profession at large the character of the service. Let the aspirant to the Army Medical Department see before him a life-career, with an assured provision for his later years—not of 19s. 10d. a day, as at present in the executive ranks, after a service of from twenty-five to thirty-five years, but of £1 a day after twenty years, rising by annual increment for further service, until he is placed on half-pay from age or infirmity. The administrative grades must be, to the majority, an impossibility, but the pension of the deputy surgeon-general should be increased. The difference between it and that of the surgeon-general is ridiculous. The retiring allowance itself is quite out of proportion with that of similar ranks in other departments. Were these important measures taken, and some matters of detail—which any capable administrator could easily grasp—attended to, with a desire to render the service popular, I have little doubt that the present difficulty of obtaining candidates would soon disappear.—I am, etc.,

COMMON SENSE.

SERVICE UNDER THE NEW ARMY MEDICAL WARRANT IN INDIA.

SIR,—Will you allow me some space in your *JOURNAL* to call attention to the following points with regard to the above, which, so far as I know, have been hitherto unnoticed? The Warrant states that surgeons will get pay amounting to £250 *per annum*, with allowances, during their period of service, which is limited to ten years. This is all very well at home; but now let us look across the water as to how we fare in India. Thirty-three surgeons entered the service immediately after the new Warrant came into force. Their commissions were dated February 4th, 1877, after they had passed through Netley, instead of being antedated to the 30th September, 1876, the time of their entering Netley, as was done with all surgeons who had entered previously, thus depriving the latter surgeons of four months' seniority. After seven months' service at home, some of them were sent out to India, and during the following three months all had been sent out with the exception of one, who was sent to Hong Kong, and another who is at present on sick-leave at home.

In India, the Warrant states that "the rates of pay will range from 317 rupees (£31 14s.) to 433 rupees (£43 6s.) per month, according to length or service". From this statement, of course we inferred that on first going out to India we should get pay amounting to the equivalent in rupees of £31 14s., and this would have been an increase of about £6 per month upon our pay and allowances while at home (the latter amounting to £25 11s. 10d. per month). But instead of getting an equivalent of £31 14s., we only get 317 rupees per month, which, on account of their present depreciation in value, represents £25 14s. 9d. per month: thus our increase of pay for serving in India amounts to £2s. 11d. per month, whilst former surgeons and other ranks in the service get almost double their home pay. The 317 rupees per month is exactly the same pay that the old assistant-surgeons got, and that surgeons serving under former Warrants get. The reason of this discrepancy is stated to be that the Indian Government refuse to recognise our right to increase of pay under the new Warrant. Now, if a surgeon enter the service who, perhaps, has

other calls on him besides merely providing for himself, I think he is bound to act on the supposition that he shall be turned out at the end of ten years with a bonus of £1000; therefore it behoves him to try and save something out of his pay so as to add to that bonus. This, though perhaps possible at home (if he have only himself to provide for), is certainly impossible in India, on account of increased expenses. He must keep a horse, he must employ at least five servants, he may even be obliged to provide himself with a tent, etc.; add to this, that nearly all articles in common use are more expensive as well as messing, etc.; and in this country we must remain five years, unless invalidated home during that period. If the latter calamity occur, provision is made that "at the discretion of our Secretary of State for War he may be granted half-pay at a rate not exceeding 8s. *per diem* if he have served five years or more, or 6s. *per diem* if he have served less than five years for a period not exceeding six months at a time. If at the expiration of six months he be unable to resume duty, a further period of six months will be allowed *without pay*; at the expiration of which time, if still unable to resume duty, his services shall be dispensed with. These conditions as regards sick-leave might surely be ameliorated; and, in all common fairness, we ought to get 3s. 8d. *per diem* in addition to the 37 rupees per month we are now getting in India—viz., the difference between our home pay and the former surgeons' home pay—our home pay being 13s. 8d. *per diem*, and theirs being 10s.

As far as pay goes, the present Warrant is an improvement on former ones, provided the surgeon serves at home; but as at least the greater part of his service will be in India, he is worse off than he was before, as he was then serving towards a pension, while at present he is not.—I am, sir, yours, etc., PERICK.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners, on April 4th; and, when eligible, will be admitted to the pass-examination.

Messrs. Octavius A. Collins, William T. Wyatt, G. W. Hamilton Cumming, Ernest Clarke, William J. Collins, and Henry R. Spackman, students of St. Bartholomew's Hospital; Thomas W. L. Beales, Dudley C. Trott, R. J. Herbert Scott, and L. W. Kinglake Phillips, of Guy's Hospital; Ebenezer D. Evans, James C. Marsden, and Henry Maudsley, of University College; Marmaduke Pittard and J. Barrington Baker, of the Charing Cross Hospital; John Thomas and W. Woolmington Webber, of St. Thomas's Hospital; J. J. Edward Renshaw, of the Manchester School; J. MacDonald Rogers, of the Middlesex Hospital; H. C. Rudolph Burn, of St. George's Hospital; and C. Graham Havell, of St. Mary's Hospital.

The following gentlemen passed on April 5th.

Messrs. Charles D. Davis, A. Osborne Knight, and Mark Jackson, of the Middlesex Hospital; Robert Heeles, T. Percy Woodhouse, and R. Isherwood Williamson, of St. Thomas's Hospital; U. A. Carpenter Harris, W. G. Augustus Bedford, and John Wilson, of St. Bartholomew's Hospital; Herbert G. Ashwell and John W. Sanders, of Guy's Hospital; E. A. Haden Horsley and H. Montague Murray, of University College; George C. Gandin and William H. Hiddings, of St. George's Hospital; William G. Evans and H. Sullivan Parker, of King's College; Henry W. Pomfret, of the Manchester School; J. P. Budgett Wills, of St. Mary's Hospital; Thomas G. Stonham, of the London Hospital; W. Jenner Clarke, of the Charing Cross Hospital; and Deane Bennett, of the Charing Cross and St. Mary's Hospitals.

The following gentlemen passed on April 8th.

Messrs. Alfred Hoare, Charles A. Weber, Heaton C. Howard, and F. D. Cæsar Hawkins, of St. George's Hospital; Sidney H. Lyndeman, William T. M. Clark and Henry J. Towson, of St. Bartholomew's Hospital; Henry W. P. Makeham and William H. F. Jones, of the London Hospital; Charles R. Crane, of the Charing Cross Hospital; Christopher J. Watkins, of University College; Kenneth W. Millican, of St. Mary's Hospital; Edward A. Starling, of Guy's Hospital; Charles S. Sherrington, of St. Thomas's Hospital; William A. Morris, of King's College; Peter F. Sturridge, of the Middlesex Hospital; and Richard Honeyburne, of the Liverpool School.

The following gentlemen passed on April 9th.

Messrs. G. Hutchinson Milnes, Charles J. Marsh, Norman McB. Reid, and C. Bradley Maitland, of St. George's Hospital; Dudley W. Buxton, Henry R. Gately, and Denis W. Donovan, of University College; William H. Quicke and Charles W. Glassington, of the Westminster Hospital; George L. Galpin, of the Middlesex Hospital; William Renne, of the Liverpool School; Robert Maguire, of the Manchester School; and John Phillips, of the Cambridge School.

Twenty-six candidates out of the one hundred and sixty-two examined, having failed to acquit themselves to the satisfaction of the Board, were referred to their anatomical and physiological studies for three months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 4th, 1878.

Claremont, Claude Clarke, Millbrook House, N.W.
Evans, James William, Trevanhan, Carmarthen
Green, Albert Edward, Ashford Terrace, N.
Green, Charles, Eston, near Middlesborough
Matthews, Valentine, 35, Southampton Street, Strand
Osborn, William Henry, Wheeley's Road, Birmingham
Robins, Harvey, Park House, Notting Hill
Swann, Alfred, Manningham, Yorkshire
Wells, Alfred George, Cross Street, Horselydown, S.E.

The following gentlemen also on the same day passed their primary professional examination.

Hare, Evan Herring, St. Thomas's Hospital
Hawkins, Walter Robert Thomas, London Hospital

Prince, Herbert, Charing Cross Hospital
Shapley, Frank, London Hospital
Steele, Warwick Charles, St. Bartholomew's Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

ABBEYLEIX UNION—Apothecary for the Workhouse. Salary, £40 per annum. Election will take place on the 16th instant.

ASHTON-UNDER-LYNE DISTRICT INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board and lodging. Applications to be made on or before the 17th instant.

BOURNEMOUTH GENERAL DISPENSARY AND COTTAGE HOSPITAL.—Resident Medical Officer. Salary, £120 per annum, with rooms, coals, gas, and attendance. Applications to be made on or before the 18th instant.

BRISTOL GENERAL HOSPITAL. Physician's Assistant. Salary, £50 per annum. Applications on or before the 19th instant.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Salary, £100 per annum, with furnished apartments, coals, gas, and servants. Applications to be made on or before the 16th instant.

ENNIS DISTRICT LUNATIC ASYLUM.—Resident Pupil. Applicants must be qualified as Physician and Surgeon, and not above thirty years of age. Salary, not less than £50, or more than £60 per annum, with apartments and rations.

GERMAN HOSPITAL, Dalston.—Honorary Assistant-Surgeon. Applications to be made on or before May 1st.

KENT and CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 25th instant.

NARBERTH UNION.—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

QUEEN'S HOSPITAL, Birmingham.—Honorary Physician. Applications to be made on or before the 13th instant.

ROSCOMMON INFIRMARY.—Resident Apothecary and Registrar. Salary, £60 a year, apartment, rations, fuel; or a Non-resident Apothecary to compound the medicines at £30 a year; and a Registrar at £30 yearly. Applications to the 17th instant.

ROYAL CORNWALL INFIRMARY.—House-Surgeon, Secretary, and Dispenser. Salary, £200 per annum, with furnished rooms, coals, gas, and attendance. Applications to be made on or before the 24th instant.

TOWCESTER UNION.—Medical Officer and Public Vaccinator for the Blakesley District. Salary, £60 per annum, and fees. Applications to be made on or before the 22nd instant.

TRALEE UNION.—Medical Officer for Brosna Dispensary District. Salary, £100 a year as Medical Officer, and £20 per annum as Sanitary Officer, with the usual Registration and Vaccination Fees. Applications to the 20th instant.

WARNEFORD, LEAMINGTON, and SOUTH WARWICKSHIRE HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before the 16th instant.

WESTMINSTER HOSPITAL.—House-Physician and House-Surgeon. Applications to be made on or before the 20th instant.

YORK DISPENSARY.—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coals, and gas. Applications to be made on or before the 18th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

AMPHLETT, Edward, M.A., M.B., appointed Assistant-Surgeon to the Charing Cross Hospital, *vice* *E. Bellamy, F.R.C.S., appointed Surgeon.

***BROWN, Charles R., M.D.,** appointed Honorary Physician to the All Saints' Convalescent Hospital, Eastbourne, *vice* Arthur Whitehead, Esq., deceased.

***BRUNTON, John, M.A., M.D.,** appointed Honorary Consulting Surgeon to the Royal Caledonian Asylum, *vice* Sir William Ferguson, Bart., deceased.

CANTLIE, James, M.B., appointed Assistant-Surgeon to the Charing Cross Hospital, *vice* R. Godlee, F.R.C.S., resigned.

PIDCOCK, G. D., B.A. Cantab., appointed Assistant House-Surgeon to the Cumberland Infirmary, Carlisle, *vice* J. W. Hinings, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

BARNES.—On April 7th, at 45, Lowther Street, Carlisle, the wife of *Henry Barnes, M.D., of a son.

MOORE.—On April 9th, at 40, Fitzwilliam Square West, Dublin, the wife of *John William Moore, M.D., of a daughter.

WATSON.—On April 5th, at Tottenham, the wife of *W. Tyndale Watson, M.D., of a daughter.

DEATHS.

MACAW, Kennedy, M.D., Surgeon-Major, aged 37, on April 9th.

MACLAGAN.—On April 6th, at 14, Melville Street, Edinburgh, aged 83, Jane White-side, widow of David MacLagan, M.D., F.R.S.E., Physician to the Forces, and Surgeon-in-Ordinary to the Queen for Scotland.

THE WIGAN INFIRMARY will receive the sum of at least £150 as the result of the exhibition of pictures painted by Captain Charles Mercier.

DONATION.—The Rev. Arthur Pakenham has given £200 to the Belfast Royal Hospital, in remembrance of his brother, Lieutenant-Colonel Pakenham; making, with previous contributions, the sum of £1000 towards the funds of this institution.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Owen, "Two Cases of Wry Neck"; Dr. Drysdale, "On Syphilis as a cause of Aphasia and Locomotor Ataxy".

TUESDAY.—Pathological Society of London, 8.30 P.M. Diseases of the Lymphatic System (concluded). Specimens by Dr. Hoggan, Mr. Porter of Netley, Drs. Kesteven, Turner, Dickinson, and Garlick. Also, by Dr. Dickinson: Ulceration of the Bowel in connection with Granular Kidney. Dr. Ord: 1. Renal Calculi of mixed Carbonate and Phosphate; 2. Specimens of Spontaneously Disintegrated Calculi.

WEDNESDAY.—Association of Surgeons Practising Dental Surgery, 8.30 P.M. Ordinary Meeting.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

DR. ABRATH'S (Suanderland) communication arrived on Thursday afternoon, as the *JOURNAL* was being made up for press. It shall have attention next week.

ERRATUM.—In the *JOURNAL* for March 2nd, page 297, column 2, line 6, for "one hundredth of a grain", read "one-twentieth of a grain".

MILITIA.—The question is a legal one, depending on the wording of the contract.

THE following communications have been handed to the General Manager:—Mr. Rigeade, London; M. Neustadt and Co., London; Mr. H. Gill, York; Mr. Andrew J. Burke, Dublin; Mrs. Fox, Liverpool (with enclosure); Mr. J. Hugo, Reading; Mr. G. Wynn, Owens; Dr. Davies, Swansea.

MENSTRUATION AND THE CURING OF MEAT.

SIR,—In connection with the above subject, the following circumstance seems worth relating. It has come to my knowledge on such trustworthy authority, that I can vouch for its accuracy. A cook in a family in the West of England had occasion to cure some pork and some beef at the same time. Shortly afterwards, both of the batches of meat thus cured went bad. On expressing her surprise at this result to her fellow-servants, they asked her whether she was menstruating at the time she cured the meat; and on her admitting that she was, they informed her that that was the cause of the failure. Either from forgetfulness or incredulity, the cook not long afterwards cured some pork again whilst in the same condition as before, and again the same result followed. Such a coincidence as this hardly seems to leave room for doubt that the common belief in the connection between these conditions, which I am told is as strong in the West of England as it is in other parts, is a real one, and not a mere matter of superstition. The fact is certainly most curious, and worthy of the investigation which your correspondent "R. B. F." suggests.—Yours faithfully, R. B.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

THE BARBER FUND.

SIR,—Kindly permit me to acknowledge the following contributions to this fund, in addition to those already received, making a total of £29 7s.

C. T. Brookhouse, M.D., Deptford	£2 2 0
William Hall, Esq., Lancaster	1 1 0
G. W. F. Bury, Esq., Lyonsdown	1 1 0

I am, sir, faithfully yours,
Latham House, Crickhowell, April 10th, 1878.

PHILIP E. HILL

KOUMISS.

SIR,—I am afraid your correspondent "A Physician" is confounding two different things. Koumiss is a spirituous liquor, distilled from mares' milk, which is of a stimulating and intoxicating character. There is another drink prepared from cows' milk, or cows, sheep, and goats, which is rendered "butter" in our translation of the Bible. Dr. William Smith, in his Dictionary, says there can be no question that in every case (except, perhaps, Proverbs xxx and 35) the term refers to a preparation of milk, well known in Eastern countries under the name of "leben". The method now pursued in its preparation is to boil the milk over a slow fire, adding to it a small piece of old leben, or some other acid to make it coagulate. Josephus notes particularly that the refreshing draught poured out of the bottle by Jael for Sisera was "leben". At certain seasons, the poor almost live upon it in the East; whilst according to Rossel, the upper classes use it to salad or meat. How this leben was first discovered is not known, for it has been propagated from loag beyond the memory of man. Some aver it was what Hagar got to drink in the desert; others, that an angel revealed the secret to Abraham. My conviction is, it was an accidental discovery. I ought to state that this fermented or acidulous beverage ought to be well shaken before pouring it out for drinking. It is kept in bottles made of animal skins; and very often the animals carry their own produce to market.

Spenser, in his book of travels in Circassia, wrote that "wines, spirituous liquors, even the boza of the Turks and Tartars, called hala-sima, is rarely used by the Circassians, their favourite beverage being 'the skhon', a species of sour milk peculiar to the East, and which I found to be a most healthful and refreshing as well as agreeable beverage during my travels in their country. Fresh milk (serend) is never used by the Circassians, being considered unwholesome, and certain to originate fevers; hence they are accustomed to boil it every morning and evening, with a little of the old skhon (leben) when the milk is cold. In three or four hours afterwards, it becomes thick and fit for use; and, when flavoured with a little rose-water and sugar, or indeed in any other form whatever, it is a most grateful and refreshing drink". It is worthy of remark, that the skhon alone gives the milk that peculiarly agreeable taste which we find in the East, and preserves it in the hottest weather in a fit state for drinking. I have condensed these extracts from my forthcoming volume on *Milk and Wine*, and fear that the difficulty of your correspondent will be to get hold of some of the genuine skhon or leben. I question if pepsine wine or cream-of-tartar, or rennet, will produce anything more than curds and whey. I believe, as a sedative to the stomach in severe vomiting, the effervescent koumiss is best.—I am, sir, yours most respectfully,

Newbiggin-by-Sea, April 1878.

J. C. REID, M.D.

SIR,—In answer to your correspondent of March 30th, I have made koumiss for some time in the following manner. Take four quarts of milk, a pint of buttermilk two days old, and twenty-one ounces of water; stir them together in an earthenware vessel, cover with a cloth, and place in a room temperature about 56 deg.; after twenty-four hours, well heat and recover; after another twenty-four hours, well beat, bottle, cork tightly, tying them down; shake and lay the bottles on their sides in a cellar. It may be used in a week or ten days. It is better not to keep more than a month in hot weather, as it is then so effervescent that the bottle will completely empty itself after the cork is drawn.—I am, etc.,

April 1878.

A. S. ROL.

IN RE BOX v. BERESFORD.

SIR,—We have been surprised at your decision in the above case, and also surprised that none of your correspondents have taken exception to what appears to us a decision on the *ex parte* and very imperfect statement of Mr. Box. Mr. Box's charges against Dr. Beresford have been of too general and too vague a character to admit of reply. Dr. Beresford has in each of his letters pressed for a more specific statement of the case—fearlessly, and, as we think, wisely, reserving his defence until Mr. Box should give it. This Mr. Box has never done, nor has he at any time (having regard to the circumstances of the case, of which we respectfully submit you, sir, apparently know very little), even after repeated requests, written such a letter as Dr. Beresford could reply to. Thus we have an indictment against Dr. Beresford, without any evidence in support of it beyond the *ipse dixit* of Mr. Box. Mr. Box alleges that the man had fracture of the radius *only*. Dr. Beresford does not deny the fracture of the radius, but contends that there was also fracture of the ulna. This is the case.

We examined the man individually and independently, at the request of Dr. Beresford, and were unanimously of opinion that both bones were fractured; and, from the different appearance of the several injuries, that the fracture of the ulna was not reduced at the same time as that of the radius.

Mr. Box's explanation of the tumour on the ulna as a node, etc., was too absurd to be surgical; besides, it was obviously *calidus*.

Dr. Beresford's long residence in Oswestry, together with the fact of his enjoying a large and highly respectable practice in that important town and its neighbourhood, are sufficient guarantee to those who know it of the estimation in which he is held; but for the benefit of your general readers, we, as his neighbours, cannot allow him to be assailed by a comparatively unknown man, and condemned by you, virtually unheard, without saying that, meeting him constantly, both socially and professionally, we have always found him eminently gentlemanly in either capacity, and a valuable aid in the latter.

The plaintiff being first in court has always the advantage, the *onus* being on the defendant. Let us, therefore, have from Mr. Box—1. A distinct statement of the case, without any generalisation; 2. The opinion of his two assistants (*if qualified*); 3. The *exact words* of the Shrewsbury surgeons who examined the case at his (Mr. Box's) request. Then, if Dr. Beresford cannot reply, we shall feel crushed, and shall be "for ever silent".—We are, sir, your obedient servants,

G. J. MORGAN, M.R.C.S.E., Dovaston, Kinnerley.
LEONARD A. MANNING, A.M., M.B., etc., Llanyfrynach.
R. MACMURDO GREEN, L.R.C.S. Edin., Llaodrinia.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

TREATMENT OF UTERINE HÆMORRHAGE.

SIR,—In your report of the Glasgow Medico-Chirurgical Society's meeting of March 1st, 1878, I see an account of an ingenious method of treating uterine hæmorrhage by Dr. D. Christie. The apparatus described is exactly like one shown me in 1863 by Mr. Sawyer, surgical instrument-maker, of London Street, Norwich, who, I remember, was greatly impressed with its value in arresting uterine hæmorrhage. It it have during the past fifteen years proved a reliable means of restraining uterine hæmorrhage, I have no doubt Mr. Sawyer has sold many, and would be able to give Dr. Christie information from the medical men who have purchased it.—Yours faithfully,
April 2nd, 1878, HENRY M. JAY, M.B.

QUADRUPLE BIRTH.

SIR,—I think the following case, from its rarity, is worth recording. I was called to attend Mrs. G. F. D. in the middle of the ninth month of her pregnancy, and found her in labour, the liquor amni having escaped, and the head being on the perineum. The pains being insufficient, I gave ergot, and in ten minutes the child was born, followed at short intervals by three others—the first being born on March 24th, at 4 A.M., and the last at 4.20 A.M. The third was a footling, the others vertex cases. The first and fourth placenta were distinct, the second and third firmly united; the fourth, a girl, died on March 26th, at 4 A.M.; the second, a boy, died on March 26th, at 4 P.M.; the first, a girl, died on March 27th, at 6 A.M.; and the third, a boy. The mother is progressing favourably. She has had one child previously, three years ago.—I am, etc.,
CLEMENT HADLEY, M.R.C.S.

RHAMNUS FRANGULA.

SIR,—A *profos* of "Rhamnus Frangula," I find the following in the *Pharmacopœia Londinensis*, or the *New London Dispensatory*; as also the *Præaxis of Chymistry*, by William Salmon, Professor of Physick; 1682. Chap. 2, of Barks. 11. "Frangula alba nigra, of the black alder tree. The inner bark purgeth both flegm and choller by stool and vomit. An infusion of it, taken for some mornings together, helps the rickets, cachexia, dropsy, jaundice, itch, or mange, causing a good appetite and a healthful constitution." Thirty-five years ago, an old and valued medical friend, talking of turpentine as then much used by Nægele in puerperal fever, warned me against its use in pregnancy; "for," said he, "I gave it once to a young woman, not knowing that she was pregnant, to expel worms, and it scotched the worms, and a three months' foetus too!"—I am, etc.,
124, Fulham Road, March 1878. V. POULAIN, M.D.

PROPOSED REGISTRATION OF FOREIGNERS WITHOUT DIPLOMAS.

SIR,—I should like to call the special attention of the profession through your columns to one of the clauses in the Government Medical Bill, by which power is sought to be given to the Medical Council to place upon the *Register* any foreign practitioner of ten years' standing whom they may consider "eminent," without requiring the production of any diploma or qualification. I refer to Clause 8 of the Bill, which I will not occupy your valuable space by quoting *in extenso*, as your readers will find it on page 426 of the *JOURNAL* for March 23rd. Now, sir, unless this clause is intended to admit to the *Register* some unqualified person or persons, it is wholly unnecessary. By Clause 6, any foreign practitioner of ten years' standing, whether "eminent" or not, who can show that he holds a recognisable foreign diploma or diplomas, can claim registration without examination. What, then, is the necessity for Clause 8? It would almost seem as if it had been specially introduced to meet the case of some unqualified person whom the Council consider "eminent." If such be the fact, surely the profession should demand its expulsion from the Bill; and if such be not the case, it should equally be expunged as being unnecessary. The whole Bill requires the most careful reading and consideration by the profession, and I trust the British Medical Association will give it earnest attention.—Apologising for occupying your space, I remain, yours, etc.,
April 2nd, 1878. W. DOUGLAS HEMMING.

EFFECTUAL TREATMENT OF THE HYSTERICAL PARONYMISM.

SIR,—Some time ago, a lady-patient of mine drove up from her husband's place of business, requesting me to visit her servant, who, she had just heard, was either dead or dying. I did not know until I arrived that "Observer" was in the house, and it is simply a fabrication of his that I "rushed in, protesting," etc. "Observer" had by this time got the girl, her clothes, and the furniture thoroughly well drenched, *secundum artem*, as he calls it; and, for all the effect produced, he also might as well have stood mutely gazing on the prostrate form. He was in doubt whether it was an hysterical or an apoplectic seizure. I suggested, and with his sanction adopted, the method he mentions. He was thus accessory to the "criminal assault." I think this by no means original plan is, under certain and proper circumstances, preferable, and less of an assault, than half-drowning a patient without any satisfactory result.—I am, etc.,
Regent Road, Salford, April 1878. J. CRAN, M.B.

ATTENDANCE OF FAMILIES OF MEDICAL MEN.

SIR,—"Another Member" states that his fee has been accepted by consulting physicians and surgeons, and I can only express my surprise if, as he says, he took care to let it be known that he was a practitioner. But I have to complain that on more than one occasion medical men who have done me the honour to consult me for themselves or their families have not at once announced the fact of their being professional brethren; but have, from what motive I cannot tell, guarded the secret until the end of the visit, with its anticipated *honorarium*. In one case particularly I found that another "consultant" had taken a fee—I believe in pure ignorance, for I was in such doubt as to the character of my visitor that I had to put the question point-blank, "Are you a medical man?"

In common with my London brethren, I am happy to assist my professional brothers and their immediate connections as far as lies in my power; but I would venture to put it to them, in all kindness, *not* to telegraph as if the case were one of extreme urgency, when delay is of little importance, and *not* to pass by professional assistance from neighbouring cities of equal value with that of London, simply because they fancy a name.

Lastly, may I say that I think although no fee is either demanded or expected from a professional brother, yet a consultant ought not to be allowed to be out of pocket for railway fare, etc.—Yours obediently,
April 1878. A LONDON SURGEON.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the *BRITISH MEDICAL JOURNAL*, should arrive at the Office not later than 10 A.M. on Thursday.

SIR.—Upon public grounds I ask you to insert the accompanying letter in next Saturday's issue of the *BRITISH MEDICAL JOURNAL*, and am, sir, your obedient servant,
T. J. EAMES BROWN.

Llanbister, March 30th, 1878.

(Copy.)

"Llanbister, March 30th, 1878.

"Dear Sir,—Unfettered by political party ties, but, nevertheless, a true Conservative, and a loyal member of the profession to which I have the honour to belong, I appeal to you, as the representative of this county in the Commons House of Parliament, on behalf of my professional brethren, engaged in her Majesty's military, naval, and auxiliary forces, to bring your influence and interest to bear upon the Government, with the view, if possible, of bringing to perfection, for public use, the services connected therewith, both upon professional or private, and national or public grounds. Allow me to suggest what a pretty pickle this country would be in should the Premier most unjustly drag us into an European war with the present unsatisfactory state of affairs, caused solely by the Government withholding justice from the medical departments of the above important services. I also ask you for some measure of justice to be meted out by the Local Government Board towards those members of my profession who happen to be employed in that service, but who, from *obligation of vision*, from which the members of that board are unfortunately suffering, fail to receive that justice which they merit.—I remain, dear sir, your obedient servant, T. J. EAMES BROWN.—To the Honourable Arthur Walsh, M.P."

AN OLD ASSOCIATE.—The question is rather legal than medical.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifeshire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

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BOOKS, ETC., RECEIVED.

Cyclopædia of the Practice of Medicine. [By Dr. H. von Ziemssen. Vol. xiv. London: Sampson Low. 1878.

THE GOULSTONIAN LECTURES ON THE LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

BY DAVID FERRIER, M.D., F.R.S., F.R.C.P.,

Professor of Forensic Medicine in King's College; Assistant-Physician to King's College Hospital; etc.

LECTURE III.—March 22nd.

II. *Irritative Lesions of the Motor Area.*—Hitherto I have directed your attention more particularly to destructive lesions of the motor area indicated by paralysis of voluntary motion, general or partial, theoretically separating them from irritative lesions indicated by unilateral convulsions or monospasms. Practically, however, they cannot be separated from each other by a hard and fast line; for many cases of limited destructive lesions are associated with unilateral convulsions or monospasms, and I have already referred to instances of this association. There are numerous cases, however, in which the predominant, and sometimes the only, feature has been a convulsive affection limited to a limb or combined in the way in which monoplegiae are combined, or which, commencing in a constant and definite way, becomes generalised into an unilateral convulsion with or without loss of consciousness, or occasionally passes into bilateral convulsions. It is the great merit of Hughlings Jackson to have first clearly indicated the pathology of these affections.

I have already alluded to some of the observations and generalisations which had been made by Bravais, Bright, Wilks, etc.; and I ought to mention here the very close approximation to regional localisation of the lesions most commonly causing convulsive affections of the opposite side at which Mr. Callender* arrived. Callender concluded that convulsions occurred more particularly with superficial lesions of the cortex in the neighbourhood of the middle meningeal artery: an approximation amply borne out by subsequent clinical and experimental research.

From the mere occurrence of an unilateral convulsion with loss of consciousness, or of an epileptic attack in which the convulsions are exhibited mainly on one side, we can form no opinion as to the nature or seat of the lesion. We may suppose, and with reason, that the opposite cerebral hemisphere is more particularly at fault; but there need be no discoverable lesion; and, should a lesion exist, it need not be in any definite position. This is in accordance both with clinical facts and also with those of experiment, for I have found that long continued irritation applied to any part of the hemisphere other than the motor area may result in an attack of unilateral convulsions. If, however, the convulsion be of the character of a monospasm, or if, tending to become generalised, it begin invariably in the same way and do not cause loss of consciousness, and if it be followed by paresis or paralysis more or less permanent, we may diagnose an irritative lesion of the motor area of the opposite hemisphere.

The seat of the lesion may be approximately determined by the rules as to the localisation of destructive lesions, but only approximately, as the diagnosis of the seat of an irritative lesion is naturally more uncertain than that of a destructive lesion, owing to the difficulty of determining the extent of the zone or the special point in this zone in which vital irritation concentrates itself. Yet many cases are on record in which the phenomena of irritation have been such as to allow exact regional diagnosis in accordance with the principles of localisation of distinct centres.

The morbid anatomy of irritative lesions is various. They are all such as tend to induce irritability and hyperæmia of the cortical grey matter or subjacent medullary tracts: a condition which I have invariably observed in my own experiments. Magnan† has found the same condition of hyperæmia of the cortex in the epileptic convulsions induced by the introduction of absinthe into the system; and MM. Pitres and Franck‡ have shown that, in the partial or unilateral epileptiform attacks to which dogs are liable after injury to the cortex, the grey

matter surrounding the cicatrix is so hyperæmic, tumefied, and irritable, that even mechanical stimulation, which normally has no effect, is sufficient to cause motor discharge.

The irritative lesion may, therefore, be an acute inflammation, or a condition of irritability set up by some chronic morbid product. Most frequently the lesion is some form of meningo-encephalitis; and of these syphilitic disease is by far the most common, so that now syphilitic epilepsy is sometimes spoken of as synonymous with "Jacksonian epilepsy". Tubercular affections, tumours or cysts situated superficially, cicatrices of old wounds, spicula of bone, etc., are all capable of producing irritation.

Hughlings Jackson is of opinion that the lesion causes the centres to become charged to a state of high tension, so that, under certain vital conditions, they discharge themselves in a sudden and explosive manner, and become exhausted for the time being; hence the temporary epileptic hemi- or monoplegia. This would account for the occurrence of intermittent effects with a constant lesion; for, according to the law of discharge formulated by G. II. Lewes,* stimulations which fall short of actual discharge of a nerve-centre increase the tension; hence, after a certain accumulation of stimuli, sudden discharge is readily induced.

Frequently the disease, which begins as an irritative lesion, tends to invade and destroy the region on which it grows, and leads to permanent paralysis with secondary degeneration; irritative phenomena being liable to occur so long as the vitality of the grey matter and subjacent medullary fibres has not been absolutely annihilated.

"Jacksonian epilepsy", in the early stages at least, has frequently the character of a monospasm, which may be brachial, facial, or crural, or these combined, as in the manner of monoplegiae. When the monospasm tends to become generalised into unilateral convulsion, the spasms seem to march usually in a certain definite order. In facial monospasm, the arm next becomes affected, and then the leg. If it commence in the hand, it goes up the arm, then to the face, and next attacks the leg. If it begin in the leg, it next invades the arm, and then the face. This order is very rarely inverted. Usually, when the convulsions have become unilateral, consciousness is lost, if not before. When the convulsion becomes bilateral, as is sometimes the case, Hughlings Jackson finds that the spasms march in the reverse order; e.g., if it have passed to the leg from the face, it ascends the opposite leg, and so to the arm and face. I have not confirmed this in experiments on animals, for I have frequently seen the same order followed on the other side as on that on which the spasms began. It would be in accordance with the bilateral association of motor nuclei (which Dr. Broadbent has applied so successfully to the explanation of the comparative escape of bilaterally associated movements in cerebral disease), that bilaterally associated movements should have most tendency to be discharged together. This fact has been well brought out by MM. Franck and Pitres, for they have shown that bilateral convulsions may still occur from excessive irritation of one hemisphere even when the motor centres of the other have been extirpated.

And many clinical cases might be cited which do not harmonise with the views of Hughlings Jackson as to the march of bilateral spasms.† It is not, however, my intention to discuss at length the pathology and symptomatology of irritative lesions: subjects which are well known to the profession in this country through the writings of Hughlings Jackson, and abroad more particularly through the writings of M. Charcot. I will content myself with calling attention to one or two of the more accurately recorded cases of circumscribed lesions with irritative symptoms, in order to show how closely the situation of irritative lesions (notwithstanding all the elements of uncertainty pertaining to them, as compared with destructive lesions) may be determined from the symptoms manifested; and, as I have already intimated, I allude only to those in which irritation or spasm was the predominant or only symptom, and only to those verified by *post mortem* examination, though I might justifiably cite others of the same kind, depending particularly on syphilis, which recover.

1. *Crural Monospasm or Protospasm.*—Of spasms limited to the leg, or invariably commencing in the leg, there are not many cases on record free from complication with paralysis, or in which the lesion remained circumscribed till death. I have already quoted two cases from Bourneville, in which crural monospasm complicated with paralysis was the chief symptom. A case is recorded by Broca‡ of crural monospasm cured by injury to the left side of the skull which was

* *Physical Basis of Mind*, p. 290.

† See Gowers's "Cases of Convulsion from Organic Brain-Disease" (BRIT. MED. JOURNAL, Sept. 26th, 1874); "Case of Intracranial Tumour", by Bramwell (BRIT. MED. JOURNAL, Sept. 1st, 1877).

‡ Soc. de Chirurgie, meeting of December 16th, 1866.

* *St. Bartholomew's Hospital Reports*, 1867; *Medico-Chirurgical Trans.*, 1871.

† *Recherches sur les Centres Nerveux*, 1876, p. 101.

‡ Soc. de Biologie, meeting of Dec. 29th, 1877; *Le Prog. Méd.*, Jan. 5th, 1878.

caused by trephining; but the exact position of the lesion I do not find recorded.

M.M. Charcot and Pitres* quote a case from Griesinger of spasm of the leg frequently recurring, and also invading the arm, followed in the intervals by paralysis of the leg and arm. The lesion, however, was not strictly limited in this case. A hydatid cyst, 4 centimetres \times 4.3 centimetres, was found on the surface of the opposite hemisphere, in such a position that its anterior border corresponded with a line drawn perpendicularly upwards from the external auditory meatus, *i. e.*, about the upper extremity of the fissure of Rolando. There were also several smaller cysts on the frontal and parietal surface of the hemisphere. If the spasm can be ascribed exclusively to the large cyst, then its position agrees with the motor centres of the leg. (Fig. 15, [1] [2].)

Hughlings Jackson† has described a case in which fits began almost invariably in the right leg, and were frequently limited to it. The leg began to become weak, and more so after each fit, the paresis deepening ultimately into a permanent paralysis. In the last stages, signs of general affection of the left hemisphere—aphasia, etc.—manifested themselves. A tumour was found at the upper posterior part of the left frontal lobe, about two inches in diameter, bounded posteriorly by the fissure of Rolando, and extending forward into the posterior part of the first and second frontal convolutions.

Another case is given by Hughlings Jackson‡ of convulsions beginning in the left great toe, often confined exclusively to the left leg, and followed ultimately by paresis of the left foot. This patient also had paralysis of the right third nerve. After death, a syphilitic lesion was found "at the upper part of the posterior ascending or ascending parietal convolution, extending over part of the upper end of the ascending frontal and over several of the adjacent convolutions of the parietal lobule" of the right hemisphere. On the right third nerve, a tumour of the size of a pea was found. This case is in exact correspondence with the situation which I have assigned to the motor centres of the foot and leg. (Fig. 15, [1] [2].)

2. *Brachial Monospasm or Protospasm.*—Of spasms limited to, or beginning in, the arm or hand, depending on localised cortical lesion, there are several cases on record. As a rule, the fits begin in the fingers, and more especially in the thumb and index finger—in the most volitional movements of the upper extremity, according to Hughlings Jackson; but this is not necessarily or invariably so. In the upper extremity, it must be remembered, there are several combinations of movements which have each a representative in the cortical motor area. These centres being all situated within a moderate compass, and all liable to be discharged by one irritative lesion, it is nevertheless possible that each may be the primary origin of the discharge, and so the mode in which the monospasm commences may vary accordingly. Hence the necessity of making minute investigation of the march of the spasm in any particular case.

Hughlings Jackson has recorded several cases of brachial monospasm. I will only mention those in which the lesion of the cortex was single and limited. A man had frequent convulsions limited to the right arm, which subsequently became partially paralysed. A nodule was found situated at the hinder extremity of the first frontal convolution of the left hemisphere. In this case, there was also a tumour in each lobe of the cerebellum, but there were no cerebellar symptoms. The march of the spasm was not recorded.§

In a second case of convulsions, nearly always limited to the right arm, and followed by temporary paralysis of that arm after each fit, the lesion, which was diagnosed by Hughlings Jackson during life, was a nodule, situated at the "posterior extremity of the first frontal convolution where it joins the ascending frontal". In this case, it was noted that the spasms always began in the shoulder and went down the arm, contrary to the usual order.¶ This is an important case, as showing that the spasm began in muscles which, as the experiments on monkeys indicate, relate to the movement of the arm as a whole, and not to those of the fingers or wrist. (Fig. 15, [3] [4] [5].)

In a third case,* convulsions invariably began in the left thumb. After death, a tumour of the size of a hazel-nut was found under the grey matter at the posterior extremity of the third frontal convolution of the right hemisphere. Some granulations existed in the bed from which it was enucleated, or in the grey matter near it.

In a fourth case, the spasms began in the right hand, and occasionally in the right cheek. Before death, left hemiplegia came on,

which, however, soon passed off. Disease was found in both cerebral hemispheres, probably syphilitic. In the left hemisphere, *i. e.*, the side opposite the spasms, adhesion was found between the dura mater and the brain in a region including "the lower part of the ascending frontal and ascending parietal convolutions, to a trifling extent to the hinder part of the third frontal, and several of the convolutions of the upper wall of the fissure of Sylvius behind the ascending parietal". In the right hemisphere—the side opposite the paralysis—"on the surface, behind the fissure of Rolando, was a mass about the size of a chestnut. The dura mater was firmly adherent to it. There was very little softening about it."**

In a fifth,† temporary right hemiplegia came on after an unilateral convulsion in which the patient did not lose consciousness. Convulsions occurred from time to time, beginning in the little finger of the right hand, occasionally in the right cheek, and followed always by slow and hesitating speech. After death, a syphilitic tumour of considerable size—as large as three small walnuts—was found growing into the cortex about the junction of the frontal and parietal lobes, surrounded by an area of softening in the posterior part of the frontals, ascending frontal and ascending parietal, and partly of the island of Reil. The sphenoidal lobe was also softened. This case, though of interest, is rather a complex one, and should, perhaps, scarcely be quoted as a limited lesion.

Dr. Dreschfeld‡ has recorded a very interesting case of brachial monospasm depending on syphilitic disease, the nature and position of which he accurately diagnosed during life. The patient suffered from repeated attacks of convulsion limited to the left arm, of which the phenomena were "sudden clenching of the fist, flexing of the wrist, and pronation of the forearm of the left side, the left angle of the mouth being at the same time strongly drawn downwards. This sudden tonic spasm lasted for several seconds, and was then followed by a few clonic spasms of the same extremity and a slight tremor of the arm; the patient at the same time was very agitated and looked very pale, but remained perfectly conscious. He stated that these paroxysms had always had the same character, varying only in degree". Death occurred from phthisis two years after the first onset of the disease. On *post mortem* examination, the dura mater was found adherent to the brain on the right side, over a space including the greater part of the ascending parietal convolution and the supramarginal lobule (fig. 21, a and b).

To these cases, in which irritative symptoms chiefly predominated, I may add one or two others, which may be considered as belonging



Fig. 21.

equally to irritative and destructive lesions. The cases are reported in full by M.M. Charcot and Pitres §. A case is recorded by Lepine, of left hemiplegia, followed by convulsions, limited chiefly to the left arm. A small hæmorrhage of the size of a nut was found at the "posterior extremity of the first frontal convolution of the right hemisphere". In another, by the same observer, of left hemiplegia, convulsions occurred, either limited to the left arm, or invariably commencing there. A yellow patch was found at the base of the first and second convolutions of the right hemisphere. A third case is given by Mahot,¶ of monoplegia and monospasm of the right arm. A glioma of the size of a pigeon's egg was found on the middle third of the ascending frontal convolution of the left hemisphere. In a fourth, recorded by Henrot, convulsions began in the fingers of the left hand, and were repeated at intervals, followed by left hemiparesis. A mass of tubercle

* *Op. cit.*

† *Medical Times and Gazette*, September 4th, 1875.

‡ *Medical Times and Gazette*, September 18th, 1876.

§ *Medical Mirror*, September 1st, 1869.

¶ *Medical Times and Gazette*, June 5th, 1875.

** *Medical Times and Gazette*, November 20th, 1872.

* *Medical Times and Gazette*, December 28th, 1872.

† *Medical Times and Gazette*, March 1st, 1873.

‡ *Lancet*, February 24th, 1877.

§ *Op. cit.*, p. 365.

¶ *Soc. Anat.*, December 15th, 1876.

was found embedded in the grey matter of the ascending frontal convolution of the right hemisphere, about the middle third. In this case, however, there was also a small tubercular mass on the right side of the pons.

It will be seen from these cases that the situation of the lesion causing brachial monospasm is not an accurately circumscribed one; and yet there is a greater agreement among them, when viewed in the light of experimental localisation of the brachial and manual centres, than may at first appear. As has already been said, there are several centres, each for a distinct movement. In four of these cases, in which the spasms were said simply to be in the arm, and in one of them in which it was noted that the spasms began in the proximal movements of the arm, the lesion was situated at the hinder extremity of the first frontal convolution, a position which, as will be seen by reference to the figures (figs. 15, 16 [5]), corresponds with the localisation of the centres of such movements in this region.

In some cases, there was no exact description of the march of the spasm: but in those in which it was more especially noted that the spasms began in the fingers or hand, the lesion was either in, or in close proximity to, the ascending parietal convolution, in which, in the monkey, these movements are especially centralised. Of these, Dreschfeld's case is the most striking, both as regards the precise character of the movements and the limited extent of the lesion, so precise as to have allowed of exact diagnosis, which was verified to the letter *post mortem*.

3. *Facial Monospasm or Protospasm.*—Though partial epileptiform convulsions beginning in the face are not uncommon as symptoms, and not unfrequently alternate with convulsions beginning in the hand, yet there are very few cases on record of facial monospasm, uncomplicated with brachial monospasm or other convulsive or paralytic symptoms, in which the position of the lesion has been verified by *post mortem* examination.

The cases of Hitzig and Wernher, already quoted, in which oral and facial monoplegia and facial monospasm alternated, are about the best examples of this on record. The lesion—the principal, at least—in these cases was the same in position, viz., the lower extremity of the ascending frontal.

A very interesting case, illustrating another fact of experimental localisation, has been recorded by Dr. Bramwell.* A woman, who had received a cranial injury some years previously, began to have right-sided convulsions, and numbness in the thumb and forefinger, followed by paralysis of the right arm and leg. She remained subject to frequently repeated convulsions, which always began in the right platysma, and frequently were almost entirely confined to this muscle. On *post mortem* examination, a spiculum of bone was found projecting from the inner table of the skull, and causing a very limited lesion of the inferior margin of the ascending parietal convolution. A reference to the figure of the brain of the monkey (fig. 15, [11]) will show that at the lower extremity of this convolution, and just posterior to the oral and lingual centres, there is an area marked off, irritation of which specially causes action of this muscle. Bramwell's case receives its explanation from this fact, and in Dreschfeld's case, in which spasm of the platysma was also a special feature, the lesion affected this point. Clinical and physiological experiment are here again in harmony.

B.—LESIONS OF THE SENSORY REGIONS.

I will now direct your attention to the subject of lesions of the sensory regions of the cerebral hemispheres. That the cerebral hemispheres are the seat of sensation or—in order to avoid disputes as to the meaning of sensation—of sensory perception, is abundantly evident both from the results of experimental physiology and from the facts of clinical medicine. And that the regions of the brain we have already considered, viz., the fronto-parietal regions, may be disorganised without causing loss of sensory perception, I consider to be demonstrated both by the facts of experiments on monkeys, and by the clinical evidence which I have laid before you. Some statements which have been made to the contrary, based on experiments on dogs and rabbits, are, as I hope to be able to show you further on, susceptible of a totally different interpretation, and one in harmony with what I have said respecting monkeys and men.

It is clear, therefore, that if the centres of sensory perception are localised in the hemispheres—and this, I think, no one will dispute—they are to be sought for in those regions yet remaining to be considered, viz., the occipital and parieto-temporal lobes. That this is so, we should be led to believe from anatomical as well as from other considerations. For, though I do not place much reliance on mere ana-

tomical investigation as a means of determining the exact course and destination and various connections of the cerebro-spinal tracts, yet, so far as main features are concerned, it furnishes us with substantial bases for other lines of research. It has been established, I think, beyond doubt, that the posterior strands of the crus, and their connections with the brain and the cord, are more especially the paths of centripetal or sensory impressions. The researches of Meynert and others would seem to show that these tracts are connected with those parts of the cortex which we are now considering. Beyond these general indications, however, I have considerable doubts as to the results of anatomical localisation. But in addition to general anatomical indications, we have experimental and pathological evidence as to the exact position of the paths which convey sensory impression to the cortex.

The experimental evidence has been furnished by the researches of Veyssière,* which have been repeated and verified by Carville and Duret, Raymond, and others. These experiments show that when section is made of the posterior part of the internal capsule, that part of the "projection system" which lies between the optic thalamus and lenticular nucleus of the corpus striatum (fig. 22 [x]), there ensues a

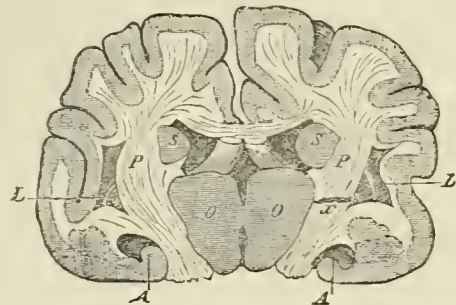


Fig. 22.

condition of hemianæsthesia of the opposite side of the body, frequently associated, temporarily however, with some degree of motor paralysis; whereas when the anterior part (two thirds) of the internal capsule (fig. 23)—that part lying between the caudate and lenticular

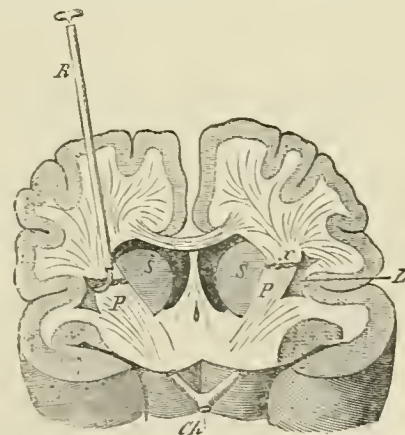


Fig. 23.

nuclei of the corpus striatum—is divided, motor paralysis, unaccompanied by sensory paralysis, or if so, functional and fleeting, is the constant result.

The facts of human pathology are no less precise. Motor hemiplegia is invariably the result of destructive lesion of the anterior two-thirds of the internal capsule, which may be accompanied temporarily by hemianæsthesia, if the lesion be such as to cause pressure, or functional disturbance of the posterior third. And we have now a tolerably large body of evidence to show that destructive lesions limited to the posterior third of the internal capsule cause cerebral hemianæsthesia.

The first observations relative to this localisation were made by Türck†

* BRITISH MEDICAL JOURNAL, August 28th, 1875.

* Sur l'Hémianesthésie de Cause Cérébrale, 1874.

† Sitzber. der kais. Acad. der Wissensch., Band XXXV; 1859.

in 1859, and since then, Charcot, Magnan, Bourneville, Rendu, Raymond, Pierret, Decaudin, Pitres, Boyer, etc., by their observations and researches, have established the pathology and symptomatology of this affection in a manner which leaves little to be desired.

Since the publication of Türck's four cases, in 1859, of the association of hemianæsthesia with lesion of the posterior part of the internal capsule, there have been recorded at least twenty others, all establishing the same fact.*

The symptoms of cerebral hemianæsthesia, which correspond with those of that strange and, as regards its therapeutics, mysterious affection termed hysterical hemianæsthesia, are such as to clearly differentiate it from anæsthesia of spinal or mesencephalic origin. The special diagnostic feature is, that all the forms of sensibility, general or special, are impaired or abolished; the organs of sense whose nerves take origin above the medulla oblongata being equally affected with those which arise here: whereas, in mesencephalic anæsthesia, in addition to the usual association of alternate paralysis, sight and smell remain unaffected.†

In cerebral hemianæsthesia, tactile sensation is affected unilaterally up to the middle line of the face and trunk; there being more or less complete insensibility to touch, pain, temperature, and also abolition of muscular sensibility, with complete retention of electro-motor contractility. The conjunctival, nasal, buccal, and cutaneo-mucous membranes are also anæsthetic. The viscera, however, remain sensitive, and deep pressure, as on the ovary, etc., is felt as before. In hysterical hemianæsthesia, there is usually hyperæsthesia in the ovarian region, and frequently also the condition termed by Charcot hysterio-epilepsy. Taste, smell, and hearing, are deficient or almost entirely abolished in a similar manner on the one side. As regards vision, the symptoms are especially noteworthy. The eye on the anæsthetic side is rarely rendered completely blind. There is rather a condition of amblyopia or diminution of the acuteness of sight, and a very remarkable contraction of the field of vision, more especially as regards the perception of colour. Landolt has found that the field of colour-perception becomes contracted in a manner corresponding to the relative extent of the colour-field in the normal state. Normally the blue field is the largest, next the yellow, orange, red, green, and last in order the violet, which is perceived only by the most central parts of the retina. In cerebral hemianæsthesia the sensibility for violet first disappears, then for the green, and later for the orange. Sensibility for yellow and blue may still persist; but in the higher degrees of anæsthesia, all colours merge into an uniform sepia tint. Landolt‡ has lately pointed out another important fact, viz., that the affection of vision is not altogether unilateral, but that the eye on the side of lesion participates, though to a less extent, in the anæsthesia.

It is further noteworthy that in this form of amblyopia, ophthalmoscopic examination reveals no organic lesion or degeneration of the optic nerve or retina, in the first instance at least; any atrophic changes which may show themselves subsequently being the consequence and not the cause of the blindness.

It is clear from these facts that the older theories respecting the decussation and distribution of the fibres of the optic tracts, and the representation in each hemisphere, only of the corresponding parts of both retinæ, are untenable. If this were the case, we should have, as the result of a central lesion, a hemiopia of both eyes; whereas we have not a hemiopia, but an amblyopia, which, though to some extent bilateral, is most marked on the side opposite the lesion.

Yet we know that hemiopia is not an uncommon symptom in connection with intracranial disease; but from the facts mentioned, we may conclude that in such cases the lesion must be situated below the cerebral cortex.

The scheme of the optic tracts and their relations, given by Charcot, enables us to give a satisfactory explanation of these facts. (Fig. 24.) Each optic tract contains two sets of fibres; the outer, passing to the eye on the same side; the inner, decussating with their fellows of the opposite side in the chiasma and passing to the corresponding part of the opposite eye. The fibres which do not decussate in the chiasma undergo decussation in the corpora quadrigemina, and pass on with the fibres which have done so to the opposite hemisphere, so that each hemisphere is brought into relation with the whole of the opposite eye. This scheme does not represent the bilateral relation of each hemisphere to both eyes, which is indicated by Landolt's researches; but we can account for this by the bilateral association in the lower ganglia. It is easy to see that a lesion of the one optic tract (κ fig. 24)

will cause bilateral hemiopia; and that a lesion in the region of the corpora geniculata (CG), or posterior part of the optic thalamus, will have a similar effect, as in a case reported by Hughlings Jackson.* We

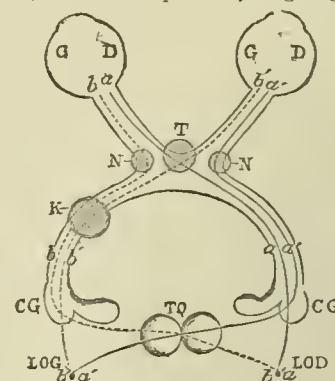


Fig. 24.

may also have cross amblyopia and bilateral hemiopia, as in a case reported by Gowers,† but as there was no necropsy, the position of the lesion is only a matter of speculation. I hope to be able to show you that these clinical observations are in harmony with the results of my experiments on monkeys.

It is evident that the lesion which causes hemianæsthesia, being in the medullary fasciculi, produces this effect, not by destroying the centres of sensory perception, but by causing solution of continuity of the paths of centripetal impressions; and the question is, whether the sensory fibres, like the motor fibres of the internal capsule, are distributed to localisable areas in the cortex. On this point, experimental physiology is, I think, in some respects at least definite enough; though it must be admitted that the same cannot as yet be said of clinical medicine and pathology. To these let us now turn.

Lesions of the Occipital Lobes.—I will first direct your attention to the occipital lobes, and compare the results of experimental investigation with the facts of disease of these regions. In reference to experimental investigation, we must rely mainly, if not exclusively, on experiments on monkeys; as in other animals these lobes are not specially differentiated and developed. I have found, as the result of numerous experiments, that electrical irritation may be applied to the occipital lobes without producing any objectively discoverable reaction. Neither does destruction or complete removal of these lobes singly, or on both sides, cause any appreciable sensory or motor disturbance. Animals so mutilated continue to see, hear, touch, taste, and smell, and retain all their powers of voluntary motion. The results of destruction, like those of irritation, are, therefore, mainly negative, and do not succeed in throwing very clear light on the functions of these regions. In one or two instances, I should mention that there seemed to be some affection of vision; but in these cases, I found that the lesion had extended beyond the occipital lobes, into the angular gyri; while in those in which the lesion did not extend beyond the occipital lobes, no such symptoms occurred. As a rule, the animals rapidly succumbed, with one exception; and I also observed that, contrary to the usual effects of destructive lesion of other parts of the hemispheres, the animals refused to eat: an occurrence which, from my numerous and close observations of the effects of destruction of every other part of the brain, I regard as in some way causally related to this lesion.

I admit that the inference as to causal relationship is considerably weakened by the fact that, in one of the animals in which I had removed both occipital lobes, the appetite for food returned after five days' abstinence. I have, however, attempted, whether successfully or not, to explain this, and propounded the hypothesis that the occipital lobes are specially related to the visceral sensibilities, and are the anatomical substrata of the correlated feelings which form a large portion of our personality and subjectivity. Whether the hypothesis is well founded or not, I leave to further investigation; but one thing is, to my mind, clearly established by these experiments, viz., that lesions of the occipital lobes, whether unilateral or bilateral, cannot be regarded as the direct cause either of motor or special sensory affections; and, therefore, I would at once discard the anatomical views of Meynert, Hugue-

* For references, etc., see Grasset, *Localisations dans les Maladies Cérébrales*. Montpellier, 1878.

† See Couty, "De l'Hémianesthésie Mésocéphalique," *Gaz. Hebdomadaire*, 1877, p. 30, et seq.

‡ *La France Médicale*, February 3rd, 1877.

* "A Physician's Notes on Ophthalmology" (*London Hospital Reports*, vol. viii, Part ii, 1875).

† "On Athetosis" (*Medico-Chirurgical Transactions*, vol. lix, Case 7).

nin, and others, which would place the central terminations of the optic tracts in the occipital lobes. They are not, I think, in harmony either with physiological experiment, or, as far as I can discover, with the facts of human pathology.

Though many speculations exist, to some of which I shall refer, as to the symptoms dependent on lesions of the occipital lobes, it does not as yet appear, as the following cases will show, that there are any symptoms, attaching to disease of these lobes, so definite and constant as to establish any direct causal relationship between them, or indicate the functions which these regions subserve. Lesions of the occipital lobes are, as a rule, *latent*.

M. Vauttier* records a case of yellow softening of the right occipital lobe, and, to a larger extent, of the internal aspect of the left (quadri-lateral lobule). No affection of motion or sensation existed; and, with the exception of considerable hebetude, there were no other symptoms of cerebral affection.

Pitres† relates a case, in which, in consequence of a fall on the head, an abscess, the size of a billiard-ball, formed in the postero-inferior aspect of the brain. There was no paralysis of motion or sensation, and mental obtuseness was the only indication of cerebral lesion.

Sir W. Gull‡ has recorded a case of abscess of the left posterior lobe, also without any objective symptoms.

A similar case, in which the abscess was situated in the right occipital lobe, is recorded by Rodocalat.§

Other cases, reported by Blyenye, Hébreau, Martinet, Merriman, Ogle, l'arrot, Ballinger, etc., are cited by M. Pitres in his before mentioned work,|| to which I would refer the reader.

It may be said, in reference to these cases, that the lesions being unilateral, and of slow growth, the absence of symptoms may be explained by functional compensation by the same or the opposite hemisphere. There are, however, some cases on record of traumatic lesions of the occipital lobes, also negative as regards objective symptoms.

Marcé¶ records a case of contusion, with effusion into the meninges, and softening of the cortex in the right occipital lobe, without any symptom as regards sensation or motion.

In addition to Vauttier's case already mentioned, a very important case of bilateral lesion of the occipital lobes has been put on record by Sestie.** In Sestie's case, there was an abscess in each occipital lobe, without any objective symptom; although the patient's memory was somewhat defective, there was nothing very remarkable in his mental condition.

Leger†† relates a case of tumour invading both occipital lobes, in which, beyond general mental obtuseness and headache, there were no objective symptoms. Sight was not impaired in this case, notwithstanding the existence of a cerebral tumour in this region. Except, therefore, as regards the fact of latency of lesions of the occipital lobes, these cases do not give us much positive material for generalisation.

Joffroy‡‡ attempts to establish a relation between lesions of the occipital lobes and the occurrence of acute sloughing of the sacrum; and thinks that the occipital lobes may be trophic centres. He quotes three cases in support of this hypothesis. One, a case of general paralysis, in which, though the cerebral lesions were not confined to the occipital lobes, yet the sacral sloughing was greater on the side opposite the lobe most affected. In the other two, there was only slight unilateral lesion: in the one case, a small focus of hemorrhage; in the other, of softening, with sloughing on the opposite side of the sacrum.

But, in reference to this hypothesis, it needs only to be remarked that sacral sloughing occurs in connection with hemiplegia where no affection of the occipital lobes has been detected; and lesions of the occipital lobes are not even commonly associated with such results. Cases have occurred, and been carefully examined, in reference to this point since the publication of M. Joffroy's views, without confirming them. One such case is reported by Sazic,§§ and another by Dreyfus-Brisac.|| These may be taken in conjunction with the other cases mentioned; for it is not likely that such a serious objective affection would have been overlooked had it actually existed.

In connection with softening of the occipital lobes, M. Charcot has occasionally noted, in addition to headache, etc., cutaneous formication and similar subjective sensations, but no true anæsthesia.

Hughlings Jackson and Bastian are of opinion that disease of the posterior lobes is more frequently associated with mental derangement than disease of the anterior lobes or other parts of the brain. Hughlings Jackson goes somewhat further, and thinks that such derangements, particularly "defective perception", are more commonly seen when the right side is affected, and that irritative lesions here give rise to coloured vision and other subjective ocular spectra. These are not put forward, however, as other than hypotheses, and I agree with Dr. Bastian when he says: "More extended observations, however, seem needed before we can safely arrive at a positive conclusion on this difficult subject."**

Even on my own hypothesis as to the relation between the occipital lobes and the organic sensations, I should regard it as highly probable that lesions of the occipital lobes should cause profound mental disturbances. For, if our feelings are our chief motors, it might readily be allowed that lesions of the anatomical substrata of such an important element of our feelings and emotions should lead to mental derangement.

But, not to indulge further in speculation, I think we have to admit that up to the present the facts do not yet enable us to generalise with certainty as to the positive effects of lesions of the occipital lobes. It is clear, however, from the negative effects of extirpation or disease that we cannot place in the occipital lobes the central terminations of the fibres of the internal capsule which convey impressions of special sense to the cortex.

[To be continued.]

CLAUDE BERNARD:

A LECTURE

Delivered to the Senior Class of Physiology at the Physiological Laboratory, New Museums, Cambridge.†

BY MICHAEL FOSTER, M.D., F.R.S.,
Trinity Prælector in Physiology.

IN order, however, that you may understand the beginning of this matter, I must take you back a little.

Possibly it has never occurred to you that there was a time when the plain unstriated muscular fibres of the arteries were things unknown, or at least not believed in; and yet it is less than forty years ago (1840) that their presence was first demonstrated by Henle. Just imagine what lame and mutilated answers you would send up, in your examinations, if you were forbidden to employ any reasoning which involved the existence of muscular contractility in the arteries. You would be brought to a standstill, not in questions only belonging directly to the circulation, but in almost all kinds of physiological problems. How could you treat properly the secretion of the digestive juices, the excretion of urine, the origin and distribution of animal heat, or even the problems of the central nervous system itself, if you were debarred from all reference to vaso-motor action? Try to withdraw from the web of to-day's physiology the thread of vascular contractility, and the whole tissue becomes a tangled skein. How, then, you may naturally ask, were those phenomena explained which we now so readily interpret as the results of vaso-motor action? Happy are you that you can now learn physiology without having your minds burdened with the ideas of determination of blood, nutritive force, capillary attraction, and other *Dei ex machinâ* called in to explain the facts which you unravel by help of the simple protoplasmic property of contractility.

Let me read you what the great anatomist and physiologist Johannes Müller wrote, just before Henle's discovery. I read from Baly's translation, which was not published indeed till after Henle's paper had appeared. "The old writers, and many recent physiologists, have erroneously regarded the contraction of the arteries which follow their dilatation as a muscular act, and have looked upon the fibres of the middle arterial coat as muscular fibres. But the fibres of the elastic coat of arteries differ, as we have already mentioned, from muscular fibres, both by their physical and chemical properties, as Berzelius has shown, as well as by their form. The different arguments for the existence of the pretended muscular contractility of arteries, which have

* *Essai sur le Ramolissement Cérébral Latent*, 1868.

† *Lesions du Centre Ovale*.

‡ *Guy's Hospital Reports*, 1857.

§ *Bull. Soc. Anat.*, 1870, p. 289.

|| *Op. cit.*, p. 134.

¶ *Bull. Soc. Anat.*, 1854, p. 295.

** *Bull. Soc. Anat.*, 1833.

†† *Bull. Soc. Anat.*, November 1876.

‡‡ *Soc. de Biologie, Séance December 4th*, 1875.

§§ *Bull. Soc. Anat.*, December 15th, 1876.

|| *Bull. Soc. Anat.*, March 23rd, 1877.

* *Paralysis from Brain-Disease*, p. 239.

† Concluded from page 521 of last number.

been adduced from comparative and pathological anatomy, are of no weight." (Vol. i, page 214.)

Then, again: "Although it be denied that the circulation is in any way aided by an attraction between the blood and the capillaries, yet the existence of such an attraction or affinity may be admitted in the instance of the 'turgescence, turgor vitalis, or orgasm,' observed to take place in certain parts of the body, which are the seat of increased vital action, independently of the action of the heart. . . . This condition of vascular turgescence may be excited very suddenly, as is seen in the instantaneous injection of the cheeks with blood in the act of blushing, and of the whole head under the influence of violent passions; in both of which instances the local phenomena are evidently induced by nervous influence. The active congestion of certain organs—of the brain, for example—while they are in a state of excitement, is a similar phenomenon." (*Ibid.*, p. 239.)

Dr. Carpenter, in writing his first edition of his *Physiology*, from which I have already quoted, was aware of Henle's discovery; and we find him using the following language. "A very important use may be assigned to this muscular coat (of the arteries), which has been generally overlooked by physiologists: that of regulating the diameter of the tubes in accordance with the quantity of blood to be conducted through them to any part." (*Op. cit.*, page 411.) And again: "The minute distribution of the sympathetic nerve upon the walls of the arteries, the known power which this has of producing contractions alike in their fibrous coat and in the muscular tissue of the intestinal canal, and various phenomena which indicate the power of certain states of mind over the dimensions of the arteries, in particular parts of the body at least, render it highly probable that the calibre of the arteries is regulated in no inconsiderable degree through its intervention." (*Ibid.*, page 412.) In these words, you will readily acknowledge an anticipation of our more modern views; and yet, in spite of this, we find Dr. Carpenter, a little further on (page 475), relapsing into an enthusiastic support of the current doctrines of determination of blood, etc.

One man indeed, a man of great honour amongst us as the author of the cell-theory, I mean Schwann (who, in a few weeks, will receive public acknowledgment of his great services in the University which he has served now for forty years), had, some few years before, not only stoutly maintained, and, as he thought, experimentally proved, the contractility of the small arteries, but offered an explanation of vascular dilatation exceedingly like our present inhibitory doctrine. To his experiments, Johannes Müller replied with the dogmatic statement, that Schwann's results "could not be due to contractility of muscular fibres, because these did not exist in arteries". (*Op. cit.*, page 218.) And the physiological world in general went astray with Müller. A few scattered adherents may, from time to time, have more or less distinctly accepted Schwann's views, or something similar; but the vaso-motor doctrines now current cannot be said to have become part of general physiological teaching until after Bernard had, in 1851, called attention to the effects of division of the cervical sympathetic. As you already know, Brown-Séquard, in the following year, arrived independently not only at Bernard's result, that section of the sympathetic caused vascular dilatation of the ear, but also at the even more important result, unknown apparently at first to Bernard, that the dilatation and blush gave place to constriction and pallor when the peripheral segment of the divided nerve was stimulated; and our own Waller did much to put the whole matter in its proper light at an early stage of the discovery.

We may note here that, in this as in many other of Bernard's exploits, the discovery was, so to speak, "in the air"—it was waiting to be made. But is not this true of all discoveries? Are they not all "waiting to be made"? If Bernard had not made the observation, Brown-Séquard would; if Brown-Séquard had not, Waller would; if Waller had not, some one else would. As a matter of fact, Bernard was the first, and to him accordingly must the credit be given.

From this simple beginning, from this slight experiment, which you have now seen so often that you think nothing of it, has grown all our large body of vaso-motor physiology. And if I needed to give you any further proof of how essentially true it is that we owe this to Claude Bernard, I should only have to call your attention to the fact that it is to him again that we are indebted for the second great step in the progress of the doctrine. In 1851, Ludwig made the memorable observation that electric stimulation of the lingual nerve (or rather of the chorda tympani fibres running in the lingual trunk) called forth the activity of the submaxillary gland; but it was Bernard who, a little later, drew attention to the fact that the stimulation of the same fibres caused dilatation of the blood-vessels of the gland. He it was who first introduced the phrase "vaso-dilator nerve"; and I need hardly remind you what a crowd of ideas, some of them perhaps conflicting, but all illuminating, these words call up in the mind of the physiological student to-day.

But time is failing me; I must content myself with brief allusions to Bernard's other services.

It was in 1844 that he commenced his remarkable investigations on urari poison, though his observations were not published till 1850. The discovery of the action of this poison is perhaps typical of Bernard's work. It, like others, was a discovery "in the air"; for Kölliker, working quite independently, arrived exactly at the same result. Bernard's treatment of the question was characteristically his own. If you read his account of the matter, you will see how he gives way to exaggeration, and even to inaccuracies; and how he frequently fails to realise, or at least to show that he realised, the difficulties of his positions. In this respect, Kölliker's more cautious work contrasts favourably with his. But this must always be remembered of Bernard's apparent rashness. His speculations, even when hasty, were in most cases happy; his conclusions, even when not warranted by the evidence before him have, not once or twice, but often, proved in the end, upon fuller knowledge, to be true.

And what shall I say of the importance of this urari discovery? Letting pass on one side altogether its effect in clearing up our notions of muscular irritability and nervous impulses, let me ask you to reflect on the service which has been rendered to physiology by a knowledge of the phenomena of urari poisoning, viewed as a mere method of research. If, at this moment, we were to blot out from our modern physiological science all that has been gained, directly or indirectly, by means of urari, what would come of it?

Such are some of the more important services rendered by Bernard to the science we are studying here. If I were to attempt to tell of all his work, from that first early memoir on the chorda tympani to that last work on ferments, in the midst of which death found and took him, not a single lecture, but almost a whole course of lectures, would be needed. I have narrated to you what I take to be his most important achievements. Remove these, and there are still left basketfuls of fragment—sufficient, I might say, to establish the reputation of a whole school of young physiologists. I might speak of his important work on carbonic acid poisoning; of his many papers on the submaxillary gland, in which, besides the capital fact of which I have already spoken, he pointed out the effects of reflex stimulation, the change of colour during activity, the so-called paralytic secretion, and contended for the autonomy of the submaxillary ganglion. I might speak, too, of his labours on animal temperature, starting with that early observation on the rise of temperature in the ear, following upon division of the cervical sympathetic, and continued till his last days. As you know, I am one of those who think that Bernard's, perhaps at present unwarranted, conclusion as to the existence of frigorific and calorific nerves, is precisely one of those which future researches will probably show to be eminently happy. If so, then we must simply double, perhaps more than double, the value which we have already attached to that pioneer experiment on the cervical sympathetic.

But I must stop. To tell of all Bernard's work, I should have to traverse the whole range of physiology. There remains, however, one feature of the man of which I must say one word. I began by telling you that he arrived at Paris a poet: he remained a poet to his death. A poet I mean, not in the sense that all scientific discoverers are poets, that it needs as fine a frenzy to pierce the darkness and unravel the perplexities of the entangled phenomena of what we call matter, as to fret about the troubles and longings of what we call spirit; but a poet, in the lower and more usual sense, that he was a phrase-maker. When you read his works, you will find yourself carried along by the flow of an easy diction, which seems to make everything plain; and every now and then you will come upon a phrase, the introduction of which is in itself equal almost in value to a discovery. You remember how, in our lectures here, we insist on the blood being regarded as the great "internal medium" on which, and in which, and by which the tissues live; you know that our teaching here is largely built up upon this conception. This picturesque and far-reaching phrase we owe, too, to Bernard. What, again, can be happier than his description of carbonic oxide poisoning as "a paralysis of the blood-corpuscles"? Other phrases of a like nature you will find scattered over Bernard's writings, some of them luminous in the highest degree, all of them happy and instructive.

Such is the story of Claude Bernard. I have not attempted to hide from you those things in which he fell short. I trust I have led you to feel how great was the work he did. Without exaggeration, we may say that his labours are *par excellence* the physiological labours of the middle third of the present century; and fortunate will be physiology if, when the century closes in, she can point to yet other later physiologists as having laboured with equal power, with equal diligence, and with equal fruit.

FATAL CASE OF CARIES OF EXTERNAL MEATUS: OTORRHOEA AND SECONDARY AFFECTION OF BRAIN.

By F. M. PIERCE, M.D.,

Senior Surgeon to the Manchester Ear Institution.

THE following case contains some points of interest to the general practitioner as well as to the specialist. It is one of a class of cases, the termination of which is more frequently witnessed by the former than by the latter. In private practice, the earlier symptoms are often entirely overlooked, and the fatal result is attributed to any cause but the true one. The specialist, consulted by patients from a distance, is too far away to have the care of such a case in the last stage, and probably only learns the result by mere accident, long after it is too late to obtain *post mortem* proof of his diagnosis.

I was called about 3 A.M. on Tuesday, October 24th, 1877, to see a German gentleman, who had suffered from slight otorrhœa of the left ear on three or four occasions during the last six years. On these occasions, the discharge was slight and almost unaccompanied by pain, and did not continue more than a few days. The patient was a rather stout, stiff-built, apparently healthy man aged 56, of great muscular ability; there were, however, indications that in early years he had been very strumous (cicatrices of abscesses in the neck and of disease of the carpal and metacarpal bones), and had had syphilis.

On Saturday, October 20th, the patient complained of slight pain in the left ear, accompanied by otorrhœa. He did not pay much attention to these symptoms, which he had had on previous occasions without causing further trouble.

On October 21st, the earache and discharge gradually increased and prevented sleep.

October 22nd.—Though still suffering from pain in the ear and otorrhœa, with slight nausea, he persisted in going to business. During the day, he became very giddy, unsteady in his gait, had sharp pain over the left temple, and severe attacks of vomiting, which compelled him to return home, when his medical attendant, Dr. Gumpert, was called in. His pulse was then 120, and temperature 101 deg. Fahr. Towards evening, the pain and discharge were aggravated, but the retching ceased; the pulse, temperature, and respiration increased as the night advanced, and delirium set in.

About 4 A.M., Wednesday, October 24th, I saw the patient with Dr. Gumpert. He was then lying in bed, on his back, almost comatose, moaning, and constantly twitching the eyelids and face, and picking at the bedclothes. There was no ptosis or facial paralysis, and the pupils were equal and about normal. The skin was bathed in a cold clammy perspiration. The pulse 150, respiration 50. The temperature was not taken. In front of the left tragus, over the temporo-maxillary articulation, there was a hard tender tumour, like an enlarged gland, which had made its appearance within the last twelve months. The mastoid process was unaffected. On examining the left external meatus after removing a profuse collection of pus, an old perforation of the anterior superior quadrant of the membrana tympani was seen. It appeared clogged with thick muco-purulent discharge; and on exploring the meatus, a probe distinctly detected a small spot of carious bone on the anterior superior wall of the meatus, near to the membrana tympani. I immediately enlarged the opening in the membrane, by cutting upwards and downwards through a speculum with lateral aperture attached to Brunton's auroscope, and incised the walls of the meatus. The tympanic cavity was rendered thoroughly impervious by means of the Eustachian catheter, and ten leeches were applied in front of the tragus and behind the auricle. The patient gradually sank, and died at 10.45 A.M. the same day, October 24th.

NECROPSY, twenty-eight hours after death.—Blood was oozing from the left ear. On opening the skull, a large quantity of fluid black blood escaped from the cerebral sinuses, which were much congested, as were also the vessels of the dura mater, which looked opaque and thickened over the anterior half of the left hemisphere. On raising the dura mater, the whole surface of the anterior half of the left cerebrum, from about one inch from the longitudinal sinus down to the surface of the petrous bone was covered with thick yellow creamy pus. On careful examination of the cranial surface of the petrous and temporal bones, no caries or lesion could be detected to account for the purulent deposit. There was no abscess in the brain-substance, and no effusion into the ventricles. The temporal bone was not removed.

REMARKS.—There can be no doubt that many fatal illnesses, accompanied by convulsions, coma, and other cerebral symptoms constituting meningitis in one form or other, are due to undetected ear-disease. In this case, the fatal issue was very rapid, considering the

slightness of the premonitory symptoms. The existence of a perforation, evidently produced at some previous attack, tended to diminish the probable extension of the suppurative inflammation to the brain. How long caries of the wall of the meatus had existed is uncertain, whether coexistent with the first appearance of otorrhœa or with the last. If with the first attack, it is singular that signs of caries should have remained dormant so long; and if the last attack were the origin of the bone-affection, its rapid course is somewhat unusual. How did the pus reach the position in which it was found? We know that the upper wall of the external meatus is closely contiguous to the dura mater and cerebrum, but in this case there was no evidence of direct extension of the caries of the anterior superior wall of the meatus to the dura mater covering the petrous bone. Probably the pus was conveyed from the meatus by means of the smaller petrosal veins to the vessels of the dura mater. Branches of the middle meningeal artery pass in the adult from the dura mater to the tympanic cavity; and when we remember the pre-eminently vascular relations of the petrous bone with the cerebral meninges, we cannot be surprised at the frequent occurrence of embolism, abscess, thrombosis, and blood-poisoning from purulent ear-disease.

Professor Gruber points out that fatal ear-affections most frequently originate in disease of the external portion of the ear—meatus, etc.—and this case is certainly corroborative. Mr. Hinton says: "The fatal result is the consequence either of caries affecting the brain or vessels by continuity, or of poisoning through the veins of the diploë: or abscess may form in the brain in the neighbourhood of an inflamed tympanum without caries or any apparent means of propagation of the morbid action."

A CASE OF CEREBELLAR ABSCESS.

By JOHN SERVICE, M.B.,

Assistant to the Professor of Clinical Medicine in the University of Glasgow, and Assistant-Physician to the Dispensary for Skin-Diseases.

THE following case, though not fully reported, may possess some interest.

Sarah H., aged 16, was sent into Belvidere Hospital on September 18th, as suffering from fever. An examination showed this to be incorrect; and at no subsequent time did she present a febrile temperature. Her history was as follows. Three months previous to admission, she began to complain of a slight, though constant, headache; and even before that, there were frequent attacks of giddiness. She never had had fits or convulsions. Her appetite had remained good; but the tongue became foul. A month after headache first began, a purulent discharge from the right ear made its appearance; and this, for a short time, is said to have given her a little relief. Soon, however, the pain returned as before, and gradually became worse.

On admission, her only complaint was of severe pain in the forehead and nape of the neck, and an inability to turn her head without great pain. The pupils were, if anything, slightly dilated. The tongue was covered by a white fur. The temperature was normal, and the pulse 80. The bowels were costive. After being ten days under observation (during which time purgation and blisters to the nape of the neck were resorted to), the patient said she was quite well, and was permitted to get out of bed. In two days more, however, she was worse than ever. The pain returned to the forehead. The pupils became very much dilated and immovable. Both eyelids drooped, and could not be completely raised; there was, therefore, ptosis. Her sight, too, was imperfect, but the power of vision varied in intensity at different times. Her tongue again became foul, and the bowels continued obstinately constipated. Twice, while at stool, she became giddy and fell forward, so that the use of the bed-pan was ordered. The temperature remained about 98.6 deg., and the pulse 60. Throughout, she remained in a drowsy state, and did not care about being disturbed. Her breath was very foetid; and for about a week before death (which took place on October 13th), there was a discharge of greenish matter from the nostrils. There was no paralysis of the limbs or anaesthesia; and she retained perfect control over speech. The heart-sounds were irregular and the second was accentuated.

To recapitulate: the leading symptoms, therefore, were persistent frontal headache, giddiness on standing, drowsiness, dilated and immovable pupils (both alike), partial ptosis, imperfect vision, and constipation. The treatment consisted of light diet, purgation, and blisters to the scalp. Transient relief was always experienced after the blistering. The iodide and bromide of potassium had also a trial.

At the necropsy (twenty-six hours after death), an abscess was found in the right lobe of the cerebellum, containing about three

drachms of greenish pus. The interior of the cavity consisted entirely of white brain-substance, and was of a firmer consistence than the rest of the brain. There were also in the cavity two small blood-clots, partially organised. The right lobe of the cerebellum was, comparatively speaking, a mere shell; and the left lobe, as well as the pons Varolii, was to a small extent also implicated. The membranes were perfectly healthy, and there was no apparent communication between the abscess and the suppurating ear.

NOTES OF A CASE OF CARBONIC ACID POISONING, TREATED BY INHALATION OF OXYGEN :

WITH A DESCRIPTION OF A NEW APPARATUS FOR RENDERING IMPURE AIR RESPIRABLE.*

By CHARLES B. BALL, M.D.,
Surgeon to the Blaenavon Iron Works.

ON January 16th, 1877, I attended a family who were found insensible in bed that morning. I found a man aged 55, his wife aged 48, and daughter aged 16, in one bed, in a very small room, quite insensible. There were the remains of a large fire in the grate, the chimney of which was imperfect. Upon admitting plenty of air and using the usual restoratives, the woman became sufficiently conscious to say that she remembered being up at 2 A.M., when she experienced considerable difficulty in breathing and a severe headache; after which she remembered nothing further till she was restored to consciousness. The man became semiconscious, but the girl remained perfectly insensible. I had her, therefore, removed to another and well-ventilated room, where artificial respiration was resorted to. She now had violent tetanoid convulsions, at intervals of a few minutes. The muscles of the face were, however, exempt from the general spasm. The pupils of the eyes were of average diameter, but dilated in bright light and contracted when the light was removed. This phenomenon was also noticed in the man's case.

During the day, the man and woman progressed favourably, but the girl became much worse, the convulsions appearing at longer intervals and the intervening coma being more profound. The treatment now adopted in her case was the application of a blister to the back of the neck, stimulating enemata, and the hypodermic injection of pure ether. None of these measures had the desired effect, and at ten o'clock that night she was apparently dying. The convulsions had entirely subsided. The pulse at the wrist could not be felt, and the respirations were few and shallow. Through the kindness of Mr. P. C. Gilchrist, F.C.S., I now obtained a large supply of pure oxygen, which, by a little arrangement of an ether-inhaler, I was enabled to give her to breathe in any degree of dilution required. At first equal parts of air and oxygen were given, but afterwards the proportion of oxygen was increased. It produced a rapid and most marked effect; the pulse soon became perceptible, and quickly increased in force. After the inhalation of about four gallons of gas, it was discontinued, respiration and circulation having been well revived. During the inhalation, the convulsions recurred, having been absent for several hours. Although not sensible during the night, she was decidedly better, being able to swallow fluid nourishment, and the convulsions gradually subsiding. She did not recover consciousness till the morning of the 18th, being forty-eight hours from the time I first saw her.

The different degrees in which the persons suffered, although exposed to the same poison, appears to be worthy of note. The intensity of the girl's symptoms is, I think, accounted for by the fact that she suffers from phthisis, and has therefore a smaller available lung-surface. As the woman got up to walk about the room during the night, she for the time respired a higher, and therefore purer, atmosphere; and this may account for the fact that her symptoms were the lightest of the three. The action of the pupils with regard to light, noticed in two of the cases, was remarkable and very apparent. Although the inhalation of oxygen has been recognised in medicine since the time of Sir H. Davy, yet its use amongst the generality of practitioners is not frequent, and the above case was the first time I have ever used it. Its action impressed me greatly; for I have never witnessed a life so certainly saved by any other therapeutic agent. One great objection to its more general use has been the difficulty of obtaining the gas readily, in a state of purity and in a portable form. This has now been obviated; and I have here a copper flask, into which fifteen gallons of pure oxygen have been compressed. I obtained it from Messrs. Barth

of 26, Duke Street, Bloomsbury, and it appears to be very convenient for medical purposes, being easily carried about, as its weight is only five pounds three ounces when full; the diminution in weight will tell roughly the amount of gas used.

From my experience in this case, I was led to the construction of an apparatus for obviating the bad effects produced by inhaling an atmosphere containing a large percentage of carbonic acid, by the simultaneous inhalation of an increased supply of oxygen; the applicability of some such apparatus being demonstrated by the experiments of Regnault and Reiset, who found that animals could live in an atmosphere containing a large quantity of carbonic acid, provided the percentage of oxygen was proportionally increased. The action of this apparatus is partially illustrated by the annexed diagrams. (Fig. 1.) It consists essen-

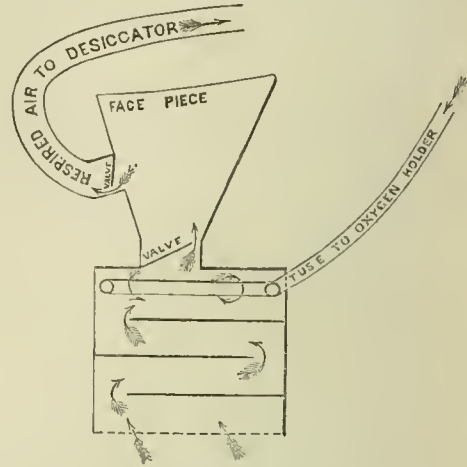


Fig. 1.

tially of a tightly fitting face-piece, which communicates with a chamber of a capacity sufficient for one inspiration. The chamber is separated from the outer atmosphere by a sheet of wire gauze, and the air is made to traverse several partitions. Behind the partition next the face-piece, oxygen is allowed to escape from a perforated tube, which is in communication with a reservoir, carried in the manner of a knapsack. The tube is supplied with a tap, which will allow the escape of

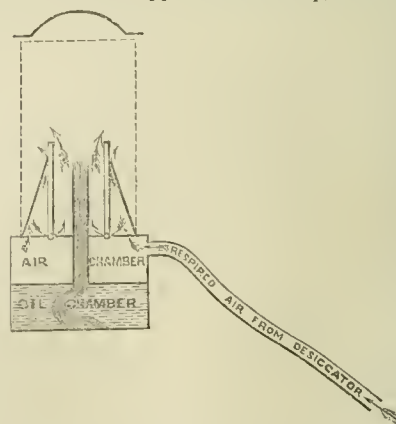


Fig. 2.

oxygen up to 30 per cent. of the air respired. During the intervals of respiration, the diaphragms will prevent the escape of oxygen from the chamber; and at each inspiration, the amount of oxygen required will be washed through the valve at the face-piece by the external atmosphere. The expired air is made by a system of valves to pass through an elastic desiccator, and thence supply a lamp. (Fig. 2.) By this means, the lamp can be made a guide as to the amount of oxygen required. By the use of this apparatus, I expect that a collier would be enabled to go into a mine charged with carbonic acid. In the case of an explosion, in which all the oxygen had been converted into carbonic acid and steam, the explorer would be enabled to supply himself with such an amount of oxygen as would neutralise the effects of the carbonic acid. The man could easily carry a supply of oxygen which would last for two hours, even when he was using the maximum quantity required; and, by connecting a second tube and face-piece to the oxygen-reservoir, he could revive any sufferer whom he might find overcome by carbonic acid. I may mention that, in the experiments connected with the construction of this apparatus, I have myself respired, without feeling any discomfort, during a considerable time, a mixture containing 18 per cent. of carbonic acid, but in which the

* Read at the South Wales and Monmouthshire Branch.

oxygen was increased to 30 per cent. This amount of carbonic acid is 6 per cent. more than that found after colliery explosions in which complete combustion has taken place.

THE TREATMENT OF ASCITES BY ABDOMINAL COMPRESSION.

By STEPHEN MACKENZIE, M.D.,

Assistant-Physician to the London Hospital.

THERE are numerous ways of treating the ascites dependent upon contraction of the liver. Alternatives, drastics, diuretics, tonics, compelling the patient to satiate his thirst from his peritoneal cavity, simply keeping the patient at rest in bed, all have their advocates, and are plans under which I, as every other physician, have seen good results in even unpromising cases. Every now and then, however, under any of these plans of treatment, alone or in combination, the peritoneal effusion remains stationary, and its removal becomes tedious. I have found that, in cases where there is any tendency to absorption, this may be greatly accelerated by a simple method—that of abdominal pressure—to be described, and that in cases in which absorption does not appear to be taking place the same plan is often successful in removing the fluid. I have employed this treatment in several cases, with such good results, that it encourages me to hope that others will find it useful. Perhaps I can best illustrate the plan of treatment I have found so successful in some cases of ascites, by narrating the first case in which I put it into operation.

E. S., aged 41, widow, was admitted into the London Hospital under my care on January 16th, 1875. The patient stated that she had not been thoroughly well since her last confinement, nineteen years previously. About one year before admission, in January, she noticed that her waistbands became tight. She attached no importance to the occurrence, however, at first. In February and March, she found that she was passing extremely small quantities of urine. In May, the size of the abdomen was much increased, and its "weight" inconvenienced her when she moved about. The enlargement of the abdomen increased rapidly up to June, when she attended at another hospital as an out-patient. She then measured forty-two inches round the largest part of the abdomen. She attended for three months, and during that time increased in size, and continued to increase in size to the end of September, at about, she thinks, the rate of "an inch a month". Since September, the increase had been less marked, but had slowly continued, until coming under treatment. She had only passed very small quantities of urine. She was the mother of two children, and had miscarried once, owing, she thought, to a strain. There was nothing in her history to support the diagnosis of syphilis; no intemperance could be elicited on close questioning. She had never had jaundice. When admitted, I noted that the patient was much emaciated, but was not decidedly cachectic. The abdomen was greatly distended, of ovoid shape, tense, with extremely distinct fluctuation-wave. The circumference of the abdomen at the umbilicus was forty-six inches, and the same two inches higher. Medium-sized superficial veins were seen coursing over the abdominal walls from below upwards, as could be demonstrated by pressure. There were no veins passing downwards to the thighs; the umbilicus protruded slightly. There was oedema of the lower extremities, from the thighs to the feet, especially on the left side. There was a small patch of discoloration on the inner aspect of the left leg, which, she stated, had been in existence for five years. It came as a small speck of the same colour, and has gradually increased to its present size. There was no history of injury to the part; no nodes. Hepatic dulness in the right mammary line was bounded by the upper border of the fourth rib. Here and in the axilla it was about two inches in extent, and posteriorly on a level with the twelfth dorsal spine, it was four inches deep. The chest organs were pushed up, but presented no noteworthy signs. Vaginal examination showed the uterus and anterior wall of the vagina depressed (cystocele).

On January 22nd, the patient's expression was anxious. She complained of difficulty of breathing, and her respiration was seen to be embarrassed. There was a slight herpetic eruption around the mouth; the patient had not been observed to have a rigor since her admission, but was suffering from catarrh when she came. The bowels had acted daily; the motions were solid and of good colour. She passed about fifty-five ounces of urine *per diem*. It was of an orange colour, free from albumen and bile-pigment. She was ordered to take five-grain doses of iodide of potassium thrice daily.

January 26th. The patient had a less anxious expression, but still looked haggard and as if she were the subject of abdominal disease. The average quantity of urine was about seventy ounces *per diem*.

Her breathing was easier, but entirely thoracic. The measurement of the abdomen at the same point as before was forty-five and a quarter inches. The legs were less swollen than on admission.

February 2nd. Whilst the patient expressed herself as better, and appeared cheerful, she looked more haggard and pinched in the face, and had dark areolæ around the eyes. The sister stated that she began to sleep with her eyes open. The abdomen had considerably diminished in size, was quite lax, and fell over to the side on which she lay. It was forty-two and five-eighths inches in circumference at the level of the umbilicus. The superficial veins were not so distended. She took all the nourishment supplied to her.

February 12th. The patient appeared better. The iodine appeared to be producing toxic effects. She had an acnoid eruption on the face, and had watering and smarting of the conjunctivæ, running at the nose, and soreness of the mouth. She was ordered to discontinue the iodide of potassium, and to take a mixture containing citrate of iron and quinine.

February 23rd. The patient looked and expressed herself as better. She slept and ate well; she passed from fifty to sixty ounces of urine daily, which had a specific gravity of 1.016 to 1.020, and was free from albumen. The largest measurement of the abdomen was now thirty-nine and a half inches. The oedema had wholly disappeared from the legs.

March 30th. The patient's general condition was improved. The abdomen now measured thirty-six inches; its summit was about three-quarters of an inch above the level of the sternum, and it was flat on the surface. The edge of the liver could now be felt three inches below the point of the xiphoid cartilage. No irregularities could be felt on the surface of the liver.

May 11th. The condition of the patient appeared stationary. There was still a considerable amount of fluid in the peritoneal cavity. She passed about forty ounces of urine in the course of the twenty-four hours. *The abdomen was ordered to be tightly bound with a flannel bandage, so as to exercise pressure.*

June 4th. When the bandage was first applied to the abdomen the pressure caused a feeling of sickness, but soon the patient bore it without discomfort; in fact, it appeared to afford her relief. The measurement around the abdomen, at the level of the umbilicus, was now thirty-three inches. She passed about thirty to forty ounces of urine daily, and did not perspire much. I now ordered a properly made abdominal support to be constructed for her by the instrument-maker. It was arranged with straps, so that it could be tightened to a very considerable degree.

June 29th. The patient expressed herself, and appeared to be, in good general health, but she was still much wasted. The abdomen looked much smaller, and measured thirty-one and a half inches at the level of the umbilicus. There was pseudo-fluctuation on percussion, but it did not convey the impression of being due to fluid. The liver could be felt in the same situation as before. Its surface was smooth, its edge firm, sharp, and regular. The spleen was not to be felt in the abdomen. Its dulness reached the seventh rib in the axillary line. She passed, on an average, fifty to sixty ounces of normal urine daily. She ate and slept well. She was now allowed to get up, but was directed to continue wearing the abdominal support. The latter, owing to the diminution of the size of the abdomen, had required to be altered. After being up in the ward for a few days, the patient was allowed to go into the garden; and there then being no reaccumulation of fluid in the abdomen, she was made an out-patient. This was in July 1875. The patient has been continually under my observation from then until now. She has had no recurrence of the ascites. Her general condition of health is feeble, but she is able to do her household work and earn her living. Unusual exertion causes slight oedema of the feet. She has never had albuminuria.

Another case where equally good results followed, is the following. A. T., aged 46, married, was admitted into the London Hospital under my care September 3rd, 1875. She was quite well until two years before admission, when her feet began to swell. The catamenia, hitherto regular, at this time ceased. After the feet had been swollen two or three months, the abdomen began to swell; and it became so large that she came into the hospital eighteen months ago. She remained in the hospital three months, and during this time was twice tapped. On returning home, the swelling increased again, and she was again tapped. After this, the fluid again accumulated; she was readmitted into the hospital and tapped again. She improved, and continued as an out-patient until about eight weeks before her present admission, when her abdomen began to swell again, and it gradually increased, until she came into the hospital. There was nothing in her history to suggest syphilis; no excessive indulgence in alcohol could be elicited. The patient was a stout person, with injected cheeks, puffy face, watery and glistening conjunctivæ. The cardiac dulness could not

be mapped out; the impulse was indistinct; the sounds were natural; the lungs were normal, except for slight emphysema. The abdomen was much distended, of spherical form, rising three or four inches above the level of the sternum, and measured forty-seven and a half inches in circumference at the umbilicus. Fluctuation was distinct; the superficial abdominal veins were somewhat distended. The liver-dulness appeared to reach the lower border of the fourth rib, in the right mammary line. Neither liver nor spleen could be felt in the abdomen. There was slight pitting on pressure over the legs. The urine was scanty, acid, of specific gravity 1,012, free from albumen. The temperature, pulse, and respiration were normal. The abdomen was directed to be bandaged with a wide flannel roller. She was ordered to take *mistura rubra*, one ounce, three times a-day.

November 15th. The ascites was considerably diminished. The abdominal walls were quite flaccid and thin. The liver-dulness did not extend two fingers-breadth in the right mammary line. The general condition was improved.

December 6th. The abdomen was greatly diminished in size; it was flaccid and pendulous. There was no distinct fluctuation wave now, but there was dulness in both flanks, whilst the summit of the abdomen was resonant. There was still slight pitting over the feet and legs. She was directed to continue the abdominal pressure.

December 20th. The patient was now up; the abdomen had not enlarged since she had left her bed. There was no œdema of the feet. She still had the kidney look observed on admission. For the last two months, she had passed, on an average, sixty-five ounces of urine daily, of pale colour, specific gravity varying between 1,010 and 1,015, and, though repeatedly examined, it had never contained albumen. The patient was now allowed to go home and attend as an out-patient. Whilst she continued under observation there was no recurrence of the ascites. The only medicine she took throughout her residence in the hospital was the *mistura rubra* of the *London Hospital Pharmacopœia* (burnt sugar and water).

It will be seen that in the first case alluded to the ascites was very great, and the vital condition of the patient brought very low from mal-assimilation. The appearance of the leg, with the absence of any history of intemperance (the latter not a very valuable indication in the case of a woman, it is true), suggested the possibility of syphilis causing the disease of liver which gives rise to the ascites. Without adopting this view, I thought it right to give the patient the advantage of the doubt, and accordingly administered iodide of potassium until the patient was fully under its influence. The ascites certainly diminished during the time the patient was taking the drug, but the diminution continued, it will be observed, when it was replaced by some quinine and iron, given as a general tonic, and was, no doubt, due to the rest in bed. I cannot ascribe any specific action to the iodide of potassium, therefore, and the patient never subsequently had any symptoms suggestive even of syphilis. Between March and May, it will be noticed, the patient made no progress. Her dropsy remained stationary. She passed at this time about forty ounces of urine daily. The idea suggested itself to me, as it had often previously, that the absorption which took place when the patient first came under treatment was due in great measure to the pressure of the greatly distended, tense, abdominal walls opening up the collateral channels of the portal circulation—the previously existing communications between the branches of the portal vein and the tributaries of the superior and inferior vena cava, and the new system of vessels developed in the augmented connective tissue of the liver, and in the adhesions formed by this organ.* When a certain amount of fluid had become absorbed, the abdominal walls became flaccid, and no longer exercised pressure on the portal system sufficient to drive the blood through devious and narrow conduits. It occurred to me to imitate the natural process by which absorption had, it seemed, been brought about in the first instance, and to the failure of which the arrest of the absorption appeared attributable. Hence I endeavoured by a bandage to convert the lax yielding abdominal wall into a tense elastic and resisting one. The employment of a properly constructed abdominal support was only a more convenient and efficacious method of applying the necessary pressure. The result was highly encouraging. The bandage and support certainly squeezed the fluid out of the peritoneal cavity, and it was carried out of the body, without loss to the system of any albumen, by means of the kidneys. The result was a cure of the portal obstruction. It is now nearly three years since the patient left the hospital, and I have had her frequently under my observation. There has been absolutely no recurrence of the ascites. Equally satisfactory was the effect of the same treatment in the second case I have given—a case from its

antecedents far from a promising one—and here the mechanical treatment was uncomplicated by the action of drugs. I may add I have had as good results in other cases.

Hitherto I have not tried abdominal compression in *increasing* ascitic effusions. It has seemed to me that the abdominal walls offered as much opposition to the pouring out of fluid as it would be safe to call into play, and that a greater strain on the vessels might lead to their rupture—effects we not unfrequently witness in cirrhosis, as hæmatemesis and hæmorrhage from the bowels. It is, however, quite possible that the obstacle offered to the effusion from the portal veins may be safely augmented to such a degree as to force open the anastomoses of the portal vein, and, by thus effectually carrying off the blood brought to the liver, to *cure the disease*. I use the word *cure* advisedly, as fibrosis of the liver in the main kills the patient by the secondary effects of the mechanical obstruction of the portal circulation. A person can get along, by management, with half a liver. In contraction of the liver, if the blood which cannot traverse the organ be efficiently carried off by other routes, and is not lost to the system, enough blood may yet pass through the liver to enable this large gland to perform its varied and important functions *for all ordinary needs* of the body. So far as I know, the plan of abdominal compression has not been recommended for cases of ascites, though I make no claim for its novelty. It has proved useful in my hands, and, I believe, will be found serviceable in causing or accelerating the absorption of an ascites, alone or in conjunction with other methods of treatment.

TWO CASES OF POISONING BY PHOSPHORUS.

By FREDERICK W. WILLMORE, M.R.C.S. Eng., Walsall.

THE recent case of death from this poison, narrated in the *JOURNAL* by Surgeon-Major Martin, induces me to record two of a similar nature which have been lately under my own observation, and which present several features of interest. Two young girls, L. C. and M. H., aged respectively sixteen and fourteen years, took between them, on the evening of March 25th ult., a small potful of phosphorus-paste, containing about half-an-ounce. Vomiting, with abdominal pain, rapidly came on, yet no advice was sought for until the afternoon of Friday the 29th. I was then asked to see the sufferers, being told "that they had taken poison on Monday, in consequence of slighted affection, and that they were still lingering". In compliance with this quaint request, I at once saw the patients. Both presented symptoms of grave depression; the vomiting still recurred occasionally; there was no diarrhœa, but the whole abdominal region was greatly distended, painful, and tender. The breath and vomited matter smelt strongly of the poison, and the skin and conjunctivæ were both deeply yellow. Severe frontal headache was complained of, and the act of swallowing was attended with considerable difficulty and pain. The pulse was thready and easily compressed—in the elder girl 135; in the younger 98. From the first, the case of the former patient gave most cause for anxiety, and I ascertained that she had taken the larger amount of the poison. A small quantity of food and mucus, obtained from the stomach of M. H., and submitted to Mitscherlich's test, gave distinct evidence of the presence of phosphorus. The bowels having been gently cleared, small doses of morphia were given, with the effect of relieving the pain and vomiting. The case of L. C., however, rapidly became worse, the prostration more marked, and drowsiness and convulsions terminated her life on March 31st, eight days after taking her fatal meal.

On Tuesday, April 2nd, fifty-six hours after death, I made a careful examination of the body, of which the following is an abridged report. The stomach and bowels were greatly distended with flatus; the inner coat showing, over nearly its whole area, traces of recent inflammation, but destitute of any erosion. In the stomach itself was found a small quantity of black grumous material, with a distinct odour of phosphorus. The liver, though normal in size, presented changes of a striking character. It was of a dull yellow colour, its borders quite black, the dark rim varying from the eighth of an inch to nearly an inch in depth. Its under surface also presented black patches, contrasting strangely with the yellow body of the organ. This dark appearance seemed limited to the capsule, and did not extend to the parenchyma. The tissue itself was abnormally yellow, soft, and friable, and under the microscope its ordinary characters were quite indistinguishable. The gall-bladder was almost empty. The spleen contained a small cystic tumour, but was otherwise of the usual size and appearance. The cerebral membranes, and more especially the pia mater, were deeply hyperæmic, and the arachnoid space was filled with a considerable amount of effused fluid. The brain-substance was

* Frerichs, *Disease of the Liver* (New Sydenham Society's translation), vol. ii, page 29.

softened, and the ventricles were distended with effusion. No morbid appearances were found either in the kidneys or bladder. This latter contained nearly a pint of limpid urine. All the remaining organs were healthy; the mouth and fauces not discoloured; nor was there any trace of ecchymosis.

The girl who survives yet maintains her yellow colour, with furred tongue and scanty excretion of urine; but in other respects she daily improves, and I hope will eventually recover. I may observe that she has been treated throughout with turpentine, and, in my judgment, with marked and continued relief.

Without wishing to comment unduly upon these cases, I may yet venture to remark one or two salient points in their history. The subacute symptoms, persisting for a space of nearly five days without materially alarming the relatives, are worthy of notice. Neither the pain nor the vomiting were of a severe nature; the bowels acted in an usual manner; and each of the patients, from time to time, took small quantities of support. Phosphorus is such an insidious and deadly poison, and in the form of paste is so accessible to the thoughtless and impulsive, that we may expect a recurrence of cases like the present. The symptoms produced by even a small dose of it are varied, and certainly not easily distinguishable; and it is only with the desire of adding some little corroborative testimony to Dr. Martin's interesting and instructive case that I have ventured to offer these few notes.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

DR. MATTHEWS DUNCAN'S WARDS.

FOR the notes of the following case we are indebted to Mr. W. E. HUSBAND, Resident Physician.

Fibroid Tumour of the Uterus proving fatal by Pressure on the Ureters.—A. S. was admitted to the hospital on January 14th, with the following history. She had been married eleven years, but had never been pregnant. The catamenia commenced at twenty-one years of age. The last period commenced nine weeks before admission; it was very profuse, and accompanied by pain in the lumbar region and abdomen; it lasted thirteen days. The periods had generally been irregular; formerly, the intervals were frequently from four to six months. Two years ago, they became more regular, a scanty show appearing every three weeks. Six months later, the periods became profuse, with only a fortnight's interval. Latterly, there had again been a longer interval—four or five weeks; and the loss had been considerable.

On admission, she complained of a stabbing pain in the lower part of the abdomen, especially in the right flank, shooting down the thighs, and coming on every few hours. The cause of this pain was not suspected during life; but the necropsy showed that it was probably due to compression of the ureters by the tumour. She also complained of loss of appetite, constipation, and painful micturition, with great flow of water. The urine, when examined, was almost colourless, reaction acid, specific gravity 1003; it was free from albumen.

On examination, the abdomen was seen to be very prominent, semi-globose in shape, and occupied by a hard dense mass said to be of twelve months' duration. The most prominent point was midway between the umbilicus and symphysis pubis. The abdomen measured in girth 32 inches. The other measurements were as follows: from the navel to the ensiform cartilage, $7\frac{1}{4}$ inches; to the symphysis pubis, $8\frac{3}{4}$ inches; to the right superior iliac spine, $7\frac{1}{4}$ inches; to the left superior iliac spine, $7\frac{1}{4}$ inches. The whole of the prominent portion of the tumour was very hard and elastic. There was dulness on percussion over the mass up to one inch above the umbilicus, but no impairment of resonance elsewhere. *Per vaginam*, the true pelvis was found to be almost entirely occupied by a hardness which could be identified with the abdominal tumour above described. The vagina was natural, and contained a little white discharge. The sound passed easily into the uterus and to the left to the extent of six inches and a half. There was tenderness on both sides of the uterus, especially on the left.

Dr. Duncan thought that the pain might be diminished by relieving the great tension in the neck of the womb. The os was slightly open

and very much on the stretch, the tumour growing down into its lip on one side. He therefore incised the os with a pair of scissors, hoping to relieve the tension and pain, and to reduce the hæmorrhage, as in these cases is often found to follow the opening up of the neck. Two days after the operation, in the evening, a severe flooding suddenly came on, preceded for a few minutes by a sharp pain. The patient lost more than a quart of blood, the lips becoming completely blanched, and the radial pulse being imperceptible for a few moments. The flooding ceased as suddenly as it came on, and did not return till two days later, when in the middle of the day it commenced again, but was soon arrested by plugging the vagina. During the next eight days, she was troubled with uncontrollable vomiting, and no medicine had any effect in diminishing it. At the end of this period, she began to have frequent muscular twitchings, and later two actual convulsive attacks. She also had a limited herpetic eruption upon the perineum and labia; nowhere else. This came on suddenly, and disappeared almost as quickly. The patient died on February 3rd, the twitchings having gradually spread upwards, at last involving the face.

Necropsy.—The stomach was distended. There was no recent peritonitis; but there was evidence of old peritonitis, the upper surface of the liver and spleen being adherent to the diaphragm; but these organs appeared healthy. The right kidney was small and wasted; its capsule was easily removed, leaving the surface smooth, pale, mottled with a few blood-vessels; the cortex was diminished and white; the pyramids were pink; the ureter was much dilated and tortuous, nearly large enough to admit the finger. The left kidney and ureter were in the same state as the right. The kidneys weighed eleven ounces. There were no clots in the inferior vena cava or spermatic veins. At the junction of the left internal iliac vein with the external was a large fibrinous clot, not completely organised, but filling up the cavity of the vessel. On following the branches of the internal iliac vein, a branch was found coming from the spine and emptying into the obstructed vessel; it was completely blocked by a nearly organised clot. Filling up nearly the whole of the pelvis, was a large fibroid tumour weighing four pounds ten ounces, and pushing the bladder over to the left; it was covered by a thin muscular capsule. There was a large vein on the right side of the tumour, dilated, tortuous, and empty. The tumour was hard and pale, no blood-vessel being seen in its substance. The cavity of the uterus was displaced to the left; it was very elongated and dilated, and very pale; the cervix was obliterated. The right ovary was very pale. The mucous membrane of the bladder was very pale. It appeared that the tumour had been jammed into the pelvis and compressed the ureters; these, becoming greatly dilated and tortuous, irritated the kidneys, and their substance became diseased. The nervous phenomena referred to were uræmic, due to compression of the ureters. The urine, when examined, had a low specific gravity, but was free from albumen. As it was passed involuntarily, it could not be re-examined.

Operation for Removal of an Uterine Polypus.—A woman, the subject of uterine polypus, came to the hospital for its removal. A large mass was felt projecting into the vagina, but neither the finger nor the uterine sound could be passed beyond the tumour to ascertain exactly its connection. Dr. Duncan referred to the importance of exact diagnosis before operation in these cases, instances having occurred in which an inverted uterus had been cut off under the impression that it was a polypus.

The patient being placed in the lithotomy position, the tumour was seized with a volsella, which was then brought downwards and forwards against the pubis; a second volsella was then used to catch the tumour at its posterior part and drag it near to the orifice. Digital examination revealed a distinct and firm pedicle, half an inch thick and about an inch and a half long, which passed up into the uterus, and the sound passed without difficulty the normal depth into the uterus. A strong pair of curved scissors was used to divide the pedicle; the operation was quite painless. The uterus itself appeared perfectly healthy, and contracted immediately after the operation, so that the stump of the pedicle could no longer be felt.

On examining the tumour removed, the pedicle, which had been cut at least an inch from its extremity, no longer projected from the tumour, but had shrunk into its mass. The tumour measured three inches in diameter; it was nodular and inflamed upon the surface, a condition not usually seen in its structure it appeared fibroid.

Parametritic Induration.—In seeking evidence by physical examination upon which to found a diagnosis in another case, Dr. Duncan commenced by examining the abdomen. Nothing abnormal was felt, but there was some fulness in the hypogastrium, about the region of the brim of the pelvis; in this locality the abdominal wall could not be depressed as easily as should be. In this case, as is usual in well-formed women, the promontory of the sacrum could be easily felt lying but a

short distance behind the anterior abdominal walls. This fact is of importance, as affording the means of estimating the sacro-pubic diameter for obstetrical purposes.

Examination *per vaginam* indicated the uterus to be in its natural position, while a hard mass was felt to the right side below the position of the cervix; it appeared to be identified with the upper and internal margin of the obturator foramen.

The bimanual method of examination was then used; the left hand being placed upon the abdomen, while the internal examination was continued; it was thus made out that there was no tumour in the pelvis.

Dr. Duncan remarked that, as there is no peritoneum in connection with the descending ramus of the pubis, where the induration was felt, the condition present could not be due to pelvic peritonitis. The symptoms of the case indicated chronic disease rather than acute, and there were no signs of suppuration. It appeared probable that the induration felt began in the bones or glands of the pelvis, as the uterus appeared to be healthy. There was, therefore, reason to fear that the disease was malignant.

It was subsequently discovered that the patient had intestino-vesical fistula: air passing through the urethra. This circumstance, together with the great degradation of general health, confirmed the diagnosis of malignant disease.

Canterisation of Epithelioma of the Uterus.—A woman, the subject of epithelioma of the cervix uteri, was brought into the theatre for operation. The thermo-cautery was used. For this operation, Dr. Duncan prefers a boxwood speculum, as the glass-tube may be broken by the heat of the cautery, or may so conduct the heat as to injure the patient. The cervix having been carefully dried after the insertion of the speculum, the cautery was freely applied to the diseased surface; the parts were then well syringed, and a plug of carbolioil was inserted. By this means, the area of ulceration and the amount of discharge might be temporarily diminished.

SAMARITAN FREE HOSPITAL.

CONSULTATIONS.

APRIL 12th. *Ovarian Tumour complicated with Uterine Outgrowth and Mucous Polypus in Cervical Canal.*—E. R., a single woman, aged 57, noticed in November 1877 that her abdomen was increasing in size. It has steadily continued to enlarge ever since. The catamenia ceased six years ago, after being excessive for eight previous years. Fifteen years ago, an uterine polypus the size of a duck's egg had been removed by ligature. She now has a large cystic tumour of the abdomen, which appears free from adhesions; also a hard nodular mass in the pelvis, lying behind and to the left of the cervix. A small mucous polypus protrudes from the cervical canal. In submitting this case to his colleagues for their opinion, Mr. Knowsley Thornton expressed his belief that a large free ovarian tumour existed, that the uterus was retroverted with subperitoneal fibroid outgrowths on its surface, and that a mucous polypus grew from its cervix. He proposed to perform ovariectomy, taking the opportunity of confirming the diagnosis as to the uterine condition. As the cervical polypus was giving no trouble, he did not propose to remove it till after the patient had completely recovered from the major operation.—Dr. Greenhalgh agreed both as to the diagnosis and treatment.—Mr. Spencer Wells admitted that the abdominal tumour was ovarian, but was of opinion that the pelvic tumour was also an enlarged ovary. He considered it immaterial whether the polypus was twisted off at once or left alone.—Dr. Day believed the cyst in the abdomen to be ovarian, and the tumour behind the cervix to be a subperitoneal fibroid growth.—Dr. Champneys and Mr. Meredith were of the same opinion.—Mr. Doran also believed in the coexistence of an ovarian and an uterine tumour. He thought that the avulsion or ligature of the polypus in an uterus otherwise unhealthy was attended with considerable risk. He had recently made a *post mortem* examination of a case of large fibroid tumour of the uterus where fatal pyemic symptoms had followed the removal, by twisting, of a small mucous polypus. He found a recent abscess in the right ovary, and another in the broad ligament; whilst the right ovarian vessels lay in a pool of pus as far as their junction with the aorta and vena cava.

Abdominal Tumour of Uncertain Nature.—S. F., aged 50, single, catamenia absent nearly two years, had enjoyed good health up to July 1877, when she found that her abdomen was enlarging. An attack of diarrhoea came on, with much abdominal pain, which lasted two months. The emaciation continued. In February 1878, she went into St. Bartholomew's Hospital, where she remained for a month. She has now considerable swelling of the abdomen, which is anteriorly rather flat as she lies on her back. The skin is dry and rough; the superficial veins and capillaries are enlarged; but the abdomen is not

tense. Dulness extends from the pubes to the ensiform cartilage in front; but the percussion-note is clear in both flanks. The uterus is small, mobile, and slightly displaced to the right; and an indefinite swelling is felt to the left and in front of that organ. Mr. Thornton was not prepared to give a positive diagnosis. If the case were ovarian, he thought it must be a tumour with universal parietal and some intestinal adhesions, or a ruptured colloid tumour with matting and adhesion of intestines. He thought, however, that it very probably might be a case of encysted peritoneal fluid resulting from chronic peritonitis. He was prepared to recommend a small antiseptic exploratory incision, and to proceed with caution. If it turned out to be a collection of fluid due to peritonitis, he considered that a cure might be effected by removing the fluid and lymph and thoroughly sponging the cavity antiseptically. Of course, if he found the tumour to be ovarian, he would remove it.—Dr. Greenhalgh believed that an ovarian tumour existed, evidently adherent to surrounding structures, since there was so little mobility.—Mr. Spencer Wells considered that the swelling was a cyst of the ovary adherent at the upper part to the abdominal parietes.—Dr. Day thought that the history, appearance of the case, and physical symptoms, all pointed to ovarian disease.—Dr. Champneys, bearing in mind the history of two months' diarrhoea and abdominal pain, and laying stress on the great want of mobility of the tumour, thought that the suggestion of a large circumscribed collection of fluid due to peritonitis was correct. By rectal examination, he believed he could detect the left ovary, apparently distinct from the pelvic swelling, close to the uterus.—Mr. Meredith considered that the symptoms indicated strongly the existence of an adherent ovarian cyst, very probably of a colloid nature.—Mr. Doran believed that the abdominal tumour was an enlarged right ovary. By simultaneous digital examination of the vagina and rectum, it seemed to him that the pelvic swelling was a diseased left ovary.

HEREFORD COUNTY AND CITY ASYLUM.

DISPLACEMENT OF LIVER BY DILATED SIGMOID FLEXURE.

(Under the care of Dr. T. A. CHAPMAN.)

J. B., a deaf-mute, died April 6th, 1878, aged 58. On *post mortem* examination, April 8th, the sigmoid flexure of the colon was greatly distended and enlarged. On opening the abdomen, it had at first sight all the aspect of the stomach, both as to appearance and size, and suggested that the case was one of transposition of the abdominal viscera. A further examination showed the enlarged viscus to really closely resemble a large stomach, both in form and appearance. When removed, it showed none of the muscular arrangement of the walls of the colon, but an uniform muscular coating; its circumference was fourteen inches, with a larger curvature of twenty inches and a smaller of ten or twelve. The descending colon passed to the right into this expansion, and the continuation to the rectum was behind and to the left of this. At the pelvic brim was a constriction, to about three inches in circumference, and, from the thickening of walls, probably the seat of old inflammatory changes; the mucous membrane here was much inflamed, the rectum was narrow, but healthy. The most remarkable point in connection with this dilated viscus was its position, viz., between the diaphragm and the right lobe of the liver, which, instead of being full and convex and applied to the diaphragm, presented a great hollow, measuring six inches backwards from the anterior margin of the liver. The liver weighed thirty-six ounces.

NOTES ON BOOKS.

EVERETT'S *Elementary Text-Book of Physics* (Blackie and Sons, London and Edinburgh) is a highly commendable book; it is concise, clear, well systematised, and adequately illustrated. It is a very useful and satisfactory text-book for elementary classes.

Practical Gynecology: a Handbook of Diseases of Women. By HEYWOOD SMITH, M.D. (J. and A. Churchill, London.)—The fault of this little book is excessive condensation, which reduces it in many parts to the character of a mere catalogue, and that of an incomplete kind. On the other hand, it is an useful *aide-memoire* to the practitioner and student who has already acquired adequate knowledge of a subject and requires refreshing. It is obviously the work of a thoroughly intelligent practitioner well versed in his art, and perhaps only too prone to give his readers credit for more knowledge than ought to be credited by the author of such a compendium to those who wish to make use of it. We expect to see this little book reach its second edition, and should advise its extension with a view to greater completeness.

GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION. SESSION, 1878.

Wednesday, April 10th, 1878.

DR. ACLAND, President, took the chair at 2 P.M.

New Members of Council.—The official notices of the appointments of the following members having been read, they were severally introduced and took their seats:—Andrew Fergus, M.D., Crown Nominee for Scotland, in place of Joseph Lister, M.B., resigned; James Bell Pettigrew, M.D., Representative of the Universities of Glasgow and St. Andrew's, in place of Allen Thomson, M.D., resigned; Robert Scott Orr, M.D., Representative of the Faculty of Physicians and Surgeons of Glasgow, in place of John G. Fleming, M.D., resigned.

President's Address.—The PRESIDENT delivered an address, which was published at page 543 of last week's BRITISH MEDICAL JOURNAL. At its conclusion, it was moved by Dr. ANDREW WOOD, seconded by Mr. SIMON, and agreed to, "That the President's Address be entered in the minutes".

Committees.—The Business and Finance Committees were appointed.

Order of Business.—Various questions were asked of the PRESIDENT relating to the order and nature of the business that would come under the notice of the Council, and to what would be the probable length of the present session.—The PRESIDENT referred to the programme, which stated the order of business as prepared by the Executive Committee. The Council would, it was hoped, follow the order of that programme. The second reading of the Government Bill was to take place on Monday next. Any resolution the Council might desire to forward to the Government before the second reading would, therefore, have to be decided before the Council rises on Saturday. No other limitation could be imposed on the liberty of the Council's action, except by resolution of the Council.

The Medical Acts Amendment Bill.—The following letter was read from the Lord President of Her Majesty's Privy Council, accompanying copies of a Bill entitled An Act to Amend the Medical Act (1858), presented by the Lord President.

"Council Office, March 23rd, 1878.

"Sir,—I am directed by the Lord President of the Council to transmit to you fifty copies of the 'Medical Act (1858) Amendment Bill', now before Parliament. The Lord President instructs me to request that you will be so good as to favour his Grace with any observations the General Medical Council may have to offer in regard to the provisions of the Bill.

"(Signed) C. L. PEEL.

"H. W. Acland, Esq., M.D., F.R.S."

The Royal College of Surgeons of England and the Medical Acts Amendment Bill.—A report was read on the Medical Acts Amendment Bill, which had been drawn up by the President and Vice-Presidents of the Royal College of Surgeons, after consultation with the two members of the Council of the College who are also members of the General Medical Council (Sir James Paget and Dr. Humphry); also a series of resolutions founded on the report and adopted by the Council of the College. (The resolutions were published at page 545, column 1, of last week's JOURNAL.)

The Royal College of Physicians of London and the Medical Acts Amendment Bill.—A memorandum was read which had been agreed on at a special meeting of the Royal College of Physicians of London. It stated that "the College desires to express its extreme regret and disappointment that the Bill altogether fails to provide for that compulsory establishment of conjoint examining boards for each division of the United Kingdom which was recommended and urged on the medical authorities by the General Medical Council, for which the College has been strenuously labouring during many years, and which constituted the main feature of Lord Ripon's Bill. For the attainment of this object, the College has spared neither time nor labour; has manifested its readiness to sacrifice its own individual interests and independence of action, and has loyally co-operated with the other English authorities, believing that by so doing it was acting in the common interests of the profession and for the good of the public. But this object, admitted on all hands to be of supreme importance in any scheme of medical reform, would certainly be hindered rather than advanced should the present Bill become law. Far from encouraging the English authorities to bring into operation the scheme which, after long and unremitting efforts and overcoming innumerable difficulties,

they have completed, and were prepared to make trial of, this Bill would compel them to abandon the scheme, and all hope of reaping any fruit from their labours." To Clause 3,* it was objected that "it not only deprives the present licence of the College of its double qualifying power, but also deprives the membership and fellowship of the College of the qualification to register unless accompanied by some other qualification. That the College of Physicians is, by this clause, really disfranchised is proved by the third schedule of the Bill, which repeals the Act 32 Henry VIII, c. 40, by which the words of the College Charter are defined as conveying a right to practise both medicine and surgery". Of Clause 8 the College could not see the object, since, "by Clauses 5, 6, and 7, provision is already made for the registration of both foreign and colonial practitioners; and the College has by by-law provided for the admission of foreign and colonial graduates on terms similar to those on which graduates of British Universities are admitted to its qualifications". Clause 9 "makes no provision for a separate list of female practitioners". The effect of this, taken in connection with subsection 4 (b) of Clause 14, "will be that in the same list will appear the names of both men and women, although their respective tests of fitness may be unequal". Clause 14, relating to examination-rules, is regarded as "a disfranchising clause". It "deprives the College of the right of fixing its own standard of fitness for the reception of its diplomas, and of regulating its own examinations. It even confers on the Privy Council the important function of determining on the admission of candidates to examination, i.e., of laying down the curriculum of study; it deprives the medical authorities of all discretion as to the requirements requisite for their several diplomas, and, whilst it requires the several authorities to confer their licences, it deprives them of the power of determining the conditions on which they are granted, and so deprives each diploma of its distinctive value, and reduces all to one dead level, to the manifest injury of the College, by destroying the prestige of its qualifications, hitherto held in the highest estimation. To a power of supervision by the General Medical Council, a body eminently qualified to judge of such matters, the College could have no objection, and would even consider it desirable that such a body should have authority to secure the efficiency of rules for conducting the examinations, and a proper standard of fitness for reception of the several diplomas. But the initiation of such rules, and their adaptation to the respective diplomas, should remain in the hands of the several authorities. If, indeed, conjoint examination boards were made compulsory for each division of the kingdom, with the view to the granting of a minimum qualification, the College of Physicians would doubtless be ready to co-operate with the other authorities, and sacrifice its individual action for the common good, retaining, however, its independent action in respect of its higher qualifications". Under Clause 17, "a person whose name appears in the certified list of those who have passed the examination of a medical board is entitled to receive from any medical authority party to the scheme a medical diploma; but, under section 4 of Clause 14, it is clear that women may go up to any examination of a medical board, although not necessarily (a) to the separate examination of any one medical authority. A woman, therefore, who had passed the examination of a medical board would be placed on the certified list, and so become entitled to a medical diploma. If the right of a woman who has passed the examination of a medical board to claim a diploma be absolute, then some provision should be made for distinguishing such diploma and placing it on a separate register, as well as for distinguishing between the examination-rules of men and women."

The British Medical Association and the Medical Acts Amendment Bill.—The following letter to the President from the Chairman of the Medical Reform Committee of the British Medical Association, and the President's answer thereto, were read.

"14, Nicholas Street, Chester, March 30th, 1878.

"Dear Dr. Acland,—In the present conjuncture of medical politics, I venture to submit to your careful consideration, as President of the General Medical Council, the Medical Acts Amendment Bill, approved and promoted by the British Medical Association. This Bill, amended as it would necessarily have been in its passage through the legislature, would, I believe, have been infinitely more acceptable to the profession and more beneficial to the public than the present Bill of the Government. I enclose with the Bill of the Association some of the reports of the Committee. The division of opinion between the General Medical Council and what is regarded as the profession in the matter of medical reform must be detrimental to the real interests of the profession which we all have so earnestly at heart. Is there no possibility of reconciling the different views held by each party, so that we

* As frequent reference will be made to the clauses of this Bill in this report of the proceedings of the Medical Council, we beg to remind our readers that it was printed in full at page 426 of the JOURNAL for March 23rd.

might with one accord urge the Government to grant the prayer of the profession?

“(Signed) EDWARD WATERS, Chairman of the Medical Reform Committee of the British Medical Association.
“Professor Acland, M.D., F.R.S., Oxford.”

“Oxford, April 3rd, 1878.

“Dear Sir,—I have to acknowledge the receipt of your letter on the subject of the amendment of the Medical Acts, together with the enclosures; viz., a Medical Bill (1876) and three other printed documents relating to changes in the Medical Acts. They shall all have my best attention. I trust with you that legislation may be able to rectify any anomalies or defects which can give just ground of dissatisfaction in respect of the Medical Acts. I am confident that you may rely on the best efforts of the Medical Council in endeavouring to ascertain what that legislation should be, and in seeking to bring about a successful issue.”

“(Signed) H. W. ACLAND.

“E. Waters, Esq., M.D., Chester.”

Conjoint Boards.—Sir WILLIAM GULL asked the PRESIDENT “what progress had been made in the matter of a conjoint scheme for a common examination in Scotland and Ireland”.—The PRESIDENT answered that no information on this subject had, so far as he knew, reached the Council.

The Medical Acts Amendment Bill, introduced into the House of Lords by the Lord President of the Privy Council, was taken as read and ordered to be printed as an appendix to the minutes.

Conjoint Examining Boards.—Dr. HUMPHRY moved: “Whereas, in 1870, this Council passed the following resolution by a large majority, and after much deliberation: ‘That this Council is of opinion that a joint examining board should be formed in each of the three divisions of the kingdom, and that every person who desires to be registered under any of the qualifications recognised in Schedule (A) to the Medical Act shall be required, previously to such registration, to appear before one of these boards and be examined in all the subjects which may be deemed advisable by the Medical Council; the rights and privileges of the universities and corporations being in all other respects the same as at present;’ and whereas the Council has subsequently sanctioned a scheme for an examining board for England made in conformity with that resolution: the Council adheres to the principle of that resolution, and is of opinion that no medical legislation relating to examinations will be satisfactory which does not provide for the formation of an examining board in each of the three divisions of the kingdom, and direct that every person who desires to be registered under the Medical Act shall be required to appear before one of these boards and be examined in the subjects which may be deemed necessary by the Medical Council.”

Dr. HUMPHRY said that the Medical Acts Amendment Bill omitted to carry out the plan proposed and insisted on by the Medical Council, and it was the first duty of the Council to express a decided opinion with reference to the principle of the formation of a single examination board for each division of the United Kingdom. The Council was never called on to decide on a more important matter; it was one on which the confidence of the public in the Council would rest. He hoped that every member would take a broad view of the question. He would enter slightly on the history of the subject, especially for the information of the new members. In 1869, a report of a committee of the Council, of which Dr. Andrew Wood was chairman, contained a sentence to the effect that the time had arrived when the Council might enter on the consideration of the formation of single examining boards in each division of the kingdom, before which every candidate for admission to the medical profession should be required to appear, it being left optional to proceed afterwards to the higher degrees and diplomas. The consideration of the report was deferred to the next year, and in the meantime it was sent to the various examining bodies for their opinions and suggestions. In 1870, the report, with the replies received, was discussed; and a resolution, proposed by Dr. Parkes, and seconded by Dr. Thomson, in favour of the formation of conjoint boards, was carried by a majority of the representatives in the Council from all the divisions of the kingdom. The Council went still further, and passed a resolution, in accordance with the foregoing one, that “The universities and medical corporations established in each division of the United Kingdom shall be requested to concert a scheme for the constitution and regulation of a conjoint examining board for that part of the kingdom to which they belong, and shall transmit such scheme for the consideration of the General Medical Council.” They also resolved to seek from the legislature the powers required for carrying the resolution into effect. The members would thus see that the Council had originated the principle of single boards, had endeavoured to bring it into action, and had requested the Government to bring in a Bill containing the necessary provisions. The medical authorities of England at once set to work and framed a

scheme, which had received the approval of the Council; and they had drawn up a series of regulations, which were nearly ready to be brought into operation. The English authorities had been taunted with the difficulties with which they had met and with the slowness of their progress; but every good and great work was attended with difficulty. He (Dr. Humphry) could speak of the difficulties which had been met with, having been more engaged perhaps than any other member in the preliminary proceedings. He had been engaged in it as a member of the Council of the Royal College of Surgeons of England, a body which had probably greater interests at stake, and superintended the education of more students, than any other. It would, then, not be wonderful if it should hesitate to give up its privileges and its opportunities of doing good work. He had also been engaged in the consideration of the conjoint scheme on the part of the University of Cambridge, which took a great interest in medical education, and had a medical school. Both these bodies entered on the scheme from the feeling that a great national good was to be attained, and this feeling had carried them through all difficulties almost to the climax of success. But the greatest difficulty was the apprehension lest the good work should fail from want of co-operation in the other divisions of the kingdom. The question to be now considered was, whether the Council would stand true to itself and to the English examining bodies, or, by setting aside its former resolution, stultify itself and leave them in the lurch. Were the circumstances different now from what they were when the resolutions were passed in 1870? It was then felt that the power of obtaining a licence to practise from any one of nineteen separate boards was an anomaly, and that the diploma or licence should cover the whole range of medicine. That reason still remained in full force. It might be said that the evils referred to might be remedied by the visitation of examinations. Visitation had indeed done much good, but, as applied to the nineteen examining bodies, was an exceedingly cumbrous and costly process, and could only be carried out effectually in ten or fifteen years. This had been acknowledged by the Council. But there was also the disadvantage of the imputation, arising from the financial interest of the corporate bodies in the examinations, that there was a downward competition among them, and that candidates rejected by one board might soon afterwards be admitted by another. He had been recently told that students, whose teachers would not certify their fitness to undergo an examination, had gone to other boards and obtained their diplomas. Such imputations ought no longer to be allowed to exist. The qualification should be obtained on such terms as to remove all ground for them. The objections to the principle of single boards came mostly from Scotland. One was, that the principle did not assure uniformity of qualification. But it would do this six-fold, by establishing three licences in place of nineteen—one for each division of the kingdom; and these examinations would be conducted, not by bodies having a financial interest in the matter, but by a combination of bodies which would receive as a whole the fees that might be paid, and hence there would be no downward competition. It was also objected that the plan of single boards would lead to too much uniformity. No doubt it would lead to a considerable amount of uniformity of examination; but there was an apprehension in Scotland that it would bring down university education to a low level. There was no reason to fear this. The English universities had entered into the scheme without fear of any lowering effect on the examinations for their degrees, and had taken precautions which the Scottish universities might also adopt. The state of the matter was this: the uniform examination would go no further than was sufficient for a simple qualification to practise, and the colleges and universities would be left free to make their own regulations for their higher degrees and diplomas. In England, the universities felt that it was an advantage to be relieved from the task of giving licences to practise, and from the necessity of preventing their requirements from being so high as to debar a candidate from obtaining a licence on which his daily bread might depend. The same was applicable to the universities of Scotland; instead of a conjoint scheme bringing down the standard of medical education, it might be made to act in the opposite direction. It has been said in Scotland that a conjoint board could not be formed there; but “cannot” was not a word for Scotland to use. It was said in Scotland that a difficulty would lie in the necessity for bringing together the candidates from all parts; but in England candidates constantly came to London from Newcastle, Liverpool, Bristol, and other distant schools. The examinations, too, might be held in different parts. Indeed, the Scottish bodies might overcome the difficulties if they would endeavour to do so. One difficulty alleged in Scotland was the effect which a conjoint board would have on the various examining bodies; but the Council should not be influenced by this: its chief duty was to act for the advantage of the public no less than of the profession, whatever feeling it might entertain towards

the examining bodies. The resolution which he proposed urged legislation on the subject of single examining boards. He would refer to the correspondence with the Marquis of Ripon in 1870. There was then scarcely any question as to the propriety of the proposed enactment, and he was astonished to find that the principle had been abandoned in the present Bill. This, he understood, had been done through the influence of Scotland. He did not object to Scotland doing its best, but it was the duty of England to stir itself, and take care that the principle was not squeezed out by the grasp of Scotland. In the Bill a twofold plan was adopted. First, means were taken in Clause 3 to secure a double qualification in medicine and surgery. This would be better than no provision at all; but what endeavour was there to secure uniformity? A plan was proposed, under which, if it passed, no single body could grant a degree, diploma, or licence except under rules framed by the General Medical Council and approved by the Privy Council; and further, power was given to the Privy Council to modify and alter the examination rules. There could be no comparison between the sacrifice of independence here entailed, and the maintenance of independence in the licensing bodies under the plan proposed by the Council. He had been largely engaged in the proceedings of the Committee of Reference which had met to frame rules for the conjoint board for England, not with reference to this or that corporation or university, but for the purpose of instituting the best plan of education and examination. He wished that some of the Scottish members had been present at some of the conferences; they would have seen the advantages of meeting and of discussing these difficulties, so as to overcome them. The Bill gave the Privy Council more power than before, and he trusted that the Council would not allow the power of the profession to regulate its own affairs to be encroached on. He trusted that the Council would stand to its own colours, and insist on the principle of a single examination in each division of the kingdom.

Sir JAMES PAGET seconded the motion.

Dr. ANDREW WOOD said that he had been at first much taken with the idea of single boards, but in a short time he found reason to believe that it would not be beneficial, and that the ends which were proposed would not be gained. He did not lay much stress on difficulties in Scotland; but, when Dr. Humphry considered that a conjoint system was the right one, he (Dr. Wood) thought that the object could be better carried out in other ways. The Council should be at liberty to discuss the question as if it were entirely new. What was the present condition of the medical profession? Were there many evils, and, if so, what remedies ought to be applied? He would go back to the period before the Medical Act was passed. Why was medical reform demanded? No doubt in consequence of the existence of a large number of bodies without any controlling power over them, each body making its own regulations, these being consequently very unequal, some being good and some bad, and scarcely any coming up to the proper standard. There were also the partial qualifications, under which members of the College of Surgeons, or licentiates of the Society of Apothecaries, might practise in all departments of the profession, though holding only a qualification in surgery or in medicine. It was a defect in the Medical Act of 1858 that there was no power to prevent the registration of men holding single qualifications. An attempt was, indeed, made to remedy this by giving power to the bodies to combine, and it was doubtless expected that they would take advantage of this. But it was done in Scotland alone. Again, before the passing of the Act there was little or no examination in general education; there was no *Medical Register*, and consequently no means of distinguishing qualified from unqualified practitioners, and there were invidious local restrictions on medical practice. The existence of these conditions led to much agitation for medical reform—for the removal of local restrictions, for the establishment of a general standard of qualification, and for the establishment of a Medical Council. Bills were brought into Parliament year after year by very able men, but legislation was obstructed by various impediments. One was the difference of opinion as to the real essentials of medical reform. Another was the existence of feuds between the licensing bodies. Another impediment arose from the difficulty of agreement as to the constitution of the Medical Council. Some proposed that it should be nominated by the Crown; others, that it should be appointed by the licensing bodies; others that it should contain members elected by the general body of the profession. At last, by a compromise, the constitution of the Council was settled as it now existed. The Medical Act had been in operation nearly twenty years, and what had been done? If some were to be believed, it had done nothing for the profession. But could this be said of a Council which had had as presidents such men as Brodie, Green, Burrows, Paget, and Acland, and among its members such as Pennett, Hawkins, Quain,

Paget, Humphry, Syme, Turner, Thomson, Corrigan, Sharpey, Stokes, Parkes, Gull, Simon, etc.? If a Medical Board so constituted could not conduct the affairs of the profession, it would be better to have none at all. During the last twenty years, the ability and skill of practitioners of medicine had increased very greatly, and he could not allow that the condition was so bad as to demand the panacea of a conjoint scheme. No student could now enter on the study of the medical profession without having passed a preliminary examination before being registered as a student. The period of study had been extended to four years, and the examinations had been made much more extensive, there being in all cases two, sometimes three, and all being both written and oral; besides which, clinical examinations were now universal. The rejections at the examinations amounted now to thirty per cent. The Medical Council had also established visitation of examinations—at first conducted by members of Council alone, and afterwards by them in conjunction with other persons; and many defects which existed in the examinations had been remedied. One thing that showed the improvements that had been effected, was the returns supplied to the Council from the Medical Department of the Army. At first, the proportion of rejections was large, but now it was reduced to a minimum, as shown in the returns now before the Council, where, of sixty-one candidates, only two were returned as having been rejected. He would repel the insinuations made as to the low condition of the Scottish diplomas and degrees; if they were low, it was the fault of the General Medical Council. It was not the fact that diplomas in Scotland were placed at a low standard in order to attract candidates. The Medical Act had not been altogether inefficient; it had changed the character of the profession; and how had this been done? Not by stringent rules, but by moral suasion: by the issuing of recommendations which had been complied with by all the bodies with but few exceptions. In these circumstances, he did not think there was need of any great amount of legislation. The Duke of Richmond and Gordon had acted wisely in abstaining from a revolutionary measure. He had some sympathy with what Dr. Humphry had said about the independence of the licensing bodies; but he did not much object to submitting rules to the Privy Council. The Bill provided that candidates should be tested in all departments: and permitted partial combinations of examining bodies. The plan of combination had been tried in Scotland and acted extremely well. The combined boards there took the first examinations of other bodies *ad eundem*. In the Universities, the examinations were not conducted by the professors alone, but partly by other examiners. In England, an attempt was made to procure combination between the licensing bodies: but it failed, and nothing was done from 1859 to 1870, when the English bodies woke up furiously, and went in for a conjoint scheme, and tried to force Scotland and Ireland to adopt a plan of which they did not approve. There was not even yet a conjoint scheme in operation in England; it was considered as an experiment; and if conjoint boards were made compulsory by an Act of Parliament, there would be no way of getting out of the matter. The result of the working of the plan should first be ascertained. The *beau-ideal* would be one board for the three kingdoms; and what would it have to do? About 1,350 candidates would have to be examined each year; and this number must be multiplied by four to represent the number of examinations to be conducted. The twelve labours of Hercules would be a mere joke in comparison with the labour of such a board. It might be said that the board could be divided into sections; but what then became of uniformity? Again, the examiners would probably not be different from the present ones—the best that could be chosen. But it was proposed to form three boards; and how was this to ensure uniformity, especially if the boards were divided into sections? Again, in Scotland there was the difficulty that the examinations were held in various places; while, in England, very few qualifications were given elsewhere than in London. Another objection was, that in England the whole burden of regulating the examinations was thrown on a committee; the medical bodies had parted with the independent power of examining candidates who would be entitled to receive their diplomas. If the ancient bodies were to be maintained, they should be careful how they parted with their identity and autonomy and independence. The examining board was to be composed of the *disjuncta membra* of the universities and medical corporations. In consequence of the introduction of the universities, two results might arise: either the standard of the university degrees might be lowered, or the influence of the universities might cause the level of the licence to practise to be raised too high. Candidates who passed the examination and obtained their licences to practise would not care for the diplomas of this or that body. The university degrees should be given only after a more strict examination in every subject, and therefore the universities should remain separate from a conjoint scheme. Sir Robert Christison had

said that he could see nothing but evil from the adoption of a levelling system. He (Dr. Wood) trusted that the Council would pause before taking a leap in the dark.

"Facilis descensus Averno;
Sed revocare gradum, superasque evadere ad auras,
Hoc opus, hic labor est."

He approved of the present Bill as a mild measure, and would advise the Council not to interfere too much with existing machinery.

Sir DOMINIC CORRIGAN could not support Dr. Humphry's proposal. Dr. Wood's defence of the Scottish bodies was complete. While the English authorities had done nothing, the Scottish boards had carried out the principle of combination. He had long advocated double qualifications, but not conjoint schemes. He did not think that the Council would stultify itself if it did not reaffirm its former vote; but it would rather stultify itself by doing so. The obligation to pass the examination of the conjoint board would lower the standard of medical education. It was absurd that a minimum qualification should entitle to registration, while a high one, such as that of the University of London, should not have that privilege. The resolution also forestalled the opinion of the Council on the Bill. There was no such thing as an universal level in nature; men were not on the same level in the practice of medicine or elsewhere in society; and the attempt to procure uniformity of qualification was opposed to common sense.

Dr. ROLLESTON pointed out that, by the provisions of the conjoint scheme for England, the Universities retained power over their degrees. With regard to the difficulty of conducting the examinations, could not they be conducted in various local centres by means of printed papers sent by post? As to the statement that there was no need for legislation, it was necessary that something should be done, for the good of Government as well as of the public. By the formation of a conjoint board, good was done by securing a healthy rivalry within the board, and all the advantages to be got from centralisation were obtained. He advised the Council to adopt Dr. Humphry's proposal if they desired to escape further centralisation. If they did not approve the proposal, they would find that at some time a *State-examen* would be instituted.

The hour of six having arrived, the debate was adjourned on the proposal of Dr. Rolleston.

Thursday, April 11th.

Dr. ACLAND, President, took the Chair at 2 P.M.

Conjoint Examining Boards.—The adjourned debate on Dr. HUMPHRY's motion was resumed.

Dr. ROLLESTON said that it was better that the medical profession should take in hand the formation of conjoint boards than that Government should do it. That Government interference was likely, was shown by Lord Ripon's Bill in 1870, which would have been passed but for accidental circumstances. He had again read the arguments of Sir R. Christison against conjoint boards as brought in question in the address which he delivered at the meeting of the British Medical Association in Edinburgh, but they had made no impression on him. The State was likely to take in hand examination for licences to practise; and, indeed, had to some extent done this, with reference to soldiers and sailors. He could not admit the objections that it was not possible to examine a large number of candidates by a conjoint board. About 960 persons were registered each year. Would the University of London, for instance, think it a difficult matter to give 960 candidates an uniform examination?

Sir DOMINIC CORRIGAN objected to Dr. Rolleston being allowed to make a second speech.

The PRESIDENT ruled that Dr. Rolleston, having been interrupted in the course of his remarks on the previous day by the time for adjournment having arrived, was in order in now completing them.

Mr. TEALE said that, if Scotland stood alone, perhaps the views of the Scottish members might be accepted. But the Medical Act had extended the privileges of members of the profession in the various parts of the kingdom, and the question must be discussed in accordance with the general law. The present was a critical period in the history of the Medical Council. Registration was indeed necessary, and might be easily done; but could it be said that medical education was in a satisfactory state? No doubt there had been improvement; but there was a general feeling that the Council had not done so much to improve medical education as it ought. It would be very unsatisfactory if the Council were to go on simply making recommendations, which might not be carried into effect by the medical bodies for three, four, or five years. This took away much of the earnestness of the Council. What would be the object of giving increased power to the Council, if it were to be littered away in super-

vision of the examinations held yearly by each of the nineteen examining bodies—in all, fifty-seven examinations? He shared in the disappointment generally expressed by the Colleges, by the British Medical Association, and the profession generally, that the Bill did not provide for securing a single conjoint examination. Dr. Wood had said that the establishment of a conjoint system would cause the standard of examination to fall to a low level; but it would be the duty of the Council to see that the standard neither fell too low nor rose too high. The latter condition was as much to be feared as the former. Nor would it lower the standard of the higher titles, as had been suggested. He agreed with Dr. Humphry, with regard to Oxford as well as to Cambridge, that it would be a great boon to be relieved from the necessity of examining students for a mere licence. If they were relieved from the duty of examining for the registrations, the Universities could raise the examinations so as to select the best class of candidates for their degrees. He was convinced that, unless there was some form of conjoint examinations, the days of the Medical Council would be numbered; it would be swept away and replaced by the State.

Dr. STORRAR said that the University of London would have no difficulty in examining a thousand students in a year. The College of Surgeons of England illustrated what could be done. He would support Dr. Humphry's motion. He thought that the Bill involved a principle on which it was necessary that the Council should express an opinion. He approved of the clauses in Lord Ripon's Bill of 1870 with regard to conjoint examinations, and also approved of Clause 15 of the present Bill. The University of London had referred the Bill to a Committee of medical and non-medical graduates. The report was not yet in such a state that he could make it public, but he might say that the Committee were unanimous; and no doubt the report would be adopted by the Senate. He had been much engaged in the conflict for medical reform before the passing of the Act of 1858. In 1856 or 1857, a medical reform bill was introduced into Parliament. Its main features were—registration, and the abolition of local jurisdiction; but it proposed also to give the medical corporations power to examine not only their own candidates, but also all University graduates. This was resisted by the Universities; and, after some discussion in the House of Commons, the Bill was referred to a select Committee. This Committee took no evidence, but approved of registration and the removal of local jurisdiction, and, to meet the anomaly of nineteen examining bodies carrying on a species of Dutch auction, proposed the establishment of examining boards for registration under a Medical Council. The Bill came back to Parliament; the Universities and corporations fought for their privileges; and the Bill was lost. In 1858, the then Home Secretary, Mr. Walpole, suggested a compromise. He omitted the central examining boards, but gave the Medical Council power of regulation and supervision. As the Bill advanced, an attempt was made in the House of Lords to encroach on the province of the corporations, but it was put aside. When the Bill at last became law, it had much of the appearance of a regiment that had come out of a general action. However, the Council made the best of it, and had for twenty years been endeavouring to carry out its principles. He concurred with Dr. Rolleston that, if the Medical Council did not move in the direction indicated in the Marquis of Ripon's bill, the strong hand of the Government would interpose, and settle the matter; and public opinion on the subject was more advanced in 1878 than it was in 1858. He was surprised to hear it stated that the examining bodies in Scotland had availed themselves first of the section in the Act enabling them to combine. When the Bill passed, it was thought by some that the Scottish Universities were not entitled to give a qualification in surgery; and this produced in 1859 a proposal for a conjoint scheme. The question at last came before the Privy Council, and it was decided that the Universities had a right to give a surgical qualification. And then the Medical Council, new to its work, when the proposal for combination came from the Scottish Colleges, omitted to make a condition that the single examination should be abolished—and thus, in fact, added two examinations to those already existing. The Scotch plan was not the Council's conception of a conjoint scheme; no doubt it was a very advantageous arrangement, but to give the Scottish corporations much credit for it was absurd. He did not agree with Dr. Wood's estimate of the present condition of examination. To say that there had been no improvement would be wrong; but he must deny that the present condition was so satisfactory that it could not be improved. He must now enter on more delicate ground. Dr. Wood seemed to imply that the examinations were so good in Scotland that it was not desirable to interfere. But, while he had much sympathy with Scotland, he could not be blind to its defects. He could not concur with Dr. Wood's conclusions. The proposal to form a conjoint board was a form of

declaration that the present system was imperfect. The English bodies did not desire to impose on Scotland what they did not wish for themselves, and had begun by forming a conjoint board in England. As regarded the University of London, if it had confined itself to its own narrow interests and its special duties, it had no need to go outside its charter; but the Senate had been led to take a more expanded view and to consider what was required for the profession and also for the public; and they felt it to be a duty to assist in establishing conjoint examinations for the common good. But the University would resist such an overriding of its powers as was contemplated in the Bill.

Dr. HALDANE said that the idea of a conjoint scheme was no doubt very seductive. Six or seven years ago an attempt to bring one into operation was commenced, but as yet the success was not great. Even in England it had not yet been tested by experience. In Scotland, an attempt was made to establish a conjoint scheme, and various meetings were held; but the negotiations ended in nothing. It was impossible to form a board in which the Universities and corporations should be on the same level. If it was difficult to form a board in England, it was much more so in Scotland. In England, about 14 per cent. of the persons placed on the *Medical Register* in a year held University degrees; in Scotland, the numbers were almost equally divided between the Universities and the corporations. A successful attempt was made in 1859 by the combination of the examinations of the Royal College of Physicians of Edinburgh with those of the Royal College of Surgeons of Edinburgh, and with those of the Faculty of Physicians and Surgeons of Glasgow. By this plan, a candidate after undergoing a single examination could obtain a double diploma. The board consisted of an equal number of examiners from each College; the College of Surgeons took entire charge of the examination in surgery, and the College of Physicians of that in medicine; the remaining subjects being each allotted to examiners from both Colleges. This plan had greatly diminished the number of single qualifications. It was true that many did still take the single qualification of the Edinburgh College of Physicians, but they were in general already members of the Royal College of Surgeons of England. Very few Edinburgh students applied for the single qualification. It was not desirable that the Universities and corporations should be amalgamated. The degrees of the Universities should be much higher than the licences of the corporations. It would be unfortunate if the University degrees should be looked on as mere licences to practise; but by the passing of the Medical Act they had been placed on the same level with the diplomas of the corporations. There was a difference between Scotland and England, inasmuch as the English Universities were not great centres of medical teaching—perhaps their retired position, which gave them greater advantages for literary study, interfered with this. But in Scotland the condition was quite different. The University of Edinburgh was the great centre of medical teaching in that city; and the same was the case, with some modifications, in Aberdeen and Glasgow; and the value of the teaching in the Universities was fully proved by the large number of students who resorted to them. Then as to the examinations, the reports of the visitors, and the returns from the army board, must be accepted as satisfactory evidence of their efficiency. He did not see how a conjoint scheme could raise the character of the examinations; the examiners would be the same men as at present. He thought it would be a pity to make a change when all things were going on well, and the Council had done much good. Dr. Rolleston had threatened the Council with a *Staats-examen*. He would prefer it to a conjoint board. Let all the examining boards go on as at present under the supervision of the Council, and let each candidate undergo, before being registered, a *Staats-examen* a year after having the ordinary examination—the intervening year being spent in holding hospital appointments, or as an assistant, or in travelling. He believed that such a plan would be more satisfactory than a conjoint board, and would keep up the character of the examination of the various bodies.

Dr. QUAIN had taken a considerable part in the formation of the conjoint scheme for England; and he believed that its objects were not quite understood. Before 1858, there were many scattered examining bodies giving unequal qualifications. The College of Surgeons of England, for instance, gave a qualification in surgery which required no previous training; and in Scotland some of the bodies gave degrees to persons whom they had scarcely seen. By the Act of 1858, all the bodies were put on an equal footing. Mr. Walpole expected that they would avail themselves of the power given them to combine, in order to give a double qualification. In Scotland, certain bodies combined to give qualifications in medicine and surgery; but they also gave their diplomas separately. With reciprocity of right to practise there should be also uniformity of qualification; but this had not yet been attained. In the letter addressed to the Council in 1870 by Mr. Simon, on behalf

of the Lord President of the Council, the following sentences occurred:—"The Lord President doubts whether the present system, under any practicable kind of supervision, can either work satisfactorily for medical education, or can provide adequate and uniform security for those great public interests which are concerned in the efficiency of the medical profession." That was the declaration of the Government, and it was, no doubt, the intention of the Lord President (the Marquis of Ripon) to act in some way. And there was also the opinion of the profession at large, as expressed in the memorial signed by nine thousand members of the Medical Reform Union, and presented to the Council by Dr. Bell Fletcher, that "the present system of granting licences to practise distracts students, fails to protect the honour of the profession, and is opposed to scientific unity and the best interests of the public". The Council had to choose between the provisions of Lord Ripon's Bill and those of the present Bill. As regarded Dr. Haldane's proposal, what object could be gained by having a second examination? It must be remembered that the Council worked not for the profit of the colleges and universities, but for the public good. Its choice lay between the formation of conjoint boards and what was proposed in the Duke of Richmond's Bill. The formation of conjoint boards was much more easy than some members of the Council thought. The College of Surgeons of England and the University of London had difficulties to contend with, but they overcame them and joined in the formation of a conjoint board for the public good. The English medical authorities had agreed to put their examinations together, and to offer a course of education and examination which would satisfy everybody. After passing the examinations of the conjoint board, candidates would be entitled to receive the diplomas of the corporations; from the universities they would get nothing. If the Council went on discussing the privileges of this or that medical body rather than consulting for the public interest, it would sooner or later be superseded.

Mr. TURNER objected to the discussion of an abstract resolution. It was not treating the Duke of Richmond with courtesy. He thought that the Council should at once proceed to the discussion of the Bill. In his opinion, the motion was an attempt to commit the Council to an abstract proposition before discussing the Bill. He had a great mistrust of abstract propositions; they were often like snakes in the grass, and traps to catch the unwary. He thought that Dr. Humphry's resolution demanded more explanation. Dr. Humphry had left some chapters out of his narrative. Some points in the minutes of the Council did not tell so strongly in favour of conjoint boards as had been represented. The resolution of February 1870 was said to have been carried by a majority of all the divisions of the kingdom. This was true only to a certain extent. On that occasion, various motions and amendments were brought forward; and, when the resolution which was adopted was passed, four members declined to vote, of whom two were Scotch, one Irish, and one English. None of them could be called supporters of the resolution; moreover, Sir Robert Christison, whose opinion on the subject was well known, was absent. Some years ago, a protest against a conjoint scheme, signed by eminent practitioners, was sent to the Council from Scotland. The movement in favour of a conjoint examining board was not national. It had been said, in support of the establishment of conjoint boards, that the present system was an anomaly, and that a conjoint scheme would ensure uniformity. If a plan of medical examinations were now being formed for the first time, no one would think of constituting nineteen separate bodies; but the Council must look at the subject in its historical aspects. Many of the examining bodies were of great antiquity, and had shown themselves earnest in promoting the improvement of the medical profession. He did not see why the Council should step in and stop their progress. They had also shown themselves ready for reform when required; why, then, should their privileges be taken away, unless they acted improperly? It had been said that the examinations of some of the Scottish boards were not up to the mark; but against this statement he would place the reports of the visitors on examinations. The Council had already sufficient power, under the Medical Act, in regard to the examinations; and the argument as to anomaly was of no value. As to uniformity of standard of examinations, was it desirable to have an uniform standard, and, if it were desirable, could it be obtained? It was a phantom which might be chased in vain over Irish bogs, or Scotch moors, or London streets. A standard of examination was a mental process, and varied not only with different persons, but at different times in the same examiner, according, e.g., to the state of his digestion. Again, a candidate's knowledge could not be weighed or measured out like tea or beer: it was a variable quantity. It had been said that, with a conjoint board in each division of the kingdom, there would be an approach to uniformity. There might be some approximation if there were one board

for the United Kingdom; but separate boards would have their own standards. To procure uniformity, all the candidates must be examined by one examiner in each subject. As regarded the conjoint scheme for England, the English authorities were introducing a series of examining boards into the scheme, thus leaving matters just where they were. Another difficulty was that, under the conjoint scheme, a great system of centralisation of examination would be introduced. He was glad to hear Dr. Rolleston protest against centralisation, and had hoped to hear him go on to argue against the conjoint scheme. One of the results of the formation of a central examining board would be the aggregation in the locality of a number of persons professing to prepare students for examination. A central board would be a great encouragement to cramming, and would interfere greatly with medical study. He referred here to the reports on the Universities of Scotland recently presented by a Royal Commission, consisting of eminent and unprejudiced men not connected with these institutions. They said that the growing tendency to increase the number of examinations was to be deprecated. It would be a misfortune if the requirements individually of the Scottish Universities were impaired, and if they were made subservient to the requirements of a central examining authority. The report spoke also of the evil influence of examination on education. Nothing further was needed to show the evil of submitting great bodies to the control of central boards. It might be said that university students would have to pass a subsequent examination before obtaining their degrees. In the English scheme, the university students must pass the examination of the conjoint board before that for the degree; and thus a new examination would be introduced which might withdraw attention from the subjects of the higher examination. Under the conjoint scheme, the same examiners would be appointed as now performed that duty, and the examinations would be practically the same. It was an argument against conjoint boards that all the candidates in each division of the kingdom would have to come before the same examiners; and it was not to be expected that men engaged in the duties of an active practice could give the time necessary for conducting the examinations, and hence these would fall into the hands of less well qualified men. The proposal to send the questions and answers by post might do very well if the examinations were entirely written; but they were also oral and clinical—and patients and candidates could not be sent by post. The telephone, indeed, enabled persons to communicate at long distances; but it had not yet reached such perfection as to enable, for instance, an examiner in Edinburgh to examine a candidate in Aberdeen. The candidate must go to the examiner, or the examiner to the candidate. If the latter, then the already great demands on the time of the examiners in Scotland would be increased. It was proposed to make the establishment of examining boards compulsory; but compulsion was not the spirit of modern legislation, which sought rather to persuade, and to remove difficulties in the way of carrying out plans of improvement. This was done by the Duke of Richmond's Bill. He objected to Dr. Humphry's proposal on national grounds. There were also certain local objections. The Scottish Universities were great teaching institutions, and had a great interest in the question, there being at present about two thousand medical students in Scotland. On the other hand, the Universities of England did not contain more than about fifty students. Again, the Scottish Universities, and the Queen's University in Ireland and the University of Dublin, carried out a complete examination in medicine and surgery, and the Irish Universities in midwifery also. The examination for degrees was in every sense thorough, and the provisions and appliances for teaching were the best that could be obtained. The fact that the Scottish Universities were frequented by students from all parts of the world, was evidence of the high estimation in which their teaching was held. These Universities objected to having their students compelled to go through the minimum examination of a conjoint board. The Council had no right to seek to impose an additional examination on the university students, and to expect them to pay such a fee as might be required for a conjoint examination. There was another and a more serious matter. Under the present system of diversity of examination, inducements were held out to candidates to proceed to higher qualifications; but, if men were allowed to be put on the *Register* with a minimum examination, many would be content with this. A compulsory system would in this way produce great injury by inducing students to stop short in their progress. The Scottish Universities would send out a smaller number of graduates, and would undergo deterioration in the estimation of the profession. The Scottish Universities differed from the other Universities in being poor, and in not being able to draw on the public purse for the payment of examiners, as the University of London could do. The Irish Universities also were more fortunate in this respect than those in Scotland. The examination fees were an important

source of income to the Scottish Universities; in Edinburgh, last year, they amounted to £3,000. These fees did not go to the examiners, but were paid into the university treasury; £300 being paid to examiners, and £350 to the non-professorial examiners. The remainder was applied to general university purposes; and thus the next generation of students actually received back, in improved means of teaching, that which their predecessors had paid. It would then be necessary to take care that this income of the Universities was not reduced by legislation. Under the proposed plan of conjoint examining boards, there would be a loss in consequence of the falling off of fees.

Dr. AQUILLA SMITH heard nothing which could induce him to change his opinion against the conjoint scheme, but much to confirm it. He was much indebted to Mr. Turner for his lucid exposition. He agreed with Mr. Turner that the Council was not treating the Duke of Richmond with proper consideration in taking up Dr. Humphry's resolution before considering the Bill. He believed that the formation of conjoint boards would discourage men from going on to the higher qualifications. He had observed with satisfaction that in recent years there had been an increase in the number of graduates in the University of Dublin; but, under the conjoint scheme, as soon as men got into general practice, all their aspirations for higher degrees would be laid aside. He agreed that it was injurious to amalgamate the universities and corporations in conjoint schemes. It was derogatory to the universities to condescend to such amalgamation; their examinations should be of a high standard.

Mr. MACNAMARA said that the question for discussion was, whether the Council would accept the principle of conjoint boards, or the Lord President's Bill. If Dr. Humphry's resolution were passed, it would deprive the Bill of its backbone. Conjoint schemes had a tendency to lower medical education. If candidates were required to undergo the examination of a medical and of a surgical board separately, they could not obtain their qualifications if they were weak in either subject. He would now make the *amende honorable* to the Scottish bodies for what he had previously said, and would now say that disparity of examination no longer existed among them. He had made very careful inquiries as to the manner in which the examinations were conducted in Edinburgh and Glasgow, and had found that they were all that could be desired. When he was a grinder, he used to charge thirty guineas for preparation for Irish examinations, twenty for English, and ten for Scotch; but now he found that the fees were alike in all cases. The Bill provided for the consolidation of licences; it permitted and encouraged the formation of conjoint boards. This was much better than compulsion. If the English bodies saw their way to the formation of a conjoint board, let them form one; but they should not force their views on the Scotch and Irish. He thought that the Council should take up the Lord President's Bill and go through it clause by clause; otherwise, if the Council succeeded in subverting the principle of the Bill, they would only stop legislation for the present year, and would expose themselves to the risk of being afterwards obliged to accept a stronger measure.

Sir WILLIAM GULL said that the difficulties in the way of conjoint schemes might be surmounted. Mr. Turner had said that a conjoint scheme was impossible in Scotland, and the real reason came out at last—it was a pecuniary one. The Scottish universities depended on the fees paid by the candidates for graduation, and the fear was that those ancient and historical institutions would dwindle away for want of funds. At least eight-tenths of all the arguments brought forward were outside the question. If he understood the principles of the conjoint scheme, the establishment of a minimum examination would be in favour of higher education; it would leave all the bodies free to raise the standard of education for their higher degrees and diplomas. The Scottish bodies were teaching down to a minimum (Mr. TURNER dissented). If not, how was it that there were so few university graduates in London, and so many in Scotland? If the Scottish Universities examined according to a maximum standard, they could not fail to have few graduates. The question was partly political and partly monetary, and involved many interests which no government could overlook. The Bill would have been much more stringent if it had not been for politics. Dr. Andrew Wood had said that the question must be looked on from three aspects—*respite, aspic, prospect*—and that if the Council did not let matters go on as they were, they would be going to Hades. He saw no ground for this. The Council could but regulate medical qualifications, unless it could supervise examinations; but this could not be done under the present system. Unless conjoint boards were formed, the Council could not do its duty. The Council should strengthen the hands of the Government, and enable it to overcome the political difficulty, and to act for the good of the profession and the public. He did not agree with the opinion that men who passed the minimum examinations would not go on to the higher diplomas; he thought that many

would not stop at the minimum qualification, but would go beyond it. Mr. Macnamara had said that the adoption of Dr. Humphry's motion would prejudice the passing of the Bill. He hoped that it would do so. He did not think that the difficulties in the way of forming conjoint schemes were insuperable, though they might be great. That the principle was a desirable one, no one could doubt. It would be certainly much more easy to supervise the examination of three boards than those of nineteen. In voting, the Council should consider what was for the general good.

Dr. PITMAN supported the motion. It had been stated by some that they approved of conjoint schemes, but at the same time they doubted whether they could be carried out. The combination of the Scottish colleges in 1859 was not a conjoint scheme, according to the view held by the English boards. Besides the combined examinations, the Scottish colleges reserved the right of granting single qualifications. What security was there that the examinations were a fair test of knowledge, if the present plan were allowed to go on? Unless constant supervision were exercised, it would be impossible to secure their efficiency. Mr. Turner had objected to the statement that the minimum examinations in the Scottish Universities did not differ from those of the corporate bodies.

Mr. TURNER said that the Universities required four years of study at a medical school; the corporations required only three years at a medical school, another year being spent elsewhere.

Dr. PITMAN could not see that it was an advantage to require the four years to be spent entirely at a medical school. He did not think that the preliminary examinations were any better in the universities. It was also not desirable that examining bodies should be also educating bodies. No doubt the system in Scotland had been much improved, but it was capable of still more improvement. What was wanted was uniformity of examination by a single board. The difficulties in the way of forming a conjoint scheme had been overcome in England; in Scotland there had been a failure, through want of perseverance. Twenty years of permission to combine had not brought forth much, and it was now proposed in the Bill to continue the permissive system. He trusted, however, that Scotland and Ireland would follow the example of England, and form conjoint boards. The day would come when the universities and corporate bodies would have to combine or be superseded; and it would be better to act voluntarily than under compulsion. The vote of the Council, he thought, would have little influence unless there were a fair majority in favour of Dr. Humphry's resolution. The question was one which concerned the public as much as the profession, and the public would act for themselves.

On the motion of Mr. SIMON, the debate was again adjourned.

Returns from the Army Medical Department.—It was moved by Dr. ANDREW WOOD, seconded by Dr. AQUILLA SMITH, and agreed to: "That the returns from the Army Medical Department be inserted in the Minutes, and that the best thanks of the Council be given to the Director-General of the Army Medical Department for his courtesy in sending these returns."

The following is an abstract of the returns.

	Aug. 13, 1877. Feb. 14, 1878.			
Total number of candidates	37	...	24	
Found physically unfit	3	...	4	
Failed to appear at the examination	3	...	1	
Rejected	1	...	1	
Successful	30	...	18	

The British Medical Association and the Medical Acts Amendment Bill.—The following letter from the Chairman of the Medical Reform Committee of the British Medical Association was read.

Chester, April 9th, 1878.

"Dear Sir,—I thank you for acknowledging the receipt of my communication respecting the amendment of the Medical Acts. On behalf of my Committee acting for the British Medical Association, I have to express a hope that the opinion of the General Medical Council may be taken on the subject of the distinct representation of the profession upon it. The action of the Association since 1866, when a deputation on its behalf waited on the Council, proves that the Association is in earnest in its desire to obtain [it].

(Signed) "EDWARD WATERS,

"Chairman of the Medical Reform Committee.

"Professor Acland, M.D."

Mr. TURNER asked the President if he could inform the Council whether the Medical Acts Amendment Bill referred to in the letter from Dr. Waters (read on the previous day) as approved and promoted by the British Medical Association, had been approved and promoted by the general body of the members of the Association, or only by the Medical Reform Committee of that Association.

The PRESIDENT answered that no information had been received by him on the subject referred to in the letters of Dr. Waters, other than was contained in the communications laid before the Council this day and yesterday.

Friday, April 12th.

Dr. ACLAND, President, took the Chair at 2 p.m.

The Conjoint Scheme for England.—Sir DOMINIC CORRIGAN, in asking the President a question concerning the Conjoint Scheme in England, stated that it would be desirable to have the latest information as to the present state of the conjoint scheme in England, and that with this view the President be requested to furnish the Council, if in his power, with such information.

The PRESIDENT stated that he had communicated with the Chairman of the Committee of Reference appointed under the medical authorities of England, on the subject of Sir Dominic Corrigan's question. The Chairman of the Committee, Sir James Paget, was in a position to give an answer which would be satisfactory to the Council.

Sir JAMES PAGET said that, shortly after the conjoint scheme proposed by the English Medical Authorities received the sanction of the General Medical Council, the authorities appointed a Committee of Reference, by whom regulations had been framed for the education and examination of candidates for qualifications for registration. The regulations were now complete, and the copy of them which he had in his hand might be published, but that they required the sanction of the authorities. This sanction, he had no doubt, would be granted, and the scheme could be brought into operation at the commencement of the next winter session in October. But whether it ever would come into operation might depend on the decision at which the Council would arrive to-day. He was not prepared to say what would be the decision of the College of Surgeons if the institution of conjoint examinations in all divisions of the kingdom were not made compulsory; but the College of Physicians, in the document just printed in the minutes of the Council, had said that in that event the "Bill would compel them to abandon the scheme and all hope of reaping any fruit from their labours" in its construction and in the preparation of the rules of education and examination.

Conjoint Examining Boards.—The adjourned discussion on the resolution proposed by Dr. HUMPHRY was resumed.

Mr. SIMON had given much attention to the discussion; and would first refer to the objections against the principle of conjoint boards. It had been said that the introduction of the resolution forestalled the discussion of the Bill on its merits. Mr. Turner had said that the resolution was abstract and obscure (no doubt, Dr. Humphry could explain it); that it was a trap for the unwary, a snake in the grass, etc. And Dr. Andrew Wood had told the Council that they would be going to the *facilis descensus Averno* if they adopted the resolution; but they must have felt relieved on hearing that the translation meant that the Scottish universities were likely to lose money if a conjoint scheme were adopted. It had been said also (by Mr. Macnamara) that the passing of the resolution would take away the backbone of the Bill. But his complaint was that the Bill had no backbone; it was a mollusc, not to say a jelly-fish. Sir William Gull had said—no doubt for reasons satisfactory to himself—that political influences had made the Bill such as it was; but the mere statement that such influences had been in operation made it all the more important that the Council should put forward a strong opinion in support of the principle of conjoint boards. Mr. Turner said that the object of legislation was to persuade people to do what was right. That was the duty of the preacher: the function of legislation was to command, and, in proper cases, to enforce obedience by penalties. He believed that, from early times, permissive legislation had been held to be in itself wrong, or to have as its object the remedy of some wrong already existing in a restrictive law. The object of the Medical Act and of the Council was to provide guarantees that none but properly qualified persons should be legally entitled to practise, and that the standard of medical education should be as high as circumstances permitted. Could such guarantee be given under the present circumstances of competing examining boards? Certainly not. This answer was not aimed at this or that examining board, but was intended to apply to the whole kingdom; and every man not influenced by local considerations would adopt it. The present system did not give adequate guarantee. What tendency could it have, except to favour the candidate who paid, against the public who did not pay? An appeal might also be made to facts. Granting that there had been considerable improvements in the examinations, many of these had taken place in consequence of pressure, and there was no guarantee for their continuance if the pressure should be withdrawn. It would be a great relief of the diffi-

culties under which the Council laboured if it could have power to enforce its recommendations. The Council could not exercise full power over the examinations: it could only visit them thoroughly in the course of ten or more years; and could this be effective in restraining downward competition? The idea of uniformity of standard had been objected to as being impossible; and it had been said that the endeavour to obtain it was like pursuing a phantom. It was also said that it was not desirable; that it would tend to mediocrity, and to sending into the profession a large number of superficially educated men. An objection had also been raised on the ground of the expenses incurred by the candidates in travelling to the places where the examinations would be held. But what of the expenses incurred at present by English students in travelling to Edinburgh? But the greatest objection urged by Mr. Turner was the effect which a conjoint scheme would have on the finances of the Scottish universities. These were great medical schools; and Edinburgh received £3,000 last year from fees, which went to maintain the school. But what if the same principle were applied elsewhere—if, for instance, the medical school of St. Bartholomew's Hospital were to have the privilege of conferring degrees and were to receive the benefit of the fees in the same way? The question must not be decided on as a matter of local interest, but of principle; as a matter of general application. The cases of the English and Scottish universities were not strictly comparable; they would be more so, if each of the separate colleges of Oxford and Cambridge had the power of granting degrees. He knew that the Scottish universities had the privileges of old; but the question was one of right and wrong, and not to be met by the reply "*Beati possidentes*". Was it not the fact that some medical practitioners in England obtained degrees from Scotland, for the purpose of making the public believe that they held qualifications superior to those of the English corporate bodies? He agreed with Mr. Teale that it was to be regretted that university degrees were made qualifications for registration. He did not, however, think that the universities should take no part in conjoint examining boards; the universities and corporations might combine, and still retain their functions with regard to the higher qualifications. When the public paid members of the profession their fees, it was expected that the coin should be of sterling quality; and so, in return, practitioners of standard quality should be secured for the public. That was the principle at which the resolution aimed—to establish a qualification that could not fall below a certain standard, and that could be improved from time to time. He hoped that the advantage of having but one legal title, as proposed in Lord Ripon's Bill, would be recognised; and that the resolution would be adopted by the Council.

Sir JAMES PAGET said that the Bill no doubt contained clauses that required change, but there was also much in it which was for the advantage of the profession as regarded conjoint examination. The Bill proposed two plans; a double qualification, and the formation of rules for ensuring uniformity. The Council hoped and looked for uniformity in the minimum qualification. If there were to be an equal right of registration, the qualification must be as uniform as possible. He believed that there was a general understanding that, in most if not all of the medical institutions, unworthy candidates still passed. The Universities complained of being obliged to admit men to their degrees, because, although the result of the examination did not come up to the standard for degrees, they would not say that they were unfit to practise. If the Council would not have conjoint examining boards, the public would take care that there should be some uniform standard below which none could be admitted to registration. The majority of the Council, the British Medical Association, and the examining bodies, had declared in favour of conjoint boards. The English conjoint scheme was nearly ready for operation, but it was now in greater peril than at any former period. Unless conjoint boards were established in all the divisions of the kingdom, there would be the alternative, according to the Bill, of the plan of double qualifications, which would virtually disfranchise three-fourths of the bodies granting single qualifications as effectually as a conjoint scheme would do. The difference would be that, as the plan was carried out in England, the bodies exercised the authority by their own will and their own rule; and this was preferable to being subjected to rules framed by the Medical Council and approved by the Privy Council, as proposed in the Bill. Suppose that there were a state examination. There were two ways of carrying out this. One was according to Dr. Haldane's proposal, by which every candidate for registration would have to undergo an examination a year after obtaining his diploma. But such a system would indicate that the degree of doctor of medicine, the diplomas of the Colleges, were not fit tests of qualification to practise. The degrees and diplomas, then, now held in honour, would be reduced to great dishonour. It might be said that the army and navy re-examined

candidates. These examinations, however, were in the first place adopted for the purpose of selecting candidates by competition, though they had of late apparently lost that character in consequence of the dearth of candidates. Another method of carrying out a State examination was to make it precede the granting of diplomas. That was the scheme of Lord Ripon's Bill. There was much to be said for such a scheme; but it must be contrasted with the conjoint scheme, under which the candidates on passing would be entitled to receive from the corporate bodies diplomas which would be registered. In the one case, the passing the examination would take a man straight to the *Register*; in the other, he would have the right to the registrable diplomas of the corporate bodies. With the exception of the Crown nominees, the members of the Council were the representatives of bodies having certain legal rights. But, if the principle of State examination were admitted, what would be the position of the Council? He saw nothing but calamity from falling under the Bill in an unaltered condition, or under a system of State examinations. The medical authorities had done great things for medical education; and on them must depend the further improvement of education. It would have nothing done which might impair their position.

Dr. FERGUS said he found nothing in the Bill to prevent the formation of conjoint schemes; it was permissive. Let the English authorities carry out their scheme, and show the other divisions of the kingdom how it worked. He thought that the Bill itself should have been discussed.

Dr. HUDSON said that he would vote for the resolution.

The PRESIDENT expressed his intention of voting in favour of Dr. Humphry's resolution. Having paid much attention to the admirable and temperate discussion which had taken place, he wished to affirm his conviction that the present system, under which nineteen different bodies had the power of admission to the *Register*, was not conducive to the interests of medical education in the kingdom. If the Council lost its present opportunity, results might happen, the nature and extent of which they did not know.

Dr. HUMPHRY replied to the objections to his resolution. In conclusion, he said that its object was that the medical authorities in each division of the kingdom should frame such a scheme as might best suit their special circumstances. Let the Scottish authorities frame such a scheme as would be best for Scotland, and let the Irish authorities do the same for Ireland. Let them use their liberty while they had it, and avoid falling into the hands of the Privy Council. The choice offered was that between compulsory and voluntary action.

The resolution was then put to the vote. The numbers were—for, 14; against, 10. The motion was declared carried.

Dr. ANDREW WOOD required that the names and numbers of those who voted for and against the motion be taken down.

Majority, 14.—The President, Dr. Pitman, Sir James Paget, Mr. Bradford, Dr. Rolleston, Dr. Humphry, Dr. Pyle, Dr. Storrar, Dr. Leet, Dr. Quain, Sir William Gull, Mr. Simon, Mr. Teale, Dr. Hudson.

Minority, 10.—Dr. Haldane, Dr. Andrew Wood, Dr. Scott Orr, Mr. Turner, Dr. Pettigrew, Dr. Aquilla Smith, Mr. Macnamara, Dr. Apjohn, Sir Dominic Corrigan, Dr. Fergus.

The Powers and Duties of the Medical Council.—Dr. PITMAN moved:

"That the duties of the Medical Council in relation to the various medical authorities (whether in separate or in joint action), should not be extended to the initiation of the examination-rules under which qualifications are to be granted, but should remain restricted, as now, to duties of superintendence and control, with power of making representation to the Privy Council in cases of default."

The resolution contained a principle adverse to clause 14 of the Bill, which recognised the existence of certain duties and powers in the Council, and further proceeded to impose additional duties without giving the necessary increase of power. It was proposed that the Council should frame examination-rules; but if it undertook to frame regulations for all the bodies, how would it find time for this? Those only who had been engaged on the Committee of Reference for the English conjoint scheme could form an idea. But even if the Council could undertake the duty, was it desirable that they should do so? He believed that the universities would not agree to having the regulations for their degrees laid down by the Medical Council. Then as to the corporations, he doubted whether the Council would be more competent to lay down rules for the guidance of these bodies than the authorities of the colleges themselves. What object was there in removing the power of making regulations from those who now possessed it? It would be like giving minute and restrictive instructions for the manufacture of an article, and then requiring the maker to put his name on it as if it were his genuine work. He had been struck

with the resemblance of the clause to certain resolutions passed by the Branch Councils in Scotland and Ireland. The clause provided a right of appeal to the medical authorities against the Medical Council; this was not a very dignified position for the Council. The clause certainly required amendment.

Dr. ROLLESTON seconded the motion, which, after some remarks in support from Dr. Andrew Wood, Sir D. Corrigan, and Sir W. Gull, was carried. It was subsequently amended by the insertion of the words "in general" between "should" and "remain restricted".

The Medical Acts Amendment Bill.—It was moved by Mr. SIMON and seconded by Dr. ANDREW WOOD, and agreed to:

"That the Council now resolve itself into a Committee of the whole Council, for the purpose of considering the Clauses of the Medical Act (1858) Amendment Bill."

Dr. ANDREW WOOD moved, Sir JAMES PAGET seconded, and it was resolved: "That Clauses 1 and 2 of the Bill be approved."

Dr. ANDREW WOOD moved, and Mr. TURNER seconded, "That Clause 3 be approved."

Mr. SIMON moved, as an amendment, and Dr. HUMPHRY seconded: "That the Council so far approves of the intention of Clause 3 as to be of opinion that none but persons whose qualifications have been tested in medicine, in surgery, and in midwifery should in future be admitted to the medical register; but that, as regards the manner in which effect should be given to this intention, the Council refers to its previous votes on the subjects of conjoint boards and examination rules." The amendment was carried.

Dr. ANDREW WOOD required that the names and numbers of those who voted for and against the amendment be taken down.

Majority, 13.—Dr. Pitman, Sir James Paget, Mr. Bradford, Dr. Rolleston, Dr. Humphry, Dr. Pyle, Dr. Storrar, Dr. Leet, Dr. Quain, Sir William Gull, Mr. Simon, Mr. Teale, Dr. Hudson.

Minority, 10.—Dr. Haldane, Dr. Andrew Wood, Dr. Scott Orr, Mr. Turner, Dr. Pettigrew, Dr. Aquilla Smith, Mr. Macnamara, Dr. Apjohn, Sir Dominic Corrigan, Dr. Fergus. The amendment having been put as a substantive motion, was carried.

The Obstetrical Society and the Education of Midwives.—A letter was read from Dr. West, President of the Obstetrical Society of London, accompanied by copies of the amended regulations proposed by the society for the examination and registration of midwives. Dr. West also called attention to some points in the Medical Acts Amendment Bill, which, he thought, required amendment, and suggested that the Obstetrical Society might be allowed an opportunity of explaining that scheme to the Medical Council.

It was moved by Sir JAMES PAGET, seconded by Dr. ANDREW WOOD, and, after a brief discussion, resolved—

"That the request of the Obstetrical Society be complied with, and that they be informed that the Council has agreed to admit them to an interview on Tuesday at 2 o'clock P.M."

Returns from the Licensing Bodies.—It was moved by Dr. ANDREW WOOD, seconded by Dr. AQUILLA SMITH, and agreed to:

"That the annexed table, showing the results of professional examinations for degrees, diplomas, and licences granted in 1877 by the bodies named in Schedule [A] of the Medical Act, be received and inserted in the minutes."

The following is a summary of the table [I=First Examination; II=Final Examination; P=passed; R=rejected].

Royal College of Physicians of London.—Licence: I, R 8, P 7; II, R 19, P 97. Membership: I, R 1; II, R 3. P 23.

Royal College of Surgeons of England.—Membership: I, R 250, P 521; II, R 133, P 413. Fellowship: I, R 41, P 48; II, R 9, P 26.

Society of Apothecaries of London.—I, R 75, P 164; II, R 44, P 217.

University of Oxford.—M.B.: I, R 3, P 8; II, P 8. M.D. (Essay): P 1.

University of Cambridge.—M.B.: First Examination, R 18, P 32; Second, R 2, P 24; Third, R 2, P 11.† M.D.: II, P 4. M.C.: P 3.

University of Durham.—M.B.: First Examination, R 4, P 10; Second, P 2; Third, P 2. M.D. (Essay): R 1. M.D. (for Practitioners of fifteen years' standing): P 2.

University of London.—M.B.: Preliminary Scientific, R 76, P 90; First M.B., R 46, P 55;† Second M.B., R 10, P 22. M.D.: R 7, P 8. B.S.: R 3, P 3. M.S.: P 1.

* In addition, one withdrew during the examination.

† The third is not, strictly speaking, the final examination, because every candidate has, subsequently to the third examination, to write a thesis and keep an "Act", in which he is subjected to more or less of oral examination.

‡ Of these, ten were among the candidates who proposed to go through the examination with the exclusion of physiology, and two were among those who, having previously passed the examination with the exclusion of physiology, presented themselves to be examined in physiology only.

§ Of these, five availed themselves of the option of reserving their examination in physiology for a future year, and seven who had previously exercised the same option passed in physiology only.

Royal College of Physicians of Edinburgh.—Science: I, R 3, P 10; II, R 26, P 115.

Royal College of Surgeons of Edinburgh.—Science: I, R 8, P 13; II, R 6, P 56.

Faculty of Physicians and Surgeons of Glasgow.—Science: I, R 22, P 7; II, R 10, P 21.

Royal Colleges of Physicians and Surgeons of Edinburgh.—Licence in Medicine and Surgery: I, R 52, P 101; II, R 68, P 102.

Royal College of Physicians of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow.—Licence in Medicine and Surgery: I, R 4, P 8; II, R 4, P 13.

University of Edinburgh.—M.B., and M.B. and M.C.: First Examination, R 83, P 175; Second, R 59, P 136; Third, R 14, P 108.* M.D. (Thesis): R 2, P 34.

University of Aberdeen.—M.D. (By promotion): P 31. M.B. and M.C.: First Examination, R 37, P 56; Second, R 30, P 33; Third, R 13, P 41.†

University of Glasgow.—M.B. and M.C.: First Examination, R 68, P 72; Second, R 39, P 56; Third, R 15, P 63.‡ M.D. I, P 1; II, R 2, P 2. M.D. (Thesis): R 3, P 15.

University of St. Andrews.—M.B. and M.C.: I, R 1; II, P 1. M.D.: R 3, P 10.

King and Queen's College of Physicians in Ireland.—Licence in Medicine: I, R 2, P 6; II, R 21, P 86. Licence in Midwifery: R 2, P 89.

Royal College of Surgeons in Ireland.—Licence: First Examination, R 56, P 109; Second, R 34, P 99; Third, R 34, P 99. Licence in Midwifery: P 9. Fellowship: Final Examination, P 9; Second, P 9; Third, R 2, P 7.

Apothecaries' Hall of Ireland.—Licence: I, R 14, P 32; II, R 7 P 24.

University of Dublin.—M.B.: II, R 6, P 30. M.C.: II, R 3, P 25. At the Half M.B. Examinations, the following were the results as regarded the subjects: Anatomy (Descriptive), R 16, P 26; Chemistry, R 8, P 34; Botany, R 9, P 19; Materia Medica, R 12, P 35; Physics, R 6, P 36.

Queen's University in Ireland.—M.D.: First Examination, R 45, P 143; Second, R 35, P 74; Third, R 29, P 44. M.C.: R 23, P 35.

Saturday, April 13th.

Dr. ACLAND, President, took the chair at 1 P.M.

The University of Glasgow and the Medical Acts Amendment Bill.—Dr. PETTIGREW presented to the Council a petition from the Senatus Academicus of the University of Glasgow against the Medical Act (1858) Amendment Bill, and requested that it be entered in the minutes of the Council.

It was moved by Mr. SIMON, seconded by Mr. BRADFORD, and agreed to:

"That the petition of the University of Glasgow be entered in the minutes."

The principal paragraphs of the petition were as follows.

"Your petitioners especially approve of its main provisions, viz.: 1. That which renders a double qualification a necessary condition of registration; and 2. That which empowers the General Medical Council to prevent the registration of a qualifying licence by any medical authority in respect of an examination lower than a fixed minimum, to be determined by the Council.

"Your petitioners are further glad to have this opportunity of expressing their satisfaction that the element of compulsory conjunction of medical authorities forms no part of this Bill. Your petitioners have always been, and still remain, of opinion that such conjunction would tend to lower the standard which the medical schools of the Scottish Universities have maintained under the existing system, whereby the examinations are conducted by a board, consisting partly of professors and partly of other examiners unconnected with the University, who are elected by the University Court in respect of their special fitness for the office.

"Your petitioners, while thus cordially approving of the main features of the Bill, venture at the same time to advert to one point in which it appears to them that the language used is open to misconstruction. Section ix, Subsection vii, seems to your petitioners to be expressed in a way which might imply the conferring on the Medical Council of a power to interfere with the right of a medical authority to exact a higher degree of knowledge than the Council might think necessary for a qualifying licence, inasmuch as it provides that the

* Of these, ninety-seven took M.B. and C.M., nine M.B. alone, and one did not graduate.

† Of these, all took M.B. and C.M.

‡ Of these, fifty-six took M.B. and C.M., six M.B. only, and one did not graduate.

Council may, from time to time, make orders for the registration and the removal from the *Medical Register* of any diplomas 'which appear to the Council to be granted after examination by any of the medical authorities, in respect of a higher degree of knowledge than is required to obtain such qualification as entitles the holder to be registered'. The Section xiv, Subsection i, might also, in its present form, imply a similar control over a medical authority exacting a higher qualification than the Medical Council might think necessary. Your petitioners cannot suppose that it was intended that either of these clauses should bear such a construction, but their phraseology seems to require amendment. Your petitioners would also represent that the exercise of any large power of control conferred on the General Medical Council should be subject to the revision of the Privy Council.

"For the reasons above stated, your petitioners humbly pray that the essential principles of the Bill, introduced into your Lordships' House by the Lord President of the Privy Council, may become law."

Registration of Dentists.—A letter from Mr. John Tomes, President of the Dental Reform Committee, was read. The following are the concluding paragraphs.

"For the reasons put forward and supported by the evidence contained in the papers handed in, and for many other obvious reasons which do not need enumeration, the majority of dentists of the United Kingdom and a very great majority of those dentists who hold registered medical qualifications earnestly hope the General Medical Council will approve and support with the full weight of its influence the Dental Practitioners Bill.

"But, should the Government ultimately require that the Dental Bill shall be embodied in the Medical Bill introduced by the Duke of Richmond and Gordon, 1878, or should the Medical Council think it desirable that the Dental should be embodied in the general Bill, then, on behalf of the Dental Reform Committee, I beg to suggest that, in the presence of the well matured and very efficient system of dental education of the College of Surgeons of England, it is not desirable the Medical Council should be required to undertake to originate a new scheme of education as proposed in the Medical Bill, Clause 23 (i), but that the Council should have full power to approve, modify, or refuse its assent to the educational details from time to time proposed by the surgical bodies authorised in the Bill to grant dental qualifications; also, that all boards of examiners in dental surgery, Clause 23 (ii), shall consist of at least six persons, and that one-half of whom shall be surgeons and the other half qualified practitioners; or otherwise the board might consist wholly of surgeons, the half of whom, without any practical knowledge of dental surgery, might, under Clause 23 (iii), enter their names on the *Dentists' Register* on the payment of a fee, and very imperfectly represent dentists upon the board. Throughout the Clause 23, and in Clause 22, the terms 'dentistry' and 'dental surgery' are used as though there were, or might be, some difference in their meaning. The Committee urge that the text should be made quite clear, so as to show that the terms are really synonymous. The same observation applies to the titles used by dental practitioners, and the Committee urge in this case also that the terms 'dentist', 'dental practitioner', 'dental surgeon', and 'surgeon-dentist' shall, as heretofore, and for reasons already stated, mean a person who is registered as in practice as a dentist before the passing of the Act, or a person who holds a registered dental or medical qualification.

"Clause 24 of the Dental Practitioners' Bill, exempting registered persons from serving on juries, etc.; and also Clause 31, 'provision for certain students', are omitted from the Medical Bill, 1878, both of which the Committee are strongly of opinion should be inserted.

"The draughtsman of the Dental Practitioners' Bill has prepared amendments for insertion in a copy of the Medical Bill, which would secure to the dentist the beforementioned results sought to be obtained in the Dentists' Bill, to which I beg to direct the attention of the Council.

"In conclusion, I may justly state that much time, labour, and money have been spent in bringing the Dental Practitioners' Bill into its present favourable position, and on this ground ask that, even though the Medical Council may think fit to recommend to Government its absorption into the Medical Bill, yet that the Council will not recommend that the Committee should abandon the Dentists' Bill until it is quite certain that the Medical Bill will become law."

The Medical Act Amendment Bill.—The Council then resolved itself into a Committee of the whole Council for the adjourned consideration of the Medical Act (1858) Amendment Bill; and proceeded, first, to consider Clause 23, relating to dentists.

The following resolutions were moved by Dr. ROLLESTON, seconded by Mr. BRADFORD, and agreed to:

"That it is desirable that provision should be made in the Medical Act (1858) Amendment Bill for the registration of Dentists."

"That it is not desirable that the Medical Council should be required to undertake to originate a new scheme of examination—rules—Section (1) of Clause 23—but that it should be entrusted with some such supervisory power as regards the educational details from time to time proposed by the medical authorities authorised in the Duke of Richmond's Bill as it already exercises with regard to other examinations."

Dr. AQUILLA SMITH moved, and Sir DOMINIC CORRIGAN seconded:

"That in paragraph (a) of Section (4) of Clause 23 of the Bill, the words 'or in dental surgery of', be omitted."

The motion was negatived.

Sir JAMES PAGET moved, Dr. ANDREW WOOD seconded, and it was resolved:

"That the Council approves the portion of the Bill that relates to the registration of dentists."

It was moved by Dr. ROLLESTON, seconded by Mr. SIMON, and agreed to:

"That the Council suggests the adoption of Clause 11 of Sir John Lubbock's Bill, viz.: 'The General Council may, if they see fit, establish in the register of dentists distinct sections for the registration of persons (not being British subjects) resident in the United Kingdom, and possessing such foreign qualifications as in the opinion of the Council are a sufficient guarantee for the possession of the requisite knowledge and skill for the efficient practice of dentistry, and for the registration of persons so resident and possessing such colonial qualifications as in the opinion of the Council are such guarantee as aforesaid; any person registered in either of such sections shall be deemed for all purposes to be registered under this Act'; instead of Subsection (5), Clause 24, of the Government Bill, viz.: 'There shall be also entered in the dentists' register, in separate alphabetical lists, such colonial and foreign dentists as are authorised by the scheme to be so registered, and the scheme shall make the like provision for the registration of colonial and foreign dentists as is made by this Act with respect to the registration of colonial and foreign practitioners in the *Medical Register*.'"

Mr. SIMON moved, Dr. ANDREW WOOD seconded, and it was resolved:

"That in Clause 7 of the Government Bill, for the words 'representing at the time of the grant thereof a degree of knowledge, as tested by examination, equal to or greater than that which at the same time was required to obtain in the United Kingdom such qualification as entitles the holder to be registered in the *Medical Register*', there should be substituted the following words:—'Furnishing, in the opinion of the Council, sufficient guarantees of the possession of the requisite knowledge and skill for the efficient practice of medicine and surgery'."

Dr. ANDREW WOOD moved, and Mr. TEALE seconded:

"That with respect to Clause 5 of the Bill, colonial practitioners must have practised five years after obtaining their diploma, or shall be required to pass the final examination of one of the medical authorities of the United Kingdom. In the latter case, they should be entitled to be placed upon the general *Medical Register*."

Mr. SIMON moved, as an amendment, and Dr. ROLLESTON seconded:

"That the Council is of opinion that Clauses 5 and 6 of the Bill should be brought into conformity with its resolutions of last year." The amendment was negatived.

Mr. SIMON required that the names and numbers of those who voted for and against the amendment respectively, and of those who did not vote, be taken down.

Majority, 11.—Dr. Humphry, Dr. Haldane, Dr. Andrew Wood, Dr. Scott Orr, Mr. Turner, Dr. Pettigrew, Dr. Aquilla Smith, Mr. Macnamara, Dr. Apjohn, Sir Dominic Corrigan, Mr. Teale.

Minority, 7.—Mr. Bradford, Dr. Rolleston, Dr. Pyle, Dr. Storrar, Dr. Lcet, Mr. Simon, Dr. Hudson.

Did not vote, 2.—The President, Sir James Paget.

Absent, 4.—Dr. Pitman, Dr. Quain, Sir William Gull, Dr. Fergus.

On the motion of Dr. ANDREW WOOD, the further consideration of the subject of foreign and colonial degrees and diplomas was adjourned till Monday.

The Council then resumed.

It was moved by Sir WILLIAM GULL, seconded by Dr. ROLLESTON, and agreed to:

"That the President, Dr. Andrew Wood, and Dr. Humphry be requested to communicate to the Lord President of the Privy Council the resolutions relating to the Medical Acts (1858) Amendment Bill, which have been passed during the present session of the Council."

Monday, April 15th.

Dr. ACLAND, President, took the chair at 2 P.M.

Deputation to the Lord President.—The PRESIDENT stated that he had laid before the Lord President of the Privy Council the following observations.

"The Medical Council deputed the President, Dr. Humphry, and Dr. Andrew Wood to present to your Grace certain resolutions which they have arrived at. The Council met on April 10th to consider the letter which your Grace forwarded, with copies of the Medical Act (1858) Amendment Bill, read in the House of Lords on March 19th. All the subjects on which the Council last year addressed your Grace are dealt with in this Bill, viz.: 1. The recognition of foreign and colonial qualifications in England; 2. The privileges of women in regard to medical qualifications; 3. The appropriation of penalties under the Medical Act; 4. To some extent the education of Midwives; 5. And, indirectly, the emendation of the law affecting certificates of lunacy. After the second reading of the Bill, the Council may have to suggest to your Grace's consideration certain amendments in various clauses relating to these subjects, and to some minor points in the Bill, prior to the consideration in Committee.

"The Council are aware that your Grace was unwilling to bring in any Government Bill which did not deal with all the chief subjects that were known to need attention in regard to medical legislation. They find, accordingly, in the Bill clauses having reference to subjects that are admitted to be of importance, and to need settlement, other than those named last year by the Council.

"They find clauses relating to the mode of conducting examinations in the United Kingdom, and to framing examination rules.

"They perceive that the permissive principles of combination of any of the licensing bodies is continued with modifications. On this subject a resolution has been passed by the Council, which forms Clause 3 of the Minutes for April 12th, 1878.

"If the Bill pass in its present form, it would, in the opinion of the majority of the Council, be necessary to make such modifications in the rules as are set forth in the resolutions in Clauses 5, 6, 9 of the Council's Minutes for April 12th, 1878.

"On the subject of the registration of colonial practitioners and other subjects therein, the Council is engaged now.

"On the subject of dentists they have passed resolutions which form Clauses 6, 7, 9, 10, 11 of the Council's Minutes for April 13th, 1878.

"As regards the registration of midwives, they have not yet had time before the second reading to pass any resolution, but they have already notified to your Grace that the Council, without assenting in all details to the scheme of the Obstetrical Society, is of opinion, with the society, that it would be desirable to provide by legislation for the following two objects: First, that means under legal sanction should be provided for giving credentials of qualification to competent midwives; and, secondly, that the lives of women in labour should, so far as practicable, be protected from the incompetent; and to-morrow they will receive a deputation from the Obstetrical Society as to the details of their proposal.

"The Council are still engaged in considering the remainder of the clauses in the Bill, and will further communicate with your Grace thereon after the Easter recess."

"Upon that, his Grace said that he would give the fullest attention and consideration to all those particulars upon which the Council had already resolved, and to any further resolutions which the Council might pass at such times as the Council thinks fit: that is, either during the present session or at any subsequent session that may take place at the will of the Council, if it takes place before the House of Lords goes into committee on this Bill. He then said that he was going to bring forward the second reading this afternoon, and that, in consequence of that, and some important business in which he is engaged, he was unable to receive the deputation of the Obstetrical Society, which he had wished to do this afternoon. He was so occupied that it was impossible for him to do so; but, as the Easter recess begins to-morrow, and he would not be able to see them at all now until after the Easter recess, having understood that they were to meet this Council to-morrow, he would be happy to receive through this Council any further communication on the subject, if there be any to be forwarded after the interview with the Obstetrical Society.

"Then he added that he had every reason for hoping that this evening the second reading of the Bill would be passed, and then that in that case he would introduce the Bill in committee, for the consideration of all the amendments which had been presented to him, and for their full discussion at the earliest possible period at which it could be done. Considering the other arrangements of the Government, and the work before the House, the earliest day at which he could undertake to do this would be on the 20th of May next, and, in his Grace's judgment, if the discussion could not successfully take place on the 20th May or thereabouts, there would be no chance of the Bill passing this year; that he would give his best attention to all amendments which should come before him before the 20th of May, and on that day he would proceed with the consideration of the Bill in committee.

"I thought it my duty to say, and I trust the Council, as well as my colleagues, will not think I went too far in this statement, that we had not yet considered fully the whole of the Bill; but I was quite sure I expressed the individual feelings of the members of the Council, that whatever opinions there might be as to the value of the Bill, we were all very sensible of the great trouble he had taken."

Mr. TEALE moved, Mr. MACNAMARA seconded, and it was resolved:

"That the foregoing communications from the President be entered in the minutes."

The British Medical Association and the Medical Acts Amendment Bill.—The following further communications from Dr. Edward Waters was read.

"14, Nicholas Street, Chester, April 12th, 1878.

"Sir,—I beg to acknowledge the receipt of your letter of the 11th instant.

"I am very happy to hear that the views of the Association will be submitted to the General Medical Council during its present session. I hope the Council will not negative the proposals without giving an opportunity to the Medical Reform Committee of defending them.

"The Committee will have a meeting in London on Wednesday next, and some of its members might possibly attend before 12 o'clock on that day. (Signed) "EDWARD WATERS.

"W. J. C. Miller, Esq."

It was moved by Mr. TEALE, seconded by Sir WILLIAM GULL, and agreed to:

"That, in reply to Dr. Waters's letter of April 12th, the President be authorised to receive Dr. Waters and the members of the Medical Reform Committee on Wednesday, at 11 o'clock, in order to hear their views of the proposals referred to in Dr. Waters's letter, and that such members of the General Medical Council as desire it shall be present at the interview."

The Medical Acts Amendment Bill.—The Council resolved itself into a Committee of the whole Council for the adjourned consideration of the Medical Act (1858) Amendment Bill.

Dr. PITMAN moved, and Dr. QUAIN seconded:

"That the Council adheres to its resolution of last year in reference to the registration of colonial diplomas."

Sir WILLIAM GULL moved as an amendment, and Dr. HUDSON seconded:

"That where a person who has been *bond fide* domiciled in any British possession can show evidence of holding some recognised medical diploma or diplomas (as hereinafter defined), granted in such British possession, and which may be satisfactory to the Medical Council, and that he is of good character, such person shall upon payment of the registration fee be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the *Medical Register*."

The amendment was negatived.

Dr. ANDREW WOOD moved as a second amendment, and Mr. TEALE seconded:

"That in Clause 5, lines 1 to 4, of the Bill, for the words, 'Where a person who either is not domiciled in the United Kingdom, or has practised medicine or surgery, or a branch of medicine or surgery, for more than ten years elsewhere than in the United Kingdom', there should be substituted the following words: 'Where a person has been domiciled in a British possession for two years immediately preceding the granting of his diploma.'"

The amendment was carried, and, having been put as a substantive motion, the following amendment was moved by Mr. SIMON and seconded by Dr. STORRER:

"That where a person who has been *bond fide* resident in a British possession outside the United Kingdom shows that he is of good character, and holds a recognised diploma or diplomas (as hereinafter defined), granted in a British possession, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the *Medical Register*."

This amendment was carried, and, having been put as a substantive motion, was agreed to.

Executive Committee.—The Council resumed, and balloted for the Executive Committee, whereupon the following members were found to be duly elected.

Sir James Paget; Dr. Humphry; Dr. Andrew Wood; Dr. Aquilla Smith; Dr. Quain; Mr. Simon.

Medical Acts' Amendment Bill.—The Council resolved itself into a Committee of the whole Council for the further consideration of the Bill; and the following resolutions were agreed to:

Moved by Mr. SIMON, seconded by Sir JAMES PAGET, and agreed to:

"That Clause 6 be in substance approved."

Moved by Mr. SIMON, seconded by Sir W. GULL, and agreed to:

"That Clause 8 be in substance approved."

Moved by Dr. ANDREW WOOD, seconded by Mr. TURNER, and agreed to:

"That Clauses 9, 10, 11, and 12, be in substance approved."

Moved by Dr. APJOHN, seconded by Mr. SIMON, and agreed to:

"That questions relating to the erasure of names from the *Medical Register* for infamous or disgraceful conduct in a professional respect ought, in the opinion of the Council, to be reserved for decision by the general body of the Council, and that it be recommended to the Lord President to amend Clause 13 of his Bill accordingly."

Moved by Dr. HUMPHRY, seconded by Dr. AQUILLA SMITH, and agreed to:

"That it is desirable the power of erasing from the *Medical Register* the name of any person who has been convicted in a court of law of a felony or misdemeanour, be deputed to a Committee of the Council."

The Council then resumed.

Restoration of a Name to the Register.—The name of Laurence P. J. Finigan, which had been erased in conformity with Section XIV of the Medical Act, was restored to the *Register*.

The Society of Apothecaries and the Medical Act Amendment Bill.—A letter addressed to the President of the Council by the Master of the Society of Apothecaries, enclosing a copy of a letter to the Lord President of the Privy Council, was read, and on the motion of Mr. BRADFORD, seconded by Dr. ANDREW WOOD, was ordered to be entered on the minutes. The letter to the Lord President was to the following effect.

"The Society consider that, if the 14th section of that Bill should become law, it will operate very much to their prejudice.

"In the first place, the privilege which the Society enjoy at the present time of framing their own examination-rules would be taken away from them, and placed in the hands of the General Medical Council. Such a result, in the opinion of the Society, would be a serious blow, not only to their own independence, but to that of all the existing medical authorities. But in the second place the Society occupy a peculiar position as regards this section, from having granted some time since their licence to a woman.

"The present Bill, by not repealing the 5th Clause of the Society's Act of 1874, while it repeals an exactly similar Clause in the College of Surgeons' Act of 1875, evidently has not lost sight of this fact.

"Assuming, then, an obligation to exist on the part of the Society to examine women, the 14th Section of the Bill would, on the one hand, compel the Society to examine women on terms and conditions differing from those to which men would be subjected, and, on the other hand, would prevent them from framing the rules for their examination.

"The anomalous position in which the Society would be placed by such legislation is obvious. The Society, therefore, cannot but think that your Grace will recognise the justice of their objection to the principle of a medical authority under an obligation to admit women to examination being deprived of the right of framing the rules under which such examination should be conducted.

"There is a further matter of less importance to which I am desired to call your Grace's attention. It is not altogether clear from the 21st Section of the Bill whether the Society (if they do not form part of a conjoint board) could alter by statute or by-law the constitution, functions, and duties of their present examining body, or whether the Society would remain in the same position as they are under their Amendment Act of 1874, which enables them only to alter such constitution, functions, and duties in the event of their forming part of a conjoint board.

"Upon the general features of the Bill, the Society desire me to state that their views are in accordance with those which have already been expressed to your Grace by the Royal College of Physicians and Surgeons."

Army Surgeons.—On the motion of Mr. MACNAMARA, seconded by Dr. AQUILLA SMITH, a letter addressed by the Royal College of Surgeons in Ireland to Mr. Ralph Thomson, Assistant Under-Secretary of State, War Office, a copy of which had been sent to the Medical Council, was ordered to be received, and entered on the minutes.

"Dublin, April 11th, 1878.

"Sir,—I am directed by the President and Council of the Royal College of Surgeons in Ireland, in reply to your letter of the 21st ultimo (1878), requesting that they would 'favour the Right Hon. the Secretary of State for War unreservedly with their opinion as to the specific causes which produce the existing difficulty in obtaining candi-

dates for the Army Medical Department', to state, that the President and Council have had the subjects therein referred to under their anxious consideration for a lengthened period, as shown in their memorial presented by deputation to the Right Hon. the Secretary of State for War upon the 3rd of June, 1875.

"Since the receipt of your communication the President and Council have taken further steps for the purpose of ascertaining accurately the causes which render the Army Medical Service now so unpopular—which produce the dissatisfaction that exists amongst those serving in it, and which deter eligible candidates from joining. These are—1. The short service scheme now in existence; 2. The abolition of the regimental system; 3. The frequent changes in warrants, after they have been published under royal authority with Her Majesty's signature, and on faith of the permanency of which warrants medical officers have accepted service: this has produced an utter want of confidence in and distrust of the service; 4. The differences which are made between combatant and medical officers in regard to ordinary and sick leave; 5. The almost absolute refusal to medical officers of the privilege to exchange; 6. The virtual withdrawal of forage allowance from those by rank entitled to it; 7. The quarters allotted to medical officers in barracks being almost invariably regimental, whilst they, as departmental officers, are supposed to be entitled to departmental quarters; 8. The discomfort caused to medical officers by want of a soldier servant, whilst the sum allowed in lieu thereof is incapable of providing a civilian; 9. The length of time (five-and-twenty years) before the medical officers can claim a right to retire from the service on adequate pension; 10. The roster, as now kept, which has been withdrawn from public inspection, so that no officer can tell how he stands in regard to foreign service; whereas formerly this document was exposed in the waiting-room at Whitehall Yard for each medical officer's specific information.

"These are the points which deter candidates from coming forward, and the President and Council feel assured that, until ameliorated, entrance into the Army Medical Service will be avoided by the desirable class of students.

"The President and Council, in conclusion, deem it right to impress upon the consideration of the Right Hon. the Secretary of State for War the fact that at the present time so many varied and lucrative outlets in the Civil Service present themselves for the acceptance of the junior members of the profession, that it becomes the more imperative to improve the condition of army and navy medical officers, so as to enable the naval and military services to compete on favourable terms with the Civil for the obtaining of the best and most highly-educated students.—(Signed) J. STANNUS HUGHES, Secretary to Council."

On Tuesday, a deputation from the Obstetrical Society of London, consisting of Dr. West (President), Dr. Barnes, Dr. Priestley, Dr. Aveling, Dr. J. Williams, and Dr. Murray, had an interview with the Council to explain the scheme proposed by the Society for the Registration and examination of Midwives.

The Council went into Committee on the Medical Acts Amendment Bill, and passed various resolutions, principally with reference to the clauses of the Bill providing for the registration of midwives.

The Registrar was directed to remove from the *Register* the names of John Baxter Langley, John Campbell White, and Owen Patrick O'Hare, who had been convicted in courts of law of certain offences.

On Wednesday, at 11 a.m., the President and several members of the Council received Dr. Edward Waters, Chairman of the Medical Reform Committee of the British Medical Association, and several other members of the Committee, in pursuance of the resolution passed at the meeting on Monday. Dr. Waters explained the action of the Association and Committee in regard to medical reform, and urged on the Council the views of the Committee with regard to the representation of the profession in the Medical Council.

At 2 p.m. the Council again went into Committee on the Bill, after which various ordinary business was transacted, and the session came to an end.

TREATMENT OF WHOOPING-COUGH BY CARBOLIC ACID.—Dr. Orville of Lille publishes (*Revue de Thérap. Méd.-Chir.*) the record of twenty-five cases of whooping-cough treated by inhalations of carbolic acid contained in a wide-mouthed bottle. When fever indicates an inflammatory lesion, this plan must not be resorted to. The bottle is placed close to the mouth of the little patient during the paroxysm of cough, at the moment when the whistling inspiration which follows prolonged expiration is produced. The inspiration of the vapour of the carbolic acid is thus very energetic.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 20TH, 1878.

THE MEDICAL ACT AMENDMENT BILL.

THE Medical Act Amendment Bill of the Duke of Richmond has passed its second reading in the House of Lords as a matter of course. But by this time the Lord President has received sufficient intimation of the general sense of the profession concerning its deficiencies, and the future fate of the Bill will, of course, turn upon the steps taken in Committee to give effect to the objections laid before the Lord President on two subjects. We pointed out these in the first instance, and even by anticipation, knowing what had been the course of the preliminary negotiations and the result of the pressure upon the Duke from highly influential quarters. The clauses which stood in the original Bill as first drafted, included provision for compulsory joint Boards, and a minimum uniform and complete qualification for the three kingdoms. These clauses were modelled upon those of Lord Ripon's Bill, which passed the House of Lords and had a second reading in the House of Commons in 1870, and were accepted as satisfactory then by the General Medical Council and by the British Medical Association. These clauses have been withdrawn under pressure, which, as we at the time intimated, proceeded mainly from the Scottish universities and examining bodies. The course of the debate in the General Medical Council has shown those bodies firm and unwavering in their opposition to such provisions; and they were joined in their opposition by a majority of the representatives of the Irish bodies. On the other hand, the Crown representatives (with one exception) and the representatives of the English bodies formed a steady majority in favour of the principle of conjoint boards and an uniform minimum qualification. The Council, therefore, as a whole, and each of the London examining bodies separately, have, by deputations or otherwise, expressed their views of compulsory clauses to the Duke of Richmond.

The Medical Reform Committee of the British Medical Association has taken the opportunity of arranging a *plébiscite* by printed interrogations addressed to every member of the profession, asking their approval of, first, the principle of conjoint examining boards and uniform minimum qualifications; second, the principle of direct representation of the profession on the General Medical Council, to which we have lately referred at length. They have also addressed the Duke of Richmond and the General Medical Council on this subject. Thus these questions are being now very effectually raised; and at least we may anticipate for them a full Parliamentary discussion. Of the probable tenour of this discussion, a good forecast may be made from what we have here stated and from the speech of the Marquis of Ripon.

Unless the Duke of Richmond is prepared to substitute the compulsory for the permissive principle in respect to conjoint examinations, and also to accept amendments providing for the direct representation of registered medical practitioners on the General Medical Council, he must be prepared to find his Bill meet with such opposition in the House of Commons as will give it little chance of becoming law.

BACTERIOID RELATIONS OF SPLENIC FEVER.

WE mentioned, in a recent number of the JOURNAL, that M. Colin read, at a recent meeting of the Paris Academy of Medicine, a paper on the Successive Development of Anthracoid Diseases.

Our readers may remember that M. Colin once made bold to say that putrefaction was not in any way related to the growth of bacteria; in fact, that it resulted from chemical changes. As a proof of this, he stated that no bacteria were found in putrefying eggs. This was easily refuted by M. Pasteur, who proved conclusively to a commission that, when eggs were putrefying, bacteria were always present. What M. Colin once endeavoured to prove to be true of ordinary putrefaction, he now states to be true of specific diseases; but just as he was wrong in stating that putrefaction was the result of chemical changes, so we may safely state that he is now still further mistaken when he believes that specific diseases are due to a poison which originates and increases independently of the presence of specific organisms. This is not a new theory, for only lately, in the London Chemical Society, a paper was read showing that splenic fever was altogether and only due to a poison which resulted from chemical changes.

But just as M. Pasteur and Dr. Burdon Sanderson have proved that putrefaction is the result of fermentative changes set up by septic bacteria, as certainly as the vinous fermentation is set up by the yeast-plant, and the lactic acid fermentation, as shown by Mr. Lister, by *bacterium lactis*, so, notwithstanding what M. Colin has said, it may, we think, be predicated that splenic fever is due to the growth and development of *Bacillus anthracis*.

This anticipation we may express before the commission meets to decide the point at issue between M. Pasteur and M. Colin, not only because we are familiar with the splendid work done by Koch and others, but also because we believe that, at University College, Dr. Ewart has made out, not only that splenic fever invariably follows when the smallest possible number of the spores or rods of *Bacillus anthracis* are introduced into the subcutaneous tissue of a small animal, but especially because he has been able to trace the rods from the point of inoculation along the lymph-channels; and further, by cultivating glandular tissue, in which, when first examined, neither rods nor spores were visible, he has developed the well-known spore-bearing anthrax filaments.

Ordinary septic bacteria are in themselves innocuous when introduced into a healthy animal; but when introduced into an animal having at any part degenerated tissue, they lead to fermentative changes—to putrefaction, it may be septicæmia. In other words, ordinary bacteria are harmless while they simply live in healthy tissues or fluids; but when provided with suitable nourishment, and thus enabled to multiply, they, as they live and move, produce a virus which, besides setting up putrefactive changes, may lead to septicæmia or pyæmia.

Specific bacteria differ from septic bacteria; for, when introduced into a healthy animal, they at once give rise to specific diseases. In the presence of septic bacteria, *Bacillus anthracis* is incapable of developing, not because the existence of ordinary bacteria indicates that putrefactive changes are going on, but because, in the struggle for life, septic bacteria overcome the less tenacious and generally motionless bacilli. M. Colin states that from the point of inoculation a virus passes to the nearest glands. The glands increase in size, and the poison being regenerated in them, and passing on to the next group of glands, forms other infective centres. In such glands, M. Colin can find no evidence of the existence of bacilli.

We know that ordinary bacteria do not mechanically cause putrefaction. They have much the same relation to putrefaction as the yeast-plant has to drunkenness; and what is true of septic bacteria seems to be true of specific bacteria; for Dr. Ewart has made out that splenic fever is not, as has been supposed, due to the mechanical action of the

bacilli, but due, in all probability, to a specific virus manufactured by them. We say a specific virus, because it sets up a specific disease, which can be easily distinguished from septicæmia and pyæmia. If this be so, even if in the glands no bacteria were found, M. Colin would not be justified in assuming that anthrax could originate and spread in the absence of bacteria; for a virus formed at the seat of inoculation might reach the glands sooner than the rods which produced it.

In justice to M. Pasteur, however, it must be said that in all probability the virulent fluid is taken up and carried away by the veins around the seat of its formation, thus entering directly the general circulation; and that the bacilli gradually find their way through the lymphatics into the large veins, and from them find their way into, and more or less block up, the small vessels and capillaries of the lungs and other organs.

We know that the virus which produces septicæmia never increases after its introduction into the system, and that the results it leads to are always in ratio to the amount at first introduced. If, then, in a similar way, splenic fever be caused by a virus formed by bacilli, we may infer that the virus has not, in itself, the power of self-regeneration in the absence of the bacilli, as stated by M. Colin; and, even if it had, we are unable to see how M. Colin can prove the possibility of such regeneration until he is able to separate the virus from the bacilli which manufacture it.

THE ARMY MEDICAL DEPARTMENT.

ONE of the objections urged by army medical officers to the present organisation of their department, when compared with the regimental system, refers to a subject which might at first be regarded as one of very minor importance; but when it is fully examined, it may be easily understood that it is not so. This is the matter of personal servants. Under the existing system, an allowance is made to the medical officer for providing a private servant to keep his uniform and appointments in order, and to attend to his personal wants; under the regimental system, a military servant was provided for him for these purposes. This, however, is really no new subject of complaint in the Army Medical Department; for under the old system, when the medical officers were divided into two sections, one belonging to the regiments, the other to the staff of the army, the same grievance existed, though it was not so widely distributed. The staff medical officers constantly experienced great difficulties in engaging civilian servants; or, if engaged, in inducing them to stay in their situations, owing to the peculiar circumstances of military life. Some of the rules and conditions in quarters are opposed to the ideas of independence entertained by civilian "helps", and they miss many of the comforts and regular habits which reconcile them to service in established homes. Hence, even while employed in England in time of peace, the "servant difficulty" was a constant source of vexation to the staff medical officer; and in campaigning, the trouble arising from it became aggravated in a tenfold degree. In the field, indeed, the difficulties in the way of keeping a non-military servant were almost insuperable. We read of staff medical officers, during the Crimean war, being reduced, from want of servants, to cook their own food and clean their own boots. On the other hand, the regimental medical officer could always rely on having the requisite attendance. His servant might occasionally be taken away from him for a time for inspection or for parade, or perhaps even to fight; but whether he were removed merely as a temporary measure, or whether he were removed altogether by the enemy, there was no doubt about some other being sent to replace the absentee. The daily necessities of the regimental medical officer were sure to be attended to, whatever else might happen; the staff medical officer had no surety of the kind, he could only depend upon himself, and that only so far as he might be able to find time from his regular occupations. What was at that time true of the staff

medical officers, is now applicable to all medical officers of the army, and hence the prominence which this grievance has assumed.

A circumstance which has increased the dissatisfaction of the medical officers on the subject of servants is the smallness of the allowance granted by the War Office as a set-off against the discontinuance of the services of a military servant. The sum given to the medical officer for obtaining a civilian servant is one shilling a day: a pittance which is, of course, quite inadequate as a payment for any man of decent character or condition. The soldier-servant received his daily pay, lodging, rations, fuel, and light from the Government, so that a very small additional amount from the officer having the use of his personal services was a sufficient compensation for this particular employment. It is almost farcical to speak of a shilling a day as an "allowance in lieu of a soldier-servant", under such circumstances. This amount, too, is the allowance irrespective of rank; the Deputy Surgeon-General gets no higher rate than the surgeon who has just joined in this regard. No increase is made in the allowance, although the medical officer may have to keep a horse and obtains forage from the Commissariat Department for it, or even if, as a Deputy Surgeon-General, he has two horses to keep. The allowance given in all cases is the sum of one shilling a day to cover all servants—grooms as well as personal servants. There seems to be an amount of absurdity about the whole affair, as well as a parsimoniousness, which is quite surprising; and it can hardly be a matter of wonder that it has given rise to a great deal of heartburning and discontent. The impracticability of hiring a servant on the terms of the Government grant, and the difficulty of keeping one even at a much higher rate of pay in military quarters, is one of the things which, like the want of a mess, exerts a powerful influence in making the daily life of a staff medical officer one of irksome discomfort, and which makes him look upon the position of a regimental officer as one of comparative ease and happiness. Cannot all officers in the army have soldier-servants assigned to them? If they are to some, why not to others? Experience has shown that officers must have military servants in time of war, if they are to have any servants at all; and the need is only a little less urgent in time of peace under the circumstances in which officers are placed and have to live.

We commend this subject to the attention of the committee that is now inquiring into the causes which prevent commissions in the medical department from being sought after and competed for as they are in other branches of the military service.

THE Royal College of Physicians of London has, on the motion of Dr. Quain, the Senior Censor, voted a sum of one hundred guineas to the fund for erecting a statue to the memory of Harvey on the occasion of his tercentenary. On the motion of the same physician, it was resolved that the College will hold during the present season a banquet in the library, in honour of the same anniversary.

AMONGST the gentlemen examined and admitted members of the Royal College of Surgeons on the 16th instant, will be seen the name of Mr. Kanehiro Takaki of Tokio, Japan. This gentleman, who is the second native of Japan in the calendar of the College, has already passed the primary examination for the higher distinction of Fellow.

AT the meeting of the Hospital Saturday Fund, Mr. John Hughes, Chairman, said that, three weeks hence, about eighty thousand collecting sheets would be distributed. They hoped to collect £10,000 on the first Saturday in September next; and it was arranged, with the view of calling further attention to the subject of this fund, to hold central meetings in order to secure sympathy for and give publicity to the work. A motion was adopted asking the Lord Mayor to call a meeting at the Mansion House; and it was also agreed that street-collections be made by ladies on Hospital Saturday. The latter we consider an objectionable element in the method of canvassing adopted by this fund.

A DEATH from hydrophobia is reported from the United Hospital, Bath.

MR. JOHN SIMON will preside at the distribution of prizes in the Faculty of Medicine at University College on Monday, May 20th, at 3 P.M.

DR. RHYS WILLIAMS, long and well known as the efficient Superintendent of Bethlehem Hospital, has been appointed Commissioner of Lunacy in lieu of Dr. Wilkes, who has retired after a long term of office. The excellent rule has been adopted of late years, in making these appointments, of selecting physicians who have had long experience of asylum management and the treatment of the insane.

DR. G. H. SAVAGE, who has for some years filled the office of Assistant-Physician at Bethlehem Hospital with great satisfaction to the governors and much professional distinction, is a candidate for the succession to Dr. Rhys Williams as Resident Physician.

THE nominations by the Council of the Royal Society to the fellowship of the Society include the names of Dr. Hughlings Jackson, the well-known Physician of the London Hospital, to whom the first Marshall Hall premium of the Royal Medical and Chirurgical Society was lately awarded for researches and original studies on the diseases of the nervous system; and Mr. Schäfer, the Assistant Professor of Histology at University College, whose excellent *Handbook of Practical Histology* and numerous researches in the laboratory of Professor Sanderson have proved his skill and earnestness in biological teaching and study.

THE Royal College of Surgeons in Ireland has addressed an extremely able statement of the grievances of the army medical officers to the Secretary of State at War, in answer to his circular to which we have already referred. The statement enumerates the points to which we have already drawn attention; and we have no doubt that, coming from the examining body which licences probably the largest number of candidates for these appointments, the representation will have great weight. The Irish College of Surgeons has always been conspicuous for the interest it has taken in this subject, and on this occasion it has acted in a manner worthy of its precedents.

OUR members generally, and especially those resident in Wales and in the metropolis, will join us in congratulating our distinguished associate Mr. W. H. Michael, F.R.C.S. and Barrister-at-Law, on his nomination as Q.C. Mr. Michael's career as a medical practitioner in Wales showed always the same intellectual power which has led him to eminent success at the parliamentary bar. His services to the Association in its efforts to advance public health law have been continuous and pre-eminent. Editorially, we have never applied to him in vain for assistance in dealing with these subjects, in which his varied legal and medical acquirements and intimate study have rendered him a great authority; and his services to the Joint State Medicine Committee of the British Medical and Social Science Associations have been and are of national value. Nor have the pressing claims on time of large parliamentary practice ever prevented Mr. Michael from giving such aid freely, voluntarily, and with the most hearty cordiality.

A WORD of satisfaction may also be expressed at the elevation of Mr. W. T. Charley, M.P., to the post of Common Serjeant for the City of London. We are indebted very largely to Mr. Charley for active, unceasing, and successful efforts to obtain parliamentary attention to the evils of baby-farming and the destruction of infant life, which were thoroughly traced out and exposed by the investigation originated and conducted for this JOURNAL by Mr. Ernest Hart, with the valuable personal aid of Dr. Wiltshire and Mr. J. B. Curganven. Mr. Charley's perseverance and strenuous earnestness triumphed over much obstruction and opposition in obtaining a Select Committee of the House of Commons, before which the medical evidence of the

three gentlemen named was taken, and procured the passage of the Infant Life Protection Act. Since then, Mr. Charley has been engaged in other useful legislation with the object of protecting infant life, for which he has twice secured the assent of the Government and the approval of the House of Commons, but which, owing to the difficulties which impede the Bills of private members, has not yet reached the final form of law. The work, however, is more than half done, and the greater authority of his new position will certainly be effectively used to promote these useful measures. Mr. Charley has always shown great sympathy for measures of medical reform, and a just appreciation of the importance of medical co-operation in measures of social improvement.

CAPTAIN D. C. HARRIS, Assistant Commissioner of Police, has issued a report, which is printed as a parliamentary paper, on the working of the Contagious Diseases Acts during 1877. The report is most favourable, and adds that, besides the great result of diminishing disease attained by these Acts, much good is accomplished in reclaiming young girls who have begun an immoral life, and in preventing others from adopting it.

THE sum of £1,000 has been handed over to the authorities of the General Hospital, Birmingham, by Dr. Balthazar Foster, under the will of the late Mr. Frederick Cohen, for the foundation of a fund for the relief of necessitous patients leaving the hospital. Samaritan funds of hospitals are among the most valuable adjuncts of their usefulness, and, as a rule, they do not sufficiently share in the munificence of benefactors.

OUR Manchester correspondent writes to us:—The following appointments have recently been made in Manchester. Dr. Little has been appointed Lecturer on Ophthalmology at Owens College; Dr. Edge and Dr. Reid have been elected Physicians to the Salford Hospital; Dr. Boddy and Mr. Buckley have been made Assistant-Physician and Assistant-Surgeon to the Clinical Hospital. Nominations to the four vacant offices connected with the Infirmary took place this week, but they are not confirmed until next Monday. —Mrs. Catherine Dauntsey Foxton, amongst other bequests, has left £1,000 to the Infirmary, £1,000 to the Convalescent Hospital at Cheadle, and £500 to St. Mary's Hospital. She has also left £5,000 to be equally divided between a legal and a medical scholarship, to be designated the Dauntsey Scholarships.—The plans for altering the Infirmary and improving the drainage are to be commenced at once. The estimates are about £5,000.—The recent epidemic of typhoid fever at Moss Side, Manchester, seems to have been very closely traced to milk-contamination by Dr. Sutcliffe, the Health Officer. The epidemic, never very extensive or deadly, is now at an end.

WATER-ANALYSIS.

MR. WANKLYN makes the announcement that, working conjointly with Mr. Cooper, an important improvement in water-analysis has been made; and that, in point of fact, the cellulose or modified cellulose in drinking-water can now be estimated, just as heretofore the nitrogenous matters have been dealt with.

THE SOCIETY OF MUTUAL DISSECTION.

OUR Paris correspondent writes:—In a former letter, I informed you of a new Society that was founded in Paris, called the Société d'Autopsie Mutuelle, by the statutes of which its adherents were required to leave, by a will made out in due form, their bodies at the disposal of the above Society for examination *post mortem*. M. Louis Asseline, editor of the *Rappel*, an extremely Radical paper, who died suddenly last week, seems to be the first member who has been brought under the operation of the new Society. Professor Paul Broca was charged with the necropsy, and the following was the result of the examination. The left auricle of the heart was found ruptured in consequence of fatty degeneration of this organ,

the muscular fibres of which had almost entirely disappeared. The brain was of an immense size, and weighed 1,400 *grammes*, which is considerably above the average. It was remarked that ossification of the fronto-parietal suture had not taken place, although the deceased had reached the age (forty-nine) when it is usually found so in ordinary circumstances. Moreover, it has been observed that, in the inferior races, or in uncultured individuals, ossification of the sutures occurs much earlier than in the white races; and the deduction from this is, that intellectual work so develops the brain as to retard or prevent the complete ossification of the cranial sutures. This, however, requires to be confirmed, as the case has not, to our knowledge, been observed in other similar conditions.

PROVINCIAL REPRESENTATION IN THE COLLEGE OF SURGEONS.

MR. CURLING's letter (which we publish in another column) of objections to the election of provincial surgeons on the Council of the College of Surgeons of England, renews the old arguments to which we have never been able to attach much weight. They cannot attend committees as much as metropolitan surgeons: the provincial schools and provincial interests are sufficiently well represented by metropolitan members of Council, for science knows no local distinctions. All this is not new; and its chief interest lies in the fact that a surgeon so liberal-minded, thoughtful, and free from parochialism as Mr. Curling, thinks it worth while, at this time of day, to repeat it. The College committee work is not likely to suffer from the disability of the small proportion of provincial men to attend to it as fully as London men: a technical difficulty of that kind has never yet in public affairs been held to prevail; and there can be few greater signs of the weakness of the general argument than when this is put prominently forward. As to the larger suggestion, that provincial interests are perfectly well represented by metropolitan men, the answer is trite, obvious, and conclusive. They may be; but, as a rule, men prefer to be represented by themselves, and it is a rule, which has in its favour universal experience as well as logical presumption, that the more thoroughly all the various elements of a constituency are included in a representative body, the more satisfactory and efficient is the representation.

MR. POLLOCK ON CANVASSING AT COLLEGE ELECTIONS.

WE have a letter from Mr. George Pollock of St. George's Hospital, enclosing a correspondence with Mr. Bradley of Manchester, in which Mr. Pollock reiterates his well-known objection to "canvassing" for signatures or support. We fear that the pressure of space this week will prevent us from doing full justice to this subject. It is, however, well known that the present mode of open election at the College renders such a proceeding almost essential; that it has been adopted in a great majority of cases for many years; and that, for example, the friends of Sir William Fergusson, Mr. Prescott Hewett, Mr. Erichsen—to mention only names of the highest distinction—felt compelled to resort to some organised means of bringing forward those eminent men when their election was desired. At the College of Physicians, as at the Royal Society, a house-list is prepared for submission to the fellows. But the evils of canvassing, such as they are, are inseparable from open voting by a scattered constituency. It is, therefore, the mode of voting at the College of Surgeons which Mr. Pollock must seek to alter, if any other consequent change is first desired; otherwise, he would only succeed in substituting for canvassing canvassing, which is still more objectionable, especially to those who do not happen to reside within the limits of the caucus.

LISTERIAN OVARIOTOMY.

DR. MARION SIMS, who has recently spent a fortnight in London, reports that during that time he has been present at eleven operations of ovariectomy. They were performed under Mr. Lister's antiseptic precautions. Several were in ordinary hospital practice—two of them at St. Thomas's Hospital; and, at the time of his leaving London, all were doing well. The reports which we have already published from

Dr. Keith of Edinburgh, Mr. Knowsley Thornton of the Samaritan Hospital, and from Dr. Schroeder in Berlin, indicate how large an element of safety the adoption of Mr. Lister's dressing appears to introduce into the practice of ovariectomy in ordinary hospital buildings. The degree of danger arising from atmospheric contamination in large hospitals has, up to the present time, appeared so largely to add to the perils of the operation as almost formally to contraindicate its performance in such a *locale*. Mr. Knowsley Thornton, whose successful experience at the Samaritan Hospital, and whose predilections for operation at that institution, might easily give him a bias in the opposite direction, has very definitely arrived at the conclusion that the minute observance of Mr. Lister's directions and antiseptic method afford so much immunity from surrounding influences of hospital infection, as to render the patient and operator almost independent of such surroundings. This also is the opinion at which Dr. Marion Sims has arrived; and he has, we believe, in a communication which he has addressed to an American journal descriptive of his recent observations in London, formally recorded his conclusions to that effect, and expressed himself enthusiastically as to the merits of a method which robs the most serious of surgical procedures of all extraneous perils to life, and enables every well-skilled surgeon to employ it, without the necessity of creating a special hospital arrangement for the purpose.

PROPOSED TESTIMONIAL TO PROFESSOR BALFOUR OF EDINBURGH.

A MEETING of Edinburgh graduates was held at the house of Dr. Duckworth on the 15th inst. to promote the above object in London and elsewhere. It was announced by Dr. MacIntosh, F.R.S., of Murthly, that about £250 had been already collected from friends and former pupils of Dr. Balfour. A most excellent portrait of the Professor has been painted by Sir Daniel Macnee, President of the Royal Scottish Academy, and this is to be presented to the Senate Hall or Library of the University. It is desired to produce a *replica* of this, from the same hand, as a gift to Dr. Balfour's family, and additional subscriptions for these purposes are now sought. A London Committee was formed consisting of the following members: the Rt. Hon. Lyon Playfair, C.B., M.P.; Dr. Murchison, F.R.S.; Dr. Crichton Browne, F.R.S.E.; Sir Joseph Fayrer, K.C.S.I.; Mr. E. Chisholm Batten, M.A.; Dr. Allen Thomson, F.R.S.; Dr. Sieveking; Dr. Farquharson; Professor Huxley, Sec.R.S.; Mr. Joseph Lister, F.R.S.; Dr. Wm. Playfair; Dr. Priestley; Dr. Ferrier, F.R.S.; Dr. Burdon Sanderson, F.R.S.; Dr. Duckworth; Dr. Lauder Brunton, F.R.S.; Dr. T. Spencer Cobbold, F.R.S.; Dr. Laidlaw Purves; Dr. Potter; Mr. R. Davy; Dr. Glover; Dr. George Harley, F.R.S.; Dr. A. Hughes Bennett; Mr. Henry Rutherford; Mr. Carruthers, F.R.S.; Dr. H. S. Wilson; Dr. J. Watt Black. Various secretaries were nominated in the provincial towns, in India, and the Colonies. It is believed that the scheme only requires to be known to the numerous pupils of the zealous and beloved Professor of Botany, scattered all over the world, to ensure a ready response. It was thought fitting thus to mark the kindly services of Dr. Balfour, who had acted as Dean of the Medical Faculty for more than thirty years, and had recently retired from that office. Subscriptions will be received by any member of the Committee, or may be sent direct to David Smith, Esq., Treasurer of the Royal Society of Edinburgh.

DIPHTHERIA AT UPPER CLAPTON.

THE inhabitants of Upper Clapton have been considerably alarmed by an outbreak of diphtheria, which they attribute to an accumulation of house-refuse on the hill-side at Clapton Common. This opinion is, to a certain extent, supported by certificates from several local medical practitioners and by Dr. Tidy, who, in this case, expresses himself in a manner which is diametrically opposed to the statement he made respecting a dust-yard in his own district. Dr. Tripe, the medical officer of health, however, says that the accumulation was in no way connected with the outbreak, as the disease did not appear in the houses nearest to the accumulation (which is above an eighth of a mile from

the nearest house), but from the effects of sewer-gas, which had obtained an entrance to the houses where the disease occurred. He also bases his opinion partly on the fact that whilst in above 150 houses in which the drainage arrangements were good only 1 case occurred, no less than 13 cases had happened in 11 houses where they were defective. It also appears that the heap has been sown with oats, and the deposit of dust has been stopped. The question of the removal of house-refuse is one attended with much difficulty in London; but there can be no doubt that the best course for the vestries and district boards to adopt is its removal, by barge or railway, into the country, where what is refuse here becomes a valuable article of commerce, either for brickmaking or for manuring heavy land.

MEDICAL ETIQUETTE.

DR. ABRATH of Sunderland considers himself aggrieved by the comment which we made in the JOURNAL of April 6th, upon an advertisement which appeared in the *Sunderland Echo* of April 1st, and which we considered contrary to notions of professional propriety. We direct attention to his letter explaining his reasons for that advertisement, which we publish on page 589, together with a reprint of the advertisement itself. We regret that, after re-reading the advertisement, and taking into consideration the circumstances stated by Dr. Abrath, we are unable to form any other opinion than that the advertisement in question is not consonant with the generally accepted notions of professional propriety among the medical profession in this country; and we say this without any reference to Dr. Abrath's views or acts, but as upholding the high professional standard which this Association has always desired to maintain. If Dr. Abrath think that our views on the subject differ in any way from those of the Association or the profession generally, he can easily satisfy himself by referring the subject for the opinion of the Council of the Branch of the Association in his district, or by asking the opinion of the Council of the Apothecaries' Society; and we shall be very happy to publish such opinion; or we shall be happy to assist him to obtain a further opinion from any source of authority in the medical profession which he may prefer.

THE OPHTHALMIC SURGEONCY AT ST. THOMAS'S HOSPITAL.

MR. NETTLESHIP has been elected Ophthalmic Surgeon to St. Thomas's Hospital, in the vacancy created by the resignation of Mr. Liebreich, who has been appointed Consulting Ophthalmic Surgeon to the hospital. Mr. Nettleship had the advantage of receiving the unanimous support of the medical staff, who had all concurred in considering that he had higher claims to the appointment than any other of the candidates. Strange to say, however, a movement was set on foot to subvert the just influence of the medical staff with the governors in deciding on the professional merits of the candidates; and the result of a very active canvass was such as make it likely that a candidate, whose superior qualifications had secured the unanimous suffrages of those best able to judge, would be set aside for one whose claims had been considered of a less convincing order. The medical staff were taken by surprise at so unusual a canvass as was instituted, and it was only by a casting vote of the governors that Mr. Nettleship's election was secured. St. Thomas's Hospital may be congratulated on having secured an officer of well known accomplishments and high professional promise; and the Governors may be regarded as fortunate in having escaped committing themselves to a proceeding, which would have savoured strongly of ingratitude and incompetency for the trust assigned to them.

MANCHESTER ROYAL INFIRMARY.

ON Monday last, a special meeting of the General Board of Management of this infirmary was convened to consider certain proposals for alterations in the system of management. Among other things, it was proposed that the rule referring to the qualifications of physicians to the infirmary should set forth that every candidate for the office of physician should be a Fellow or Member of the Royal College of Physicians in London, and should have a diploma from some university requiring

examination for its degrees, together with satisfactory attestations of having studied in some well reputed school or schools of medicine during four years, at which at least one year shall have been spent in the university where he graduated, except in the case of the University of London, where residence is not required. A memorial from Dr. Radford, Dr. Lloyd Roberts, and several other medical gentlemen, was read, stating that the condition requiring one year's residence at an university would exclude a large number of English students who prosecuted their studies at the great medical schools of London and the provinces, and give an unfair advantage to Scotch and Irish students. The memorialists, therefore, urged the board to allow the old rule to remain in force. By the casting vote of the Chairman, it was resolved that the rule should remain as quoted on the revised list, which must be, however, submitted to the trustees in general meeting on the 26th instant. The resolution, we are informed, was passed by the lay board in opposition to the opinion of a majority of the Medical Committee of the Infirmary, expressed at a full meeting held on the 6th instant. Such a clause is, as our correspondent points out, a move in a backward direction. The lay board, by the terms of the rule, are not satisfied with an university degree and the Fellowship or Membership of the Royal College of Physicians of London, such as would be required at any London hospital, but seek to make it imperative that the candidate should have resided one year at the university where he took his degree: a sort of special educational requirement which trenches upon the province of the General Medical Council of Education. We know no precedent for such a resolution, and do not understand what can render it necessary in this city more than elsewhere.

THE HUNTERIAN SOCIETY.

AT the meeting of the Hunterian Society, which will be held in the London Institution, Finsbury Circus, on Wednesday, April 24th, Dr. B. W. Richardson, F.R.S., will read a paper "On the Practice of Total Abstinence from Alcohol in Health and Disease". We are requested to state that the President and Council desire that every member of the profession interested in the subject may be present to hear the paper and join in the discussion.

SCOTLAND.

OWING to the prevalence of measles in the town of Alloa, the public schools have been ordered to be closed for two weeks.

LAST week, Dr. Haldane of Braemar was presented, on the occasion of his leaving to settle at the Bridge of Allan, with a time-piece and a silver service, in recognition of the respect, affection, and esteem entertained for him by his many friends in Braemar.

DR. MACKENZIE, a physician who has been for many years resident in Kelso, where he was held in high esteem for his professional skill and personal character, died in that town on Saturday, at the age of fifty-nine. He had held for a considerable period the appointment of Physician to the Kelso Dispensary, and was a prominent member of the Border Medical Society.

AT a recent meeting of the Edinburgh University Court, it was resolved, *inter alia*, to authorise the opening of a Class of Practical Materia Medica in the University; the course to consist of not less than fifty hours' instruction: the fee for the course was fixed at three guineas. It was further resolved, to submit to Her Majesty in Council, for approval, an alteration of Ordinance No. 5, Section v, with a view to constituting attendance on this class a way of obtaining the instruction in the compounding and dispensing of drugs which is required for graduation in Medicine in the University.

GLASGOW: THE MILK QUESTION.

IN the minutes of the Glasgow Health Committee, submitted to a

meeting of the Town Council on Monday last, it was stated that Dr. Russell, Medical Officer of Health, reported that, according to instructions, he had gone to London in reference to legislation on the milk question. He obtained an interview with the Duke of Richmond and Gordon, and submitted the suggestion as to the dairy and cow-shed clauses in the Cattle Diseases (Animals) Bill. His Grace stated that it was a mistake to suppose that the words "infection or contamination" in these clauses referred to the diseases of human beings. The whole Bill had reference only to the diseases of animals. He thought the subject was one for the Local Government Board. Dr. Russell saw the Medical Officer and Counsel to the Board, but got no encouragement to hope that any Government measure would be brought in. At a subsequent meeting with the Lord Advocate, at which several members of the Health Committee were present, a similar opinion was expressed, although his Lordship seemed personally favourable. Mr. Anderson, M.P., was then seen, and expressed his readiness to introduce a short measure on the subject. It was subsequently stated that Mr. Anderson had drafted a short Bill, but it was probably too late to get anything done this session. With reference to milk-dairies in Glasgow, it was stated, in the Sanitary Officer's report, that fifty-three places for selling milk had been inspected, when it was found that, in forty-four of these, other articles were sold along with the milk, and the keepers and their families lived in the back premises. Nine were found arranged for the sale of milk only, without any sleeping accommodation. The whole appeared clean and in good order.

IRELAND.

DR. BALDWIN, Medical Officer of Kilmeadan Dispensary District, died suddenly at Portlaw on the 30th ultimo, being found dead in his bed. The deceased had been in delicate health for some time, but a fatal termination was quite unexpected.

TAKING CARE OF A PUMP.

DR. RICHARD RYAN of Carrigwohill, at a recent meeting of the Guardians of the Midleton Union, reported that the water supplied by the public pump in the village was unfit for use. In consequence of the sanitary arrangements, the water was impregnated with fetid gases and other deleterious ingredients, at once poisonous in themselves and rendering the water totally unfit for drinking purposes. He suggested that steps should be taken to close the present well, and that another be sunk in the village, at an available site, easy of access to the inhabitants, and which would not contain facilities for contaminations. The guardians seemed disinclined to adopt this arrangement, and appointed a caretaker to look after the pump, which, it was considered, would abate the nuisances complained of. The expedient seems comical, and will hardly avail to prevent disease from occurring.

APPOINTMENTS.

At a meeting, held on the 25th ultimo, Dr. Brennan was unanimously appointed Medical Officer to the Kiltormer Dispensary District of the Ballinasloe Union: emoluments, £127 *per annum*, with registration and vaccination fees. Dr. Jefferson has been appointed to the Aghalee Dispensary District, Lurgan Union, at a salary of £116 yearly, with registration, etc., fees. On the 14th ultimo, Dr. Taaffe was elected to the Ardahan Dispensary, Gort Union, at a yearly salary of £150, with the usual extras. The vacancy in Carney Dispensary, Sligo Union, has been filled up by the selection of Dr. O'Neill, the emoluments amounting to £140 *per annum*, with registration and vaccination fees.

LIMERICK LUNATIC ASYLUM.

At a recent meeting of the board, the report of Dr. Nugent, Inspector of Asylums, was read. It spoke in high terms of the condition of the institution generally, and stated that its accommodation would be greatly improved by the addition of the one hundred and forty beds the new establishment would give.

RATHDOWN UNION: SMALL-POX.

A REPORT from Drs. Darby and Mayne was received by the guardians of this union last week, suggesting that the entire fever hospital should be devoted to small-pox patients: a recommendation which has been objected to by the Local Government Board, who considered that special sheds should be erected for that purpose. On a division, it was resolved that sheds should be erected as proposed, the Chairman giving a casting vote in favour of the plan.

OUTBREAKS OF MEASLES.

At Cappamore, Limerick, a serious epidemic of this disease has occurred. Dr. Keys, medical officer of the district, lately attended one hundred and fifty dispensary patients and sixty private patients in the village and its vicinity. The deaths since the outbreak have already amounted to twenty-four, and the disease has been of a malignant type in most cases among the poor. The disease, which was introduced from Tipperary, has been much influenced by the ill-ventilated houses, the extreme poverty of the poor, the bad sewerage of the village, and want of cleanliness of the people. The improvement of the drainage has been urged upon the Limerick Rural Sanitary Board by the Local Government Board, and a motion will be considered this week for the effective drainage of the village concerned. At a meeting of the Wexford Board of Guardians last week, a letter was received from the Local Government Board, calling their attention to the fact of there being over seventy children affected with measles transferred to the Fever Hospital, Wexford, and requesting a report from the medical officer as to the epidemic, and the sufficiency of the accommodation available for the treatment of such a large number of cases. Dr. Crean, the medical officer, reported that the children attacked had been transferred to the Fever Hospital sheds; that the disease was of a mild type; and that the greater number of those attacked were now convalescent.

SMALL-POX IN BELFAST.

At a meeting of the guardians of the Belfast Workhouse last week, Dr. Seaton Reid, in reply to a communication from the Local Government Board, stated that, as the accommodation for small-pox patients in hospital was now more than sufficient for all who were applying, he would suggest that, for the present, the shed on the Twin Islands should be used as a quarantine-ward, to which the healthy members of a family could be transferred when those ill with small-pox had been sent to the hospital. This would give an additional ward in the hospital for small-pox patients, should the numbers increase. Dr. Reid, having found that some patients who had been in hospital with fever, took small-pox after leaving it, investigated the matter, and ascertained that there was a hole in the wall which separated the drying-loft for the fever-patients' clothes from that in which the small-pox clothes were dried; and, therefore, believed it was possible that the clothing for fever-patients may in this way have become infected. For the week ending the 6th instant, there were forty-four cases of small-pox under treatment in the Union Hospital, eight fresh cases having been admitted during the week.

THE DEATH-RATE OF DUBLIN.

A SPECIALLY convened meeting of the Dublin Sanitary Association was held last week, to consider what steps should be taken in reference to the present high death-rate in this city. The Association were anxious that a public inquiry should be held into the cause of the continued excessive mortality, and hoped that the Public Health Committee of the Corporation would have joined them in seeking an official investigation. A misunderstanding, which, however, was in great part explained away at the meeting, unfortunately arose between the two bodies; the Corporation Committee finally declining to be parties to seeking an inquiry, contending that, as the causes of the high death-rate were well known, the proposal was unnecessary. These causes, as explained by the Superintendent Medical Officer of Health, are: The

wretched condition of the tenement-houses in Dublin, the poverty of the population, overcrowding, and the spread of intemperance. The Sanitary Association, in a report on the subject, assigned several additional causes, viz., bad drainage of the city, the defective scavenging of its streets, the filth of the Corporation manure depôts, and the condition of the slaughter-houses. Several suggestions, made by the Sanitary Association, with a view to remedy these crying evils—the existence of which could not be denied—were characterised as Utopian and absurd—possible, it might be, in Dr. Richardson's Hygiea, but quite out of the question in a crowded city like Dublin. The meeting was well attended, and several interesting speeches on the sanitary condition of Dublin—notably one by Surgeon-General Crawford, the principal Medical Officer of the Army Medical Department in Ireland—were made. It was finally resolved: "That the Executive Committee be directed to communicate with the Chief Secretary for Ireland, requesting him to receive a deputation from the Association, to lay before him a statement of their reasons for believing a public inquiry would be necessary." It is to be regretted that in Ireland there are no properly qualified inspectors under the Local Government Board, as in England, by whom such an inquiry as asked for could be satisfactorily conducted.

SMALL-POX IN LIMERICK.

At a meeting of the Corporation Sanitary Board last week, a report was read from Dr. Meehan, recommending that the houses of parties having small-pox patients should be fumigated, the bedding and clothes washed, and the house whitewashed. Dr. Barry, in reply to one of the guardians, stated that washing the clothing of small-pox patients was inadequate, and he considered that articles of this nature should be disinfected. There were eleven cases under treatment in the union hospital last week, and the convalescent patients from fever became so alarmed that they suddenly decamped from the workhouse. The Board of Guardians have determined to rent a portion of St. John's Hospital for the accommodation of small-pox patients, owing to a recent communication from the Local Government Board, who pointed out that there was not proper provision outside the house for this class of patients, should an epidemic occur.

NEWTOWARDS BOARD OF GUARDIANS.

At a meeting of this board last week, their attention was directed to a recent report of Dr. S. Stewart, the sanitary officer for Donaghadee, to the Local Government Board, stating that he had several times brought the notice of the guardians to the sanitary condition of the town, but that nothing had been done to remedy the evils complained of. At the same meeting, Dr. Reuben Bolton, the Bangor sanitary officer, reported that three deaths had recently occurred in the town from diphtheria, which it was probable arose from the defective sewerage, which appears to be inefficient, inasmuch as the works are limited to but a portion of the principal thoroughfares, situated at one side of the street in each case, and allowed to discharge their contents into the sea at an unsuitable spot without the intervention of any tank to retain the solid portion of the sewage-matter. Both these reports were referred to the dispensary committees of the respective localities for their consideration.

DOWNPATRICK WATER-SUPPLY.

On the 9th instant, Dr. Roughan, Local Government Board Inspector, held an inquiry in the Court-house, Downpatrick, into the proposed scheme for supplying this town with water. Several medical gentlemen were examined, and agreed in stating that the present supply of water was inadequate; whilst the evidence of Dr. Cameron as regarded the quality of the water proposed to be introduced was to the effect that it was a very fair water for drinking and domestic purposes, and that, on examination of the wells and fountains in Downpatrick, he had found them all to be of an exceptionally bad quality. It is expected that the proposed waterworks can be carried out for about £13,000.

THE MEDICAL ACTS AMENDMENT BILL.

To the Members of the British Medical Association.

THE Medical Reform Committee desires to impress on the members of the Association and on the Secretaries of Branches the importance of urging the preparation of petitions to the House of Lords, in accordance with the form issued by the Committee.

The petitions must be written on *one side* of a sheet of paper, and signed on the *same side* of the same sheet by at least one person.

Any further number of names may be subsequently added by joining additional sheets.

Members of the Association are requested to use their influence with such registered medical men as are not members to support the Association.

EDWARD WATERS,

Chairman of the Medical Reform Committee.

Committee of Council Room, April 17th, 1878.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting was held on the 15th instant.

Dr. Christian Gottfried Bäumlér was admitted a Fellow.

Licences to practise Physic were granted to several gentlemen.

A communication on the Distribution and Causation of Leprosy in the Bombay Presidency from the India Office was read.

The sum of one hundred guineas was voted towards a Statue of Harvey, to be erected at Folkestone, his birthplace. The College resolved to hold a National Banquet in honour of Harvey at the College during the present season, this being the three hundredth year since Harvey's birth.

A Committee was appointed to make the necessary preparations.

The Treasurer having stated that the new edition of the *College Roll* was nearly completed, power was given to the Roll Committee to take the necessary steps for its publication.

The President then addressed the Fellows, reviewing the principal events of the past year, and resigning his office. A ballot was taken; and James Risdon Bennett, M.D., F.R.S., was unanimously re-elected President for the ensuing year.

Thanks were voted to the President for his address.

The President returned thanks on his re-election.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following requisition was presented to Mr. Lund on Tuesday, April 16th.

To Edward Lund, Esq., F.R.C.S., etc.

Dear Sir,—We, the undersigned Fellows of the Royal College of Surgeons, respectfully hope that you will offer yourself as a candidate for the forthcoming vacancy in the Council of College, feeling a just confidence that your acknowledged eminence as a surgeon, and wide popularity both in London and the provinces will insure a successful issue to the contest.—We are, dear sir, yours faithfully, etc.

[The requisition is not only very numerous, but very influentially, signed, including many well known London names as well as provincial, to the number of upwards of 350. Pressure of space, however, prevents us from appending the list of names.]

Mr. Lund's Reply.

Gentlemen,—The fact that more than three hundred Fellows have signed the requisition presented to me to-day asking me to consent to be nominated as a candidate at the next election of members of the Council of the Royal College of Surgeons of England leaves me no alternative but to accept with many thanks the compliment thus paid to me, and to accede to the request contained.

This request has been tendered so much earlier than I had expected that I fear, in your anxiety to carry out speedily the wishes of my friends, you may seem to have overlooked the names of other Fellows of our College whose claims to such a post of honourable trust are quite equal to my own; but I hope the good sense of the constituency to whom I have to appeal will not permit my cause to suffer through any excess of zeal in its supporters.—Very truly yours,

EDWARD LUND.

THE HARVEY TRICENTENARY MEMORIAL FUND.

THE amount subscribed now exceeds £1,250. Amongst the contributions of the past week, are one hundred guineas from the Royal College of Physicians of London. We are desired to state that further subscriptions are greatly needed, and again to request the members of the profession who have not hitherto contributed to this object to kindly send their donations at once to either of the hon. treasurers (Sir George Burrows, Bart., or Mr. Prescott Hewett), or to either of the hon. secretaries (Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone), or to pay them into the account of the Harvey Tricentenary Memorial Fund, at the Western Branch of the Bank of England, Burlington Gardens, London, W. Subscriptions from five shillings upwards will be very acceptable.

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of the Session will be held at the York House, Bath, on Thursday, April 25th, at 7.15 P.M.; HENRY MARSHALL, M.D., President.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, April 1st, 1878.

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held in the Board Room of the Guardians, at Hexham, on Thursday, April 25th, at 2 o'clock P.M.

The following papers, etc., have been promised.

1. Drs. Stainthorpe and Farmer: Case of Aortic Aneurism in a boy aged 13.
2. Drs. Stainthorpe and Farmer: Case of Contracted Knee-Joint, recently operated on by division of the Tendons and Forcible Extension.
3. Dr. Byrom Bramwell: On the Differential Diagnosis of Aortic Aneurisms and other Intrathoracic Tumours, with cases and specimens.
4. Dr. E. C. Anderson: On Leucine and Tyrosine, and their Diagnostic Value in Disease, with cases.
5. Dr. James Murphy: Exhibition of Tarnier's Obstetric Forceps.
6. Dr. James Murphy: On Puerperal Convulsions.
7. Dr. Philipson: Notes of a Case of Hæmaturia.
8. Dr. J. C. Murray: Case of Difficult Instrumental Labour from Deformed Pelvis.
9. Dr. M. McW. Bradley: *Post Partum* Hæmorrhage; with notes of three cases successfully treated by compression of the Abdominal Aorta.
10. Dr. Eastwood: Medical Reform and a Petition to Parliament.

Dinner at the White Hart Hotel at 4.30 P.M.; charge six shillings, exclusive of wine.

G. H. PHILIPSON, M.D., *Honorary Secretary.*
Newcastle-upon-Tyne, April 2nd, 1878.

CORRESPONDENCE.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—I request the favour of an insertion in your JOURNAL of a copy of a letter, which I have addressed to Mr. Bradley, on the subject of Mr. Lund's candidature for election into the Council of the College of Surgeons.—I am, sir, your obedient servant, T. B. CURLING.

39, Grosvenor Street, Grosvenor Square, W., April 13th, 1878.

"39, Grosvenor Street, Grosvenor Square, W., April 13th, 1878.

"Dear Sir,—I regret that I am unable to sign the paper you have sent me, inviting Mr. Lund to become a candidate, at the next election, to the Council of the College of Surgeons. Mr. Lund's position as a surgeon, and his contributions to surgical literature, I cordially agree with you, entitle him to the confidence of the profession; but they do not give him a claim to election on the College Council in preference to many of his seniors in the Fellowship, amongst whom I may name Mr. Lister, Sir Henry Thompson, Mr. Callender, Mr. Hulke, Mr. Heath, Mr. Durham, and Mr. Hutchinson.

"There are already three Provincial Fellows on the Council, and, if the numbers be increased, there may be difficulty in getting the busi-

ness of the College transacted. Members of the Council residing at a distance from London are not usually elected on important committees, from a desire not to put them to the serious inconvenience of attendance; and they are practically ineligible for the higher offices of President and Vice-President, who are expected to attend all committees.

"Even if there were not several Fellows from the provinces on the Council, I should demur altogether to the reason you give for Mr. Lund's election as a representative of the provincial Fellows. The Council know nothing of class interests. The interests of the provincial Fellows are equally the interests of the metropolitan.—I am, dear sir, yours faithfully,

"S. M. Bradley, Esq."

"T. B. CURLING."

MEDICAL REFORM.

SIR,—I have just received a circular inviting me, at the instance of the Medical Reform Committee of the British Medical Association, to enrol myself as an individual atom, or (say) $\frac{1}{200000}$ th part, in a *plébiscite* of the whole profession, as regards two important questions to be answered by a simple "Yes" or "No". I cannot give such an answer, and I wish to explain to you the reason. In doing so, although I do not affect to speak for more than one member of a large body, it may be that I shall be giving expression to opinions also entertained by others.

For the Medical Reform Committee, individually and collectively, I feel, personally, nothing but entire respect. Most of the members of it are my friends, some of them very old friends. But I venture to doubt whether the principle of the *plébiscite*, as thus introduced by them into medical politics, is a sound one. We all know that when Napoleon some years ago, under the Second Empire, demanded of the French people the famous "Oui", or "Non", the issue was already prejudged in his favour. We all know, also, what that same French people think now-a-days of the claims of the "man of Sedan". It may be, that a *plébiscite* without reasons, and promoted by the Medical Reform Committee upon a prejudged issue, may be equally conclusive as to the real opinion of the medical profession.

A prejudged issue? Yes; for the letter of the seven members of Committee, enclosed along with the voting paper, declares that "the action of the British Medical Association and of the profession is *imperatively required* to frustrate the passing of a Medical Bill which does not embody the principles, etc."; and it calls upon every one of us to petition the House of Lords against "any Bill which does not embody these great principles". A form of petition to this effect, ready made for use, and with full directions, is enclosed along with the voting paper and this general order from head-quarters. Now, that is what I call a somewhat Napoleonic proceeding, no doubt in a very modified degree as compared with the original; let us call it a very mild kind of benevolent despotism on the part of our Medical Reform Committee.

I will now give you my answers to the two questions—not in the simple form proposed of "Yes" and "No"—yet briefly, and without too much detailed argument.

1. Are you of opinion that the medical profession should be directly represented in the General Medical Council? *Answer*—Yes; provided a fitting machinery can be devised for so complicated and difficult an operation as ascertaining, and finally giving effect to, the real mind of the whole profession upon the claims of individuals; but certainly *not*, if you, Mr. Editor, and the Medical Reform Committee, or any other committee, or committees, of the British Medical Association, are to be constituted the official wire-pullers, or promoters, of a vote done, like this one, in the form of a *plébiscite*. And I need hardly say to you that I mean nothing offensive, or even disrespectful, to any of you by this declaration. What I mean is simply that the medical profession, apart from its ancient and more or less organised corporations, is at present an almost inorganised and incoherent mass of opinion, which can only be organised through some kind of deliberative assembly, and not through a chance got in a hurry, say for half an hour at each annual meeting of the British Medical Association, for expressing itself in a kind of casual and make-believe fashion on such important questions as are here submitted to us at the instance of the Medical Reform Committee. Those who were present last year at Manchester know what kind of discussion takes place, and who represent "the profession", when nine-tenths of the Association have gone off in search of amusement on a fine afternoon, caring nothing about politics. Dr. Waters, in particular, will, I think, probably agree with me that "the profession" does not always appear to advantage in such political discussion, when, like every other fortuitous concourse of atoms, we are blown hither and thither, while perhaps a dozen or two of us make speeches and pass resolutions, in the name of the British Medical Association.

2. Are you of opinion that the establishment of a conjoint board for the granting of licences to practise all branches of the profession should be made compulsory in each of the three divisions of the kingdom? *Answer*—Certainly not; for although the question of conjoint boards, as above, has been before us in Scotland now for these eight or nine years, I believe it is perfectly safe to affirm that the more we look at it the less we like it. Of course it will be said that this is a mere corporation and university prejudice on the part of the northern division of the kingdom. Be it so; it is not my purpose at present to argue that point. But this I will say, that, among corporations, the Royal College of Surgeons of Edinburgh is distinguished by nearly a whole century of disinterested effort on behalf of the general practitioner, and its diploma has from first to last been granted only after an education much more complete than that required by any single corporation in England. I will not speak of the Universities of Scotland, though of three of them, at least, it may be said that during the last twenty or twenty-five years they have done more of practical educational work (and I believe it will be admitted of a constantly improving quality) for larger numbers of the medical profession than any other institution in the country. To carry by sheer force of numbers blindly led a "principle" opposed to the deliberate conviction of bodies like these is not, in my opinion, a justifiable use of a *plébiscite*. And therefore, without in the meantime giving you my own ultimate conclusions either as to the Duke of Richmond's Bill, or the "great principles" of the Medical Reform Committee, I venture to think that their mode of action at present is to be deprecated, and does not afford a strikingly good example of the direct representation of the medical profession.—I am, sir, yours, etc., W. T. GAIRDNER.

Glasgow, April 15th, 1878.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS—Monday, March 15th, 1878.

Medical Act (1858) Amendment Bill.—On the motion for the second reading of this Bill, the Marquis of RIPON said the measure dealt with the important question of how in future persons were to obtain a licence to practise surgery and medicine in the United Kingdom. At the present time, there were in England, Ireland, and Scotland nineteen different bodies, the diplomas of each of which entitled the holder to have his name placed on the *Medical Register*. It was scarcely necessary to point out the inevitable effect of allowing distinct bodies to confer a title to practise. It was that some of those bodies attempted to underbid the others as to the terms on which they granted their licence. Consequently, the public had not the necessary security that the holder of a licence had the minimum qualification which ought to entitle a man to practise as a surgeon or a physician. It was felt very generally that there ought to be but one Examining Board, or that at most there ought to be only one for each of the three parts of the United Kingdom, through which admission to the practice of medicine could be legally obtained. Since 1858, when the Medical Council Bill was passed, there had been almost continuous, but unsuccessful, attempts to establish what was known as the conjoint scheme. As the Bill of his noble friend was merely permissive in that respect, it would leave the matter of a conjoint scheme where it had been for the last twenty years. His noble friend had expressed a hope that, before the Bill was before both Houses, such a scheme would have been established for England; but he had held out no hope that such a scheme would by that time have been established for either Ireland or Scotland. He only went the length of saying that, when conjoint schemes were framed for those countries, they would, under the Bill, when an Act of Parliament, obtain legal force. His noble friend must by this time be aware that the College of Surgeons of London, the College of Physicians of London, the Syndicate of the University of Cambridge, the representative of the University of Oxford on the Medical Council, and the representative of the University of London, had all in discussing the Bill, pronounced in favour of a conjoint scheme as compulsory under this measure. This was not the case of old corporations wishing to uphold their own privileges, but that of examining bodies who were ready to make a sacrifice of their own independence in the matter of licences to practise and to have a conjoint scheme, provided they were not exposed to the competition of small bodies standing outside that scheme, and having power to grant such licences. His noble friend had, no doubt, seen in *The Times* of Saturday, a report of a meeting of the Medical Council, held on the previous day, at which a resolution in favour of a compulsory provision for a conjoint scheme in the Bill before their Lordships was proposed by Professor Humphry, seconded by Sir James

Paget, and carried by a large majority. The resolution declared that nothing short of the compulsory establishment of a joint examining Board in each of the three portions of the United Kingdom could be deemed satisfactory. The British Medical Association, a body numbering, he believed, 7,000 members, strongly objected to the Bill, because it was permissive in respect of a conjoint scheme, and on another ground. As in 1870, the British Medical Association were strong enough to procure the rejection of his Bill, which was compulsory, he thought his noble friend had every reason to fear that his measure might not meet with a better fate. He did not propose to challenge the opinion of the House on the second reading. As, probably the resolution arrived at by the Medical Council was not in the hands of his noble friend till Saturday, he should not ask him for a positive opinion at the present moment; but he did hope that his noble friend would seriously consider the question between that stage and the committee on the Bill, and would see his way to make it compulsory in respect of a conjoint scheme. His noble friend had a great opportunity of settling an important question, and he hoped he would not avail himself of a political majority to pass a Bill which would be satisfactory neither to the profession nor to the public.—The Duke of RICHMOND and GORDON was glad that his noble friend was not going to challenge the second reading, because if he did so, and he were successful, as he seemed to think might be the case, he would indefinitely postpone the settlement of a question which they all wished to see settled. The history of the Bill was this. In the month of May of last year, he received from the General Medical Council, through its President—of whom one could hardly say too much either from a professional point of view or in reference to the manner in which he discharged his duties as President of that body—a memorial in which he was asked to deal with five points: first, the foreign and colonial degrees; second, the registration of the medical qualifications of women; third, the appropriation of penalties under the Act; fourth, midwives; fifth, the lunacy laws. It was a remarkable fact that the conjoint scheme was not included in that memorial of the Medical Council. He did not say that Council was not alive to it; but certainly the question was not brought under the notice of the Medical Council. He was quite willing to admit that if there were an uniform and satisfactory test, more especially with this Bill, it would be possible to deal with unqualified practitioners in a more stringent manner than they could now be dealt with; and he thought it possible that the best mode of having such a test was for a conjoint scheme. His noble friend when filling the office which he had now the honour to occupy had endeavoured to legislate on the subject, and his experience in 1870 had led him to very candidly acknowledge that the task was no easy one. There were a number of interests which required considerable attention in order that a means of reconciling them one with the other might be found. And it was by no means clear that success in that direction was attainable. In England, the difficulty in respect of a conjoint scheme was not so great. The Universities of Oxford and Cambridge did not object to such a scheme. In Ireland, again, as all the medical bodies were more or less centred in Dublin, he did not imagine there would be any great difficulty. In Scotland, however, the case was otherwise. There were the College of Surgeons, the College of Physicians, and the Faculty of Physicians in Edinburgh; the Universities of Edinburgh, Glasgow, Aberdeen, and St. Andrew's—all of which would be very much affected by a conjoint scheme. The fact was—so desirous had he been of, if possible, coming to some conclusion which would enable him to legislate on the difficult subject—that he had adopted the alternative his noble friend condemned very severely, and made the provision as to a conjoint scheme permissive for the three parts of the United Kingdom; and, in order to meet the objection to the provision being only permissive, he had raised the qualification of medical practitioners by providing that no person could be placed on the *Register* of the Medical Council who did not possess two qualifications—one in surgery, and the other in medicine. He was quite ready to admit that this was not the best solution of the difficulty, but it was a step in the right direction, supposing that it was not possible to insert in the Bill a compulsory clause for the three parts of the United Kingdom. He was aware of the objections taken to the Bill by the medical bodies to which his noble friend had referred, and he was far from saying that there ought not to be a conjoint board. He thought it would be dishonest of him to say that it would not be an advantage to the country; but it was not always easy to carry out by Act of Parliament what one thought desirable. The clause in the Act referring to the medical examination of women was inserted to cure a technical defect in Mr. Russell Gurney's Act, and would not render it more difficult for women to enter the medical profession, except inasmuch as it raised the standard of

qualification for registration by requiring a double qualification from all persons who sought to be put on the *Register*.

The Bill was then read a second time.

HOUSE OF COMMONS.—Thursday, April 11th, 1878.

The Cruelty to Animals Act.—Mr. HOLTS asked the Secretary of State for the Home Department, with reference to the return of licences granted under the Cruelty to Animals Act, 1876, for which an address to the Crown was ordered on the 19th ult., whether he was willing to include in the return the number of licences cancelled, the reasons for which they had been cancelled, and the names of the inspectors employed under the Act; and whether he still objected to publish the names of the persons licensed. He also wished to ask whether a return would be given in reference to Ireland?—Mr. CROSS said no licences had been cancelled on account of misconduct by their holders. There could be no objection to the return asked for; but he could not promise the names of the persons to whom licences had been granted. He had no jurisdiction as far as Ireland was concerned; but he had no doubt that his right honourable friend the Secretary to the Lord Lieutenant would assent to a return as far as that country was concerned, if it were moved for.

The Case of the Rev. Mr. Dodwell.—Dr. KENEALY asked the Secretary of State for the Home Department whether he would explain to the House why, after the reports made to him by Dr. Forbes Winslow, in consultation with Mr. Gibson and Dr. Winn, which declared the perfect sanity of the Rev. Mr. Dodwell, now in Newgate for a common assault, he still detained that gentleman in custody as a criminal lunatic, to be confined during Her Majesty's pleasure, and whether he would recommend his release without further delay.—Mr. CROSS: I think that the terms of the honourable member's question might lead some honourable members to suppose that I had called for a report from the gentlemen named; but that is certainly very far from being the fact, I merely having received certain letters from them in reference to the case in question. I have this morning received a letter from two of these gentlemen, stating that notice of this question had been placed upon the paper without their sanction and against their wish. In reply to the question of the honourable member, I have to state that it has been found by the verdict of a jury that this unfortunate gentleman committed the act constituting the offence for which he was indicted when insane; and he has, therefore, in accordance with the usual practice, been sent to the Criminal Lunatic Asylum at Broadmoor. In accordance with the invariable practice of my predecessors, I shall allow him to remain there until I am advised by the proper authorities that it will be safe to the public and to himself to release him.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates on April 15th, 1878.

Bartlett, Felix Paul, 5, Albert Street, N.W.
Birt, Ernest, County Asylum, Shrewsbury
Davis, George, 11, Avenue, Blackheath, S.E.
Dumbleton, Edgar Hunt, 81, Commercial Street, E.
Ellis, William Ashton, 59, Sloane Street, S.W.
Gaible, Ernest Langwith Gompertz, 8, Chase, Clapham Common, S.W.
Gaze, William Henry, Woodlands, Thames Ditton
Greenwood, Arthur, 140, Minories, S.E.
Greenwood, Major, London Hospital, E.
Henry, Louis, 34, Amphil Square, N.W.
Jover, Anthony, 20, Paris Street, S.E.
May, Albert Edward, 5, Clifton Gardens, W.
Moritz, Siegmund, Chesham, Manchester
Nicoll, Thomas Vere, Chartreuse, E.C.
Norton, Ritchie Robinson, University College, W.C.
Oram, Richard Russell William, 28, Great Coram Street, W.C.
Pacler, William Herbert, County Asylum, Gloucester
Reddy, Herbert Lionel, St. Thomas's Hospital, S. E.
Shaw, Charles Thomas Knox, 8, Guildford Place, W.C.
Stokes, Richard Lingard, 30, Albert Street, N.W.
Vasey, Samuel William, 5, Cavendish Place, W.

The following gentleman was admitted Fellow on April 15th, 1878.

Baumler, Christian Gottfried Heinrich, M.D., Erlangen, Freiburg, Germany.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 16th.

Hall, William M., Camden Road (St. Bartholomew's Hospital)
Bennett, William C. Storer, George Street, W. (Middlesex Hospital)
Burt, Alfred, Ventnor (Guy's Hospital)
Buxton, Alfred St. C., Shepherd's Bush (Guy's Hospital)
Claburn, Tom G., Norwich (King's College)
Clark, Charles A. D., Twickenham (St. Bartholomew's Hospital)

Clarke, Richard, Henton, Oxon (Aberdeen School)
Clarke, Thomas F., Richmond, Surrey (King's College)
Flood, Francis P., Leeds (Leeds School)
Gabb, Claude B., Hastings (St. Bartholomew's Hospital)
Gilbert, Philip F., Cripplegate (Guy's Hospital)
Griffith, Walter S. A., St. Albans (St. Bartholomew's Hospital)
Henderson, Cecil, Clifton (Bristol School)
Hetherington, George H., Uxbridge (St. Mary's Hospital)
Kendall, Stanley M., Turquay (Edinburgh School)
Lowson, David, Huddersfield (Aberdeen School)
Pearse, Thomas F., Finborough Road, S.W. (Middlesex Hospital)
Pinching, William W., Gravesend (Guy's Hospital)
Powell, Arthur E., Norwich (St. Thomas's Hospital)
Prichard, James E., Clifton, Bristol (University College)
Sayer, Thomas, Swaffham (University College)
Skelding, Henry J., Bayswater (University College)
Takaki, Kanehiro, Tokio, Japan (St. Thomas's Hospital)
Wride, Francis G., Oxton, Cheshire (St. Thomas's Hospital)

Five gentlemen passed in Surgery; and, when qualified in Medicine, will be admitted members of the College. Six candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 11th, 1878.

Benington, Robert Crowdsom, Vivian Road, Peckham Rye
Bisdee, Alfred James, Huthen, Weston-super-Mare
Brock, Charles De Lisle, St. John's Vicarage, Guernsey
Bryden, Richard Joseph, Uffculme, Devon
Burt, Alfred, Ventnor, Isle of Wight
Cumming, Robert Frederick, St. David's Hill, Exeter
Drewitt, Frederick George Davtry, Cumberland Street, Eccleston Square
Wiles, Frederick William, Wotton-under-Edge, Gloucestershire

MEDICAL VACANCIES.

THE following vacancies are announced:—
BROMPTON PROVIDENT DISPENSARY—Medical Officer. Applications to be made on or before the 26th instant.

BROMYARD UNION—Medical Officer and Public Vaccinator for the Parish of Cradley. Salary, £50 per annum, and fees. Applications to be made on or before May 4th.

GERMAN HOSPITAL, Dalston—Honorary Assistant-Surgeon. Applications to be made on or before May 1st.

GREAT NORTHERN HOSPITAL—Ophthalmic Surgeon. Applications to be made on or before May 6th.

KENT and CANTERBURY HOSPITAL—Assistant House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 25th instant.

LEITH HOSPITAL—House-Surgeon and Assistant-Surgeon. Salaries, £70 and £60 respectively, with board. Applications to be made on or before May 15th.

NARBERTH UNION—Medical Officer for No. 4 District. Salary, £35 per annum, and fees, with £10 as Medical Officer of Health.

RATHDOWN UNION—Medical Officer for Dundrum and Glencullen Dispensary District. Salary, £110 per annum. Election to take place on the 25th instant.

ROYAL CORNWALL INFIRMARY—House-Surgeon, Secretary, and Dispenser. Salary, £200 per annum, with furnished rooms, coals, gas, and attendance. Applications to be made on or before the 24th instant.

ST. PETER'S HOSPITAL—House-Surgeon. Salary, Fifty Guineas per annum, with board and residence. Applications to be made on or before the 23rd inst.

TAUNTON UNION—Medical Officer and Public Vaccinator to the Churchstanton District. Salary, £52 per annum, and fees. Applications to be made on or before the 26th instant.

TOWCESTER UNION—Medical Officer and Public Vaccinator for the Blakesley District. Salary, £60 per annum, and fees. Applications to be made on or before the 22nd instant.

TRALEE UNION—Medical Officer for Brosna Dispensary District. Salary, £100 a year as Medical Officer, and £20 per annum as Sanitary Officer, with the usual Registration and Vaccination Fees. Applications to the 20th instant.

WATERFORD UNION—Medical Officer of Kilmeehan Dispensary District. Salary, £100 a year, exclusive of Registration, Vaccination, and Sanitary Fees. Applications up to the 26th instant.

WESTMINSTER HOSPITAL—House-Physician and House-Surgeon. Applications to be made on or before the 20th instant.

WORKSOP DISPENSARY—Resident Surgeon. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance. Applications to be made on or before the 25th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*EDDOWES, Wm., M.R.C.S., appointed Surgeon of the Salop Infirmary, *vice* Samu. I. Wood, F.R.C.S., appointed Surgeon-Extraordinary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

McDOWALL.—At the Northumberland County Asylum, Morpeth, on April 13th, the wife of T. W. McDowall, M.D., of a daughter.
ROBERTS.—On April 13th, at Hopetown Villa, Upper Lewisham Road the wife of H. W. Roberts, M.R.C.S.E., of a daughter.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Nettleship, "On a rare form of Primary Opacity of the Cornea"; Mr. Harrison Cripps, "On the Treatment of Hemorrhage from Punctured Wounds of the Throat and Neck"; Dr. Topham, "On an Abscess within the Thorax, accompanied by Pulsation".

WEDNESDAY.—Hunterian Society, 8 P.M. Dr. D. W. Richardson, F.R.S., "On the practice of Total Abstinence from Alcohol in Health and Disease".

THURSDAY.—Harveian Society of London, 8 P.M. Special Meeting. Mr. Augustus J. Pepper, "On Abnormalities of Fœtal Development".

FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. J. G. Waller, "On variation in *Spongilla Fluvialtilis*".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE LADY MEMBERS OF THE ASSOCIATION.

MR. HENRY BROWN of Northallerton wrote to us last week that the report of the last part of the discussion at the special meeting at Birmingham was meagre. What, however, appeared in the number in question was only a brief summary furnished by the reporter, who had had to transcribe the long report of the business which occupied the meeting the first three hours, and reserved the full transcription of his notes to the subsequent number. Mr. Henry Brown added: "The British Medical Association now stands in the anomalous position of having committed itself to frame a by-law so that 'women' cannot be admitted in future; but they will not interfere with the two lady-members, Mrs. Anderson and Mrs. Hoggan. Well, this is certainly a nice job. 'We don't want women members: we have power to expel them, but *we* (the Council) won't.' Now, this matter cannot be allowed to rest. In spite of opposition, I shall give the necessary notices, so that the whole question shall be discussed, according to the by-laws, at Bath." We concluded that after reading the speeches in full, he would see that he had apparently misunderstood the view taken by the Committee of Council, who had undertaken to refer the question of the legal status of the two ladies who have been elected members of the Association to the opinions of counsel; and we pointed out to him that Dr. Wade had clearly stated the present position of the Committee of Council in the matter. Mr. Brown now writes to us that he is not labouring under any misapprehension whatever as to what Dr. Wade said or meant to convey in his speech at Birmingham. He adds: "I am determined to bring the question as to whether or not Mrs. Anderson and Mrs. Hoggan are members of the Association forward for discussion. I deny that Mrs. Hoggan and Mrs. Anderson are *de facto* and *de jure* members of the Association." As we understand from the result of the discussion, the Committee of Council are also pledged, first of all, to take counsel's opinion on the subject, whether these ladies are or are not legally at present members of the Association, and are also pledged to bring it forward for discussion. We have already pointed out there is also another course open to any independent member, and that is, supposing that these ladies are legally members, the constitution of the Association provides means by which they would, on a vote of the majority of the members, taken in a prescribed form, cease to be members.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

DR. ARRATH AND MEDICAL ETIQUETTE.

SIR,—In your issue of last Saturday, the 6th of April, I find you have published a paragraph which is of a nature to damage my professional character. Your *JOURNAL* is widely circulated in this district, therefore it has more power to do me harm. As a general consulting practitioner, and one who performs both general and special surgical operations—such as operations on the eye, ovariotomy, lithotomy, tracheotomy, colotomy, excision of various joints and bones, amputations, etc., likewise as having an extensive general medical consulting practice; having, moreover, to pay to her Majesty's Government heavy taxes—I cannot let my professional character be damaged by either jealous medical men on the *Medical Register*, who style themselves doctors without ever having graduated at an university, nor by individuals who hold some medical or surgical licence, and style themselves surgeons or physicians, yet never have been examined in chemistry; nor will I allow any man, even an editor of any medical or other journal, to interfere with my legal rights and try to damage my professional standing. The *BRITISH MEDICAL JOURNAL* of last Saturday has been shown to some of my patients, to whom it has been pointed out that you accuse me of having gone against the discipline of the Apothecaries' Society, and language has been used on the subject which would sound very curious in a law court. You must be aware that the Apothecaries' Society of London is the oldest medical corporation in England, and that since 1815 it has never admitted any man to examination unless he has had a classical education, besides being examined in all the medical branches of the profession, which include chemistry; and as all our pathological knowledge is based upon physics and chemistry, the Society's diploma must be looked upon as an old standard. The College of Surgeons of England has till quite recently admitted men to examinations without any classical education or examination in chemistry; and the College of Physicians of Edinburgh and the University of St. Andrew's, under their by-laws, have done and do the same. I admit that, notwithstanding this, many respectable practitioners hold diplomas from these corporations only. Coming to the point, the holder of the Apothecaries' Society diploma has the privilege of keeping an open shop; and as the Society itself deals in drugs, and of course must have a price-list, he can charge for consultations, visits, and medicines extra, and he has a right to state his charges publicly; therefore, I defy you to prove that I have acted against the discipline of the *Apothecaries' Society*. Daily we see in our newspapers medical men, and even some holding chairs in medical schools in this country, who are, in connection with provident dispensaries, advertising their charges. Some have self-supporting dispensaries of their own, and circulate printed bills setting forth their charges. Provident dispensaries' practice is of a systematic nature, and such practice is not very beneficial either to the profession or the patients. May I ask what interest the yearly paid medical man in general takes in his patients? Of course, the system fills the pocket of a small number of the so-called medical profession—those medical men who publish their charges as a regular thing, and not in self-defence, as I have done. Why do you say nothing to them? Is it that they are Englishmen, and I am a German and have no power to defend myself? If you think so, you are mistaken. I know true Englishmen like justice, and justice I demand, and nothing more. Why did you not in your paragraph state the reasons for which I published my scale of charges? You call them rignaroles: they may be so in your eyes, but nevertheless everything I have stated is the fact. Why did you not state that the chief reasons of the publication was that certain members of the profession and other individuals had spread abroad, in clubs, etc., that I overcharged the public, and that I had brought a farmer into the Sunderland County Court who would not pay my fees? But as regards this case, surely any man with common sense will say that my charges were moderate. A well-to-do farmer, residing six miles from Sunderland, in a place only to be approached by bad driving roads, I charged £1 per visit, medicines extra. Several of the visits were night-visits. Payment was refused, and I had to summon the man to the County Court. The farmer's son-in-law afterwards stated to me that the case would never have gone into court if some medical men had not been at the bottom of it, and stated that the charge was too high. But in several other cases, self-styled doctors and other professional reptiles have spread scandals about me without the least foundation: therefore I think that, as a Licentiate of the Society of Apothecaries (London), I have a right to vindicate my professional character against such insinuations as you have chosen to make, merely on account of my publishing my scale of charges, which are as follows.

1. To the working-classes and people of limited income, my charge for consultations at my consulting-rooms, or by visit (if too ill to attend there) at their residence in any part of the town, including medicines, is 2s. 6d.

2. To people in better circumstances to do, from 3s. 6d., 5s., 7s. 6d., 10s. 6d., to £1 1s.

3. For night practice, double charges.

4. If several members of a family are ill in one house, the medicine only is charged extra.

5. Surgical operations, or any visit, near or far, in the country will be charged according to agreement before hand; so also in case of accident or injury from such in town or country.

6. No extra charge for examination in eye-disease with the ophthalmoscope.

Why do you not censure those self-styled doctors and corporations who give licenses as surgeons and physicians, and never examine in chemistry? The holders of such diplomas are generally the people who slander properly qualified medical men who try to do their duty in their calling. I hope the day will soon come when we shall get a medical reform, and students will be better educated in practical anatomy, physics, and chemistry: then we will get true medical etiquette, as the practitioner will learn something about the laws of Nature and his duty as a scientific man, and not, as in many instances now, be a licensed empiric only. At present, what is deemed medical etiquette may not improperly be styled humbug, as through it innumerable thousands of persons have had to go to early graves. We have five thousand and more fantastic names for different diseases which the human frame is supposed to be liable to, but which, with a better classification, might be reduced to two or three hundred real ones. Owing to this confusion, we see medical men in our day listening with the stethoscope over the region of the stomach in abdominal aneurism and pronouncing it to be over some region of the heart, or putting the instrument in cases of empyema over the liver instead of over the lungs. On the other hand, so-called ophthalmic surgeons with so-called high credentials (even London men) have been known to state upon oath in assize courts that the retina

can receive arterial blood only through the arteria centralis retinae, and no otherwise, although these men may have operated for cataract a dozen times more than a Hindoo shepherd without any special anatomical knowledge of the eye whatever. This notwithstanding that my countryman Dr. Richard Liebreich more than twenty years ago proved by anatomical facts, that the retina can receive arterial blood independent of that particular artery. Again, we see that medical men who hold lectureships on pathology or medical jurisprudence, have been ignorant of the efficacy of the galvanic test in paralysis; others do not know how to act in the simplest case of a medico-legal character. That some of these practitioners—I do not care what high or low position they hold—get their brains muddled and speak evil things which are not true of their neighbours is no wonder; but one thing is a blessing, that there are superior courts where slanderers and libellers can be punished.—I am, yours truly,

GUSTAV ABRATH, Doctor of Medicine,
Surgery, and Midwifery (by written and *viva voce* examinations),
University Heidelberg; Licentiate of the Apothecaries'
Society, London.

Sunderland, April 10th, 1878.
. The following is the text of the advertisement referred to. It is cut from the *Sunderland Echo* of April 1st, 1878.

"The Dispute of Medical Charges in County Courts."

"To the Editor.—Sir,—In London there are a large number of medical men, some of whom attend upon members of the Royal Families resident there; some hold appointments as professors, or are lecturers at medical colleges, and others fill positions at the various hospitals and dispensaries. Now, it is an admitted fact, that these gentlemen cannot and do not agree with other medical men—say, in their evidence upon a *post mortem* examination made, it may be, on a sweep, a barrister, or an emperor—and hence when a dispute arises, they invariably ventilate the subject of the dispute in the columns of the metropolitan press, wherein they are enabled to cheaply advertise their medical works, setting forth the virtues of some fancy remedy, or trifling matter, such as whether a fever-patient shall take "iced milk" instead of "frozen milk". This is one method of using the columns of a newspaper by medical men in the settlement of a dispute. On the other hand, there are to be found batches of medical men, both in London and the provinces, who are connected with provident dispensaries, who do not hesitate to use the public press as a means to advertise their charges. I am led to make these observations, because I think it high time when a provincial practitioner comes to grief through the jealousy and machinations of certain members of his profession, and other individuals. His professional character is damaged, in a covert and insidious manner, by statements that he overcharges the public—statements which are not true, but which operate in such a way as to cause his patients to refuse payment of his medical fees, etc.; therefore, the ill treated provincial practitioner has no other course open to him but to state his grievance through the medium of the local press. Slanderers have busily circulated, not only in the clubs, but other places, that I overcharged the public; and this, together with a case I recently had in the County Court at Sunderland, compels me, in vindication of my professional character, to publish in the newspapers my scale of charges." [The scale is the same as that given above].—Yours truly, GUSTAV ABRATH, Doctor of Medicine, Surgery, and Midwifery (by double examination), University of Heidelberg; Licentiate of the Society of Apothecaries, London.—Sunderland, March 1878.

J. P. S. (Glasgow) is alarming himself unnecessarily. He should take the advice of a respectable local family practitioner, and avoid the alarmist advice of advertisers and quacks generally.

ATTENDANCE ON FAMILIES OF MEMBERS OF THE PROFESSION.

SIR,—My attention has been arrested by the letters in the *JOURNAL* anent the above heading; and, as the question is of some importance, I will try briefly to give my experience. When I was only a pupil in London, I had occasion to consult the late Sir James Clark, and I can never forget the words made use of by him on my tendering him a two guinea fee—viz., "Young man, if ever through life you want to insult a professional brother, tender him a fee." During twenty-five years in harness, I have always accepted that saying as my guide, never refusing service to, or accepting such from, the members of our truly noble (if exercised rightly) profession with the idea of a cash consideration; and, although I and mine have consulted the profession largely, I have never received an account excepting the one enclosed in my letter published by you on March 16th for attendance on my daughter. I regret this the more, as it precluded me from the pleasure of acknowledging the services by a "souvenir" of the confidence I reposed in the brother to whom was entrusted my wife's or child's health. I may also state that I am married to the only daughter of a late surgeon, who, prior to marriage, spent most of her time in visiting in various parts of England and Wales, where she often required professional assistance, being delicate. In no instance did she ever offer, or her late father pay, for such in cash, although on her return home a suitable acknowledgment was always made in a tangible form. This I take to be the proper mode of expressing our gratitude; for what can raise a man more in his own estimation or public opinion than the fact of his being entrusted with the life of a brother or any member of his family? And in my practice I have always carried this further. I never sent an account to a governess, a poor curate, or an actor; and, I am happy to say, I never lost by such conduct. Although not now in harness, I would pursue the same course again toward all those who, from the very nature of their callings, had to keep up an appearance on generally a very small salary, and whom God help should sickness overtake them or theirs. At the same time, I certainly am opposed to gratuitous advice and the "club" system, as at present carried on. As to the arguments used by "Another Member" talking about his card being lost or stolen, does he mean to say or think professional men are so wanting in discrimination as not to detect an impostor? Again, in my case, the medical attendant did know well his patient was the daughter of a brother practitioner, and more than one or two letters passed between us relative to the case.

In conclusion, I endorse all "Senior" says in his letter; and as the question is being so well ventilated, I hope not to trespass again on your valuable space in reference to this (to me) unpleasant subject.—I am, etc.,

MEMBER.

REVOLVING MIDWIFERY FORCEPS.

SIR,—I notice that in your account of the March meeting of the Glasgow Medico-Chirurgical Society, it is stated that Dr. J. T. Whittaker showed a form of revolving midwifery forceps, the two halves being connected by a ball and socket-joint, which enabled one blade to move round the other. Will you allow me to state that this is not a new instrument? One was submitted to me, as an American invention, about four years ago. The objection to it appeared to be that, though not difficult to apply, it was next to impossible to keep the clamps in position.—I am, Sir, yours truly,

FRANCIS VACHER.

Birkenhead, April 2nd, 1878.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATER IN MARCH 1878.
THE following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen used to Oxidise Organic Matter.	Nitrogen As Nitrates, &c.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	21.20	0.051	0.120	0.000	0.007	13.7	3.3
West Middlesex ..	21.10	0.062	0.105	0.000	0.008	13.7	3.7
Southwark and Vauxhall	20.90	0.061	0.120	0.000	0.011	13.2	3.3
Chelsea	20.90	0.048	0.120	0.000	0.010	13.7	2.8
Lambeth	22.20	0.062	0.114	0.000	0.011	13.7	2.8
<i>Other Companies.</i>							
Kent	26.40	0.000	0.195	0.000	0.002	17.0	4.6
New River	20.20	0.024	0.134	0.000	0.007	13.7	2.8
East London	22.40	0.032	0.105	0.000	0.007	14.3	4.2

Note.—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be clear and nearly colourless in all cases.

MENSTRUATION AND THE CURING OF MEAT.

SIR,—There have been some interesting letters on the above subject in the *JOURNAL*, and the following question, which could readily be answered by any of the female members of our profession, naturally arises. If such bad results accrue from a woman curing dead meat whilst she is menstruating, what would result, under similar conditions, from her attempt to cure living flesh in her midwifery or surgical practice?—I am, etc.,

SURGEON.

THE following communications have been handed to the General Manager:—Mr. Campbell, Glasgow; Editor of "Brief".

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

. We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. M. Foster, Cambridge; Dr. D. Ferrier, London; Dr. George Johnson, London; Dr. J. Hughlings Jackson, London; Dr. R. L. Bowles, Folkestone; Mr. F. G. White, Chipstow; Mr. A. Doran, London; Mr. T. T. Allen, London; Dr. Fairlie Clarke, Southborough; The Secretary of the Harveian Society; Dr. C. Holman, Reigate; Mr. H. M. Morgan, Lichfield; Dr. Tripe, London; Our Paris Correspondent; Dr. C. Handfield Jones, London; Dr. R. E. Burges, Frampton-on-Severn; Mr. F. Campbell, Edinburgh; Dr. Shrimpton, London; Dr. C. B. Ball, Newport; Mr. S. W. Hope, Petworth; Mr. R. Ley, Teignmouth; Mr. Eastes, London; M.D.; The Secretary of Apothecaries' Hall; Dr. Stephen Mackenzie, London; The Secretary of the Medical Society of London; Dr. Edis, London; Mr. T. M. Stone, London; The Registrar-General of Ireland; Mr. Shirley Murphy, London; Dr. E. C. Thompson, Omagh; Semper Vigilans; Dr. McKendrick, Glasgow; Mr. John Hughes, Carmarthen; The Registrar-General of England; Dr. Sawyer, Birmingham; Mr. R. Clement Lucas, London; The Secretary of the Royal Medical and Chirurgical Society; Mr. H. Sewill, London; Dr. J. Milner Fothergill, London; The Secretary of the Hunterian Society; Mr. F. W. Lowndes, Liverpool; W.; Dr. McKeown, Belfast; Dr. J. Wallace, Greenock; Dr. J. Imray, San Domingo; Dr. W. McComish, Madras; Mr. H. Brown, Northallerton; Mr. T. B. Curling, London; Dr. J. T. Whittaker, Glasgow; Dr. H. Tomkins, Manchester; Dr. A. Collie, Homerton; Mr. John Martin, Belfast; Dr. Thompson, Leamington; A Surgeon-Major; Dr. C. E. Saunders, London; Dr. R. J. Lee, London; Dr. C. Parsons, Dover; Mr. J. F. M. Bussey, London; C. C. D.; Dr. G. Thomson, Oldham; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. R. P. B. Taaffe, Brighton; Mr. T. R. Greenwood, London; Mr. Treves, Margate; Mr. S. M. Bradley, Manchester; Mr. W. T. Gairdner, Glasgow; Dr. A. Sheen, Cardiff; Dr. Groth, London; Mr. Walter Schroeder, London; M. T. Johnson, Belper; Dr. R. J. Harvey, Dublin; Dr. R. Bell, Glasgow; The Editor of "Brief", London; Dr. Valling, Paris; Dr. Lloyd Roberts, Manchester; Our Dublin Correspondent; Mr. W. Eddowes, Shrewsbury; Our Edinburgh Correspondent; Mr. R. Morgan, Morriston; Dr. Savage, London; Dr. J. B. Russell, Glasgow; Mr. A. H. Benson, Dublin; Mr. Talfourd Ely, London; Peregrinus; Mr. W. M. Skinner, Sunderland; J. N.; etc.

THE GOULSTONIAN LECTURES ON THE LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.,

Professor of Forensic Medicine in King's College; Assistant-Physician to King's College Hospital; etc.

LECTURE III (*concluded*).—March 22nd.

Lesions of the Parieto-Temporal Region.—There remains, therefore, a region, situated between the motor area and the occipital lobes, in which it is natural to look for a central differentiation of these tracts. This region includes the supramarginal lobule and angular gyrus or inferior parietal lobe, the convolutions of the temporo-sphenoidal lobe on its external and internal aspect, viz., the superior, middle, and inferior temporo-sphenoidal convolutions, the occipito-temporal convolutions (lingual lobule, fusiform lobule), the uncinate gyrus, and hippocampus major or cornu Ammonis. (Fig. 1.) We may call the whole of this the parieto-temporal region. It has, I think, been shown conclusively that experimental lesions of the cortex in this region in the lower animals—a region in which I claim to have demonstrated the existence of individually differentiated centres of special sense—are capable of producing impairment or paralysis of sensation on the opposite side of the body.

This has been shown more particularly as regards vision (which seems specially to have been investigated), by the experiments of McKendrick on pigeons, and by those of Hitzig, Goltz, etc., on dogs. Without precisely defining the regions, lesion of which causes sensory disturbances, we may take it as firmly established that unilateral lesions of the cortex are capable of causing such effects in the lower animals. And here it will be convenient to consider the views advanced by Goltz, with respect to the effects of cortical lesions.*

According to Goltz, it is not so much the position as the extent of the injury on which the phenomena of cortical lesions depend. These he finds to be a conjunction of motor paralysis or paresis, tactile anæsthesia, and blindness or impairment of vision on the opposite side. I need scarcely say, from what I have already brought before you, that if that is the type of cortical lesions in the dog, then we must look upon canine and human pathology as having no resemblance to each other. But it requires very little examination of Goltz's facts to discover that his views are equally at variance with the facts themselves, as with those of clinical medicine and pathology. Instead of laying bare a distinct region in the brain, and accurately limiting his destructive lesion to the part the functions of which he is desirous to investigate, he merely trephines a hole or holes in the temporal region and destroys the cerebral substance by squirting it out with a strong stream of water. This method he adopts in order to avoid risk of hæmorrhage or subsequent meningitis; and therefore, to keep the animal alive as long as possible. While we may credit it with securing the latter object more or less, it is clearly impossible to say what extent of brain-substance may thus be rendered functionless; and that it produces profound derangement of the whole cerebro-spinal system, is evident from the frequently fatal consequences resulting from this procedure. The extent of grey matter destroyed or rendered functionless, Goltz himself admits, it is impossible to estimate, and he nowhere attempts it in the record he has given of his experiments.

These are fatal objections to Goltz's experiments, as bearing on the question of cerebral localisation. They are to be looked upon as experiments only on cerebral lesions. The explanation of his results is, I think, easily afforded by the facts to which I will presently call your attention, as well as by the abovementioned experiments of Veyssière as to the effect of lesion of the posterior part of the internal capsule. These latter, however, Goltz seems to have altogether ignored, as he makes no allusion to them.

The situation usually chosen by Goltz for his trephine openings and syringing operations is such as to, almost without fail, ensure damage of the sensory fibres of the internal capsule; and he has, in a rude way,

practically produced the same results as Veyssière obtained by careful limitation of his experimental lesion.

While Goltz's description of the phenomena themselves resulting from this procedure may be accepted without question, his theory that the effects of cortical lesions depend more on their extent than on their position, must, I think, be unhesitatingly rejected.

I will now give you a brief *résumé* of the results of my experiments on the brain of monkeys, full details of which I have published elsewhere.* On these facts I take my stand, and hold that they establish the differentiation and localisation of special sensory centres in the cortex.

Angular Gyrus (fig. 15 [13] [13']).—Electrical irritation of the angular gyrus in the monkey causes movements of the eyeballs, pupils, and head, which are to be taken as reflex or associated signs of subjective visual sensation, for the reason that destruction of this region causes no motor paralysis whatever, whether of eyelids, ocular muscles, or pupils. But unilateral destruction has the effect of causing temporary blindness of the opposite eye, while bilateral destruction causes total and permanent blindness in both eyes. Hence it appears that each hemisphere is in relation with both eyes, and the destruction of this centre in one hemisphere is not necessarily followed by complete or permanent blindness. This conclusion is confirmed by Goltz's experiments on dogs, and is in harmony with the researches of Landolt in regard to the affection of both eyes in cerebral hemianæsthesia depending on lesion of the posterior third of the internal capsule.

Superior Temporo-sphenoidal Convolution (fig. 15 [14]).—Electrical irritation of this region causes twitching of the opposite ear and other reflex indications of excitation of subjective auditory sensation. Destruction causes no motor paralysis whatever; but, though it is certain that hearing is at least impaired on the opposite side, the difficulty of ascertaining the conditions of auditory perception in animals, when only one ear is affected, is such as to render it impossible to speak definitely as to the extent and duration of the affection of hearing; whereas, when these centres are destroyed bilaterally, there seems to be total loss of the sense of hearing; meaning by that, auditory discrimination as contradistinguished from mere auditory reaction.

Subicular Region.—Irritation of the lower extremity of the temporo-sphenoidal lobe, or region of the subiculum cornu Ammonis, causes movements of the nostril and head indicative of excitation of subjective olfactory sensation. Destruction causes no motor paralysis, but is followed by loss of smell on the same side; and, when the lesions invade not merely the subiculum but the neighbouring regions on one side, taste also is affected on the opposite side of the tongue. Bilateral lesions cause complete loss both of taste and smell.

Hippocampal Region.—On account of the concealed position of this region, it is impossible to cause localised irritation free from all complication; nor is it possible to destroy it, without injuring other parts of the hemisphere. I found, however, that only in cases in which this region was involved along with others, there occurred impairment or abolition of tactile sensation on the opposite side; and when the region of the hippocampus and uncinate gyrus was ploughed up in such a manner as to avoid the internal capsule and the medullary fibres of the other cortical regions (with the exception of part of the occipital lobe), tactile sensation was abolished on the opposite side, sight and hearing remaining unimpaired. A condition resembling motor paralysis was also induced; but in reality, a functional paralysis depending on the abolition of tactile and muscular sensation, such as occurs from division of sensory nerves.

Such being the indications furnished by experiments on monkeys, we may now proceed to consider the effects of disease of the corresponding regions in the human brain. The facts I am about to quote seem to point to a remarkable, and apparently irreconcilable, discrepancy between human pathology and experimental physiology. Cases are on record in which lesion or some form of degeneration has been found in one or other of all these so-called sensory areas, and in which no affection of sensation has been observed. Lesions here are usually said to be latent.

First, as to the cases: MM. Charcot and Pitres† report a case, latent as regards symptoms, in which there was found a yellow softening of the cortex of the right hemisphere, occupying the posterior half of the island of Reil, the posterior two-thirds of the inferior parietal lobule, comprising the angular gyrus, and the upper or posterior half of the second and third temporo-sphenoidal convolutions. (Fig. 25.) There was no secondary degeneration of the spinal cord.

M. Pitres‡ records a case of extensive hæmorrhage into the medullary substance of the left temporo-sphenoidal lobe, in which, though

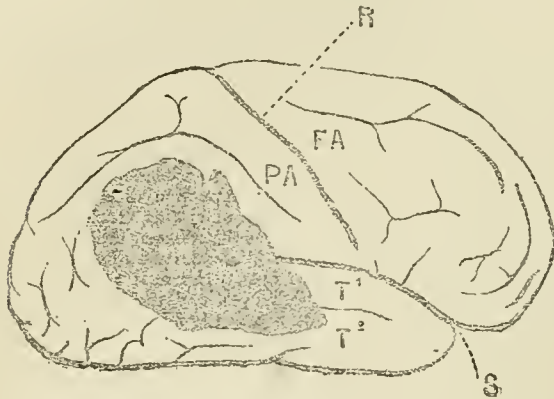
* *Philosophical Transactions*, vol. ii, 1875; *Functions of the Brain*, chap. ix.

† *Revue Mensuelle*, No. 1, p. 10.

‡ *Lesions du Centre Ovale*, p. 54.

* Pflüger's *Archiv für Physiologie*, Band xiii, Heft i; 1876.

consciousness was deeply affected, there was no real paralysis and no lateral distortion or conjugate deviation of the eyes. He quotes a case reported by Thibault,* also latent as regards sensory or motor symptoms, in which, in addition to a layer of extravasation of the posterior three-quarters of the left hemisphere, there was found, in the



sphenoidal lobe, a large extravasation extending from its anterior extremity to within three centimètres of the posterior extremity of the hemisphere.

Sabourin† has recorded a case of extensive lesion of the sphenoidal and occipital convolutions in which there was no paralysis.

MM. Charcot and Pitres‡ also give a case in which the chief symptoms were a state of dementia and very marked itching of the chest and abdomen without apparent cause. After death, a yellow softening was found in the left hemisphere, occupying the first and second occipito-temporal convolutions, commencing about one centimètre behind the anterior extremity of the temporo-sphenoidal lobe, and extending backwards to within about three centimètres from the tip of the occipital lobe. (Fig. 26.)

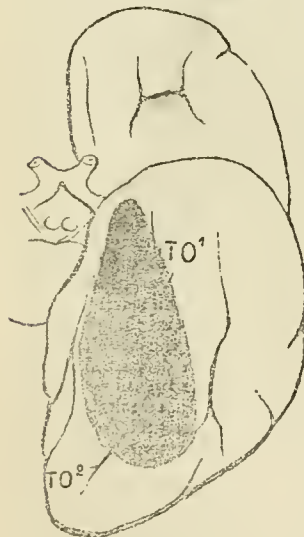


fig. 6.

M. Sabourin communicated to MM. Charcot and Pitres a case exactly similar to the above, and another in which a yellow softening existed in the *cuneus* and posterior two-thirds of the quadrilateral lobule of the left hemisphere, likewise latent as regards symptoms.

A case is reported by Humbert§ of abscess in the anterior and inferior part of the right temporo-sphenoidal lobe, resulting from suppuration of the ear, in which there were no special symptoms indicative of such a grave cerebral lesion.

Of similar affections of this part of the brain in connection with otitis, and with nothing but the

general symptoms of cerebral abscess, I might quote a multitude. References are given by Pitres to cases of this kind related by Ormerod, Sir W. Gull, Blondeau, Haslewood, Homolle, and Renault.

Of lesions specially confined to the hippocampus, I have not been able to find any on record, except those of Bouchet, Meynert, etc., in respect to degeneration or sclerosis of the hippocampus in chronic epileptics. Bouchet,|| in twelve out of forty-three cases which he examined, noted the existence of sclerosis in one or both hippocampi, but he did not attach any special importance to this; as induration of the brain in chronic epilepsy he looked upon as a general affection, of

which this was only a local manifestation. This condition of the hippocampus has been observed also by Cazauvielh, Foville, Lelut, Delasiauve, Bourneville, in epileptics. In 1868, Meynert* called special attention to this degeneration of the hippocampus in epileptics, giving nineteen cases in which one or other hippocampus was indurated or atrophied. Meynert, without looking upon this as the cause of epilepsy, thought that there was some special relation between this degeneration and the lesion on which epilepsy depended. In a recent paper, Hemkes† states that he has seen atrophy of the hippocampus in only six out of thirty-four cases. Beyond the fact of the existence of such degeneration in epileptics, we have no record of the exact symptoms in the cases in which it was found. Meynert‡ believed that the optic tracts had special relations with this region; and he gives four cases of disease situated in or near the hippocampus and fusiform lobule, in which disorders of vision were observed. The cases, however, are altogether deficient as regards ophthalmoscopic appearances, on which it would be necessary to have some information before coming to a conclusion as to whether the disorders of vision were the direct or indirect results of the cerebral disease.

I have quoted a number of cases of unilateral lesion of the sensory regions, mostly of a chronic form, in which no special symptoms were noted. It may be said that the absence of symptoms in all these cases may be accounted for by functional compensation by the same or the opposite hemisphere. Yet there are on record cases of traumatic lesion, also apparently latent, which would militate against this idea, supposing them in every respect carefully investigated.

M. Herpin§ has recorded a case of fracture of the skull and injury of the brain in the region of the squamous portion of the temporal and greater wing of the sphenoid. The man did not lose consciousness, and, from the time of the accident till death, four days afterwards, nothing was observable, either as regards motility or sensibility. After death, a contusion of the third degree was found in the inferior aspect of the temporo-sphenoidal lobe (which side not stated), extending five centimètres in an antero-posterior direction, three centimètres in breadth, and affecting more particularly the middle and external (inferior) temporo-sphenoidal convolutions; a situation corresponding exactly to the cranial injury. A clot, of the size of a bean, existed at the anterior extremity of the lesion. A case in some respects similar has been put on record by Alcock.|| This was a case of cranial injury, followed by restlessness and sleeplessness; and only on the third day after the accident did the patient seem to hear when spoken to. He gradually got worse, and died on the thirty-third day after the accident, without being affected by paralysis. Wilfulness and obstinacy were his most prominent mental symptoms. On the right hemisphere, there was a patch of ecchymosis, of the size of a florin, in the pia mater, over the upper extremity of the superior temporo-sphenoidal convolution, but the brain-substance underneath was not injured. On the left side, "the portion of brain corresponding to the lower part of the squamous portion of the temporal bone was soft and pulpy, being easily washed away by a stream of water, leaving a cavity with ragged walls, the area of which equalled that of half-a-crown, and about a quarter of an inch in depth. The ventricles contained an excess of serum". The only indication as regards sensory affection in this case was the apparent want of auditory perception at first; but whether this was a part merely of the general dazed condition of the man, or as the result of affection of the auditory centres, it is impossible to say definitely, though the position of the lesions might be taken in favour of the latter.

I have not been able to find any cases of bilateral lesions of the hemispheres in corresponding parts of the sensory area without such profound mental disturbance as to render the determination of the existence or absence of sensory impairment a matter of impossibility. This is greatly to be regretted, as on these the question of special sensory localisation in man to a large extent depends.

But if we confine our attention to the cases of unilateral lesion of the sensory area which I have mentioned, and compare the negative results as regards sensation, whether with chronic or sudden lesions of the sensory regions in man, with the affections of sensation, carefully observed and confirmed by many physiologists, which result from similar cortical lesions in the lower animals, we cannot but be struck by the discrepancies which exist. To account for these, we must adopt one or other of two suppositions: either, taking the facts as equally well established, that the parallel which has hitherto been shown to exist between the brain of man and that of the monkey and the lower

* *Bulletin de la Société Anatomique*, 1844, p. 93.

† *Bulletin de la Société Anatomique*, October 21st, 1876.

‡ *Op. cit.*, p. 11.

§ *Bulletin de la Société Anatomique*, 1870, p. 367.

|| "Sur l'Epilepsie", *Annales Médico-Psycholog.*, 1853, t. v, p. 209. Quoted by Lepine, *op. cit.*, p. 130.

* *Vierteiljahrsh. für Psychiatrie*, p. 381.

† *Allgemeine Zeitsch. für Psychiatrie*, Band xxxiv, Heft. vi.

‡ *Op. cit.*, p. 400.

§ *Bulletin de la Société Anatomique*, May 1876.

|| *Lancet*, Marc 10th, 1877.

animals now suddenly ceases to hold, and that, in respect to sensory localisation, the brain of man is constituted on a totally different type from that of the lower animals; or, if this be regarded as improbable, that the latency which is said to characterise lesions of the sensory area in man is a latency not so much of actual symptoms as of observation.

M. Pitres* is of opinion that the sensory fibres which are gathered together in the posterior third of the internal capsule, instead of distributing themselves like the motor fibres to individually differentiated areas in the cortex, spread themselves indifferently over the whole occipito-sphenoidal region. But this does not remove the difficulty; for we should then expect that extensive lesions of this region should cause general impairment of all the sensory powers on the opposite side together; a hypothesis which the clinical records no more support than that of special localisation. And it would seem strange if there should be a distinct differentiation of centres of motion, and a general *confusion* in the centres of organs so highly specialised as the organs of sense. This is a supposition which I cannot entertain, and for which I see no substantial grounds. That the organs of sense may be more bilaterally represented in each hemisphere in man than in the lower animals, is not impossible. That bilateral representation does exist to a large extent, and particularly as regards sight and hearing, is in accordance with the facts of experiment, and is sufficient to account for the absence of any very obvious impairment of these faculties in cases of unilateral lesion of a slowly progressive character. But that there is no impairment at all of sensory perception or discrimination in *sudden* unilateral lesions, or even in *chronic* lesions, is a fact which I do not admit as proved; and I adopt the alternative supposition, that the latency has been in observation rather than in symptoms.

This may seem a sweeping charge, and a very summary method of disposing of difficulties; but I cannot help expressing the frequent disappointment I have experienced in reading through multitudes of cases of cerebral lesion, which might have served to throw light on this subject, and finding no indication of any attempt having been made to investigate the conditions of special sense. Considering the perfunctory manner in which this is so commonly carried out, if investigation be made at all, and the frequent omissions in this respect which are to be found in the records of even our most accurate and competent clinical observers, I cannot take mere absence of remark as proof of negation of symptoms, unless there be clear evidence that the various points had been fully and fairly investigated, and the negation of symptoms positively established. For the clinical facts are not all of the same negative order as those I have brought before you, and many of them are, in my opinion, capable of satisfactory explanation only on the views I have advanced.

Let us take first the question of affections of sight directly dependent on cerebral lesion. Here, of course, we must eliminate all those cases in which impairment or abolition of vision is caused by changes in the optic nerve and retina, secondary to intracranial disease wherever situated. Hence must of the records of cerebral disease, before the invention of the ophthalmoscope, and, I may add, very many since, are for the most part worthless in this relation. But the following case, which is recorded by Abercrombie,† and which I give in his own words, has a special value. "The effect of superficial inflammation of the brain or its membranes is well illustrated by another case related by Dr. Anderson, in which the disease took place under his own eye. A boy suffered from an injury of the head, the depression of a considerable portion of the *right parietal bone*, the depressed portion being forced through the dura mater and driven inwards upon the brain. *He had paralysis of the left side, and the left eye was insensible.* The depressed portion being removed, the paralysis was greatly diminished, and the eye recovered a considerable degree of vision. On the third day after the operation, the wound in the dura mater was inflamed, with considerable tumefaction; and immediately the left leg and arm became paralysed, the paralysis being accompanied by convulsion; and *the left eye also became again insensible.* He had frequent convulsion of these parts for several days, the right side not being in the least affected, when, suppuration having taken place, all the symptoms subsided" (p. 121-2). Now, though recovery took place, and therefore the case is incomplete in an anatomical point of view, it is clearly a case of cortical lesion, and possesses all the typical features of such; and that the affection of the opposite eye, which proceeded *pari passu* with the motor symptoms, had a similar cause—viz., lesion of the cortex—is, I think, unquestionable. Though the exact extent and position of the depressed fracture is not stated, yet, as it was in the parietal

region, we may conclude that the lesion involved not only the cortical motor area, but also the *visual* centre, which is in close proximity to it under the parietal eminence (fig. 3). This case, in my opinion, distinctly confirms the sensory localisation which I have arrived at by experiment, or at least is explicable only in this way.

The same author also quotes another case related by John Bell, in which, from injury to the head, extravasation of blood occurred on the surface of the brain, for which the patient was repeatedly trephined. Local inflammatory attacks with suppuration occurred from time to time on the left hemisphere after the trephining. These local attacks, when they occurred towards the anterior part, were accompanied by double vision; but, "when they were towards the posterior part, there was not double vision, but a state of vision in which a candle was seen with a halo round it" (p. 122).

I mention this case chiefly because it harmonises with the observations of Hughlings Jackson, already referred to, in respect to the frequent association of optical illusions, coloured vision, etc., with disease of the posterior lobes. These spectra are the counterpart of the motor discharges caused by irritative lesions of the motor centres. That they should occur more particularly with lesions situated towards the posterior aspect of the hemispheres, is quite in accordance with the localisation of the visual centre in the angular gyrus. These sensory discharges in connection with epilepsy of cortical origin, whether in the domain of sight, hearing, smell, taste, or tactile sensation, are without doubt to be looked upon as indications of irritative lesion of the sensory centres, though we have not yet sufficient material to enable us, from a purely clinical point of view, to connect any particular form of sensory discharge with a specially localisable lesion, unless we regard it as established in respect to optical illusions. Not unfrequently the sensory centres are discharged together, as in a general unilateral convulsion, and there is no clear discrimination of one form of sensation from another. This was well exemplified and graphically described to me by a highly intelligent patient, who told me that his epileptic attacks (*petit mal*) were ushered in by a "horrible smell of green thunder", or by some equally strange compound of smells, colours, and sounds, inextricably intermingled.

Reverting to the impairment of sight in connection with destructive lesions, it has been remarked by Dr. Bastian that not unfrequently, in cases of thrombosis of the posterior cerebral artery, vision is impaired on the side of motor paralysis.* This he attributes to affection of the opposite optic tract, or to the opposite side of the corpora quadrigemina. But, as lesion of the optic tract would seem to be associated rather with bilateral hemiopia than with unilateral amblyopia, and as lesion of the corpora quadrigemina is generally accompanied by more complex symptoms than mere motor hemiplegia, it seems to me that the impairment of vision may be attributed to sudden interference with the visual centre. I advance this only as a suggestion, without pretending to pronounce definitively on the subject.

Apart from the evidence of auditory discharges and subjective auditory spectra of various kinds in connection with epilepsy and other cerebral affections, I cannot find any altogether satisfactory evidence of impairment or abolition of hearing in connection with destructive lesions of the cortex. Hughlings Jackson repeatedly emphasises the statement, that he has never met with deafness as the result of disease of the cerebral hemispheres directly.

But, though we may admit, in accordance with the results of experimental physiology, that unilateral destruction of the centres of hearing and sight need not cause actual blindness or deafness of a complete or enduring character, there are certain facts which tend to show that unilateral lesions of these centres may produce what we may call *subjective* deafness and blindness. Such conditions are not unfrequently classed with aphasia, and may occur with it: but they may occur *without* true aphasia or speechlessness. They have been termed by Kussmaul "word-blindness" and "word-deafness" (*cecitas et surditas verbalis*). These two conditions may occur separately or in association. In the one case, though a man may be able to speak and write, he cannot translate written symbols into ideas, though he may understand articulate sounds; in the other, he may be able to read, though he cannot understand spoken words, or he may be unable to do either. In neither case is there actual objective blindness or deafness. In a case of word-deafness of this kind reported by Wernicke,† there was, besides a general atrophy of the convolutions, a thrombotic softening of the first and a large portion of the second temporo-sphenoidal convolution of the left hemisphere. The auditory centre was thus destroyed. A very interesting case of subjective or word-blindness has been recorded by Dr. Broadbent.‡ The essential points are thus

* *Lesions du Centre Ovale*, p. 53.

† *Diseases of the Brain and Spinal Cord*, second edition, 1829.

* *Paralysis from Brain-Disease*, p. 113.

† *Der Aphatische Symptomen-Complex*, 1874, Case 11.

‡ "Cerebral Mechanism of Thought and Speech", *Méd.-Chir. Trans.*, vol. lv, 1872.

summed up by him. "After an acute cerebral attack, absolute inability to read printed or written words (except own name), while the patient wrote correctly from dictation, and composed and wrote letters with a little prompting. Inability to recall the name of the most familiar object presented to his sight, while he conversed intelligently, employing an extensive and varied vocabulary, making few mistakes, but occasionally forgetting names of streets, persons, and objects. Death from apoplexy; extensive atheroma of cerebral vessels; old clots in substance of left hemisphere, with softening of adjacent substance to outer side of lateral ventricle, at junction of descending cornu. Recent hæmorrhage in same situation." The primary lesions on which the softening and subsequent fatal hæmorrhage appeared to depend were two old clots. The first, of the size and shape of an almond, was loosely imbedded in the inframarginal gyrus or superior temporo-sphenoidal convolution, about opposite the junction of the upper third with the lower two-thirds of the descending cornu. The other, which Dr. Broadbent regards as the more important and the cause of the softening which led to the fatal hæmorrhage, was a clot of the size of a bean, surrounded by softening, situated at the upper extremity of the fissure of Sylvius externally, and at the junction of the descending cornu with the body of the ventricle internally. This, it will be seen by reference to fig. 16, is in the region of the angular gyrus and supramarginal lobule, the homologue of the visual centre in the monkey. These cases I take to be in harmony with the views I have elsewhere expressed, that the sensory centres are also the substrata of corresponding sensory memory and sensory ideation. In the one of these cases (Wernicke's) in which the auditory centre was the seat of lesion, there was paralysis of auditory ideation; in the other (Broadbent's), in which the visual centre was the seat of disease, there was paralysis of visual ideation, more particularly in connection with articulate symbols or their visible equivalents.

The paralysis of visual and auditory ideation in special reference to words in these cases is accounted for by the fact, that in both the disease was situated in the visual and auditory centres of the left hemisphere, between which and the speech-centre we may reasonably suppose there exists a more intimate organic or functional connection than between this and the sensory centres of the right hemisphere. But, as regards sensory discrimination and sensory ideation in general, we have not the same grounds for regarding the right hemisphere as subordinate to the left, as is the rule in respect to voluntary movements and motor ideation; for, with equally acute sensibility on both sides, we find that, for delicate sensory discrimination, some invariably use one eye or one ear in preference to the other, and therefore the opposite cerebral hemisphere. Thus the same individual will use his right eye for microscopic work, and his left ear for auscultation; which we may take to mean that his left visual and right auditory centres are more especially cultivated and developed.

Hence we may conclude that unilateral lesions of the sensory centres will vary considerably in respect to their effects on sensory ideation, according as the lesion is on the side of the more or less developed centre. It is not impossible, therefore, that what Hughlings Jackson terms "defective perception" may be more common with lesions of the sensory regions of the right hemisphere, if these be more commonly cultivated and developed.

Before passing from this subject, I would refer to an interesting case related by Dr. Banks* of Dublin, in which, though unfortunately no *post mortem* examination could be made, there are certain facts bearing on the question as to whether actual deafness may occur from cerebral disease. In this case, after a sudden cerebral seizure, but without coma or paralysis, the patient was found to be incapable of understanding either speech or writing, though he could both speak and write. He was found to be completely deaf, taking no notice of what was said to him, or even of the loudest noises; and, indeed, he used to allude to his deafness himself. One day, he said he could neither hear nor read; "only a little could read the words, but not take in the meaning". This patient died ultimately of coma and right hemiplegia; but no *post mortem* examination was allowed. Unless we suppose, in this case, that the patient had a separate lesion in both auditory nerves or both ears, occurring simultaneously with his cerebral lesion, we may take it as a case of deafness depending directly on cerebral disease; but whether the lesion was unilateral or bilateral, the absence of a *post mortem* examination unfortunately renders it impossible to decide.

Affections of smell and of taste, we have seen, occur with affections of the other senses in cerebral hemianæsthesia; but affections of smell alone, or of taste and smell combined, may occur without other sensory impairment in connection with certain forms of cerebral lesion.

As regards smell, there seems to be some discrepancy between my localisation of the olfactory centre and the facts of cerebral hemianæsthesia. I find that destruction of the subicular region causes loss of smell on the same side; while in hemianæsthesia the impairment of smell is on the side opposite the cerebral lesion. I have endeavoured to account for this by the fact, discovered by Magendie, that abolition of the common sensibility of the nostril by section of the sensory branches of the fifth nerve causes loss of smell; and, as in hemianæsthesia the sensibility of the mucous membrane of the nostril is lost, so we may consider this to be a sufficient cause of the unilateral anosmia. I see no reason to doubt the validity of this explanation; but I would supplement it by another consideration. Though the outer root of the olfactory tract can be directly traced to the subiculum of the same side, it is not unlikely that the inner root passes on to the opposite hemisphere with the other sensory tracts; and hence each hemisphere may maintain a bilateral relation with the organ of smell. If this were so, then the partial impairment of smell, which would result from lesion of the special sensory paths of the opposite hemisphere, would be rendered more complete by the simultaneous abolition of common sensation in the nostril. I cannot give anatomical evidence of this arrangement, for the inner root of the olfactory tract has not been traced by Meynert beyond the corpus striatum; but that it ends here is, I think, more than improbable.

Unilateral anosmia has been observed in many cases of cerebral lesion, and on the same side as the lesion; but, without a necropsy, it is of course difficult to decide whether this was due to direct lesion of the olfactory tract, or of its centre. Several such cases have been reported in connection with aphasia, the anosmia being on the left side.* A good many cases are now on record of loss of smell, or combined loss of smell and taste, as the result of blows on the head, more particularly of the vertex or occiput.†

As regards the anosmia, the mode of causation suggested by Ogle,‡ viz., injury by counterstroke to the olfactory nerves, bulbs, or tracts, seems in every way satisfactory. To the loss of smell, Ogle further ascribes such affections of taste as may be combined with it, viz., the impairment or abolition of the perception of flavours, which are a compound of smell and taste. And, indeed, in many of the so-called cases of loss of taste and smell, taste proper does not appear to have been affected. Hence they may be accounted for in the manner indicated by Ogle. But even when there is absolute loss of smell, we find cases in which taste is but little interfered with. A patient of mine who had suffered from complete anosmia for six years, dating from a fall on his head which had rendered him temporarily unconscious, made no complaint as regarded his power of taste, as he could distinguish all the ordinary articles of food from each other, and could clearly perceive the flavour of onions. Yet, though there was no obstruction of the nasal passages, anteriorly or posteriorly, he could recognise no smell in assafoetida or musk; acetic acid, he said, caused some sensation about two-thirds up the nostril, but no real odour. I have no doubt that in this case there had been rupture of the olfactory nerves or tracts; but the mere loss of smell is incapable of accounting for the symptoms in another case which I have seen. This patient had lost both smell and taste in consequence of a fall on his head into the street six years before. I was not aware until lately that my colleague Dr. Burney Yeo had already brought the particulars of the same case before the Clinical Society,§ and, therefore, the subsequent history of the patient will be all the more interesting. This man had not merely total loss of smell, but also total loss of taste proper, such as for bitter, sweet, salt, sour, etc. One day, in fact, when suffering from pain in the stomach, he swallowed a glass of what he took to be brandy, and was not aware it was vinegar until the aggravation of his pain made him ask his wife what was in the bottle. While under Dr. Yeo's care, and taking iodide of potassium, he recovered taste to some extent, but he did not, as he told me, recover smell, though he once or twice had something like a subjective sensation of camphor or burnt wood. When he left off the iodide, he became as bad as before. This was in 1872. In 1875, when he came under my care for another affection, he had absolute loss of taste and smell, and had given up all thoughts of recovery, and had tried to accommodate himself to circumstances. Again, on the administration of iodide of potassium, taste returned to some extent, but there was no improvement as regards smell, with the exception of an occasional subjective sensation;

* Ogle, *Med.-Chir. Trans.*, 1870; Fletcher and Ransome, *BRIT. MED. JOURNAL*, April 1864; Hughlings Jackson, *London Hospital Reports*, vol. i, 1864, Cases II, V, XV, XXII.

† See "Collected Cases" by Knight, *Boston Medical and Surgical Journal*, September 13th, 1877.

‡ *Medico-Chirurgical Transactions*, 1870.

§ *BRITISH MEDICAL JOURNAL*, May 25th, 1872.

* *Dublin Quarterly Journal*, Feb. 1865, vol. xxxi, p. 62.

and a relapse again occurred on leaving off the medicine. I lost sight of him till the end of 1876, and found him in his original condition. In January, 1877 I began to treat him with the constant current (ten cells gradually increasing) directed transversely through the head in the zygomatic fossæ, varied occasionally by the application of one pole here, and the other on the bridge of the nose. After one or two applications, while he felt somewhat giddy, various subjective smells were experienced during the passage of the current, which he described as "gassy", "rank", etc. At the end of a week of daily treatment with the current, he began to smell strong odours; subjective sensations also occurred at intervals, and taste became more acute. He gradually and steadily improved, and, after a few weeks' treatment, the power of smell returned, so that he could recognise such things as assafoetida, musk, coffee, tobacco. He could readily distinguish between one smell and another, but continued to have some difficulty as to identification of the substance. There has been no relapse, and now (Feb. 28th, 1878), at the end of a year, he continues to enjoy perfect taste, and his powers of smell, which were never very acute, he thinks are as good as ever.

I will not attempt to decide what was the exact *modus operandi* of the galvanic current, whether it acted by stimulation of the olfactory nerve direct, or by stimulation of the cerebral centres of taste and smell; but, as a therapeutic experiment, it may be regarded as worthy of repetition in similar cases. But, as regards the pathology of this case, I think it is evident that both smell and taste were abolished independently of each other, and that we cannot account for the loss of taste by the loss of smell; nor can we say that the olfactory nerves were ruptured. It is also in the highest degree improbable that the loss of taste and smell could have resulted from simultaneous affection of the various nerves concerned in these functions; situated as they are so widely apart from each other, and bound up more or less with others not conjointly affected. But it might well happen that such a blow on the vertex as this man received would cause such injury to the subicular regions, by what is usually termed counterstroke, or by what Duret terms the *cône de soulèvement*, as to cause impairment or temporary abolition of the functional activity of the cerebral centres of taste and smell, which, as experiments on monkeys indicate, are here localised. Hence I would take this, and similar instances in which smell and taste proper are abolished by cranial injuries, as clinical corroboration of physiological experiment.

In respect to tactile sensation, though this form of sensibility is more frequently affected than any of the others by cerebral disease, it is extremely difficult, from a clinical standpoint only, to establish a distinct relation between this and certain cortical lesions, or localise the centres of tactile sensation. Motor paralysis and tactile anæsthesia are frequently associated with each other. But that the cerebral centres of motion and tactile sensation are distinct from each other, is evident from the fact that we may have the most complete motor paralysis without impairment of tactile sensation, as is the case with cortical lesions. And though motion is more or less impaired by the abolition of tactile sensation (by which motion is mainly guided), yet we have many instances in which the power of voluntary motion is retained notwithstanding the complete annihilation of tactile sensation, cutaneous or deep. There is, therefore, no organic fusion of the motor and tactile centres with each other, seeing that each may be affected independently of the other, and the two do not vary quantitatively with each other when they are conjointly affected.

The facts of cerebral disease in general, and of cerebral hemianæsthesia in particular, would seem to show that in respect to tactile sensation there is less bilateral representation in each hemisphere than as regards the other forms of sensibility. For, in central hemianæsthesia, tactile sensation is always most deeply affected, and may still remain greatly impaired after all the other forms of sensory impairment have disappeared. Hence, in the slighter forms of affection of the posterior third of the internal capsule, tactile sensation only may be impaired. Hence, also, with motor paralysis due to lesion of the anterior division of the internal capsule, we frequently get partial or temporary impairment of tactile sensation, owing to pressure on, or slight organic or functional derangement of the posterior or sensory fibres.

If, therefore, tactile sensibility be more unilaterally represented in each hemisphere—and this we might conclude from the remarkable power we possess of localising the seat of tactile impressions on any part of the body—we should naturally expect to find that lesions of the cortical centres of tactile sensation should be accompanied by symptoms of impairment or abolition of this sense. These centres, as I have already indicated, are situated in the hippocampal region. Lesions of this region are not, however, common; and I have not been able to find any cases of localised lesion of the hippocampus, except

those to which I have already alluded in connection with chronic epilepsy and insanity. But, as we have no record of the facts relating to the condition of tactile sensation in these cases, I must leave this question to be settled by future clinical investigation.

There are, however, some facts which would seem to indicate that lesions in the neighbourhood of the hippocampus do cause affection of tactile sensation, though doubt may be entertained as to whether the phenomena are dependent on direct affection of the hippocampus, or affection of the posterior front of the internal capsule, directly or indirectly.

Mr. Jonathan Hutchinson* concludes, from his observations on cranial injuries, that contusion of the sphenoidal lobe more particularly, causes, along with partial motor paralysis, paralysis of tactile sensation on the opposite side of the body. As I have said, these effects may be attributed to injury of the sensory fibres of the internal capsule; but contusion of the sphenoidal lobe might also be interpreted as injury of the hippocampal region; and if the impairment of sensation in the cases described by Hutchinson were to be proved absolutely restricted to tactile sensation, we should have good grounds for considering the phenomena dependent on lesion of the cortical centres here situated. The definitive settlement, however, of these various points must be left to future research.

I have now brought under your notice a considerable number of facts, both positive and negative, in reference to the localisation of special sensory regions in the human brain; and though the positive clinical evidence is as yet comparatively scanty, and leaves much to be desired, I entertain the hope and belief that it will not long remain so. And I trust that those who rely more on the evidence of human pathology and the phenomena of disease than on the facts of experiment, even on the most human of the lower animals, and do not, therefore, share my own very decided convictions as to the localisation of special sensory regions, will take the facts I have adduced into careful consideration, and, when opportunities occur, investigate the conditions as to sensation in cerebral disease, with the accuracy and thoroughness which are much needed in order to clear up the doubts and obscurities which still surround this important question.

CROUP: DIPHTHERIA: TRACHEOTOMY.†

By ROBERT L. BOWLES, M.D., Folkestone.

I HOPE I shall be excused by this society for so persistently bringing before it the well worn subjects of the heading of my paper. But, although these subjects have now for some years past anxiously engaged the attention of our profession, it does not appear, from the long and interesting correspondence in the *Lancet* during the year 1875, and the discussion at the Royal Medical and Chirurgical Society in the latter part of that year, that any decided opinion has been arrived at; still, the tendency of opinion (led chiefly by the authority of Bretonneau, Trousseau, Sir William Jenner, Dr. George Johnson, Dr. Semple, and others) is clearly in the direction of admitting that membranous croup is always diphtheria, *i.e.*, dependent only upon the specific contagium of diphtheria. Dr. West, whose excellent article on croup has always appeared to me to express the truth, in holding the opposite opinion, confesses that he is wavering; and there are many others in the same position as himself.

To no members of our profession is this matter of so much importance as to us who live in the provinces; especially to those of us who are in lone country districts. Croup is of more frequent occurrence in the country; and as many of us are compelled to act upon our own responsibility and act promptly, it is most desirable that we should be well supported by the authority of the leaders of our profession in any views we may feel ourselves compelled to adopt. Suppose, for example, one of us has lost a case of croup in a large country house—in the house of our best patient—that we had looked upon the case as catarrhal and inflammatory, and had treated it with tartar emetic or calomel, the family goes to tow and is there told that "such theories are exploded, that the case was certainly one of diphtheria and ought to have been treated by wine, tincture of iron, or such like remedies, and that it was no wonder the child died". The happiness of the family is gone, and the reputation of the doctor with it. It well behoves us, therefore, to give anxious consideration to this question, and to think for ourselves; we have, I think, more opportunities of making accurate and complete investigations into the origin of our cases, than

* *Medical Times and Gazette*, 1875, p. 165.

† Read before the East Kent District of the South-Eastern Branch of the British Medical Association.

our London hospital physicians, and we ought, moreover, to press our experiences and our difficulties on those gentlemen, and prevent them, if there are doubts, from laying down dogmas, that will certainly influence the public and all those members of our profession who do not take the trouble to think for themselves. To this end, then, I now again contribute a paper on croup and tracheotomy.

CASE I.—In September 1874, I was requested by Mr. Hackney of Hythe to see a case of diphtheria, with laryngeal complication; the child was in imminent danger of suffocation; tracheotomy was at once decided upon. There was a membranous patch on each tonsil, but no glandular complication, no swelling of the cellular tissue, and no history of contagion. Was this inflammatory croup or diphtheria? The operation was successful, and on the seventh day, the child appeared quite well, full of fun and mischief; on that day, the mother left it for a time, and for fun, during the mother's absence, the child threw off the flannel covering the tube; the next morning, signs of bronchitis appeared, and the child died in two days.

CASE II.—In January 1875, I was again called in by Mr. Hackney to see a case of what he, this time, called croup in a child which had taken cold, and which had not, so far as could be found, been subjected to the infection of diphtheria. It had commenced with catarrh, and bore the character of the old-fashioned croup; there was no glandular swelling or swelling of the cellular tissue. The case had been treated with tartar emetic and ipecacuanha, and was getting worse, but it was not thought justifiable to operate then; the child was to have a chance, as we had often seen cases of this nature yield to emetics. On looking into the throat, there was a small patch on one tonsil of closely adherent membrane; and then at once arose the terrible question, Is this croup, after all, or is it not diphtheria? Shall we treat the case with tincture of iron and wine, and the larynx with saturated solution of sulphate of copper; or shall we continue the antiphlogistic treatment of inflammatory croup? Yielding to authority and the tone of thought of the present day, we resolved upon the former course, contrary to the opinion we had formed before seeing the membranous patch. The next night, the child was worse, and but for tracheotomy would have died from suffocation. The child lived two days after the operation, and died from exhaustion with symptoms of bronchitis. In neither of these cases was Mr. Hackney able to obtain a *post mortem* examination.

CASE III.—On the evening of Saturday, January 8th, of the present year, I was requested, in Dr. Jervis's absence, to see a case of croup which he had been attending for four days. The history was that the child had a cold on the preceding Tuesday, running at the eyes and nose and slightly croupy cough. On Wednesday evening, the cough became more croupy. On Thursday, the cough was still more so, and the breathing slightly stridulous at times; the child was fourteen months old and teething, so the gums were lanced, and an ipecacuanha and squill mixture given, with instructions that, if the child became very croupy in the night, an emetic of ipecacuanha wine was to be given; the child did become croupy, and the emetic was administered. On Friday morning, the child was better and looking not much amiss; in the evening, croup as usual was worse; and on Saturday morning better, but the breathing perhaps more stridulous than on any preceding morning. A warm room, a steaming kettle, poultices, and other adjuvants, had been employed by Dr. Jervis from the first. On Saturday evening late, as I said before, I first saw the child, *i.e.*, four days from the commencement of the case. The croupy symptoms had become much worse and the breathing persistently stridulous, or rather, I would say, sibilant, notwithstanding the emetics. The child was prostrated by the vomiting. I carefully examined the throat, but could find no false membrane.

January 9th.—On Sunday morning, the sibilant breathing was evidently increased and not at all relieved by vomiting, which had occurred several times during the night; and now (8 A.M.) the child looked very faint and ill; the bowels had been purged three times; the motions were thin and very offensive, evidently from the medicines. Again I carefully examined for signs of diphtheria, but found no false membranes in the pharynx, and no swelling of the cervical glands or cellular tissue, or any history of contagion or bad drains connected with the illness. On the other hand, the child's nurse, the mother, and two servants, had had colds, all partaking of the laryngeal character, before the child was taken ill; and coincidentally with and subsequently to it, the grandfather and grandmother and lady's maid all had colds of a like nature. Colds were also prevalent in the town, but there was, to my knowledge, no diphtheria. Moreover, there were distinct dulness on percussion and fine rhonchus at the lower half of the right lung. The pulse was quick, but the child was so alarmed at my approach that I found it difficult to be accurate as to its number, and for the same reason I could make no satisfactory use of the ther-

mometer. I made up my mind, therefore, that I had to deal with inflammatory croup excited by catarrh; that doubtless false membrane already existed; and that, to save the child's life, tracheotomy would probably become necessary. Emetics were badly borne; but I ventured, in consequence of the presence of bronchopneumonia, to try five-minim doses of antimonial and ipecacuanha wines.

On Monday morning, January 10th, I found that even those small doses caused so much sickness and faintness that they were discontinued, and small doses of calomel were prescribed, in addition to mercurial inunction. The breathing was now very difficult and markedly diaphragmatic, whilst the intercostal spaces were depressed at each inspiration; the cough was dry, harsh, and husky; the voice thin and weak; the respiratory murmur feeble on the right side and accompanied with fine rhonchus and dulness on percussion. Late at night, Mr. Pollock arrived, and the operation of tracheotomy was anxiously discussed by him, Dr. Jervis (who had also returned), and myself. Just lately, there were some large moist *râles* to be heard in the trachea and larger bronchi, so it was thought we ought to give the child a chance of being saved the operation until the morning. Early the following morning, we found things just as they were, except that the trachea and bronchi had been cleared of their loose mucus. The child had not slept, but had suffered much from dyspnoea, and was constantly throwing itself about. It was put under the influence of a mixture of chloroform and ether; and at 9 A.M. the operation was leisurely performed by Mr. Pollock. Veins were pulled aside, and certainly less than thirty minims of blood were lost.

On the 12th, at 10 A.M., the child was comfortable and doing well, and took its food without difficulty. The skin was cool; respiration 40, pulse 160. 7 P.M.—He was sleeping quietly. Respiration 50; pulse 130, very weak. He coughed less and took but little food. He was ordered to take a teaspoonful of brandy every four hours.

January 13th. At 10 A.M., the child had taken its brandy and food well, and was much better in every respect. Pulse 140; skin cool.

January 14th. It was found that the child had taken two drachms of brandy every two hours, and was evidently slightly intoxicated, and had now been sick three times. It had had a dark greenish motion. The inunction was stopped, and the brandy was diminished to thirty minims. As dried mucus collected in the tube, the flannel was kept more moist.

January 15th and 16th. All went well, with the exception of a vomiting attack. Skin cool; pulse 124; respirations 40. He coughed more, and brought up a quantity of sticky brownish muco-purulent secretion. The right lung was much clearer; the *râles* were to be heard, but no tubular breathing.

On the 17th, 18th, and 19th, he was doing well. He looked pale and weak; coughed less. He took egg and bread and butter.

On the 20th, the tube was removed; but almost no air passed by the larynx. Violent coughing and struggling commenced. The child could get no air by the wound or larynx; for during inspiration the sides of the wound were sucked together. On expiration, false membrane was seen flapping through the wound. A fenestrated tube was immediately inserted, but with some difficulty, in consequence of its sides (it was a bivalve) catching on the sides of the trachea, pressing it backwards, and thus nearly suffocating the child. During the violent coughing and struggling, much muco-pus was expectorated. In the evening, the child was quietly asleep, breathing almost entirely by the nose. Respirations 32.

On the 22nd, the child seemed very uneasy. Although there was no dyspnoea, the tube was found to be stopped up with pus; it was removed, and its removal was followed by about half a drachm of pus and a little blood.* No air passed by the wound.

January 25th. The wound was healed; the child convalescent. The urine was examined for albumen, but there was none.

Neither in these cases, nor in two other successful cases of tracheotomy for membranous croup which I formerly brought before this society, was there any secondary paralysis.

If I might venture, gentlemen, to offer a suggestion, I would say that it would be desirable as much as possible that the discussion, which I hope will result from the reading of the foregoing cases, should be divided into two portions: 1. Whether they were cases excited by the specific contagium of diphtheria, or not; and 2. The merits of the operation of tracheotomy. I would more especially draw your attention to the first portion, which is almost daily the subject of our anxious consideration, and upon which we have to take prompt and decided action, resulting in good or evil of the utmost gravity, according as that action is right or wrong. In reference to this, I

* It is probable that this tube had not been in the trachea, but in the cellular tissue in front, and that what air did come by the tube was by the fenestra.

would just remark upon the great danger of stamping everything as diphtheria where there is found fibrinous exudation. We know that it is found as a result of scald from hot water, and I have seen a throat after the removal of tonsils that I could not have distinguished from diphtheria.

Three years ago, my coachman lost his voice, and I found a thick tough exudation over the whole of the posterior wall of the larynx. There had been bad measles in the house in which he lodged, and bad drainage. There was no glandular enlargement or puffing of the cellular tissue. I believed it to be diphtheria, and treated it as such; but it was bad for many weeks, and only yielded to iodide of potassium or warm weather. There was *no history whatever of syphilis*. The next winter, it was just in the same condition; and this year again it was like the two preceding winters, although each time he was living in different houses and under different circumstances, and no other members of his family had suffered in a similar manner. My coachman attributed it, and I now think with reason, to the exposure to cold, as he is never in any way ill excepting in the bad weather of winter.

In bad scarlatina, in bad measles, and at the end of many exhausting diseases, membranous exudations are to be found; and I think it very probable that of late years many cases have been attributed to the specific contagion of diphtheria, which really owned no such origin.

MALARIAL FEVER AT ROME.

By LAUHLAN AITKEN, M.D., Rome.

THE existence of a malarial element in the climate of Rome is so generally admitted, that it is quite unnecessary to enter into the history of the subject, to point out the foci of infection in the Campagna, to discuss the different effects of the poison, or even to mention the many varieties of malarial fever which authors describe. In this paper, I shall only deal with the effects of the malaria on unacclimatised strangers, English or American, who have been under my care. So dormant is the poison during the winter and spring months, that acclimatised members of the nationalities mentioned, who can afford to live well and to reside in a healthy quarter, are, so far as my six years' experience goes, never affected; but visitors, who are careless of consequences and heedless of the ordinary warnings, often overwork themselves in sight-seeing, become heated in the sun, and stand for hours in museums, galleries, and churches, exhausting their nervous systems, or expose themselves more directly on the Campagna, or even within the walls of the city, to a chill which results in an attack of so-called Roman fever. What this fever is the residents are often very puzzled to know, as strangers include under the generic term all kinds of ailments from a simple cold to a severe enteric fever; and it is sufficient to fall ill in Rome to be credited everywhere with being a victim of that vague disease. The result is naturally a wide divergence of views on the subject, and an alarm proportionate to the amount of confusion created. *Omne ignotum pro terribili* is the idea of all who speak of Roman fever.

That the malarial poison does produce, more particularly in the unacclimatised, a type of fever which can scarcely be classed under any such heading as intermittent or remittent, is certain. To this form the name "subcontinuous typhoid" has been given by Professor Baccelli of Rome. The term, fortunately, has not as yet become widely known; for, though the type of fever may be regarded as subcontinuous, yet, in whatever sense we take the word typhoid, the epithet is misapplied. If we regard it as used to express the group of symptoms called typhoid, or the typhoid state, my experience contradicts such an use, as none of the forty-five cases I have treated throughout have presented those symptoms which British physicians at least class under this heading. On the other hand, it is evident that Baccelli does not look on this fever as the product of the union of the malarial poison with that of decomposing excrementitious matter, as he carefully distinguishes his subcontinued typhoid from true ileo-typhus (enteric fever). Indeed, Baccelli seems to contradict himself in his lectures on the subject, as in one part he says that "the two morbid entities—the typhoid and malarial poisons—each losing its autonomy, become so fused together, but with the malarial predominating, that they give rise to the special type—subcontinuous typhoid"; while in other pages of the same pamphlet he asserts that "the subcontinuous typhoid is a fever resulting from malarial infection, pernicious as to type"; and again, "that, when a subcontinuous typhoid breaks out, every other morbid element, rheumatic, bilious, or typhoid, becomes subordinate to the malarial". It is, therefore, difficult to determine in what exact sense Baccelli uses the term typhoid; and I prefer to regard those

fevers as truly malarial, though presenting a remarkably continued course.* I am far from denying the occurrence of the combined type of fever which may appropriately be called typho-malarial. Indeed, I have treated such cases; but, as might be expected, the more severe poison very soon predominates, and the bowel-symptoms and eruption make the diagnosis of an enteric fever clear.

Etiology.—The fever to be described results, then, from malarial poisoning; the predisposing causes being, in the cases I have seen, unacclimatisation; lowered vitality from anxiety of mind, from chronic diseases, or from previous acute complaints, particularly the malarial; pregnancy and the puerperal state; or a combination of some of these; while the exciting cause in every instance I have known has been a direct chill when the body was overheated, or its power of resisting cold diminished by any such causes as have just been mentioned, or by exposure during the night, when the heat of the body is naturally lower. A few lines from my case-books will illustrate this.

E. P., a young lady aged 22, goes to an evening party after a fatiguing day's sight-seeing; dances until well on in the morning; stands, when perspiring, at the door awaiting her carriage; gets a chill, and the next day is laid up.

J. G., a gentleman aged 28, has a hard day's work after the bounds on the Campagna, arrives much overheated at one of the gates after sunset, dismounts there, and drives to his hotel in an open cab without putting on a greatcoat. Two days afterwards, he shivers, and he has a somewhat prolonged fever.

S. S., a young lady aged 17, just convalescing from bronchitis, sits at an open window one cold afternoon in December, gets chilled, and has the most severe attack yet treated by me.

The Rev. Mr. D., aged 30, reading with some Oxford students, has one of the headaches to which he is liable; and, after a long heating walk to get rid of it, he sits down about sunset on the grass outside one of the gates, and gets what proves to be a mild attack.

D. W., aged 19, a young gentleman, rising one morning in December with a stitch in his side—dry pleurisy it turns out to be—takes his cold bath as usual, does not react at all, and has also a mild attack, which masks the pleuritic symptoms entirely for more than ten days.

An exactly similar account of the origin of the complaint might be given in nearly all the forty to fifty cases mentioned.

It is certain that the young are much oftener the victims than those advanced in life, which partly arises from their greater imprudence, and partly from their greater predisposition to contract fevers. So much is this the case that, though quite as many, if not more, elderly people come to Rome, yet among my cases four only have been over forty years of age. So far as sex is concerned, the numbers have been pretty equal; and the severity of the attack has apparently depended more on the previous state of the patient than on the fact of the chill having occurred within or without the walls of the city.

Incubation.—This could not be determined in every case; but, in nearly all in which the time of getting the chill was definitely fixed, it did not extend over two or three days. In several, the first symptom—more or less decided shivering—began within a few hours. In the young lady mentioned, in whom the attack followed a bronchitis, the temperature was 102.2 deg. within seven hours from the time of the chill. In another young lady, the shivering and headache began within a few hours from the time at which she had felt cold when sitting in a draught at an afternoon tea. In one gentleman (over forty), the incubation-stage seemed much longer. He was ill for about eight days with indefinite symptoms; loss of appetite; furred tongue; urine laden with lithates; evening headache and disturbed sleep, but no rise of temperature—pointing, as I supposed, to functional liver-disorder, but quite unrelieved by the treatment adopted; when he was sent to Albano, where he became worse instead of better, and from which he returned after a few days with a well-developed attack. At what exact period of his stay at Albano the fever first showed itself, is uncertain. It may be objected, that the symptoms previous to the appearance of the fever did not necessarily constitute the incubation-stage; but I incline to think they did, from the non-specific treatment adopted doing no good at all. In the other three cases of elderly people being affected, I was unable to fix the date of the chill. Indeed, two of the patients had been under the care of other physicians before I was sent for; and in the fourth I could not definitely determine the length of the incubation, which probably varies with the age and power of resistance of the patient, as well as with the dose of the poison. General languor, an inclination to sigh and yawn, insomnia, aching pains in the muscles, and loss of appetite, are symptoms common to the incubation-period of all forms of fever.

* Although venturing to differ from Professor Baccelli as to the name of the fever, I would here express my appreciation of the great value of his communications on the subject.

Symptoms.—The fever begins usually with more or less decided shivering, but never, in my experience, to the extent of the chattering of the teeth, blueness of the lips and face, and shaking of the whole body, seen in an ague-fit. Sometimes there is only the feeling of cold water running down the back, and occasionally nothing more than a little shuddering or the sensation of goose-skin. In one young lady, aged 24, a prolonged syncopal attack was the first symptom, recurring more or less every day for about ten days at the same hour. This daily recurring faintness I saw in another young lady, in whom the fever began in the regular way with shivering. Neither of the patients had ever been subject to fainting fits, which obviously took the place of the cold stage of an ague. It may begin as a genuine intermittent, and take the subcontinued form. Baccelli asserts that it often does so, but I have never seen it amongst the strangers, though I have known it terminate both as a quotidian and a tertian intermittent. Headache is invariably present in the beginning of the attack, always frontal and quite distinguishable from the neuralgia of the ophthalmic divisions of the fifth nerve, supraorbital and ocular, which pressure on the supra-orbital notch and on the eyeball, and the attempt to rotate the eyes, often prove to exist. Occasionally, the neuralgia is occipital; and in one old lady, aged 65, violent unilateral neuralgia of the branches of the fifth and of the cervico-occipital nerves, of an intermittent character, constantly reappeared during a somewhat prolonged attack of the fever. The eyes are generally congested at the beginning, while, during the fever, the conjunctivæ become yellowish, as Baccelli also observes.

Few of the nerve-symptoms were prominent, either in the beginning or throughout the complaint. Delirium was rare and transitory, except in my two youngest patients, aged 14 and 17 respectively. Slight confusion of ideas, marked listlessness, and sleeplessness, were common to all, but no deafness apart from that caused by drugs.

Temperature.—The thermometer shows a sudden and rapid rise of temperature, after the initial symptoms; from 102 deg. to 105 deg. being very commonly found quite early in the complaint, within a few hours from the shivering, for instance; and until means are taken to diminish it, either by cold applications or by the use of quinine, this increase of heat virtually remains unchanged. During the progress of the fever, however, there seem to be rapid fluctuations of temperature several times in the twenty-four hours, and the remissions are not invariably in the morning. Indeed, the temperature in several of my patients has been lower in the evening than in the morning, and that for many days consecutively; but, as all my cases have been treated with antipyretics—quinine, usually in large doses—the charts only indicate the course of the fever thus modified.

Case of E. F., an English lady, aged 23. First seen on the evening of the second day of the fever. The case was of average severity, and there were no complications. She was treated throughout with quinine, but not quite in such large doses as usual.

Days.	M.	E.	Days.	M.	E.
2	..	102.6	12	100.0	100.7
3	..	101.6	13	..	100.1
4	..	102.0	14	..	99.2
5	..	101.6	15	..	99.0
6	..	102.0	16	..	98.8
7	..	100.6	17	..	98.9
8	..	101.5	18	..	98.9
9	..	100.5	19	..	99.0
10	..	100.5	20	..	98.8
11	..	101.4	21	..	98.8

S. S., aged 17, English. Case severe; complicated with constant vomiting at the beginning, and bronchitis from the tenth day of the fever. Subcutaneous injection of quinine from the fourth to the eighth days of the fever. Reported at length in the British Medical Journal for April 1st, 1876.

Days.	M.	E.	Days.	M.	E.
1	..	102.5	10	100.9	103.6
2	..	100.5	11	..	101.0
3	..	100.5	12	..	101.1
4	..	102.0	13	..	99.5
5	..	102.1	14	..	98.8
6	..	103.1	15	..	98.7
7	..	99.5	16	..	98.7
8	..	101.0	17	..	98.5
9	..	101.0			

A typical case ought to have the temperature indicated every few hours, but in private practice that is nearly impossible.

Circulatory System.—The circulation never seems so rapid as the rise of temperature would lead us to expect. Even quite at the beginning of the attack, the pulse is seldom more than 100 per minute, and, as soon as antipyretics are absorbed, it falls, so that it is quite usual to find the heart beating only from 70 to 90, with a temperature at from 101 deg. to 104 deg. It is nearly always quicker in the evening than in the morning, but not more so proportionately than in health. Feebleness, irregularity, and intermittency have often been observed after the

fever had gone on some time. Occasionally, there is congestion of the cutaneous vesicles of the face, neck, chest, and abdomen; and I have seen limited erythematous patches, in two or three cases, over the same parts; but there is no eruption characteristic of the complaint.

Sweating is a nearly constant symptom. As a rule, it has been moderate in amount and has come on in the early morning hours, but very often it has appeared at other times without any apparent cause. In some patients, it has been a symptom throughout; while in others, it has first shown itself towards the end of the complaint. In only a very few has it been so excessive as to require the use of waterproof sheeting to protect the bedding.

Digestive System.—The tongue from the beginning is covered with a thick white fur. I have notes of the occasional appearance of red prominent papillæ at the tip, but never of its being red all over, nor of cracks or fissures on it at any time, nor of any hæmorrhage from the tongue or gums. In one or two of the younger patients, there has been epistaxis, and the lips have bled, but not to any extent. When the patient improves, the white coating begins to disappear from the tip and edges first. The mouth is rarely dry, and patients do not complain much of thirst. The appetite is lost, but nausea and vomiting are unfrequent; though, in one severe case, vomiting was the leading symptom in the beginning of the attack. The liver and spleen are both enlarged. The former organ is congested, and Baccelli believes there is probably catarrh of the bile-ducts in many cases. I have, however, never seen jaundice; and, while the conjunctiva often becomes yellow during the progress of the complaint, the presence of bile in the urine has not been detected. The spleen is invariably somewhat larger than usual, but it seems to yield readily to the action of quinine, as only in one case did it assume great dimensions and project into the epigastrium. It was then very tender to the touch, and pressure on it excited severe retching. But though there may be exceptional cases, the rule seems to be that the spleen does not enlarge to the extent described by writers on intermittent and remittent fevers. In microscopical examinations of the blood, no excess of leucocytes has been found, or any of the pigment-particles which other observers have noticed. In the bowels there is little noteworthy. Constipation seems the rule, necessitating purgatives, and sometimes very strong purgatives. When there has been diarrhoea, it has been of a bilious character; more bile escaping from the congested liver, or the reabsorption in the bowels being more sluggish. No pea-soup stools occur, nor general or localised tenderness on pressure over any part of the abdomen except the epigastrium, or over the liver or spleen if enlarged. Occasionally there is slight meteorismus, but, as Baccelli notices too, it is never persistent. At the beginning, the urine is acid, scanty, of high specific gravity, and filled with urates. As soon as treatment takes effect, it becomes neutral or alkaline, clear, and with only slight deposit of epithelium and of phosphates, but the chief microscopic feature is the nearly constant presence of pigment-particles. Analyses of urea have been made, but are not yet worth reporting. Albumen has scarcely ever been found; a fact in marked contrast to my observations in enteric fever here.

Course.—This fever seems to have no definite duration. The shortest of my cases—a gentleman aged 39—was apyretic on the seventh day, and continued so; but I suspect he had fever two days before I was sent for. The longest case lasted thirty-six days; but this was due to a relapse, as the patient, a young lady, was without fever from the seventeenth to the twenty-second day. The termination of the case is often indicated by the gradual cleaning of the tongue, by the fever assuming a true remittent or intermittent type, and by an increase of the perspiration in the morning hours; and if this be excessive, the temperature has been frequently found subnormal at all hours of the day. Very rarely do anything like critical deposits occur in the urine.

Complications.—Two patients had unilateral pleurisy with considerable effusion, which, however, disappeared quickly. One—a lady aged 51—had pleurisy and endocarditis, and only slowly recovered. One patient had bronchitis, and one thrombosis of the left leg. None of my own patients had any other complication; but one lady, aged 28, whom I attended as consulting physician ten days after the fever began, miscarried at the eighth month, and died from *post partum* hæmorrhage. Baccelli describes complicated cases as special forms of the fever—the bilious, the rheumatic, the pneumonic, etc.—but I know nothing of these.

Prognosis.—None of the forty-five patients treated throughout by myself died; and only three—the two youngest treated and the lady who had the complication with pleurisy and endocarditis—were very dangerously ill. One young gentleman, aged 18, whose temperature was 102.4 deg., insisted on getting up on the tenth day, and went out for a walk. He repeated this on two subsequent days, was none the worse, and was apyretic on the fourteenth day. Some of the patients

had been delicate, and were travelling by the advice of physicians, but none had any well defined chronic malady. In uncomplicated cases, therefore, in average health, the prognosis is very favourable.

Diagnosis.—The only other fever with which this could easily be confounded is a mild enteric fever, as they certainly have some features in common; but the short incubation, and the rapid rise of temperature even to 104 deg. soon after a chill, seem almost absolutely to exclude the idea of sewage-poisoning. The response of the fever to treatment, its indefinite duration, and the total absence of any eruption like that of enteric fever, with the negative character of the bowel-symptoms, seem quite as certainly to disprove the existence of any specific intestinal glandular lesions, even if the *post mortem* examinations made by others were not quite satisfactory on the point, hyperæmia of the Peyerian patches being the utmost that is found; while the frequent termination of the cases as remittents, or even as genuine quotidian and tertian intermittents, seems quite as eloquently to prove its origin from malaria alone. Enteric fever, indeed, is as marked in its features in Rome as in London. I have lost five out of fifteen cases, two from bowel-hæmorrhage; and the abdominal symptoms have been prominent in all. It is obviously essential to distinguish the two fevers, as an early and energetic specific treatment undoubtedly lessens the severity and shortens the duration of the malarial form; whereas, if neglected in the beginning, it becomes rebellious to remedies and very tedious in its course. The prognosis, too, is very different, and it is probably from the two fevers being constantly confounded together that Rome has acquired its unenviable reputation for typhoid; whereas, as I have shown in the *BRITISH MEDICAL JOURNAL* for September 16th, 1876, fewer cases of enteric fever originate in Rome in proportion to population than in any other large continental city.

The subcontinued type of the fever described, and the rapid variations of the temperature, distinguish it clearly from the malarial remittents of British authors; but it frequently passes into a remittent fever. For other fevers it could not well be mistaken.

Treatment.—When the ordinary antipyretic mixtures have been given in the beginning of those fevers, they have had no appreciable effect, except perhaps in making the pulse a little slower. A good purge is usually given, the much abused calomel very often, and then quinine in some form. At first, it was given in small and divided doses: two grains every two hours, or three to four grains every four hours. But most of the patients have had the drug in one or two large doses in the forenoon, or at least before 2 P.M., if possible, although the thermometer too often fails to show a remission at that time. Unless the patient's objections are insurmountable, the quinine is given in solution. Formerly, it was combined with bromide of potassium, or alkaline mixtures were given at the same time. Now, I almost always use the hydrobromic acid, as recommended by Dr. Milner Fothergill. Both the bromide and hydrobromic acid counteract to a certain extent the unpleasant effects of large doses of quinine; but the hydrobromic acid is much the more effectual of the two. The headache, neuralgia, malaise, and general aching pains either disappear altogether or are much alleviated, as soon as the patient comes under the influence of the quinine. It notably slackens the pulse and lowers the temperature. Fifteen grains will bring the pulse down from five to ten beats, and the temperature from one to three degrees, within two hours of its administration in solution. The average amount given in the beginning is from fifteen to thirty grains daily. I have found no patient intolerant of the remedy, even when their repugnance to it has been based on the opinions of the leading physicians of Great Britain and America. Most of them, after the first doses, are too sensible of the benefit derived to doubt the fact that the disease indicates the means of cure. If the patient will not take it in solution, it is given as a powder in a rice-wafer, followed by some drops of nitric or hydrochloric acid. Quinine enemata have rarely been used, and subcutaneous injections of the drug were necessitated in only one case by constant sickness, and by the young patient not tolerating the enema-syringe. Cold applications, too, are always used. Frequent cold sponging of the body, the ice-bag to the forehead and back of the head, iced compresses over the spleen, are all useful. Tepid baths rapidly reduced in temperature were required in a boy aged 14, who was very delirious. They were given eight or ten times with excellent results. The diet is restricted to fluids; and stimulants are seldom needed, except during convalescence. Salicylate of soda has been given in doses varying from thirty to ninety grains at short intervals; and, in the forenoon hours, if practicable, sixty to ninety grains have nearly the same power in reducing temperature as fifteen or twenty grains of quinine, but the effect seems to disappear more rapidly. Salicin, tincture of eucalyptus, and Warburg's tincture, have also been used; but little reliance is placed on anything but quinine.

Recurrence.—It is uncertain whether this type of malarial fever tends

to recur. In those patients whose history, subsequent to the fever, is known, it has not done so. If it did, it would probably be as some variety of intermittent fever. No injurious sequelæ have come under my notice.

Frequency of Occurrence among Visitors.—It is obviously impossible for any one physician to give an exact idea on this point. The fever goes by so many different names—Roman, bilious, nervous, gastric, typhoid—that it is very difficult to know when it is the type described that is meant. Besides, there are no proper data for calculating the number of visitors in a season.

CLINICAL MEMORANDA.

REMARKS ON SCARLATINOID ERUPTION IN THE AGUISH DISORDERS OF CHILDREN.

IN Dr. Cheadle's interesting paper on the occurrence of ague in young children in London (*BRITISH MEDICAL JOURNAL*, April 13th, 1878, p. 523), he remarks that he had never previously observed a general scarlatinoïd eruption in young children, nor can discover any instance of its occurrence on record. I have never witnessed so general an eruption as existed in his first case; but I have long been aware that cutaneous hyperæmias occur in aguish disorders, such as I have termed malarioïd remittent, having more or less resemblance to scarlatinal rash; and I referred to them in my work as roseolous. In the case mentioned at page 765, the child, aged $3\frac{1}{2}$, became red all over, legs, face, and all, two or three times a day. She had several pyrexial attacks in the twenty-four hours, and I found her temperature in one of them to be 102.2. In the following case, which occurred to me in 1869, the cutaneous hyperæmia was usually a less striking feature than the anæmia; but both phenomena were well marked, and are both attributable to the same cause, just as the cold and hot stages of a common ague are.

E. B., aged 3, admitted October 14th with herpes of the face, was described as having suffered for one or two years with seizures occurring two or three times a day, in which she turned "deadly white"—"as white as a child laid out for dead". She was also very restless at night, very feverish, and "burned" very much: Usually the burning affected the hands; but on November 24th her chest and face were quite red, as in scarlatina, for three hours; and about the middle of December she was one day quite prostrate and scarlet all over, slept all day until the evening, then woke up, lost her redness, and appeared quite well. Beside the vasa spasm and paresis, she had fits of panting and difficulty of breathing, lasting several hours or even a whole day. These were probably analogous attacks of bronchial spasm. In general condition, she was languid and drooping, and her flesh was flabby. With citrate of iron and quinine, five grains three times a day, administered for three months, she improved steadily, and completely recovered. In such a case as this, the diagnosis of malarioïd remittent was sufficiently plain; and usually the rash is, I think, more suggestive of roseola than scarlet fever. Yet, in some cases, for a time doubt may prevail, especially should there happen to be some sore-throat.

I have no note as to whether this child had ever resided in a malarious district; but that London is capable of giving rise to aguish disorder is, I hold, certain. In addition to the evidence given in my work at page 761, I may mention the case of a student who had never had ague, or been in the way of it, before he came to London, where he had several attacks, and could not get rid of it until he left. Another case was that of a young lady who always lived in a high dry locality, except that she spent one night at Stratford near London. She had well-marked ague for three or four weeks, and felt its effects long afterwards. Jaccoud's experience of Paris is quite similar.

C. HANDFIELD JONES, M.B.

STRAPPING THE CHEST IN THE TREATMENT OF CHRONIC PULMONARY CONSUMPTION.

IN private practice, I have lately had a case of pulmonary consumption in which great benefit was produced by strapping the upper part of the chest. The patient was a female aged 33, the wife of a tradesman; she had had one child. The disease apparently began, as chronic pneumonia of the apex, in February 1877; and when I was first consulted, exactly a year afterwards, there was sufficient evidence of a cavity at the top of each lung, and the constitutional symptoms were very grave. The case was clearly hopeless; but at first there was a marked improvement from the internal use of the hypophosphite of lime, and from the external application of strips of soap-plaster, ex-

tending three inches below the clavicle in front to halfway down the chest behind. The plaster was put on with considerable firmness, and each strip was about an inch broad. My patient spoke gratefully of the comfort and support which this simple plan afforded her, and the cough was strikingly lessened. Unfortunately, the cold weather at the end of March caused a sudden exacerbation of disease, and death ensued after a short period of dyspnoea and other suffering.

The method of strapping the chest in various pulmonary diseases was recommended by Dr. F. T. Roberts some years ago in the *Practitioner*, and again in his *Handbook of the Theory and Practice of Medicine*. He applies both vertical and transverse pieces of plaster, some of the latter being placed horizontally and others obliquely; and if there be any marked depressions above or below the clavicle, he fixes pads of cotton-wool in the hollows beneath the plasters. For obvious reasons, the transverse strips are not so easy to apply in the female; and my patient was quite contented with the vertical strips, as she found a single cross strip above the breast apt to get wrinkled and uncomfortable.

Dr. Roberts has explained the objects to be aimed at by this treatment; the chief of which are the keeping of diseased structures in as quiescent a state as possible, and, by a limitation of the chest-movements, it is attempted to check an overactive circulation. One result (not noticed by Dr. Roberts) may be this: by supporting weak ribs and weak intercostal muscles, the chest-walls are kept more together, and therefore less work is required of the ordinary muscles of respiration; and everything which economises muscular force must help to maintain the patient's strength.

JOHN K. SPENDER, M.D.Lond., Bath.

NOTES ON A CASE OF LARDACEOUS DISEASE.

PERHAPS the following case may be deemed interesting; firstly, for the fulfilment of the law of its course as well as the law of its onset; secondly, for the side-issues raised (a) as to its origin in nerve-change, or otherwise; (b) as to its bearing on prognosis; and (c) as to the particular part played by the non-expectorated lung-discharges; and thirdly, it is interesting from the fact that until within three weeks of death, the patient never or rarely owned to any feeling of illness. At twelve years of age, I. T., whose mother died in decline, was a fair, dreamy-looking, blue-eyed girl, with a clear delicate skin and fine light hair. She came under notice in 1874. In June 1875, she suffered from an ulcer of the cornea, with much tearing and fear of light; but, aided by atropine, warm fomentations and bandages, etc., the eye got well again, carrying but little trace of the past mischief. In July 1876, the top of the left lung broke down; and for about three months, a destructive inflammation never left that part; the thermometer registering, whenever placed under the tongue, temperatures varying from 99 deg. Fahr. to over 103 deg. Fahr. There were, moreover, during this time, attacks of diarrhoea, night-sweats, a pulse often of an almost empty vessel, and nights disturbed by cough. The left chest plainly lagged behind its fellow in breathing; the part under the collar-bone looked fallen in; and gave out, on tapping, the usual muffled note. If, as a set-off against these bad signs, we put that for the greater part of the three months she took a good deal of food, and also that, in August, she walked two miles, we have grounds enough for a prognosis. In September, the temperature being 102 deg. Fahr., I told one who was interested in the case that it was not at all likely the girl would live to see Christmas-day. Soon after this, the temperature began to fall, and flesh and strength to be gained; and many weeks before Christmas 1876, all active mischief was gone. One point I have not named: she never spat after coughing unless she was made to. Of drugs, she took hypophosphite of soda for a time, bark and cod-liver oil the whole time, and also iron for a time. She had a morphia and hydrocyanic acid linctus to take when required. She was allowed plenty of new milk and plain food; but no stimulants, because they did not agree with her. Through the whole of 1877, she did not require any attendance, though she sometimes had a bottle of her linctus. In January 1878, she came to me with shingles; and this set me wondering whether any kinship ran through the shingles, the ulcerated cornea, and the ulcerated lung; whether they were but different expressions of a like faulty nerve-influence; for changes in the highest of organised tissues would seem likely to be an early factor in the sum of those changes which make for an early general death. But this by the way. A fortnight afterwards, her cough began to trouble her again. She passed a great deal of urine, both in the day and in the night. Her legs, too, had taken to swelling; so I was called in. I found her up and about. The face was a little puffed, but her cheeks wore the look of health. The legs, always rather thick, were swollen. On listening with the stetho-

scope over the dull upper part of the left lung, and asking her to say "One, two", the somewhat punch-like "One, two", was heard, followed by "Whiff, whiff", like a sort of whispered echo, first "One, two", then "Whiff, whiff". There were creaking sounds at the apex of the right lung. Temperature 99 deg. Fahr. The urine coagulated to about one-fourth. The microscope showed several long, wide, straight tube-cases, and a few pus-corpuscles. For the next month, or at least up to March 7th, she continued to get about; and the chief troubles she had to fight against were: dropsy, which was met by iron, sulphate of potash, acetate of potash, and acetate of ammonia; diarrhoea, which was met by leaving off the sulphate and acetate of potash; sickness, which was met by a bismuth mixture; cough, which was met by a morphia linctus; and weakness, which was met by port wine, animal food, and new milk. But on March 7th, 1878, the urine became scanty; and two wineglassfuls of decoction of scopolarium morning and night, with a quinine mixture and an iron mixture given alternately at two-hour intervals through the day, failed to mend matters long. By March 20th, no urine was passed except what might escape when the bowels were moved. On the 21st, there was a slight convulsion; and from this time the dropsy ceased to trouble, while death threatened by a diarrhoea with blood, on the one hand; and by fits and head symptoms, on the other. The diarrhoea was checked by sulphate of copper, and the head-symptoms were met by a milk-diet; but she died on March 30th.

S. WILSON HOPE, Petworth, Sussex.

ARTIFICIAL RESPIRATION IN SUSPENDED ANIMATION.

I OBSERVE that this subject is just now engaging the attention of the profession pretty extensively, owing to a new method of procedure being advocated. This method is exactly the mode of procedure I have pursued for the last eighteen years in the case of infants born in a state of suspended animation. I may have been remiss in not having placed my course of action before the profession long since; but, as I commenced these tactics without any consideration on my part, and without laying out for myself any special line of procedure, I thought it more than likely that very many, if not all, of my professional brethren would be found to practise similar methods, and that hence what to me might seem original would turn out to be in general practice. I have not had to do with suspended animation in the adult, so do not know if I should have resorted to similar tactics in the more mature being. For the time above indicated, on a child being born in this state, I have been in the habit, both before and after the severance of the umbilical cord, of placing one hand on each side of the chest and using steady gentle pressure, thus approximating the sides of the thorax sufficiently to allow considerable expansion on the removal of my hands (which I do just then), from the elasticity of the parts in returning to their natural position. In a few cases where I have found the resumption of the natural position slow, I have used a little gentle pressure over the sternum, which invariably sends out the ribs at once. By repeating this with sufficient frequency, in imitation of the process of breathing in the young infant, together with clearing out the mouth and fauces, and looking after the position of the tongue, also with a little douche of cold water now and then, I have, I believe, been rewarded with more than usual success.

I do not recollect having lost a single case in which there was the least sign of animation, although I have been asked to desist by professional nurses and relatives. In some of these cases, while I clean out the fauces and change the position of the tongue or body with one hand, I carry on the respiration with the other by using the counter-pressure of my thumb, grasping, as it were, the front and sides of the thorax in my hand and tightening or relaxing my grasp as required, just as one would do with an elastic air-ball.

I hope these few short remarks on my mode of procedure in these cases will not be considered obtrusive, and that they will assist in establishing what, I believe, will be found a better mode of procedure in these cases.

JOHN MARTIN, L.K.Q.C.P.I., L.R.C.S.I.,
Senior Medical Attendant, Belfast Dispensary.

WE often receive queries as to the subject of preparation for the Public Health Service, which has now become an important career for medical men. We are requested to mention that a course of lectures by Dr. W. H. Corfield on Public Health will commence on Thursday next, at 4 P.M.; and that it will be especially suited for those who are intending to compete for State Medicine certificates. We may also state that the hygienic laboratory of University College is open for the necessary practical work, and that two of the laboratory students have lately gained certificates in sanitary science.

GENERAL COUNCIL

OF

MEDICAL EDUCATION AND REGISTRATION.

SESSION, 1878.

Tuesday, April 16th.

Dr. ACLAND, President, took the chair at 2 P.M.

Deputation from the Obstetrical Society.—In accordance with a resolution passed at the Council's meeting on April 12th, 1878, a deputation from the Obstetrical Society attended, composed of Dr. West (President), Dr. Barnes, Dr. Priestley, Dr. Aveling, Dr. John Williams, and Dr. Murray. Dr. WEST explained the views of the Society, and enlarged on the scheme proposed by it.

The following are the principal provisions of the scheme.

1. No woman, unless her name is placed on the Register, shall hereafter be allowed to call herself a duly qualified, legally qualified, or registered midwife; or to use any name, addition, or description implying that she is duly registered; and every woman so doing shall, upon a summary conviction for any such offence, pay a sum not exceeding £5. No woman shall be entitled to recover any charge in any court of law for attendance or services as a midwife, unless she shall prove at the trial that she is duly registered.—2. All women at present practising as midwives may be placed on the Register on production of a certificate of moral character from some magistrate, clergyman, or other minister of religion in the town, parish, or hamlet in which she lives, and of a certificate of competence from some registered medical practitioner, personally acquainted with her, on payment of five shillings for the expenses of registration. (Fraudulent registration to be a misdemeanor, punishable with imprisonment for a term not exceeding twelve months.)—3. All women placed on the Register shall receive a numbered certificate, corresponding to the number on the Register; the possession of which shall alone render them eligible for holding any public appointment as midwives.—4. A register, containing particulars of name, age, civil state, and residence of each midwife, with a number corresponding to that on each certificate, shall be kept by the Senior Medical Officer of Health in the City of London, and in each assize town throughout England and Wales (with certain exceptions).—5. Each district registrar shall make an annual return to the Registrar of the General Medical Council of the names and addresses of registered midwives in his district, and also of the names and addresses of those registered each year; and it shall be the duty of the Registrar of the General Medical Council to keep such register, and to render it accessible to all applicants. Any registered midwife may, on the payment of five shillings to the registrar of the district in which she lives, receive from him a certificate which shall enable her to have her name transferred to the register of the district to which she removes.—6. The registration towns in each district shall also be the towns at which examinations of midwives shall be held at least twice in the year.—7. All complaints of malpraxis, or of immorality in the exercise of her calling, shall be made to the registrar of the district in which the offence is alleged to have been committed; and he shall thereupon summon the members of the examining board of such district to consider the complaint; and it shall be competent for them to send a report with their recommendation on the subject to the General Medical Council, who may, if they think fit, suspend her for a time, or remove her name from the Register. Any midwife continuing to call herself a duly qualified, or legally qualified, or registered midwife during the time of her suspension, or after her name has been removed from the Register, shall be liable to such punishment as is referred to in Regulation 1. If any registered midwife shall be convicted in England or Wales of any felony or misdemeanor, it shall be the duty of the district registrar to communicate the fact forthwith to the General Medical Council, which shall cause her name to be removed from the Register, and send her notice of such removal.—8. The certificate conveys no right to the midwife to practise, or to be registered, as a medical practitioner. Any registrar who shall wilfully make, or cause to be made, any falsification in any matter relating to the Register, shall be deemed guilty of a misdemeanor.—9. Every woman applying for admission to examination in order to be placed on the Register as a midwife, must bring proof of being not less than twenty-one years of age, and of good moral character, as certified by a magistrate, or by a clergyman, or by some other minister of religion, in the town, parish, or hamlet in which she lives.—10. She must satisfy the examiners that she can read

writing as well as printing easily; that she can write legibly; and that she can do easy sums in the first four simple rules of arithmetic.—11. She must bring written proof from the medical officer or officers of some hospital or workhouse infirmary of having acted as a nurse there to his or their satisfaction for a period of three months, or from some duly qualified medical practitioner of having been engaged for six months under proper medical supervision in attendance on the sick at their own homes. She must bring written proof of having been a midwifery pupil for three months in some lying-in hospital, where instruction is given by the medical officers, or in the lying-in ward of a workhouse for six months, or of having attended under the supervision of some medical practitioner or registered midwife at least twenty-five labours.—12. She must pass the required examinations.—13. An examining board for midwives shall be appointed in each registration town throughout England and Wales.—14. The board shall consist of the senior medical officer of health for the town or district, *ex officio*, and of four other medical practitioners, of whom two shall, if circumstances will permit, be the two senior medical officers of the lying-in hospital, hospital, infirmary, or dispensary in the town, and the other two the two senior medical practitioners in the town or registration district, their seniority being determined by the date of their registration as medical practitioners. If any of these four shall be wanting, or shall decline to serve, the remaining members of the board shall fill up the vacancies from practitioners in the town or registration district; and if all four shall be wanting, or shall decline, the vacancies shall be filled up by the senior medical officer of health.—15. Three must be present to form a quorum.—16. The examination shall be partly written, partly oral. The object of the written examination shall be to ascertain that the candidate is possessed of a moderate elementary education. The oral examination shall be the test of professional knowledge; but it shall be in the power of the examiners, when they see fit, to propose questions to be replied to in writing.—17. This examination shall test the candidate's knowledge on certain subjects mentioned below, and no alteration shall be made in the nature of the examination instituted without the previous approval of the Medical Council, who shall have power from time to time to alter or modify such examinations as to them may see fit.—18. (Suggests the subjects of examination.)—19. The fee for the examination shall be £2. Rejected candidates shall have 30s. of their fee returned.—(The remaining paragraphs refer to the duties of midwives.)

The PRESIDENT asked how far the Medical Act Amendment Bill agreed with the scheme proposed by the Society.

Dr. WEST said that the Bill and the scheme were not contradictory; but the former gave only general principles and did not enter into details. The idea was, that the details in it should be arranged by the Medical Council with or without the assistance of the Obstetrical Society. He thought the registration fee named in the Bill to be too high, and beyond the means of the class of persons who became midwives. There was no provision for those claiming registration on the ground of having acted as midwives before the passing of the Bill. The Society objected to the permissive power to form local boards; it would be inoperative. He thought that the printing and publishing of a complete register would be expensive and unnecessary; local registers would be sufficient, if means were adopted for the identification of the midwives by means of numbers.

Mr. SIMON asked whether, if a midwife were registered for a county, and she went elsewhere, her certificate would still be valid if endorsed with a *visa* on the part of the local authorities. Would a central register be necessary?

Dr. WEST thought that, if local registration were properly conducted, a central register would not be very essential.

Mr. SIMON asked if the proposed removal of midwives from the register on account of malpraxis included cases of simple breach of regulations.

Dr. WEST thought that the proposal referred to cases of brutal ignorance—such as tearing out the intestines and allowing fatal hæmorrhage without calling in medical aid. The propagation of puerperal fever by carelessness might also come under the same head.

Dr. QUAIN asked who was to investigate charges of malpraxis.

Dr. WEST said this would be the duty of the local board in each district. He did not think that it would be a serious addition to the duties of the Medical Council to decide on such cases, as they would have received a report made, after thorough inquiry, by the local board.

Dr. HUMPHRY asked whether the plan of appointing examiners proposed in the Medical Act Amendment Bill was not preferable to appointing a board of practitioners in any particular district.

Dr. WEST said that medical men in the country towns would have a large local reputation, and their certificates would be more valued in

the locality than those of practitioners in London. He thought, also, that it would be almost impossible to get men engaged in large practice to travel about the country for the purpose of examining midwives.

Dr. ROLLESTON asked if the duties of the Council with respect to cases of malapraxis would be very onerous.

Dr. WEST did not think that they would. It would be only in grave cases that the Council would be troubled.

Dr. ANDREW WOOD asked if it were proposed to restrict the scheme to England and Wales.

Dr. WEST replied that the Obstetrical Society had referred to England and Wales alone, because its operations were confined to that part of the United Kingdom. But the Society had no desire to restrict the scheme.

Sir JAMES PAGET asked what would be the number of midwives to be registered.

Dr. AYLLING thought that there would be about 11,500 in England and Wales.

Mr. MACNAMARA thought that the scheme could be carried out in Ireland.

Dr. AYLLING said that the Presidents of the Obstetrical Societies in Edinburgh and Dublin had expressed their readiness to co-operate.

After some further conversation, the deputation retired.

The Medical Act Amendment Bill.—The Council went into Committee for the further consideration of the Medical Act Amendment Bill.

On the proposal of Mr. SIMON, seconded by Dr. STORRAN, the section of the report of last year's Medical Acts Committee, relating to the Proposals of the Obstetrical Society with regard to Women acting as Midwives in England, was read. (See BRITISH MEDICAL JOURNAL, June 2nd, 1877, page 680.)

Mr. SIMON said that, as Chairman of the Medical Acts Committee of last year, he was prepared to express sympathy with the general intention of the Obstetrical Society, though he differed from it with regard to some points. The gist of the recommendations of the Committee was to lay stress on local rather than on central action. He thought that the Lord President's Bill tended to impose duties on the Council which it could not well execute. It should not be called on to institute examination-rules, and a system of central registration would be very expensive. There was already very great difficulty in keeping the *Medical Register* correct; there were numerous complaints of errors. Now, a medical practitioner was a tangible object and might be traced; but a midwife, being a comparatively less fixed and less known person, easily escaped notice. The registration fee of £5 mentioned in the Bill would be quite impossible for the class of persons of whom midwives consisted. The Council could scarcely undertake the duties of central registration. It was also suggested that the Council should have a disciplinary authority; but he thought that the local authority should be competent for this rather than the Council, unless the latter had the machinery for holding local inquiries. The responsibility which the Bill proposed to throw on the Council was very great. He moved:

"That the Council adheres to the opinion which it expressed last year, in accordance with what it regards as the general intention of the proposals of the Obstetrical Society, that legislation for the following two objects would be desirable: 'firstly, that means under legal sanction should be provided for giving credentials of qualification to competent midwives; and, secondly, that the lives of women in labour should, as far as possible, be protected from the incompetent.'"

Sir WILLIAM GULL seconded the motion. An attempt on the part of the Council to make examination-rules for midwives would fail. It would be much better to delegate the examinations to medical men practising in the localities, who would be more likely to have knowledge as to the characters, etc., of the women, than strangers coming from a distance. The plan of local examinations, however, should be under the general control of the Council, who might see how it would work, and make any alterations that might be necessary. Local registers would be sufficient for all the purposes mentioned in the Bill.

The motion was carried.

The Committee then proceeded to discuss Clause 24 of the Bill.

Mr. SIMON moved, and Sir W. GULL seconded:

"That the Council, having regard to its own special purposes and organisation, and to the resources of its office, could not undertake to initiate arrangements (which must, for the chief part, be local) for the examination, licensing, and registration of midwives throughout the United Kingdom, nor accept such administrative responsibilities as would attach to any central authority which might purport to act in control of the local arrangements for those purposes; but that the Council would willingly, if so desired, provide examination-rules for

the assistance of administrative authorities, local or central, which might be appointed for the purposes of the law."

Dr. HUMPHRY moved, as an amendment, and Mr. TEALE seconded: "That Section i of Clause 24 be in substance approved."

Dr. FERGUS called attention to the resolution passed on April 13th against the framing of examination-rules by the Council.

Dr. ANDREW WOOD said that the Council had last year reported that a system of registration of midwives should be provided; and the Government had inquired as to the means of carrying it out, and had proposed that the Council should be the controlling power. But he did not think that the Council should be required to originate the details of a scheme.

After some remarks from Sir W. GULL, Dr. ROLLESTON, Dr. A. SMITH, Mr. SIMON, Dr. HUMPHRY, and Dr. QUAIN, the amendment was carried—one member only voting against it. It was then put as a substantive motion, and carried.

The Council then resumed.

Removal of Names from the Register.—The Registrar was directed to remove from the *Medical Register* the names of John Baxter Langley (M.R.C.S.Eng. 1843), who was reported by the Secretary of the Royal College of Surgeons of England to have been removed from being a member of the College, in consequence of having been convicted of fraud and sentenced to eighteen months' imprisonment with hard labour; of John Campbell White (M.R.C.S.Eng. 1867, L.S.A. 1868, L.R.C.P. Ed. 1868), who had been convicted of attempting to procure miscarriage and sentenced to five years' penal servitude; and of Owen Patrick O'Hare (M.R.C.S.Eng. 1854, M.D. Qu. Univ. Irel. 1855, L.A.H. Dubl. 1862), who had been convicted of a felony and sentenced to twelve months' imprisonment.

The Medical Act Amendment Bill.—The Council again went into Committee on this Bill; and the following resolutions were adopted.

Moved by Dr. HUMPHRY, and seconded by Dr. AQUILLA SMITH:

"That Section ii of Clause 24 of the Bill be in substance approved."

Moved by Dr. HUMPHRY, and seconded by Sir JAMES PAGET:

"That, in the opinion of this Council, it is not necessary that a central register of midwives should be kept, but that there should be local registers, and that the duty of keeping them should devolve upon the authorities having power of government in the several places in which the examinations are conducted."

Moved by Mr. MACNAMARA, seconded by Dr. AQUILLA SMITH:

"That the word 'midwifery' in lines 2 and 5 of Section iii of Clause 24 be changed to 'as a midwife', and that the same change be also made elsewhere throughout the Bill."

Moved by Dr. HUMPHRY, and seconded by Sir JAMES PAGET:

"That Sections iii and iv of Clause 24 be modified in accordance with the foregoing resolution, and that it be provided that a certificate of good character be required in the case of those who present themselves for examination or registration."

Moved by Dr. HUMPHRY, and seconded by Sir JAMES PAGET:

"That Section v of Clause 24 be in substance approved."

Moved by Dr. ROLLESTON, and seconded by Sir JAMES PAGET:

"That the following be in substance an addition to Section v of Clause 24: 'Persons not upon such a register shall not be eligible for public appointments as midwives.'"

Moved by Dr. HUMPHRY, and seconded by Sir JAMES PAGET:

"That Section vi of Clause 24 of the Bill, to the end of the Subsection (i), be in substance approved."

Moved by Sir WILLIAM GULL, and seconded by Dr. ROLLESTON:

"That, instead of Subsection ii of Section vi of Clause 24, the following be substituted: '(ii) The register of midwives shall from time to time, and at least once a year, be printed, published, and sold in the several districts of the United Kingdom, as directed by the General Medical Council from time to time; and copies of these registers shall be forwarded to the Medical Council on the 1st of January in each year.'"

Moved by Dr. HUMPHRY, and seconded by Sir JAMES PAGET:

"That lines 28 to 40 of Section vi of Clause 24 be in substance approved."

Moved by Dr. HUMPHRY, and seconded by Sir JAMES PAGET:

"That, with reference to Section vi of Clause 24, the Council is of opinion that the duty of prosecuting under this Clause should devolve upon the local authorities specified under Section v."

Moved by Dr. ANDREW WOOD, and seconded by Dr. AQUILLA SMITH:

"That Clauses 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 be in substance approved."

Moved by Sir JAMES PAGET, and seconded by Dr. ROLLESTON:

"That the attention of the draughtsman be called to the first and third paragraphs of Clause 22 of the Bill."

Moved by Dr. ANDREW WOOD, and seconded by Sir JAMES PAGET:

"That paragraph 4 of Clause 22 be in substance approved."

Moved by Dr. ANDREW WOOD, and seconded by Dr. PYLE:

"That the attention of the draughtsman be called to paragraph 5 of Clause 22."

Moved by Dr. ANDREW WOOD, and seconded by Dr. A. SMITH:

"That paragraph 6 of Clause 22 be in substance approved."

The Council then resumed, and adjourned.

Wednesday, April 17th.

Dr. ACLAND, President, took the Chair at 2 P.M.

Deputation on the Medical Act Amendment Bill.—The PRESIDENT stated that a deputation had been received this morning, at 11 o'clock, consisting of the following gentlemen: Dr. Waters (of Chester), Chairman of the Medical Reform Committee; Dr. Davey (of Bristol); Dr. Wade (of Birmingham); Dr. Stewart (of London); Dr. Leech (of Manchester); Mr. Wheelhouse (of Leeds); Mr. Nicholson (of Hull). They were received by himself and the following members of the General Council: Sir James Paget, Dr. Rolleston, Dr. Pyle, Dr. Storrar, Dr. Andrew Wood, Mr. Macnamara, Dr. Leet, Dr. Apjohn, Sir Dominic Corrigan, Dr. Quain, and Mr. Teale. The PRESIDENT informed the Council that the deputation had fully laid before the members of the Council the views of the deputation as to the constitution of the General Medical Council. Of these, the chief seemed to be, that one-fourth of the Council should be elected by the whole medical profession, one-fourth nominated by the Crown, and one-half elected by the medical authorities of the United Kingdom. The number of the Council was not held to be important—that is to say, whether they were more or less than now, or the same as now. Various questions were asked of the members of the Council and replied to. The deputation were informed that the members of the Council present met to receive the statements of the deputation, and to hear their opinions; but that, as the business of the present Session of the Council was mainly the consideration of the Government Medical Act (1858) Amendment Bill, the Council might be unable to discuss, as a Council, so important a subject as that of the reconstruction of the General Medical Council. The deputation might be assured that the members of the Council would consider the statements and arguments brought before them with the utmost attention. The question was one which involved many details as well as large issues.

(A full account of the proceedings is given at page 616.)

The Medical Act Amendment Bill.—The Council resolved itself into a Committee of the whole Council, for the further consideration of the Medical Act Amendment Bill; and the following resolutions were agreed to:

Moved by Dr. ROLLESTON, seconded by Dr. PYLE, and agreed:

"That the words of Section iv of Clause 14, 'The examination rules shall provide for the admission of women to the examinations', be approved."

Moved by Mr. SIMON, seconded by Sir WILLIAM GULL:

"That after the words 'to the examinations' in Section iv of Clause 14, the following words be added, 'with such distinctions as may be judged necessary between the cases of men and women'."

Moved by Dr. ROLLESTON, seconded by Mr. TURNER:

"That Subsection (a) of Section iv of Clause 14 run as follows: 'No medical authority who, at the passing of this Act, has not granted a medical diploma to women, shall be compelled to admit a woman to examination for a qualification granted by that authority'."

Moved by Sir WILLIAM GULL, and seconded by Dr. HUDSON:

"That the attention of the draughtsman be drawn to the deficiency of power in the Council to carry out the Act in respect of examination-rules as regards women, in Section iv of Clause 14."

Moved by Dr. ROLLESTON, and seconded by Sir WM. GULL:

"That, provided there be no conjoint scheme in operation in any division of the United Kingdom, or there be no admission of women to examination for a double qualification in such division of the kingdom, it shall be in the power of the Council to establish a board for the examination of women in such division of the kingdom."

Moved by Mr. SIMON, and seconded by Mr. MACNAMARA:

"That Subsection (b) of Section iv, Clause 14, be omitted."

Moved by Dr. ROLLESTON, and seconded by Sir WM. GULL:

"That, in place of Subsection (b) of Section iv, Clause 14, of the Bill, the following be substituted: '(b) They shall secure that in the cases of women desirous of obtaining a legal qualification as practitioners in this country, the medical education, evidence of which is required by the examining board, shall have been conducted entirely apart from that of males. (c) They shall secure that the examination

of female candidates, though conducted by the examining board or boards appointed for the examination of male candidates, shall, nevertheless, be conducted entirely apart from the examinations of male candidates'."

Moved by Dr. ROLLESTON, and seconded by Dr. QUAIN:

"That the following Subsection be added to what is set forth in the foregoing resolution:

"(d) That women who pass any examination giving a legal qualification shall have their names entered on a separate register'."

Dr. ANDREW WOOD required that the names and numbers of those who voted for and against the motion respectively, and of those who did not vote, be taken down.

Majority. 10.—Mr. Bradford, Dr. Rolleston, Dr. Pyle, Dr. Haldane, Mr. Macnamara, Dr. Leet, Dr. Apjohn, Dr. Quain, Dr. Fergus, Dr. Hudson.

Minority. 8.—Dr. Pitman, Sir James Paget, Dr. Humphry, Dr. Andrew Wood, Mr. Turner, Dr. Aquilla Smith, Sir William Gull, Mr. Teale.

Did not vote. 5.—The President, Dr. Storrar, Dr. Scott Orr, Sir Dominic Corrigan, Mr. Simon.

Absent. 1.—Dr. Pettigrew.

The following resolutions were then adopted.

Moved by Mr. SIMON, seconded by Dr. ROLLESTON, and carried:

"That the following be added to the foregoing resolution: 'Such separation of names not to imply any difference of legal rights'."

Moved by Dr. ROLLESTON, and seconded by Sir WILLIAM GULL:

"That Sections v, vi, vii, and viii of Clause 14 be in substance approved."

Moved by Mr. MACNAMARA, seconded by Dr. A. SMITH, and agreed to:

"That, in the opinion of this Council, it is not desirable to transfer to the Registrar of the General Medical Council the powers possessed by the registrars of the several Branch Councils under the Medical Act (1858) to register duly qualified persons and to receive the fees payable by such persons for such registration, and that a copy of this resolution be transmitted to the draughtsman of his Grace the Lord President's Bill, with a request that he will reconsider, in the spirit of this resolution, the Registration Clauses of the present proposed Medical Act (1858) Amendment Bill."

Sir DOMINIC CORRIGAN moved, and Dr. AQUILLA SMITH seconded:

"That Section ii of Clause 14 run thus: 'The examination-rules shall not require a candidate to adopt the practice of any particular theory of medicine or surgery'."

The motion was negatived.

It was moved by Dr. HUMPHRY, seconded by Dr. QUAIN, and agreed to:

"That, after paragraph 3 of line 15 of Clause 15, the following be added: 'But that power of withdrawal from such scheme on the part of any of the medical authorities be provided in the event of there not being an examining board in each division of the United Kingdom, as recommended by the Council in its resolution of the meeting on April 12th'."

It was moved by Dr. HUMPHRY, seconded by Sir JAMES PAGET, and agreed to:

"That Clauses 16, 17, 18, 19, be in substance approved."

Mr. SIMON moved, and Sir WILLIAM GULL seconded:

"That in line 19 of Clause 20, after the words 'both sexes', be added the words 'with distinction, if judged necessary, between the diplomas of men and women'."

The motion was negatived.

It was moved by Dr. HUMPHRY, seconded by Sir JAMES PAGET, and agreed to:

"That Clause 20 be in substance approved, but that Subsection ii of Section ii of that clause be altered in accordance with the Council's recommendation as to Subsection (a) of Section iv of Clause 14 of the Bill."

Dr. HUMPHRY moved, Sir JAMES PAGET seconded, and it was agreed to:

"That Clause 21 be in substance approved."

The Council then resumed.

Disposal of Trust Moneys.—It was moved by Dr. AQUILLA SMITH, and seconded by Sir DOMINIC CORRIGAN:

"That the following amendments be made in Section xiii of the Medical Act (1858):

"(a.) That all moneys held in trust by the Branch Councils for England, Scotland, and Ireland, and now invested in Government securities, be transferred to trustees to be appointed by the General Medical Council, and that, at the end of every financial year, the

balance to the credit of the respective Branch Councils shall be paid to the trustees aforesaid; save and except that the Branch Council for England may retain, at the end of every year, a sum not exceeding two hundred pounds, and the Councils for Scotland and Ireland a sum not exceeding one hundred pounds respectively, to enable them to pay salaries and other expenses before sufficient registration fees be received.

"(B) That all moneys payable to the respective Councils shall be to the treasurers or registrars of such Councils respectively, and shall be applied to defray the expenses of carrying the *Medical Acts 1858 to 1878* into execution in manner following: that is to say, separate accounts shall be kept of the receipts and the expenses of the General Council and of those of the Branch Councils. Returns shall be made by the treasurers of the respective Branch Councils, at such times as the General Council shall direct, of all moneys received by them.

"The expenses of the Branch Councils shall be defrayed, under the directions of those Councils respectively, out of the moneys so received as aforesaid; and the expenses of the General Council, including those of keeping, printing, and publishing the *Registers and the preparing, printing, and publishing the British Pharmacopœia*, shall be defrayed under the direction of the General Council out of the fund held by the trustees.

"[*Note.* The provision respecting the percentage rate has been omitted, and the words introduced in this amendment are in italics.]"

The motion was negatived.

It was moved by Dr. ANDREW WOOD, seconded by Dr. PITMAN, and agreed to:

"That the resolutions passed by the Council in Committee be now brought up."

"That these resolutions be in substance adopted, and that they be remitted to the Executive Committee to be arranged in order and transmitted by the Committee to the Lord President of Her Majesty's Privy Council."

Unqualified Assistants.—Sir DOMINIC CORRIGAN moved, Dr. AQUILLA SMITH seconded, and it was resolved:

"That, while the Council cannot undertake the duty of prosecuting unqualified practitioners, they, nevertheless, think it their duty to draw the attention of the Local Government Board of England to a practice which, it would appear, exists in England of practitioners in charge of medical relief districts employing unqualified assistants to act for them in the treatment of medical and midwifery cases, tending to the detriment of the public and other evils; and they would suggest to the Local Government Board of England the consideration of the rule in Ireland, that no medical officer in charge of any dispensary district is permitted to have a substitute to perform his duties unless for a limited time, and unless such substitute is fully qualified to the satisfaction of the dispensary boards and with the sanction of the Local Government Board."

Report of Finance Committee.—It was moved by Dr. QUAIN, seconded by Dr. AQUILLA SMITH, and agreed to:

"That the following Report of the Finance Committee be adopted."

Report of Finance Committee.—The report for 1877 was to the following effect (we omit the tabular statements and the references to them):

"The Finance Committee reports that the income of the General and Branch Councils for the year 1877 has been £6,035 9s. 8d., which is less than the income of the preceding year by £250 17s. 1d. The expenditure for the year 1877 has been £6,684 19s. 3d., a sum exceeding the expenditure of the preceding year by £773 0s. 1d. It will, therefore, be evident that, while the income has been less, the expenditure has been greater than during the preceding year. Comparing the actual receipts with the actual expenditure, there remains a deficiency on the year of £649 9s. 7d.

"The amount of fees paid in 1877 to the members of Council was greater than that paid in 1876 by the sum of £259 7s.; and greater than that of 1875 by £569 2s. This result is due to the prolonged sitting of the Council in 1877, which lasted for thirteen days.

"Another considerable item of expenditure has been that for printing the *Pharmacopœia*, being £488 14s., which, of course, is in progress of being refunded by the sale of the work, and which will ultimately produce a profit. There is, further, an exceptional expenditure of £250 on preparing a general index to the first ten volumes of the Minutes of the Council. The honorarium paid to the late registrar caused another exceptional increase in the expenditure of £210. On the other hand, in reference to the diminution of expenditure, it is very gratifying to observe that the attention called in the report of the Finance Committee of last year to the very large expenditure on general printing resulted in a considerable decrease, amounting, indeed, to no less a sum than £470 17s. 5d.

"During the past seven years the expenditure has, on three occasions, exceeded the income by a sum averaging £783, whilst, on four other occasions, the income has exceeded the expenditure by a sum averaging £1,006 12s. 0½d. Whilst the average income for the last seven years has been £5,798, the average expenditure for the same time has been £5,558.

"Lastly, the Committee would draw the attention of the Council to the fact that, but for the exceptional outlay of sums amounting in the whole to £948 14s., there would this year have been a balance in favour of the income of £359 4s.

"RICHARD QUAIN, M.D., Chairman."

Preliminary Education and Examination of Medical Students.—Dr. ANDREW WOOD moved, Mr. TEALE seconded, and it was resolved:

"That the following 'answers from medical licensing bodies to a letter sent to them by the Executive Committee in regard to the preliminary education and examination of medical students' be inserted in the minutes."

The letter sent by the Executive Committee to the licensing bodies was as follows.

The Executive Committee, by a resolution passed at its meeting on October 26th, 1877, ordered "That there be addressed to each of the medical licensing bodies a letter in the following terms":

"The General Medical Council, during the last session, had under its serious consideration the very important subject of the preliminary education and examination of medical students, and came thereupon to the following resolutions:

"(a) That a letter be addressed to each of the examining boards whose certificate is accepted as a test of preliminary education by this Council, directing attention to the complaints which have been made by several of the licensing bodies with regard to the insufficiency of the general education of many of the candidates presenting themselves for their examinations."

"(B) That it be recommended to the various licensing bodies to instruct their examiners in professional subjects to report to them any cases in which decided ignorance in general education has been displayed by the candidates, with the name of the board or boards before which the preliminary examinations have been passed; and that the licensing bodies be requested to transmit such reports to the Registrar of the General Medical Council."

"(γ) That it is desirable that the examination in general education be left to the Universities, and such other bodies engaged in general education and examination as may from time to time be approved by this Council, and that it be delegated to the Executive Committee to communicate with the licensing bodies on the subject."

"The complaints referred to in Resolution (a) will be found in the answers from medical licensing bodies to questions proposed to them by the Executive Committee, printed in the General Medical Council's minutes for May 10th, 1877.

"With regard to Resolution (γ), it may be observed that it has always been the opinion of the Council that the examinations in the subjects of general education should eventually be left to the national educational bodies, although it was, in the first instance, desirable, and indeed necessary, that special examinations for medical students should be instituted by some of the licensing bodies.

"During the last few years, the opportunities afforded to students of presenting themselves for examination in general education have been largely increased, more especially through the local examinations of the several Universities, which are now much resorted to. Thus, the need of the examinations by the licensing bodies has been greatly diminished; and the Council was thus led to think it desirable that these examinations should now be discontinued.

"Upon this point, the Executive Committee would be glad to learn the opinion of your body, at as early a period as it can conveniently be given."

A copy of the foregoing letter was sent by the Registrar to each of the medical licensing bodies on November 6th, 1877. The communications received in answer thereto were to the following effect.

The Registrar of the Royal College of Physicians of London stated: 1. That the recommendation to the various licensing bodies "to instruct their examiners in professional subjects to report to them any cases in which decided ignorance in general education has been displayed by the candidates" had been adopted by the College; 2. That the College has for many years discontinued conducting an examination on the subjects of general education, in compliance with the wish of the General Medical Council.

The Secretary of the Royal College of Surgeons of England reported that the Council had, on the recommendation of the Court of Examiners, adopted, on March 14th, the following resolution: "That, with respect to Resolution (B) of the General Medical Council, as re-

commended by the Court, the suggestion of that Council be complied with, viz., that the examiners of the College in professional subjects be instructed to report to the Council any cases in which decided ignorance in general education has been displayed by the candidates, with the name of the board or boards before which the preliminary examinations have been passed, with a view to such report being transmitted to the Registrar of the General Medical Council." The Court of Examiners, with the consent of the Council, proposed to defer their consideration of the question referred to in Resolution (7) of the General Medical Council until it shall have been determined by the several medical authorities whether or not it is expedient to hold a special examination in general education under the scheme for an examining board, dated the 1st of May last, agreed to by those authorities.

The Master of the Society of Apothecaries of London replied that the Court of Assistants had decided that, "having regard to the origin of our examination in arts, the success which has attended it, and the esteem in which it is, and has always been, held by members of the medical profession, this Society should not discontinue it, at least for the present."

The Vice-Chancellor of the University of Oxford forwarded the following resolutions of the Committee to which the letter of the Executive Committee was referred by the Hebdomadal Council:

"1. That, as regards the Resolutions (a) and (b), we only examine our own candidates for the degree of Bachelor of Arts, and have, therefore, no observations to make upon those resolutions.

"2. That, as regards the question raised in the subsequent part of the letter of the Executive Committee, it is with much satisfaction that we note the confidence reposed by the General Medical Council in the trustworthiness of our local examinations, as well as our responses, moderations, and final schools, or examinations for the degree of B.A."

On the part of the University of Cambridge, Dr. Paget forwarded the following resolutions, passed by the Board of Medical Studies:

"With reference to Resolution (b), the answer of the board is: 'That all students, before presenting themselves for the medical examinations in Cambridge, have passed the previous examination required by the University of candidates for a degree in Arts, or one of the examinations accepted by the University in lieu thereof, and this test is found sufficient.'

"With respect to (7), the answer of the board is: 'That it is desirable that the examinations in general education be left to the Universities and such other bodies engaged in general education and examination as may from time to time be approved by the Council.'

From the University of Durham, it was reported that, at a meeting of the Senate on December 4th, it was decided to agree to the recommendation of the General Council that the examinations in the subjects of general education by the licensing bodies be discontinued.

The Registrar of the University of London replied that he was "directed to point out that the University of London had from the first insisted upon an adequate general education, tested by its matriculation examination, as the condition of admission to its curriculum of study for degrees in medicine. And as it examined for those degrees none but its own matriculated candidates, it had no experience of the deficiency referred to in resolutions (a) and (b) of the General Medical Council. In view of the adoption of a uniform standard of professional qualification for admission to the *Medical Register*, it seemed much to be desired that there should be, so far as might be found practicable, an uniform minimum of preliminary qualification, and that this should be tested by the national educational bodies, rather than by the medical licensing bodies."

The Royal Colleges of Physicians and Surgeons of Edinburgh made a joint reply. They stated that: "In regard to the resolutions (a) and (b), the Colleges, by their representatives in the General Medical Council, had occasion, at meetings of the Council, to refer to the insufficient attainments in general education of not a few of the candidates who from time to time present themselves at the professional examinations of the Colleges. They are glad, therefore, to find that the Council have taken measures calculated to abate the evil, and have made a recommendation (b, as above) of which they highly approve, and which they have already determined to carry into effect." In regard to Resolution (7), the Colleges stated, for various reasons which were assigned: "That they do not deem it either necessary or expedient to part with a privilege which they consider it important that they should continue to possess, and to abandon a duty which they have always endeavoured to fulfil conscientiously and efficiently."

The Faculty of Physicians and Surgeons of Glasgow also sent an elaborate reply. With regard to Resolution (b), they remarked: "That the procedure recommended would, as regards the licensing body so reporting, be somewhat invidious; and as regards the board so reported upon, it would be unfair, unless the papers on which the report was

founded were also transmitted to the General Medical Council. Even if carried into effect, the resolution could be operative only in extreme cases, and therefore could have little influence in raising the standard of general education among medical students." With regard to Resolution (7), the Faculty suggested: "That a thorough and systematic inspection of the preliminary examinations under the control of the Medical Council, viz., those conducted by the universities and the other licensing bodies specially for medical students, would directly conduce to this end. As these examinations are entirely written, such inspection would be comparatively inexpensive, the personal presence of visiting inspectors not being necessary. Let the General Medical Council call for the production of the printed questions as well as the whole written papers of any examination (and not merely a selection from these papers), and submit these questions and papers to competent judges, either within or outside their own body." The Faculty further assigned reasons for holding that it was not desirable that the preliminary examination of medical students should be left exclusively in the hands of the national educating bodies. "On the ground that the work is as well done by them as it is done by the universities, the Faculty are not prepared to divest themselves, in favour of the latter, of a privilege which they have exercised from a period considerably anterior to the passing of the Medical Act. That they perform the duty carefully and honestly is shown by the comparatively small proportion of those who pass to those who enter for the examination." Further: "It would tend to the disintegration of the extra-academic medical schools, to make it imperative on their students to pass their arts examination under the auspices of the universities."

The Dean of the Faculty of Medicine of the University of Edinburgh replies as follows: "I am instructed to state in reply that the Faculty approve of Resolution (7). With regard to Resolution (b), the examination on general education conducted in this University is of such a character that candidates displaying decided ignorance are rejected, and are not admitted to the examinations on the subjects of professional education."

The Secretary of the Medical Faculty of the University of Aberdeen replied that "the Faculty has, on the whole, little ground to complain of defective general education, and is not aware of any complaints having been made by any of the licensing bodies of deficiency in the general education of candidates who had passed the examination in general education in this University. The Faculty is of opinion that the number of such examinations held by the various licensing bodies should be diminished; that it would be enough were there one such examination in Scotland, one in England, and one in Ireland, in addition to the examinations held by the Universities."

The Clerk of the Senate of the University of Glasgow replied as follows: "The Senate are glad to be able to state that a marked improvement in the general education of candidates for the profession, both as tested by the preliminary examinations and as shown by the quality of the papers at the various degree examinations, has been observed from year to year; and they are of opinion that no good purpose will be served by disturbing the action of the various bodies at present in regard to this matter, in any of the ways indicated by the resolutions. They are also of opinion that it would not be desirable, on the part of this University, to undertake the criticism of, or direct attention to, what might appear to be a defective preliminary examination of any other university or licensing body. Whilst concurring in the desire of the Medical Council to do everything in their power to raise gradually the standard of the preliminary examinations, the Senate are of opinion that this object will be best served by allowing the present arrangements to continue without change."

The Secretary of the University of St. Andrew's stated that, at a meeting of the *Senatus Academicus* held on 12th January last, "Professor Pettigrew reported on behalf of the Medical Faculty that they recommended that the *Senatus* should announce to the General Medical Council that they were of opinion that the preliminary examination in medicine should be continued. This was agreed to."

The Registrar of the King and Queen's College of Physicians in Ireland wrote: "I have to inform you (1) that this College has for many years discontinued holding examinations in preliminary education; (2) that this College has given directions to their examiners to report to them the name of the licensing corporation at which any candidate who shall signally fail in general education passed his preliminary examination, and that such examining body shall be reported by the College to the General Medical Council; (3) that this College is highly in favour of leaving the examination in general education to the universities or such other bodies engaged in general education and examination as may from time to time be approved by the General Medical Council."

The Secretary of Council of the Royal College of Surgeons in Ireland wrote: "In deference to the Medical Council, this Council has

reluctantly accepted the certificates on preliminary education issued by other bodies than their own, the names of which appear to be approved by the General Medical Council, but has done so with considerable hesitation, inasmuch as this Council cannot learn that the General Medical Council has ever taken efficient means to ascertain the character of such examinations. . . . Until assured of the efficient and searching character of such examinations, this Council cannot see their way to adopt the recommendation of the General Medical Council, to the effect that this College should renounce its right to test candidates for its licence as to their preliminary knowledge by its own special Board of Examiners." With reference to the recommendation (β), the President and Council of the College "must decline to impose so invidious a task upon their examiners in professional subjects".

The Secretary of the Apothecaries' Hall of Ireland wrote: "I am directed by the Council of the Apothecaries' Hall to inform the Committee that they must respectfully decline to act upon the suggestions under the recommendation marked (β); and I am further to state that they are not at present disposed to transfer their right of examining medical students in the subjects of preliminary education to the national educational bodies, as suggested under the recommendation (γ), forasmuch as it would necessitate their lowering the standard of education and examination which they have required for the past seventy years."

The Registrar of the University of Dublin reported that the Board of Trinity College approved of the action of the Council with regard to the preliminary education and examination of medical students, and were prepared to co-operate in carrying out the resolution of the Council.

The University of London and the Medical Acts Amendment Bill.—On the motion of Dr. STORRAR, seconded by Mr. SIMON, it was agreed that the report of a Committee of the Senate of the University of London on the Medical Act (1858) Amendment Bill, adopted by the Senate of the University at its meeting on April 17th, be received and entered in the minutes. After an elaborate examination of Clause 14, the report stated:—"Your committee, while strongly objecting to those provisions of the Lord President's Bill which give to the Medical Council the power of framing examination-rules either for individual bodies or for conjoint schemes (as to which last they consider the existing powers adequate), not only concur in, but would greatly extend, the power given to the Medical Council in promoting such conjoint schemes; feeling assured that no amendment of the existing Act can have any other than a limited and imperfect action which does not provide for the institution of an uniform system of examination and certification in the three kingdoms, such certification being based on the highest attainable minimum for the 'double qualification'." With regard to the admission of women to the medical profession, "while fully agreeing with the principle already laid down by the Medical Council, adopted in the Russell Gurney Act, and sanctioned in the Bill of the Lord President, that no one of the medical bodies should be required to admit women within its pale, your Committee are strongly of opinion that to any general qualifying examination, whether instituted by a conjoint board of medical bodies or by the General Medical Council, women should have a statutory claim for admission; and that such women as pass that examination should thereby gain a title to be placed on the *Medical Register* as qualified medical practitioners, without being admitted either as graduates of any university or as members of any medical corporation".

Deferred Communications.—The following communications were referred to the Executive Committee.

1. A recommendation by the Executive Committee that the Cambridge higher local examinations be recognised.
2. A letter from the Secretary of the Queen's University in Scotland, asking information as to the meaning of the term "national educational bodies".
3. A letter from the Medical Alliance Association, asking the Council to hand over an amount equal to half of the penalties recovered in certain cases of prosecution of illegal practitioners.

4. Letters received from Mr. P. E. McKeon, asking whether, as a licentiate of the College of Physicians and Surgeons of Canada East, he could practise his profession in London.

Executive Committee.—It was moved by Dr. AQUILLA SMITH, seconded by Dr. A. WOOD, and agreed:

"That the powers and duties heretofore delegated to the Executive Committee be vested in the said committee until the next meeting of the General Medical Council."

Votes of Thanks.—It was moved by Dr. AQUILLA SMITH, seconded by Mr. TURNER, and agreed to:

"That the cordial thanks of this Council are eminently due, and are hereby tendered, to Dr. Andrew Wood for his services as Chairman of the Business Committee during the present session of the Council."

Dr. AQUILLA SMITH moved, Dr. ANDREW WOOD seconded, and it was resolved:

"That the thanks of the Council are due, and are hereby tendered, to the treasurers, Dr. Quain and Dr. Pitman, for their services."

It was moved by Dr. AQUILLA SMITH, seconded by Dr. ANDREW WOOD, and carried by acclamation:

"That the thanks of the Council are hereby cordially tendered to Dr. Acland, the President, for his efficient services during the present session of the Medical Council."

BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 27TH, 1878.

THE GENERAL MEDICAL COUNCIL.

THE members of the General Medical Council were this year called together at an earlier date than usual, in consequence of the introduction into the House of Lords of the Lord President's Bill to Amend the Medical Act of 1858. The discussion of this measure, and of questions immediately arising therefrom, occupied nearly the whole of the seven days' session of the Council: in fact, beyond some formal matters, little else was transacted.

After the President's address, the principal topic of which was the Medical Act Amendment Bill, there were laid before the Council important documents in regard to the Bill drawn up by the English Colleges of Physicians and Surgeons; and subsequently expressions of opinion on the measure were received from the Society of Apothecaries and the University of London. The Senatus Academicus of the University of Glasgow also sent a copy of a petition to the House of Lords in favour of the Bill. The Obstetrical Society of London, through its President, Dr. West, sent to the Council a letter with a copy of the Society's amended scheme for the education and registration of midwives; and Mr. Tomes, President of the Dental Reform Committee, forwarded a letter in reference to the Dentists' clauses of the Medical Act Amendment Bill and Sir John Lubbock's Dental Practitioners' Bill.

Before proceeding formally to examine the Lord President's Bill, the opinion of the Council was first sought on one of the most important subjects treated in it—the establishment of conjoint examining boards. The debate on this subject was opened by Dr. Humphry, representative of the University of Cambridge, who, on the first day of the session, proposed a resolution reaffirming the decision at which, by a large majority, the Council had arrived in 1870 in favour of the establishment of such boards. The discussion, which was commenced in the middle of the first day's sitting, was continued through the second day, and was not concluded till the middle of the third. The principle of conjoint examining boards was supported by the English and opposed by the Scottish members of the Council; and it may fairly be considered that the arguments against them were exhaustively set forth by the opponents of the resolution. The principal arguments which they adduced were, that uniformity of examination was not attainable, and even if attainable not desirable, inasmuch as it would tend to lower the standard of professional education; that the conduct of the examinations by a single board in each division of the kingdom would be a work of excessive difficulty; that an additional examination ought not to be imposed on the students of the Scottish universities, which bodies granted licences to practise in almost equal number with the Scottish corporations; that for many years the Edinburgh College of Physicians has held examinations for a double diploma in conjunction with the Edinburgh College of Surgeons and the Glasgow Faculty of Physicians and Surgeons; and that, by the establishment of a conjoint board in Scotland, the revenue of the universities, the greater part of which is applied to the improvement of the means of teaching, would be seriously impaired. These objections were met by the English members, who further objected to the permissive nature of the Bill in respect to con-

joint boards; while several of them called attention to the danger of Government taking the matter entirely into its own hands and instituting a "State examination" on the continental plan, thereby depriving the profession to a very great extent of its liberty of regulating its own affairs; and Dr. Humphry, in his reply, pointed out that the conjoint boards in Scotland and Ireland should be laid down precisely on the same lines as that for England, but that they should be adapted to the circumstances in each division of the kingdom. Ultimately, Dr. Humphry's resolution was carried by a majority of fourteen against ten; the majority consisting of the President, the whole of the English members of the Council, and two Irish members (Dr. Hudson, Crown nominee, and Dr. Leet, the representative of the Apothecaries' Hall in Ireland); and the minority being formed of the whole of the Scottish members and four out of the six Irish members.

This matter having been decided, Dr. Pitman proposed a resolution objecting to the provisions in Clause 14 of the Bill, which directs the General Medical Council to frame the examination-rules for such conjoint boards as might be formed. He argued that this duty would be better performed by the universities and corporations, who would probably, however, object to being deprived of power in this matter. The functions of the Medical Council should be that of superintendence and control, with the power of making representations to the Privy Council should the necessity arise for doing so. The motion was carried.

The Council considered the Lord President's Bill in committee of the whole Council during several days of the session. Clauses 1 and 2 were approved without discussion; but, on Clause 3, an amendment was proposed by Mr. Simon, and seconded by Dr. Humphry, re-asserting the already expressed opinion of the Council on the subjects of conjoint boards and examination-rules. This amendment was carried by a majority of thirteen against ten. Except that the President did not vote on this occasion, the majority and minority consisted respectively of the same members as formed the majority and minority in the vote on Dr. Humphry's resolution.

In discussing the clause (23) of the Bill relating to Dentists, the Council expressed in general terms approval of the introduction into the Bill of provision for their registration; but disapproval of the proposal that the General Medical Council should be required to originate a scheme of examination-rules. In regard to the registration of foreign and colonial dental practitioners, the Council preferred the clause of Sir John Lubbock's Bill relating to that subject to the provisions of the Medical Act Amendment Bill.

With regard to the clauses providing for the recognition of colonial diplomas and degrees, some discussion took place as to the period of probation which should be required; and it was generally felt that ten years, as proposed in the Bill, was too long. Several motions and amendments were proposed; and ultimately it was decided to recommend the omission of all reference to the time during which a person has been in practice in a British possession after the granting of his diploma. Clause 6, relating to the registration of foreign degrees, was in substance approved. No discussion took place, nor was any proposal made, regarding the registration of foreign degrees obtained for ornamental reasons by British registered practitioners.

Clause 13 of the Bill, which provides that the powers of erasing names from and restoring them to the *Register*, was objected to, principally on the ground that the responsibility of deciding on a charge of "infamous or disgraceful conduct in a professional character" ought to lie on the whole Council, whose proceedings should be publicly conducted, as hitherto. A motion in this sense, asking the Lord President to amend Clause 13 accordingly, was adopted; and it was further agreed that it was desirable that the power of erasing the names of registered practitioners convicted of felony or misdemeanour might be deputed to a Committee of the Council—which might be the Executive Committee.

The discussion on the clause relating to the registration of midwives was prefaced by the reception of a deputation from the Obstetrical Society, consisting of Dr. West, the President, and several members,

who called the attention of the Council to the amended scheme drawn up by the Society, and explained their views. In the conversation on the subject, opinions were expressed on the part of the Society that the fee named in the Bill (£5) was too high; that locally conducted examinations and local registers would be sufficient, and indeed preferable to central examinations and a central register; and that evidence of good character should be one of the conditions of registration. The deputation having retired, the Council reaffirmed its approval of the general intention of the proposals of the Obstetrical Society with regard to the registration of qualified midwives. The provisions of Clause 24 of the Bill were then discussed, and generally approved, with the exception that it was considered that a central register of midwives was not necessary, but that local registers should be kept by the local authorities, copies being forwarded yearly to the Medical Council. The Council also expressed the opinion that an addition should be made to the clause, to the effect that none but registered midwives should be capable of holding public appointments. It was also agreed, with reference to the concluding portion of Clause 24, that the duty of prosecuting midwives for offences should devolve on the local authorities.

The portion of the Bill relating to female practitioners of medicine caused some discussion, which was, however, somewhat limited by the shortness of the time at the disposal of the Council for the present session. The opinion of the Council was expressed by a decided majority in favour of conducting the education and examination of females separately from that of males. It was also decided to recommend that the names of females who obtained qualifications to practise should be placed in a separate department of the *Register*; this not to imply any interference with legal rights. It will be remembered that colonial and foreign practitioners are also to be registered separately.

The remaining portions of the Bill received general approval. An objection was raised, however, to certain portions which appear to deprive the Scottish and Irish Branch Councils of the power of registration which they have hitherto—much to the convenience of the profession in the respective divisions of the kingdom—possessed; and it was agreed that the attention of Government should be called to the matter.

The resolutions of the Committee having been brought up, were formally adopted; and the Executive Committee was charged with the duty of arranging them and transmitting them to the Lord President of the Privy Council. Previously to the conclusion of the discussion on the Bill, a deputation consisting of the President, Dr. Humphry, and Dr. Andrew Wood, waited on the Duke of Richmond before the rising of the Houses of Parliament for the Easter vacation, and laid before his Grace the resolutions that had up to the time been passed.

In connection with the question of the amendment of the Medical Act, Dr. E. Waters, and several members of the Medical Reform Committee of the British Medical Association, had an interview, in the forenoon of the last day of the session, with the President and some members of the Medical Council regarding the subject of direct representation of the profession in the Council. A prolonged discussion took place, an account of which will be found at p. 616.

A resolution calling the attention of the Local Government Board to the alleged employment of unqualified persons as assistants by Poor-law medical officers in England, was proposed on the last day of the session by Sir Dominic Corrigan, and adopted.

A series of communications from the various medical authorities in reply to a letter addressed to them by the Executive Committee, with copies of resolutions passed during last year's session of the Council regarding the preliminary examinations of medical students, were ordered to be entered on the minutes; and several documents, for the consideration of which there was not time, were referred to the Executive Committee.

Having transacted some routine business, and passed the usual votes of thanks, the Council separated after a session of seven da

MEDICAL REFORM: DIRECT REPRESENTATION OF THE PROFESSION IN THE GENERAL MEDICAL COUNCIL.

IN a preceding number, we have demonstrated that it was mainly through the continued efforts of the Association that the Medical Act of 1858 became law, and that, after the failure of several ministers and members of Parliament, it was not until Mr. Headlam, acting for the Association, carried, on July 1st, 1857, the second reading of his Bill by a majority of one hundred and forty-seven, that Mr. Cowper-Temple took charge of a similar measure in the following session, and the Medical Act of 1858, with the concurrence of Mr. Walpole on the part of the Government, was successfully carried through both Houses of the Legislature and became law. As evidence of the recognition by the Government of that day of the important part played by the Association, the fact of the application by Mr. Cowper-Temple to the President of the Council of the Association for a personal interview, before deciding on the character of the measures to be introduced, was also recorded. A change of Government intervened, but the question of medical reform was not on that account again shelved; the vote taken on Mr. Headlam's Bill was held to be decisive of the necessity for legislation, and the Medical Act of 1858 was passed when the present Prime Minister was Chancellor of the Exchequer. The Medical Act of 1858 was never regarded as other than an instalment in the right direction, all that was at that time practicable; and the attempts at legislation which have since been made by the General Medical Council, by the profession as distinguished from the universities and licensing corporations, but above all by ministers of different Governments, prove the want of some further measure. Let us hope, as the Act of 1858 was passed when the present Premier was Chancellor of the Exchequer, so a really efficient measure of medical reform may become law under the Prime Minister who was the first on his accession to office specially to inscribe "Sanitary Legislation" on his banner—a measure in accordance with the enlightened experience of the profession, and one meeting the needs of the public.

The views held by the Association have always been openly set forth; and as stated in the number of the JOURNAL already referred to, an influential meeting was held in London in 1854, before the passing of the Medical Act of 1858, at which the four great principles on which medical reform was to be founded were laid down.

1. Uniformity of qualification.
2. Reciprocity of rights to practise.
3. Registration of qualified practitioners.
4. The government of the profession by representative councils.

The second and third objects—viz., reciprocity of rights to practise and registration of qualified practitioners—were attained and secured by the Act of 1858. The first and fourth objects yet remain to be realised. Uniformity of qualification has also met with general acceptance. The only means of effecting it are those advocated by the Association; that is to say, the establishment of conjoint boards of examination in each division of the kingdom on the principle of equal fees and equal examinations, which every person entering the profession must in the first instance pass. All who succeed in passing this examination will be at once entitled to be placed on the *Medical Register* as registered medical practitioners, qualified to practise all branches of the profession, and will then be at liberty to graduate at any university, or join any of the colleges, on fulfilling the requirements of the corporation they may desire to join. The formation and working of the conjoint boards of examination would necessarily fall under the supervision of the General Medical Council, which would thus, endowed with greater powers than it at present possesses, become virtually the governing body of the profession. This increased power to be granted to the General Medical Council leads up to the fourth prin-

ciple, for which the Association, supported by the profession, has undeviatingly contended; and—if the long and well thought out reasoning, or, if it be preferred, the instinct of the profession, has proved the Association right with regard to uniformity, reciprocity, and registration—the inference is that the instinct of the Association and the profession is equally unerring in its demand for representation in the General Medical Council.

Before the passing of the Medical Act of 1858, the then Medical Reform Committee was taken into council with the Government; and it is proved on unquestionable testimony that, in the conferences which were then held, the question of the direct representation of the profession in the General Medical Council was not only discussed, but that the non-existence of a *Register* of the profession was the reason why it was deferred. The late Mr. Southam, an active member of the Medical Reform Committee of that day, has more than once distinctly stated that it was only deferred on the understanding that, when the *Register* was formed, representatives on the General Medical Council should be accorded to the profession. The arrangement then arrived at was much in the nature of a compact; but it is on other grounds that the Association claims this representation.

First, the General Medical Council, as at present constituted, is imperfect and marred by anomalies. Its composition was simply the result of a compromise, and on that account, if on that alone, requires modification. In Scotland, the great Medical University of Edinburgh is linked with that of Aberdeen, only second to Edinburgh in importance, in representation, and both together send one representative to the General Medical Council. The University of Glasgow is, in like manner, linked with that of St. Andrew's in representation. On the other hand, the University of Durham, which exercises no important bearing on medical education, and which is dependent on Newcastle-on-Tyne for its medical school, has its own special representative in the General Medical Council. Again, the vote of the Apothecaries' Hall of Ireland counts equally with the vote of the Royal College of Surgeons of England, with its thirteen thousand members, in the decisions of the Council. The representatives of the University of Durham and of the Apothecaries' Hall of Ireland are not elected in the same manner. The representative of Durham is elected by a small number of graduates in medicine and a much larger number of clergymen; the representative of the Apothecaries' Hall of Ireland is nominated by a small number of shareholders, some of them women. The advantages attending variety of representation will doubtless be urged by some as a justification of these anomalies; but then comes the question, How can the presence of these representatives in the General Medical Council be defended when the important provincial school of Manchester, with its noble hospitals and great teaching endowments, the flourishing medical schools of Liverpool, Birmingham, Leeds, Sheffield, and Bristol have no voice in the Council?

These circumstances fully bear out the statement that the General Medical Council is at present marred by anomalies, and also imperfect as containing no representative of the profession and of the great provincial schools.

The next question to be considered is, whether the Council thus composed has worked as well as is desirable. Take only the question of medical reform; the necessity for an amendment of the Medical Act of 1858 has been admitted from the time of its enactment. It was always regarded as a preliminary measure. Admitting this, year after year the question of medical reform has been considered by the General Medical Council, and with what result? The Government of the country asked for the aid of the Council in regard to it. The General Medical Council has discussed it; the British Medical Association and the profession have demanded it, and now, after a period of twenty years, the Council has completely failed to arrive at anything approaching an united opinion. The profession has never wavered; year

after year, it called for the establishment of the conjoint scheme of examination unflinchingly, unswervingly, while the General Medical Council has hesitated and halted, and in its recent session, by the small majority of fourteen to ten, succeeded in carrying a vote in favour of it—a majority of four on a point with regard to which the profession has never doubted. Is not this an indication that the Council would be improved, and its efforts for good increased by the infusion into it of a just proportion of independent members having no corporate interests to serve, no fees of lecturers to protect: independent members elected by the general suffrage of the profession?

The plain question, Why has the General Medical Council experienced so much difficulty in settling so vital a point in medical reform? is at once explained by the undue preponderance of the representatives of the licensing bodies upon it. Seventeen members of the Council exclusively represent universities and corporations, and to many of these the granting of diplomas and the fees of professors and lecturers are the first consideration. An impression is entertained that the carrying out of the conjoint scheme may injuriously affect certain corporations and lecturers connected with them, and hence, it is maintained, the hostility of the representatives of such corporations to the conjoint scheme. The profession holds that an addition of independent members to the Council, elected by the profession as distinct from the universities and corporations, is the only means of balancing this too great influence.

Expression has been given to the opinion that the profession does not evince sufficient interest in the proceedings of the Council. This statement was made in the Council by Dr. Andrew Wood, and was one of the reasons urged by him for the admission of direct representatives.

The discussions of the Medical Council involve a considerable outlay. The President, in his opening address during the recent session, stated it to be about £400 for one day, or about £160 day by day. It cannot be denied that the length of the oft-repeated discussions on medical reform has been chiefly caused by those representatives who have been defending the corporations they represent against the supposed injurious effects of the establishment of the conjoint scheme. The richly endowed universities and corporations contribute nothing to the remuneration of their representatives on the Council. The expenses are entirely defrayed by the registration fees paid by the members of the profession. The Council commenced its labours on a sum of many thousands drawn from the members already in the profession at the passing of the Medical Act. On this ground, also, the profession founds one of its claims to representation.

The Council, as at present constituted, is at variance with the profession, and the Association is of opinion that this unnatural state of things would be changed by the concession of direct representation, which would introduce into the Council men free from all narrowness of spirit, possessing the confidence of those who selected them, and having the general welfare of humanity at heart. None are better judges than students of the merits of those who instruct them. Self-interest, material advantage, too often banish disinterestedness; but the members of the medical profession, in remedying the defects of examination and of education of which they are naturally cognisant, will be conferring an unalloyed benefit on the community.

The principle of direct representation is that which the Association has always advocated. Some have suggested that members of corporations should elect the representative of their corporations on the Council, as being more easily worked; they object to the number of the constituency if direct representation be carried out. The difficulty is in reality groundless, and certainly no greater in England, which would have the largest constituency, than in respect of the Royal College of Surgeons of England, which numbers some thirteen thousand members. The present representative for the University of Cambridge

is elected by all the graduates, numbering upwards of four thousand—a number far greater than that of the profession in Ireland and in Scotland.

The expense of election has also been urged against the proposal; and that of a contested election of a representative of Parliament for any of the universities has been brought forward in illustration. The comparison, however, is far-fetched indeed; the representatives of universities in Parliament are men of high position in the world of politics, men looking for office under Government, and to whom an university seat is of the highest importance. There will be no such struggle for a seat at the Board of the General Medical Council, which offers no opportunity of a distinguished career, and which must always entail pecuniary loss, however much it may be prized as a mark of professional confidence. One thing is certain, that, with a constituency such as that which the medical profession will form, no noisy pretender, no vain self-assertor, will have a chance of election. The great provincial schools unquestionably afford an abundance of eligible candidates.

Space will not permit, on the present occasion, the details of the mode of election: they are fully set forth in the drafted Bill of the Association which has been placed before the General Medical Council. They are similar to a plan worked out in great measure with the late Mr. Graves and Sir J. Gray, M.P. for Dublin (who was also a medical man), and were adopted in a Bill drafted by the *Lancet*.

The Association claims the representation of the profession in the General Medical Council, first, as a right, and secondly, as a means of improving the composition and the working of the Council by balancing the undue preponderance of the licensing corporations upon it.

DISARTICULATION AT THE HIP.

TOWARDS the end of 1877, M. Verneuil communicated to the Academy of Medicine in Paris a paper on this subject, with remarks on the operative proceeding and mode of dressing. This paper became the starting-point of a long discussion, in which all the surgical celebrities of Paris have in succession taken part. Disarticulation of the hip, says M. Verneuil in his memoir, will always involve a grave prognosis, on the one hand by reason of the dangers inherent to the conditions which necessitate it, on the other by reason of the traumatic accidents to which it is exposed by reason of the extent of the wound. "Death", he adds, "is sometimes immediate, on the operating-table itself; sometimes rapid in the first five hours; sometimes approximate within two hours. At other times, it occurs after the first seven days, or later. Early deaths are by much the most frequent, ordinarily caused by the hæmorrhage which precedes, accompanies, or follows the operation, and which proceeds not only from the femoral artery, but also from the branches of the gluteal and the sciatic arteries. Later deaths are most frequently the result of blood-poisoning." M. Verneuil then attempts to discover, first, what is the mode of operation most calculated to realise economy of blood; and, second, what is the mode of dressing which affords the best precaution against the accidents of infection. To reduce the loss of blood to its minimum, the best method, according to M. Verneuil, consists first in pushing back into the system the blood contained in the limbs by means of the elastic bandage; then removing the thigh as if one were proceeding to remove a voluminous tumour, by exposing and tying the principal vessels before dividing them. This method of proceeding was followed for the first time by M. Verneuil in 1864. To prevent septicæmia in its diverse forms, acute, chronic, or pyæmic, M. Verneuil considers it essential to prevent the discharges from stagnating in the wound, too favourably disposed to retain them; and useful, if it be possible, to prevent changes in those fluids. Primary union, adopted by all surgeons and held in view by all the inventors of operative methods, is, he considers, unfit to fulfil the two former conditions; it favours rather the alteration and retention of the fluids, even if only in the cotyloid

cavity. It ought, he advises, to be abandoned. For the same reason, M. Verneuil abandons the lateral oval proceeding, and the operation by the anterior flap, which favours retention of the fluids, and prefers an open wound largely exposed, such as he obtains by the "racquet" method. The following are the different stages of this procedure. In the first stage, an incision is made in the skin—a vertical incision from 2 to 2.4 inches, starting from a finger's breadth from below the crural arch; and from the inferior extremity of this is made an incision which crosses obliquely the external surface of the great trochanter, and is continued along the gluteal fold. The second stage consists of opening the sheath of the vessels; preventive ligature of the femoral artery above its bifurcation, and ligature of its two branches *en masse* to avoid the reflex hæmorrhage by anastomosis; and section of the veins between the ligatures. The third stage consists of section with the bistoury of the muscles of the anterior region. The vessels compressed in the muscular interstices are only divided after previous ligature. In the fourth stage, the joint is laid open. The fifth stage consists of division of the posterior muscles and of the vessels with the same precautions. The operation may be terminated in half an hour. The wound is open, and shaped like a hollow cone. As to dressing, M. Verneuil employs small squares of tarlatan soaked in water, on which are applied small feathery masses of charpie dipped in antiseptic liquids, which are covered with a thick layer of cotton-wool. The whole is kept in place by a piece of oiled silk as simply arranged as possible. The dressing (*à la Lister modifié*) is rearranged every morning.

All the surgeons who followed M. Verneuil in the discussion admitted the originality of his method. M. Roche, however, observed that Marcellin Duval had already previously substituted the bistoury for the knife; but his proceeding differed essentially from that of M. Verneuil, in that the vessels were not tied until after the operation. M. Terrillon preferred the external oval method; he compressed the aorta and tied the vessels as he proceeded with the section. M. Richet recommended direct compression of the open arteries by the aid of large sponges, soaked, if desired, in hæmostatic fluids. Two operations performed with these precautions—one in 1850, and the other in 1864—ended both successfully; whilst a first disarticulation, performed in June 1848, resulted in considerable hæmorrhage and the death of the patient in forty-eight hours. M. Trélat compressed the iliac and performed preliminary ligature, or prompt ligature of divided vessels, whilst an assistant compressed the whole base of the anterior flap. As for the posterior flap, "what prevents us," he asked, "from proceeding slowly and applying the hæmostatic forceps to every branch which gives blood?" M. Legouest had three times performed disarticulation of the thigh, and had assisted at an equal number of operations. The first of his patients died at the end of four months; the second, at the end of forty-eight hours; and the third, at the end of fifteen days. In the first and third operations, there was abundant hæmorrhage. M. Legouest advised the prevention of hæmorrhage from the femoral and its branches by employing the procedure by the anterior flap, and tying immediately the vessels which it contains. Having uncovered the articulation, he disengaged the head of the femur; and, separating it from the pelvis, he passed behind it the flat of the knife, so as to divide at the same time the posterior soft parts in front of the hands of an assistant who compresses them, stopping to tie the vessels as they are opened. Finally, M. Lefort was of opinion that the sometimes abundant hæmorrhage which often accompanies this operation is not the principal cause of the rapidly fatal result. This frightful mutilation, by cutting off almost a fourth in weight of the body, carries with the limb a quantity of arterial and venous blood greater than that of which even abundant hæmorrhage may cause the loss. This loss, added to that which occurs by the vessels which the surgeon opens, augments in a formidable proportion the gravity of the operation; and to this must be added the modification which must occur in the hydrostatics of the circulation by the removal of so considerable a part of the body. The relative benignity

of disarticulation in patients whose thighs have already been amputated at a more or less distant time, the successful employment of Esmarch's bandage, and the observations of Joseph Bell at the Royal Infirmary of Edinburgh, have led M. Legouest to insist upon this particular part of the question. The economy of blood deserves, then, the attention of all surgeons in performing coxo-femoral disarticulation; and it follows from the communications of all those surgeons, that it is absolutely indispensable to employ every means capable of lessening loss of blood either as a preventive or definitive means.

M. Gros of Nancy, in reviewing this long debate in the *Revue Médicale de l'Est*, which is the organ of the new University at Nancy, calls attention to the very complete memoir recently published on coxo-femoral disarticulation by Dr. Lünig of Zürich (*Ueber die Blutung bei der Exarticulation des Oberschenkels und deren Vermeidung*, Zürich, 1877). Dr. Lünig, he pointed out, had collected four hundred and ninety-seven observations on disarticulation of the hip, in which the mortality is as high as 70 per cent.; but it has been ameliorated of late years. It is greatest in operations performed for wounds by fire-arms, and hardly better in operations performed for ordinary injuries (71 per cent.); more favourable in operations performed for pathological lesions (42 per cent.); and most so in cases of reamputation (40 per cent.) In two hundred and thirty-nine operations having a bad result, and in which the date of death is exactly known, Dr. Lünig has noted that in 5 per cent. of the cases the patient has succumbed during the operation; in 12½ per 100, within one hour; in 26, within five hours; in 46 per 100, or nearly one-half of the cases, within the first day; in 57 per 100 of the cases, within forty-eight hours; and, finally, in 70 per 100 of the cases, before the fifth day.

THE old pupils and friends of Mr. Henry Spencer Smith have set on foot a movement to mark their affectionate sense of his long services at St. Mary's Hospital, and personal kindness to themselves, by a suitable testimonial of regard and affection. Mr. Juler of St. Mary's Hospital is the honorary secretary.

A FUND has also been commenced by the old pupils and friends of Mr. Edwin Canton at Charing Cross Hospital for a similar purpose, in connection with his retirement from office.

WE regret to hear this week of the death of Mr. Thomas Carr Jackson of the Great Northern Hospital, an active and able surgeon, who had achieved a good professional reputation and a large measure of success, and has died prematurely, with painful disease of the prostate and bladder, at the age of fifty-two.

MANY London men will also hear with great regret of the quite sudden decease of Mr. Arthur Noverre, a general practitioner in large fashionable practice at the West End, who had only comparatively late in life acquired his London connection, but had made himself more than usually liked and respected by his gentleness of character and the high professional standard by which all his opinions and actions were guided.

THE odour of iodoform is so pungent as to be an objection to its use for the purposes of treatment, in cases in which it has recently been recommended by writers in our columns. *L'Union Médicale* states that, on dissolving it in ether and applying to the diseased parts, on evaporation an odourless coating of iodoform is left.

A TRAMP in Pennsylvania has recently inoculated numbers of individuals with syphilis. He made a vocation of tattooing; and during the process, in order to wet his needles, put them into his mouth, which was full of sores. Measures were taken to have the man arrested, and he freely acknowledged that he was in the tattooing business, but did not know that he had done any harm.

THE *Canada Medical Record* mentions that Dr. Craig recommends a twenty-grain solution of chlorate hydrate for the painless removal of warts.

DR. J. DANIEL MOORE, of Lancaster, has been appointed Visitor of all Houses Licensed for the Reception of Lunatics within the West Riding of Yorkshire, in place of Dr. E. Denis De Vitre, who has resigned.

DR. DA COSTA of Philadelphia reports that he has used hypodermic injection of dialysed iron in chlorosis with most gratifying results. He injects fifteen to thirty minims of the pure liquid daily, with no bad effects whatever.

THE Pharmaceutical Society has just issued an excellent catalogue of their fine *Materia Medica* Museum; it is compiled by the curator, Mr. Holmes, and is full of useful material. Students (and lecturers) who have not always access to very complete collections in our hospital schools, will find the quality and arrangement of the specimens in Bloomsbury Square such as to amply repay study.

AT this week's meeting of the Clinical Society (Friday, April 26th), the following papers will be read: Dr. Tilbury Fox—*Cacotrophia Folliculorum*; Dr. Barlow and Mr. Marsh—*Ovariectomy in a Girl aged 12*; Mr. Barker—*Wound of an Abnormal Obturator Artery in an Operation for Femoral Hernia*; Dr. Barlow (for Dr. Sangster)—*Urticaria Pigmentosa* (living specimen).

CHLOROFORM IN LABOUR.

M. LUCAS-CHAMPIONNIÈRE, one of the younger generation of French physicians, who are freeing the school to which they belong from the reproach of neglecting the progress of the medical sciences and medical practice in other countries, has attracted much attention lately to the neglect of chloroform in labour by the French school of accoucheurs. Unaware of the absolute safety of chloroform anæsthesia in labour, demonstrated now in this country and America until it has become a commonplace of experience in untold thousands of cases, French accoucheurs have either ridiculed, denounced, or neglected this precious means of ease and safety, which has proved so immense a boon in easing the pangs of childbirth. French women have no reason to be thankful to them for this neglect. Dr. Campbell, in Paris, has in vain sought to urge the English practice upon the attention of the great body of French accoucheurs. M. Lucas-Championnière seems likely to be more successful; and his able advocacy, and the statement of his experience at the Hôpital Cochin, seem likely to popularise a practice which experience has rendered in other countries as general as it is safe and beneficial.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE following are the names of members nominated by the Council, and proposed to the College for election to the fellowship: John Sykes, M.D. Edinburgh, Doncaster; Thomas Guy, M.D. Heidelberg; John Louis Wm. Thudichum, M.D. Giessen; Arthur Ernest Sansom, M.D. London; William Orange, M.D. Heidelberg, Broadmoor; Alfred Wiltshire, M.D. St. Andrew's; David Lloyd Roberts, M.D. St. Andrew's, Manchester; Charles Henry Ralfe, M.D. Cambridge; John Mitchell Bruce, M.B. London; William Henry Alchin, M.B. London; John Curnow, M.D. London; Alfred Lewis Galabin, M.D. Cambridge.

AN AFFLICTED POPULATION.

IN a report lately submitted to the Prefect of the Seine, the following startling disclosures were made. Amongst the population of France, which is estimated at 36,000,000, it has been discovered that there are 37,927 blind and 29,512 deaf and dumb; that is to say, there is 1 blind person to 950 inhabitants, and a deaf and dumb to 1,212. The proportion of lunatics is also considerable. Of 24,456 insane persons, Paris alone contains 7,333.

MEDICAL ETIQUETTE.

WE publish another communication from Dr. Abrath of Sunderland on page 632. In reference to it, we have only to repeat that the advertisement by a medical practitioner in a public paper of his private scale of fees and charges is opposed to the generally accepted notions of professional propriety in this country; and Dr. Abrath need only refer to the files of any medical newspaper, to make himself aware that such infractions of medical etiquette have not failed to be blamed when from time to time brought to editorial notice in respect to other persons and on other occasions. That such a practice would involve the striking off the *Register*, or taking away the licence of anyone who resorts to it, has not been suggested in these columns, nor has anything been said to warrant this suggestion. That is an extreme measure reserved for offences of a very serious grade indeed, and, so far as we know, has never been done except for an actual breach of the law of a flagrant kind, or for some most disgraceful professional offence. There is nothing to warrant any such suggestion in Dr. Abrath's advertisement, which, although it offends against accepted professional rules, and thus calls for reproof, is by no means of so serious a character as to justify any such action. We regret, therefore, if any one has distorted our censure of Dr. Abrath's advertisement into any such implication. Still more improper would it be to make any such suggestion to patients. We know nothing, however, of any quotations of our observations, or of Dr. Abrath's private affairs; and it is unnecessary to add that our comments, far from being "malicious", are made as a matter of editorial duty upon a public document, and in accordance with long accepted and time honoured rules in the profession. In mentioning the Council of the Apothecaries' Society or of the British Medical Association as a professional tribunal to whom we should willingly see Dr. Abrath refer the comments which we have made upon his advertisement, we added that we should willingly accept any other respectable professional authority, such, for example, as the Medical Faculty of his own University of Heidelberg; to whose judgment in the matter, if he chose to refer it, we shall be equally happy to give publicity. To the irrelevant matter in these letters, including Dr. Abrath's opinion of the British Medical Association, we need not refer.

MATERNAL AND FETAL MEDICATION.

THE influence on the infant of medicines, particularly narcotics, administered to the mother during pregnancy and labour, to which attention was directed at the last meeting of the Association by Dr. McClintock, has been the subject of discussion recently in America, and has called forth diverse opinions from men eminent in the profession there. The editor of the *Ohio Medical Recorder*, in referring to them, premises that some interesting experiments upon this same subject were made during the latter part of the year 1875, by Dr. Benecke (*Allg. Wien. Mediz. Zeitung*), with salicylic acid in half-drachm doses, administered shortly before and during labour. Among other results, he shows that "the interchange between the mother and fetus was very rapid". Salicylic acid was found to have passed into the foetal organism in forty minutes, and appeared in the urine in two hours. (See *BRITISH MEDICAL JOURNAL*, December 25th, 1875, p. 786.) Other experiments had also been made by Gussierow with iodide of potassium, which seemed to prove that foreign substances easily pass from the maternal into the foetal circulation. On the other hand, experiments made by Spaeth and Schauenstein with mercury, and by Fehling with woorara, seemed equally to prove that medicinal substances do not reach the child through the placental circulation. The discussion above referred to related specially to narcotics as being of the greatest practical importance to the daily practitioner. Drs. Barker, Peaslee, and Luck, had used morphia extensively in midwifery practice, and had yet failed to recall any deleterious effects therefrom—indeed, Dr. Luck says, one patient took upwards of thirty drops of Magendie's solution on the day of her confinement, and for ten days previously, and the child was

active and lively at birth. On the other hand, the experience of Drs. Thomas, Gillette, and others, was such as to warrant the conclusions "that morphia, when administered to the degree of producing its physiological phenomena in the mother, will invariably produce a relative condition of narcotism in the new-born infant"; and, if confirmed by further experience on the part of the profession, it ought to exclude morphia as a therapeutical resource in labour. Carefully prepared tables on the one side and on the other have been presented in the *American Journal of Obstetrics* by Dr. Luck and Dr. Gillette, showing great uniformity in the effects noted by each observer; but, singularly enough, entirely diverse the one from the other.

THE GERMAN SURGICAL CONGRESS.

THE seventh annual congress of the Society of German Surgeons commenced in Berlin on Wednesday, April 10th. The proceedings were opened with an address by Professor von Langenbeck, who, in the course of his remarks, said that the society now numbered two hundred and twenty-five members, sixteen of whom had recently joined. Three members had died during the year: Dr. Paul of Breslau, Dr. von Heine of Prague, and Dr. von Linhart of Würzburg. Professor von Langenbeck was re-elected President.

STATISTICS OF THE INSANE IN PRUSSIA.

IN 1876, according to the information furnished by fifty-two public and seventy-three private lunatic asylums, there were 20,115 insane persons in Prussia—10,754 males and 9,361 females. As regards the diseases, 24.7 per cent. were cases of secondary mental disturbance. Melancholia furnished 23.08 per cent., mania 19.94, paralysis of the insane 10.01, and delirium tremens 7.42 per cent.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE spring meeting will be held on Tuesday, April 30th, at the Town Hall, Easingwold, at 2 P.M., when the following papers will be read. 1. S. W. North, Esq., on the Registration of Disease; 2. E. B. Hicks, Esq., on a few matters of Sanitary Interest from a rural point of view; 3. Dr. H. F. Parsons, on Dangers to Rural Populations from the Excrement Disposal of Towns. The members will dine together at 4 P.M.

MEDICAL EVIDENCE IN COURTS OF LAW.

IN a case which is exciting a good deal of attention this week, arising out of an alleged assault upon a popular actress, Mr. Prescott Hewett was quoted in court as having requested that other evidence than his own might be taken, as he declined to appear as a witness in court. It is well known that many other surgeons of similar position to that occupied by Mr. Prescott Hewett, and equally solicitous of preserving professional reputation intact before the public, have for many years adopted a similar course. We do not remember to have seen, for instance, Sir James Paget, or Mr. Savory, or Mr. George Pollock, make any appearance as medical witnesses in contested cases. Of course it may be said, and will be said, that, for the purposes of justice, it is essential that expert evidence should be forthcoming; and that, if all medical men of high reputation were to adopt a similar course, the evidence forthcoming at railway and other cases would be often of a less satisfactory character than that which even now often proves the cause of much public scandal. The force of such an observation is undoubted, and this is a consideration not to be undervalued. On the other hand, under the present unsatisfactory conditions of the taking of expert medical evidence in courts of law, it may be doubted whether, if practical protests of this sort were pretty universal, it would not more effectually than any other course lead to the desired reform by which expert evidence should be taken in an impartial manner for the information of the court. Certain it is that judges and lawyers alike concur in estimating, as a rule, very cheaply the sort of medical evidence which is now so frequent in courts of law; nor do they hesitate, both officially on the bench and on public occasions, and in private, to express a strong regret for the sort of conflict which frequently

occurs before them, and their opinion that it does not tend to increase the respect entertained for the acquisitions and impartiality of the members of the medical profession. The resolution taken, therefore, by such men as Mr. Prescott Hewett, Mr. Pollock, and Mr. Savory, to decline to give expert evidence, is readily understood, and will meet with a good deal of sympathy; and, if the example were more generally followed, although it might tend in the first instance to still further degradation of medical evidence in courts of law, it might probably, by that very fact, ultimately lead to very salutary reform.

EXTENSION OF THE PROVIDENT SYSTEM.

THE Charity Organisation Society has appointed an officer for organising the extension and promotion of Provident Dispensaries in the metropolis. In notifying this useful step, Sir Charles Trevelyan mentions that the services of this officer are available in forming new Provident Dispensaries, or in converting Free into Provident Dispensaries.

TO VEGETARIANS.

PROFESSOR GUBLER, in his recent researches as to the causes of cretaceous degeneration of the arteries, has made the very interesting discovery that a principal cause lies in a vegetable diet, and thus explains the frequency of cretaceous arteries among the French rural population at the early age of forty. This is the more important because it is well understood that "a man is as old as his arteries", and that chalky degeneration of the arteries is the most fatal kind of premature senility. Further proof he finds in the fact that the Trappists, who live exclusively on vegetable food, very soon show arterial degeneration. In districts where chalky soils load the drinking-water with earthy salts, a vegetable diet acts more rapidly in affecting the arteries than in regions of siliceous formation.

DEATHS FROM STARVATION IN LONDON.

A RETURN issued of cases in which coroners' juries have returned verdicts of death caused by starvation or accelerated by privation in the metropolitan district during the year 1877 shows that the total number of such deaths was seventy-one, of which forty-seven occurred in the central division of Middlesex, twenty-two in the eastern division, one in the city and liberty of Westminster, and one in the Greenwich division. No such deaths were reported in the western division of Middlesex, city of London and borough of Southwark, Duchy of Lancaster (Middlesex and Surrey), Her Majesty's Tower of London, the verge of the royal palaces, and the New Wandsworth Division.

THE LONDON FEVER HOSPITAL.

THE report of this hospital shows that, during the year 1877, 629 patients were treated, as against 730 in 1876. The mortality in all cases refers to patients treated to the termination of illness. Of scarlet fever, there were 406 cases, of which 31 died, or 7.65 per cent.; of enteric fever, 119 cases, of which 19 died, or 17.5 per cent. The low mortality of scarlet fever is, perhaps, to be explained by the comparatively large number admitted with this disease after twenty years of age, when it is less common to meet with fatal cases. Eight cases of typhus were admitted, of whom four died. Of measles, there were 56 admissions and two deaths; one or two cases of erysipelas febricula and mumps, and 45 cases of other disease. At the present time, when so much is being attempted in preventive medicine, one reads with regret the following extract from this report. "The number of admissions into the private wards set apart for patients of a higher position who are able to pay for their accommodation, was twenty-seven." These small numbers show that the advantages of this department of the hospital are still insufficiently known to the public and, we would add, to medical men. According to Rule 2 of the hospital, any person can be admitted on a certificate signed by any physician, surgeon, or apothecary, stating the disease to be fever of a contagious nature, or likely to become such. Fever and small-pox are now only too rife in London, and one cannot too strongly impress on medical practitioners

the fact that there is a hospital in London at which non-pauper cases of contagious fever can be treated, whatever the grade of society from which they come; and, were this once well known, we should cease to hear of epidemics of the more usual contagious fevers arising from servants and school-children being sent to their homes at a time when there is well grounded suspicion that they are sickening for, if not actually suffering from, a contagious fever.

A NEW, CHEAP, AND SELF-GENERATING DISINFECTANT.

UNDER this title, Dr. John Day of Geelong, Australia, recommends for use in civil and military hospitals, and also for the purpose of destroying the poison-germs of small-pox, scarlet fever, and other infectious diseases, a disinfectant ingeniously composed of one part of rectified oil of turpentine, and seven parts of benzine, with the addition of five drops of oil of verberna to each ounce. Its purifying and disinfecting properties are due to the power which is possessed by each of its ingredients of absorbing atmospheric oxygen, and converting it into peroxide of hydrogen—a highly active oxidising agent, and very similar in its nature to ozone. Articles of clothing, furniture, wall-paper, carpeting, books, newspapers, letters, etc., may be perfectly saturated with it without receiving the slightest injury; and when it has been once freely applied to any rough or porous surface, its action will be persistent for an almost indefinite period. This may, at any time, be readily shown by pouring a few drops of a solution of iodide of potassium over the material which has been disinfected, when the peroxide of hydrogen which is being continually generated within it will quickly liberate the iodine from its combination with the potassium, and give rise to dark brown stains. It may be applied with a brush or a sponge, or, if more convenient, as is the case with certain articles, such as books, newspapers, and letters, it may be simply poured over them until they are well soaked; they may then be allowed to dry, either in a warm room or in the open air.

RESPIRATION AT HIGH ALTITUDES.

AT a recent meeting of the Royal Society, Dr. William Marcet communicated a paper on "An Experimental Inquiry into the Function of Respiration at Various Altitudes". His experiments were mainly undertaken with the view of inquiry into the state of the respiration of tourists at various altitudes, and under the different circumstances met with on Alpine excursions. Pettenkofer's method was adopted in the estimation of carbonic acid, and the experiments were many in number. The ori-nasal mask worn to collect the air breathed out, and the India-rubber bags that received the breath, were described. Dr. Marcet confirmed previous experiments in the fact that the quantity of carbonic acid breathed out is greater after food has been taken; and in his experiments on respiration at high altitudes, he endeavoured to neutralise the effect of food by taking an early breakfast and a late dinner, and doing the climbing between the meals. Experiments were made at the Breithorn, 13,685 feet; St. Theodule, 10,899 feet; the Rifel, 8,428 feet; St. Bernard, 8,115 feet; and the Lake of Geneva, 1,230 feet. In experiments made while sitting, Dr. Marcet finds that there is an increase of carbonic acid breathed out as a person rises above the sea on a mountain excursion, and that this is due to the fall of the atmospheric temperature, and to the cold produced by increased evaporation from the body, arising from the diminished pressure of the atmosphere. In short, more carbonic acid is formed in the body to counterbalance the influence of cold from the causes just mentioned. If on ascending to a higher level we should find the same atmospheric temperature as we left at the lower station, still an increased amount of carbonic acid would be expected, on account of the cold due to the greater cutaneous and pulmonary evaporation. Dr. Marcet experimented in a similar manner while ascending hills. Walking up rapidly over rocks and grass patches yields most carbonic acid, the amount being 3.155 grammes per minute, which, he said, was attended with the inhalation of the largest volume of air breathed. Ascending quickly at the height of St. Theodule caused a considerable elimination of carbonic acid through the lungs, amounting to 2.972 grammes.

On the other hand, walking leisurely up-hill at the St. Bernard gave rise to the production of no more carbonic acid than quick walking on the level ground at that same station.

THE VITAL STATISTICS OF ITALY.

IN Italy during the year 1876 there were 225,000 marriages, 1,083,000 births, and 796,000 deaths, the population being 27,700,000 persons. Of the marriages, the largest number, compared with the population, occurred in the southern provinces, or *compartimenti*, in Basilicata, where there were 10 per 1,000, and Apulia, where the proportion was 9 per 1,000. In the province of Rome the number was the smallest—namely, 5.59 per 1,000, and after Rome in Sardinia, where it was 6.87 per 1,000. The fecundity of marriages stands, however, in inverse ratio to their number, being greatest in Rome and Sardinia, and smallest in Basilicata. In Basilicata, again, the fewest marriage certificates were subscribed by both parties—viz., only 3 per cent. In Rome 30 per cent. were subscribed, but education is most advanced of all in Piedmont and Lombardy, where 55 per cent. and 45 per cent. respectively wrote their names upon the certificate. Of cases in which neither the man nor the woman contracting could write, there were 80 per cent. in Basilicata, while there were only 13 per cent. of such cases in Piedmont, 24 per cent. in Lombardy, and 23 per cent. in Liguria. The percentage in Rome was 38. Education is, however, advancing in Italy as elsewhere; for while there were only 34 per cent. who could write their names on the marriage certificates in 1872, there were 37 per cent. in 1876. Of the births, the largest percentage of legitimate children occurred in Piedmont, Liguria, and Lombardy—viz., from 95 to 97 per cent. of all children born. The illegitimate numbered only 2.17 to 3.50 per cent., and the children exposed in Lombardy only .68, and in the other two departments about 1.30 per cent. In Rome, on the contrary, the percentage of legitimate births was smallest—namely, 81 per cent., and of illegitimate largest, 15 per cent.; but there were, again, only 3 per cent. of the children exposed, while in Sicily, for instance, 5 per cent. were exposed. In Sicily, while the number of illegitimate children born was 3,000, there were 6,000 exposed, so that 3,000 of these were recruited from those born legitimately.

LEGALITY OF POST MORTEM EXAMINATIONS.

A CASE has recently occurred in France, in which the right to examine a dead body without the consent of the relatives and executors has been brought as a question before a court of law. The widow P. died in the hospital of Montpellier. Her relatives desired to see the body, and they found that one of the feet had been cut off. The missing foot, at the request of the relatives, was produced and replaced on the leg of the corpse. In explanation, it was stated that the widow P. had died of a peculiar disease of great interest in a scientific point of view, and that the Professor of Pathology had found it necessary to make a necropsy and had removed the foot, as it was the seat of an inflammatory lesion the nature of which it was necessary to determine. The relatives of the deceased widow protested against these proceedings, and affirmed that from the date of the death they had given the sister of the ward notice that they would reclaim the dead body. They summoned Professor E., who had conducted the *post mortem* examination, before the civil tribunal, and claimed from him damages for his interference with the body without their permission. The civil tribunal, in an elaborate judgment, decided against the plaintiffs, and condemned them in the costs of the action, chiefly on the ground that, under an edict of March 1707, the bodies of persons dying in hospitals in which they have received gratuitous attendance shall be at the disposal of the professors for surgical and anatomical examination under certain restrictions. There was, further, no proof that the notice to the ward-sister had been communicated to the professor (*Chronique des Tribunaux*). As a rule, the hospital authorities in England claim a right to examine the bodies of those who have died in the hospital, not for the purposes of dissection, but to determine and explain the cause of death when this is absent. In some cases, the relatives sign a paper to this effect before the applicant is admitted as a patient. Such a right should in all cases be conceded.

SCOTLAND.

THERE were eighty-three deaths from measles and whooping-cough in Edinburgh during the month of March.

At a meeting of the St. Cuthbert's Parochial Board, last week, the Inspector reported forty-four cases of defaulters under the Vaccination Act, and the usual proceedings were ordered to be taken against them.

It is understood that Dr. Heron Watson, whose term of office as a Surgeon to the Edinburgh Royal Infirmary has expired, retains two wards as long as the present buildings are occupied. It is rumoured that the managers are about to appoint a third Assistant-Surgeon to the institution. The election is likely to take place shortly.

THE report, by the Medical Officer of Edinburgh, of the health of the city for the month of March shows that, during that period, there were no deaths from typhus, diphtheria, or small-pox, and only four from typhoid and seven from scarlatina. On the other hand, the deaths from measles were 60, and from whooping cough 23. The total mortality from zymotic diseases was 96, or at the rate of 21 per cent. of the total mortality. The deaths from these diseases, for the quarter ending March 31st, were 251, or 18 per cent. of the total mortality, as contrasted with 78 deaths, or 6.78 per cent., in the corresponding quarter of last year. The total mortality of the quarter was at the rate of 26 per 1,000, the average for the past five years being 23.76. The death-rate during the same period was equal to an annual rate of 33.5 per 1,000 of estimated population.

ST. ANDREW'S UNIVERSITY.

THE ceremony of graduating those who have passed in Medicine and Arts took place on Thursday, the 18th, in St. Mary's College, St. Andrew's; Principal Tulloch presided. The following received the degree of M.D.: Oliver Codrington, Chatham; W. T. Colby, Malton, Yorkshire; A. Eteson, Watford, Herts; S. Grose, Staff-Surgeon R.N., Melksham, Wilts; F. Hall, Leeds; W. Hicks, Hendon, Middlesex; A. T. McGowan, Clifton, Bristol; W. Whalley, Bradford; H. Woolton, London; H. B. Wynter, Wandsworth. The following were presented with the degrees of M.B., C.M.: J. S. Mackay, Edinburgh; J. H. Rea, Belfast; J. Dearden, Church; C. P. Kempe, London.

DR. ALLEN THOMSON.

THE portrait of Dr. Allen Thomson, painted by Sir Daniel Macnee, P.R.S.A., was presented to the Glasgow University authorities, and a *replica* to Mrs. Thomson, by the citizens, in recognition of his services to science, before a large audience, in the Lower Hall of the University, on Wednesday, April 17th. In making the presentation to the University authorities, the Lord Provost remarked that Dr. Thomson, who had attained a place in the foremost rank of modern scientific men, had graduated at Edinburgh, his native city, forty-eight years ago; that he had been a professor, first in Aberdeen, then in Edinburgh, and lastly in Glasgow, for thirty years. During this long term of office, which had only expired on his retirement quite recently, he had taken an active part in all academic matters, as they might judge from the fact that he was selected to cut the first sod when the works connected with the new University were commenced; and he hoped he would take part in an equally interesting ceremony, when, through the princely munificence of the Marquis of Bute, the building should be completed. Principal Caird, in acknowledging receipt of the portrait, expressed the utmost gratification that the University authorities should possess this masterly work, which not only gave the form and features, but something of the mind and spirit of the man—something of the cultured intelligence, of the high bred wisdom, of the man of science; of the sagacity and ripe experience of one who was pre-eminently wise in counsel, and the no less genial, kindly, unselfish, and tried and trusted friend. In acknow-

ledging the present of the *replica*, Dr. Thomson expressed his great pleasure in having obtained the approbation of the citizens, his deep sense of the honour conferred on him, and his extreme satisfaction with the manner in which the portrait had been painted by his friend Sir Daniel Macnee.

MUNIFICENT BEQUESTS.

THE late Mrs. Bell of Balgray has left to the University of St. Andrew's the sum of £1,000, for the foundation of a Scholarship in Arts or Medicine, to be called the Patrick Kidd Scholarship, in memory of her father. The residue of the remainder of Mrs. Bell's estate, about £9,000, will be divided among the poor of certain parishes, the Dundee Royal Infirmary, and other charitable institutions, in the proportion of from one to three-tenths to each; the Infirmary receiving three-tenths. The residue of the estate of her sister, Mrs. Byers, to the same amount, is divided among similar institutions, among which the Perth Infirmary receives three-tenths.

EDINBURGH BOTANICAL GARDEN.

A REPORT for the year 1877, by Professor Balfour, the Regius Keeper of the Garden, has been issued recently. From it we learn that Inverkeith House, the future residence of the Regius Keeper, cannot be made habitable before the end of the approaching summer. A most important want in the house is a room for a library, especially botanical. The Keeper has still to complain of want of funds to carry on the ordinary work of the Garden; the total sum allowed annually for this purpose being £1,400: an extra sum of at least £300 annually is required for the ordinary working expenses of the Garden. There is no botanical garden of the same area, and used to the same extent for teaching purposes, which is kept up on so small an outlay. The accommodation of the students who attend the lectures on botany is still in the same inefficient state as it has been for some years. The class-room can at most accommodate 230, and last summer the number attending the class was 389. Petitions for increased accommodation have been, during three years, sent to the Office of Works, one of the petitions being signed by three hundred students of medicine. While the Professors of the Medical Faculty in the University are getting increased accommodation by the aid of a grant from Government, the Professor of Medicine and Botany, whose class last year was third highest as regards numbers, is compelled to lecture in an overcrowded room, the vitiated air of which is injurious to the health of both lecturer and pupils. The Garden stands in need of an aquarium and fern-house, in order to complete its means of teaching. The number of visitors to the Garden in 1877 amounted to nearly 80,000. The number of fresh specimens of plants used for lectures and demonstrations during the year was 48,820. Plants and seeds have been forwarded to thirty-five gardens at home and abroad.

IRELAND.

At a meeting of the Senate of Queen's University, held on Wednesday last, Dr. Duffey was appointed an Examiner in Materia Medica.

DR. STRAHAN, dispensary medical officer of No. 2 subdistrict, Belfast, having resigned, Dr. McKee has been appointed *locum tenens* until the vacancy is filled up. The election will take place on the first Monday in May.

DR. BLAQUIERE, who is the medical officer of the Ballynoe Dispensary District, Fermoy Union, was last week thrown from his horse, and sustained serious injury, several ribs being broken.

LIMERICK DISPENSARY.

At a meeting of the Dispensary Committee last week, an election for a dispensary medical officer to No. 1 District took place, in the vacancy occasioned by the resignation of Dr. Carey. There were two candi-

dates—Drs. Meehan and O'Connor—the latter gentleman being appointed by a majority of votes. Dr. Carey, who had served for forty-seven years, has been recommended for a retiring allowance equivalent to two-thirds of his late salary.

SMALL-POX IN LIMERICK.

THREE additional cases were admitted into the Workhouse Hospital last week, two of the patients being privates in the Royal County Limerick Fusiliers. As the barracks are very close to the workhouse, the regiment will be placed in tents at the King's Island, and their quarters at the Royal Barracks thoroughly disinfected.

STEWART INSTITUTION FOR IMBECILE CHILDREN.

AT a meeting of the Managing Committee of this institution last week, Mr. Pascal P. Law handed over securities amounting to £835, making, with £3,165 given on February 25th last, the sum of £4,000, to form the nucleus of a fund for an additional wing to the new buildings, which will shortly be opened at Palmerstown, County Dublin. A bazaar in aid of the funds of the charity will be held early next month.

CORK STREET FEVER HOSPITAL.

AT the meeting of the Managing Committee of this hospital last week, it was reported that the accommodation available for small-pox patients was virtually exhausted, there being one hundred and thirty-two cases of the disease, as well as twenty-eight fever cases, in the hospital. Fortunately, the Kilmainham auxiliary sheds are now ready for the reception of small-pox patients, either acute or convalescent cases. In this way, the pressure on the Cork Street Fever Hospital has, it will be observed, been timely removed. But only barely so; the Board of Guardians of the South Dublin Union having taken no satisfactory steps to fulfil their duties in providing hospital accommodation, until threatened with dismissal by the Local Government Board.

THE HOSPITAL FOR INCURABLES.

THE Misses Brooke, sisters of the late John Brooke, Esq., Q.C., whose liberality to the charitable medical institutions of Dublin has been noticed by us on former occasions, have given a sum of £500 to this hospital, in addition to a former contribution of £200 to the same charity.

ST. MARK'S OPHTHALMIC HOSPITAL.

THE bazaar recently held for the benefit of this hospital realised a sum of £518. Considering the number of bazaars for charitable purposes held about the same time in Dublin, this result must be looked upon as very gratifying and satisfactory. The Misses Brooke have also given a second donation of £100 in aid of the Building Fund of the hospital.

HEALTH OF DUBLIN: QUARTERLY REPORT.

IN the Dublin Registration District, during the quarter ending March 30th, the births registered amounted to 2,526, being equal to an annual ratio of 1 in 31.1, or 32.1 in every 1,000 of the population; and the deaths registered to 2,460, affording an annual ratio of 1 in 32.0, or 31.3 per 1,000. The death-rate, it will thus be seen, was not much below the birth-rate; the former being 31.3 and the latter 32.1 in every 1,000; but it was, however, slightly less than the average rate of the first quarter of the last ten years. The deaths from zymotic diseases amounted to 431, the mortality from the seven principal being equal to an annual death-rate of 4.3 per 1,000 inhabitants. Of these, small-pox caused 57 deaths; fever, 69; whilst the deaths from measles and its complications, which had been very numerous throughout the greater part of last year, 147 having been registered in the December quarter, fell in the March quarter to 75, of which one-half were recorded in the month of January. Croup produced 33 deaths; scarlet fever, 20; diarrhoea, 33; diphtheria, 7; dysentery, 5; erysipelas, 3. One hundred and seventy-four deaths in children were ascribed to convulsions; and 107 deaths attributed to heart-disease. Diseases of the respiratory

organs (excluding phthisis) caused 660 deaths, or 27 per cent. of the total mortality. These deaths, owing to the prevalence of pneumonia, were 51 over the average in the corresponding quarter of the past ten years.

ARMY MEDICAL DEPARTMENT.

THE following memorandum, in reply to the late Secretary of State for War's circular to the Medical School, has been forwarded from the Professors of the School of Physic.

"At a meeting of the Professors of the School of Physic in Ireland, held in Trinity College on April 15th, 1878, it was resolved (in drawing up a reply to Mr. Secretary Hardy's letter of March 21st last) to mention the following as the principal reasons which prevent the students of Trinity College from competing in larger numbers for the Army Medical Service:—1. The feeling of distrust produced by the frequent changes in warrants and regulations has caused a reluctance on the part of the medical students of Trinity College to enter a service in which they are unable to calculate with certainty on their future career and treatment; 2. The recent short service system, by which a medical officer is liable to compulsory retirement at the end of ten years' service; 3. The disadvantage at which medical officers are placed, as compared with other officers, in respect to several matters, such as sick and ordinary leave, exchange, and barrack privileges. In addition to the foregoing reasons, the medical students of Trinity College are of opinion (whether rightly or wrongly the professors do not undertake to say) that the abolition of the regimental system has seriously diminished the social and other attractions of the service for candidates of liberal academical education.

"SAMUEL HAUGHTON, Medical Registrar."

THE RIVER LIFFEY NUISANCE.

WITH the return of dry and warm weather, the foul emanations and "abominable stench" from this open sewer are making its existence the subject of annually recurring complaint by, and discomfort to, the citizens of Dublin. The foreshore of the river was cleansed last in the spring of 1876. Lately, in the neighbourhood of the most frequented portions of the river, the lodgment of solid sewage-matter on the banks, especially during low tides, has become most offensive. This is chiefly owing, no doubt, to the works in connection with the widening of Carlisle Bridge now in progress, and by which there is much disturbance of the sewage caused. The projecting piers of another recently erected bridge higher up the river—the smaller bridge—also tend to cause an accumulation of sewage in the angles. We are glad to see that, on the motion of Mr. Gray, M.P., the corporation have directed the Public Health Committee to consider and report as to the best means of abating the present foul condition of the river, and have authorised the Committee to incur an expenditure not exceeding £200 for such temporary abatement of the nuisance as it may think advisable.

PHYSIOLOGICAL TEACHING IN DUBLIN.

AT a meeting of the Council of the Royal College of Surgeons in Ireland last week, a resolution was adopted: "That steps be taken to obtain a change in the existing by-laws relating to physiology and surgery certificates." The subject was brought under the notice of the Council in consequence of an application from the Registrar of the Carmichael School of Medicine (Dr. Harvey), requesting that a certificate of attendance on a laboratory course of practical physiology should be accepted in lieu of one of the three winter courses of theoretical lectures in physiology required by the by-law. The question was referred to the Educational Committee to report as to what changes were necessary. As to the changes which we believe to be necessary, we have already clearly expressed our opinion in commenting on Dr. Harvey's letter to us on the subject in the JOURNAL of the 6th instant; viz., that a distinct course of practical physiology is a necessity of the improved teaching of the present day. Dr. Mapother's views, however, as to the teaching of practical physiology (*vide* JOURNAL, April 13th, page 551) will no, we believe, be shared in by any teacher who has had experience in conducting a practical class.

MEDICAL REFORM COMMITTEE OF THE BRITISH
MEDICAL ASSOCIATION AND THE GENERAL
MEDICAL COUNCIL.

ON Wednesday, April 16th, a number of the members of the Medical Reform Committee waited upon the President and several of the members of the General Medical Council, at an informal meeting held at 11 A.M. for the purpose of receiving them. The deputation consisted of Dr. Waters of Chester (Chairman of the Committee), Dr. Davey of Bristol, Dr. Wade of Birmingham, Dr. Stewart of London, Dr. Leech of Manchester, Mr. Wheelhouse of Leeds, and Mr. Nicholson of Hull.

The members of the Medical Council present were—Dr. Acland (President), Sir James Paget, Dr. Rolleston, Dr. Pyle, Dr. Storrar, Dr. Andrew Wood, Mr. Macnamara, Dr. Leet, Dr. Apjohn, Sir Dominic Corrigan, Dr. Quain, and Mr. Teale.

The PRESIDENT, addressing Dr. Waters, said: We have received this telegram from you, Dr. Waters, saying you desired to see the Council; and it has been laid before the Council. The Council have received two letters, written, it is supposed, by your colleagues.

Dr. WATERS: I am acting on behalf of the Medical Reform Committee; and, in writing the letter to the Council, I was fulfilling the instructions of the Committee, and, having full power to act for it, my letters were not read to the Committee.

The PRESIDENT: The Council requested me to ask, for its information, whom you represent. As, perhaps, your colleagues have not seen your letter, and they may like to bear it, I will ask the registrar to read the letter, because that will tell the gentlemen present what business has brought us together.

The following letter was then read.

"14, Nicholas Street, Chester, March 30th, 1878.

"Dear Dr. Acland,—In the present conjuncture of medical politics, I venture to submit to your careful consideration, as President of the General Medical Council, the Medical Acts Amendment Bill, approved and promoted by the British Medical Association. This Bill, amended as it would necessarily have been in its passage through the legislature, would, I believe, have been infinitely more acceptable to the profession and more beneficial to the public than the present Bill of the Government. I enclose with the Bill of the Association some of the reports of the Committee. The division of opinion between the General Medical Council and what is regarded as the profession in the matter of medical reform must be detrimental to the real interests of the profession which we all have so earnestly at heart. Is there no possibility of reconciling the different views held by each party, so that we might with one accord urge the Government to grant the prayer of the profession?" (Signed) EDWARD WATERS, Chairman of the

Medical Reform Committee of the British Medical Association.

"Professor Acland, M.D., F.R.S., Oxford."

The PRESIDENT: I received that communication from Dr. Waters, written as Chairman of the Medical Reform Committee of the British Medical Association; and, feeling that it was my duty to do everything that lay in my power to meet the wishes of the British Medical Association, I replied to it without expressing any opinion as to the contents of the letter, which spoke of divisions of opinion between the General Medical Council and what was regarded as the profession; and, without in any way committing the Council to acknowledge any such division of opinion, I thought it my duty at once to reply to Dr. Waters as follows.

"Oxford, April 3rd, 1878.

"Dear Sir,—I have to acknowledge the receipt of your letter on the subject of the amendment of the Medical Acts, together with the enclosures; viz., a Medical Bill (1876) and three other printed documents relating to changes in the Medical Acts. They shall all have my best attention. I trust with you that legislation may be able to rectify any anomalies or defects which can give just ground of dissatisfaction in respect of the Medical Acts. I am confident that you may rely on the best efforts of the Medical Council in endeavouring to ascertain what that legislation should be, and in seeking to bring about a successful issue.

(Signed) H. W. ACLAND.

"E. Waters, Esq., M.D., Chester."

That letter, which was written by me in the absence of the Council, I think I may venture to say, expresses the feeling of the Council since it has met. The Council has now been engaged for several days in considering the best way of amending the Medical Act Amendment Bill. I pledged myself that in my judgment the members would do

so; and they have done so certainly this last week. Then I received another letter from Dr. Waters.

"Chester, April 9th, 1878.

"Dear Sir,—I thank you for acknowledging the receipt of my communication respecting the amendment of the Medical Acts. On behalf of my Committee acting for the British Medical Association, I have to express a hope that the opinion of the General Medical Council may be taken on the subject of the distinct representation of the profession upon it. The action of the Association since 1866, when a deputation on its behalf waited on the Council, proves that the Association is in earnest in its desire to obtain [it].

"(Signed) "EDWARD WATERS,
Chairman of the Medical Reform Committee.

"Professor Acland, M.D."

The Council decided at once to comply with the request of Dr. Waters, and expressed its readiness to answer any communication he might wish to send to the Council. We received the letter on Monday; and, unless the standing orders of the Council had been suspended, it would have been impossible to comply with the request therein contained, which was, that the Council should receive the members of (I suppose) this Committee before twelve o'clock on Wednesday. Unless the Council had considerably set aside the standing orders, that was impossible. This was done; and we were able to reply on Monday night that, although it was impossible for the Council to meet to-day before two o'clock, a greater part of the Council would be present to receive you. The following telegraphic message was sent in reply.

"I cannot summon the Committee to attend a mere informal meeting." That is how the matter stands. Having said this much to the deputation, I am sure those present desire to receive in the most open manner any communication which Dr. Waters or the gentlemen present desire to make.

Dr. WATERS: There is one element which I think it would be well to lay before the Committee, that is, the letter containing the resolution of the General Medical Council to which this telegram is a reply; and I should like the letter to be read. In the meantime, perhaps, Mr. President, I should like to ask the members of the Committee whether my communications with the General Medical Council, acting on behalf of the Medical Reform Committee, are not strictly in accordance with the lines of action laid down by the Committee in all our meetings. There have been meeting after meeting of the Medical Reform Committee, the members of which are busily engaged in responsible positions in different parts of the kingdom; and, as in the case of other bodies, so in this instance, a certain power is delegated naturally to the Chairman of acting on behalf of the Committee as circumstances may arise; but in all I have done I have the knowledge that I have only been doing precisely what the Committee had commissioned me to do.

The REGISTRAR then read the letter sent, with the resolution passed on the 12th.

Dr. WATERS: May I read the telegraphic reply? "I cannot formally summon the Committee to attend an informal meeting." In the resolution, as I read it, it appeared that the Committee was not invited to meet the General Council here present as a body, but that the Council had permitted the President of the General Medical Council, with such members as might be pleased to attend, to receive me or other members of the Committee; and therefore, of course, I could not formally summon the Committee to attend as a matter of duty at this meeting. I issued telegrams, and the result has been that several members from different parts of the country—Birmingham, Leeds, Hull, and other places—have attended to-day; but I think it right also to state that some members of the Committee in London—the ex-Presidents of the Association, the President of the Association, and the President-elect of the Association—taking into consideration the terms of the resolution, do not attend. They thought it was not a meeting of the General Medical Council as a body, but merely such portion of the General Medical Council as might be inclined to attend; and therefore I have to regret that on this occasion we only have a portion of the Committee present, while many of the ancient members belonging to it are absent.

Dr. QUAIN: Before Dr. Waters proceeds further, I should like to know what his request really was. It was, as I understood, that the Council should receive him at twelve o'clock, and at no other hour.

The PRESIDENT: Excuse me; before twelve o'clock.

Dr. QUAIN: I protest against such a request. Here is a body representing the most distinguished institutions of this country. The members have a fixed time for their duties, and a gentleman writes and says, "Receive me before twelve o'clock". Why, sir, courtesy should have made him ask, "When can you receive me?" I protest against this mode of procedure. I would say that for the

Council to be asked to wait on Dr. Waters in this fashion is an insult to the Council.

Dr. WATERS: I should be sorry if it be so understood. If any feeling be imported into this matter, it will very materially prejudice the proceedings of this day.

Dr. QUAIN: There is no personal feeling in the matter; but to sit here and be upbraided for not receiving Dr. Waters at a particular time, when the fault is entirely his own—

Sir DOMINIC CORRIGAN: I beg leave to say a word in reference to the observation that Dr. Quain has made. He has taken upon himself to speak for the Council, and says that an insult has been offered to it. I do not take anything that Dr. Waters has said as an insult to the Council.

Dr. QUAIN: I did not say so.

Sir DOMINIC CORRIGAN: As a member of the Council, I dissent from that statement of Dr. Quain. I have heard nothing to justify its being said that it is an insult to the Council.

The PRESIDENT: I am sure that, be the deputation a formal committee or an informal committee, be this a formal meeting of the Council or an informal meeting of the Council, all present desire that no personal feeling should be imported into the matter. Only it would be extremely desirable, before proceeding further, to consider what has brought us together. Sir James Paget and Dr. Quain himself, and several other members of the Council, have left their duties to-day at a time when they are not called upon by the rules of the Council to come, and wish all idea of personality of any kind to be entirely dismissed, and all idea of disrespect to the gentlemen of the deputation, and for this plain reason—which is the fact—that we set aside our standing orders to bring the matter in discussion before the Council; and, indeed, it was only by the courtesy of the Council towards the President that we were enabled to depart from our ordinary proceedings to consider the matter at all; and had we not done so, Dr. Waters would not have received an answer. And an answer to what? An answer to his request that we should receive him to-day before twelve o'clock. If the Council had not gone out of its usual way to comply with this request, the meeting could not have been held at all. Therefore, gentlemen, let us understand all round that the meeting is informal in its character, and I do not know of any similar proceedings being adopted during the whole twenty years of the existence of the Council. I, for instance, came up from Oxford this morning; so that all idea of discourtesy should be dismissed absolutely. Now, we will proceed to business. Allow me to say one thing, which will possibly set the matter straight. The first letter I received from Dr. Waters was answered in the heartiest way possible, that I was quite sure the Council wished to assist the whole profession, and Dr. Waters and all others who had the interests of the public and the profession at heart, in every way they could. We were meeting to discuss a particular Bill, and we have discussed that Bill for a week. In that Bill, there is no allusion to the subject which is referred to in the second communication—not even in the first, as brought forward by Dr. Waters. And we are met, I say, for a subject this morning, for the consideration of which we have not been summoned at all, because the particular subject brought before us this morning is not contained in our Bill. Having cleared up everything, we are quite ready now to enter fully into the subject brought forward by Dr. Waters.

Dr. WATERS: I am very sorry any remarks of mine should have excited so much warmth on the part of a member whom I personally know, and for whom I have a great regard.

Dr. QUAIN: I can but express my regret.

The PRESIDENT: I trust that the business will now be proceeded with.

Dr. WATERS: I wanted to explain why it occurred that certain members of the Committee were not present. I would say, with regard to the first communication to the President of the General Medical Council, that the Bill advocated by the Association was submitted to the General Medical Council for its consideration.

The PRESIDENT: I beg to ask to what Bill you allude. Is it the Bill you forwarded to me?

Dr. WATERS: The Bill of the British Medical Association—the proposed Bill.

The PRESIDENT: Has that been introduced into Parliament?

Dr. WATERS: It was read the first time in Parliament in the year 1873. It is not before Parliament now. The Bill embodies the principle to which the Association has pledged itself for years. It was read in the House of Commons in 1873. In that Bill, the very first provisions are as regards the representation of the profession in the General Medical Council; and as on that point there was a difference of opinion, so to that point the attention of the General Medical Council should be specially directed.

Dr. ROLLESTON: May I ask on what subject there was a difference of opinion?

Dr. WATERS: The representation of the profession.

Dr. ROLLESTON: Where was the difference?

Dr. WATERS: We have for many years back been before the General Medical Council, and we have suggested that the profession should have direct representation in the General Medical Council. The Council has never accorded that desire of the profession or of the Association.

Dr. ROLLESTON: Has it expressed any opinion upon it?

Dr. WATERS: The difficulty has been to obtain a collective opinion; the question has been shelved when brought before the Medical Council.

Dr. ROLLESTON: It has then been brought before the General Medical Council, but not in my time.

Dr. WATERS: Dr. Andrew Wood was a strong advocate for the representation of the profession in the General Medical Council. This being one of the main objects of the Bill of the Association, it was natural to suppose that the attention of the General Medical Council would be directed to it, in consequence of the letter from me as Chairman of the Medical Reform Committee.

Dr. QUAIN: When was the Medical Reform Committee appointed?

Dr. WATERS: It was appointed at Newcastle several years ago, after the withdrawal of the proposed Medical Amendment Act of the Marquis of Ripon. Before that time, the British Medical Association had simply what was called a Committee on Direct Representation, and that Committee was formed with the sole view of obtaining direct representation of the profession in the General Medical Council.

Dr. QUAIN: Did that Committee resign as the result of a subsequent resolution?

Dr. WATERS: It has never resigned.

Dr. QUAIN: Or any members of it?

Dr. WATERS: No members of it.

Dr. QUAIN: I understood that a resolution was carried at a subsequent meeting, and, as I read in the reports in the JOURNAL, several members of that Committee resigned, and Dr. Waters was one of them. I never read of the reappointment of the Committee.

The PRESIDENT: Perhaps I shall express the sense of the members of the Council present when I say that it would be very desirable, as Dr. Waters has requested us to come and hear his statement, that we should hear him in full. Notes should be taken of any question we desire to ask. Our position is this: that we have come here to listen to the communication and statements that Dr. Waters wishes to make.

Dr. QUAIN: It is very desirable to know by whose authority Dr. Waters speaks.

The PRESIDENT: No doubt, Dr. Waters will give us all the information we require; and if not, we will receive information by and bye.

Dr. WATERS: We shall never get on really at this rate, if I am speaking of a meeting at Newcastle years ago, and then suddenly have to jump over an interval of time and come to the meeting at Manchester held last autumn. Dr. Quain has put a question, and I was answering him. I say, up to that meeting at Newcastle, from the time of meeting in Dublin, when the Committee was first appointed, there was simply in this Association a Direct Representation Committee, as it was termed. It had one object before it—to obtain a modification of the General Medical Council; and the Committee then, when the Bill of the Marquis of Ripon came before the Legislature, declined to accept that Bill because it did not concede what the Association prayed for, and believed to be, not its right, but the right of the profession. On the withdrawal of the Bill it was assumed by the Association—indeed, it was assumed by the members of the House of Commons at the time—that the Association had entered on a different phase; and, so far from being a Direct Representation Committee, it became converted into a Medical Reform Committee, and from the time of the meeting at Newcastle up to the present moment, it has been the Medical Reform Committee of the Association. I was Chairman of the Direct Representation Committee, and I have been Chairman of the Medical Reform Committee, and remained Chairman of that Committee without a break until the meeting last August in Manchester. The report on the Reform Committee was then brought forward as usual at the annual meeting of the Association, and it was read and accepted; but a member of the Association moved that, instead of simply going in for the whole broad features of medical reform, to which the Association has been pledged for forty-five years, the Association should simply go in for a Bill to enact penal clauses by which practitioners should be kept in what many members consider their proper places. As Chairman of the Committee, I resigned my post, and other members also resigned; and one gentleman, Dr. Stewart, is here to-day, who resigned on the occasion. Now to explain to Dr. Quain, the Committee is appointed from year to year

with power to add to its number. The Committee met. I was requested, though I resigned, to attend that Committee. I attended, and they begged me again to resume my place on the Committee. I hesitated, but, on representations made to me, I after a time resumed my place upon the Medical Reform Committee of the British Medical Association, and again became Chairman of that Committee, and in that capacity have acted ever since, summoning the Committee at such times as I thought right; and, indeed, I have summoned the members for to-day by special telegram, and the response of the Committee to my summons will satisfy Dr. Quain that there can be no doubt that, so far as any body can constitute me Chairman of that Committee, I stand here in that capacity. A crisis, as we believe, having occurred again in the matter of medical legislation, the Committee have had more than one meeting; it has had several meetings, and individual members of the Committee have taken action, and, in accordance with instructions given me, I communicated with the President of the General Medical Council. My object in doing so was to bring, if possible, united action between the General Medical Council and the profession. I believe in my heart and conscience, that there is no doubt that the Association represents the general body of the profession in this country. I believe, also, that this Medical Reform Committee, which has been appointed year after year now over a period of ten or eleven years, represents the views of the Association, and that, so far as any body of men can represent others, so does this Committee represent the Association in its collective capacity. I believe it also represents the profession, and that we have the voice of the profession of this country with us in the objects for which we are now striving. I should like to say that this Association, since the second year of its existence, has been busy in the matter of medical reform, and that it has continued to be so; that, indeed, to the Association is due the Medical Act of 1858. It is very natural for many people to think that the Association may not have played the part that we believe it has played; but, at any rate, it is certain that, in 1853, the Association drafted a Bill, regarding which Bill there waited on Lord Palmerston a deputation of numerous members of the profession. It was supported by members of Parliament, including many distinguished men, such as the late Mr. Macaulay and others; but it is not necessary to enumerate the names, because they are given in the JOURNAL of that date. In reference to that Bill, Sir Charles Hastings told Lord Palmerston that he went in for three things, viz., equal rights to practise throughout the United Kingdom—those rights have been given: the adoption of uniformity of qualification—unfortunately, uniformity of qualification has not yet been attained; and the adoption of the representative principle in the formation of the Council. Then there was the formation of a register. Now two of the objects for which the Association has striven have been obtained; that is, reciprocity, and next the register; but we have a far more important object, the having a good portal by which the qualifications of every man entering the profession shall be tested. I think that reciprocity without a good portal is conferring an advantage upon bodies, it may be, of a very inferior character, and so persons unfitted to practise the profession may, through the absence of uniformity, enter the profession and be registered as qualified practitioners and practise with impunity as regards the public generally. Now that uniformity not having hitherto been obtained, we have striven to reach it by the conjoint scheme of examination in each division of the Kingdom; and the Bill of the Marquis of Ripon gave us that. By the decision of the Direct Representation Committee, we were obliged not to accept it. Whether rightly or wrongly, we did not accept it; we were commissioned to obtain an object which was not conceded, notwithstanding the prayers of the Association, notwithstanding its representations to the General Medical Council; more than once we declined to accept it, and we did so for this reason, that we believed, if we accepted the conjoint scheme, the question of the general representation of the profession in the General Medical Council could not have been brought before the legislature. Now we still go in for the conjoint scheme, but we want, further than this, direct representation; and I think we may well come before the General Medical Council to-day to ask the members whether they do not think that there is some reason why the profession as a body should be represented in this General Medical Council. The objects of the Association are, uniformity of qualification; secondly, equal rights to practise throughout the United Kingdom; thirdly, the adoption of the representative principle in the formation of the Councils. At one time, it was thought there might be a Council in each division of the kingdom.

The PRESIDENT: You are mentioning a Council in each of the three divisions of the kingdom. That idea has long ceased.

Dr. WATERS: It has long ceased. If there were a Council in each division of the kingdom, then the profession should be represented in such Medical Councils; but now there is only one General Medical

Council, and we hold that in that Council the profession ought to be represented, and therefore, so far as the enactments are concerned, although instead of Medical Councils there is happily but one General Medical Council, still we hold to that great principle. That is a mere matter of detail; but we hold to the principle that the medical profession ought to be represented in the General Medical Council. Now I do not know whether it is necessary for me to go into all the arguments in favour of this.

Sir JAMES PAGET: I think I may say, for every member of the Council, that we have read them all. I should be ashamed of myself if I had not read them carefully.

Dr. WATERS: Then I may assume that it will be admitted. But there is no doubt that the money paid as registration fees by the sixteen thousand or eighteen thousand members of the profession, when this Council was first formed, amounting to something like £36,000 or £40,000, constituted the bank upon which this General Medical Council commenced its general operations. From that day, there has been a registration fee exacted from every member entering the profession. We enter the profession, and are contented to pay it. Well, we feel that, if the working man be represented in Parliament, and if it be believed that the representation of the working man is a valuable addition to the legislature, surely educated members of the medical profession may safely be trusted with the election of representatives to the General Medical Council. I will not go through all these arguments; for, as Sir James Paget has said, they have been placed before the profession, and they will be continued to be placed before the public and the profession; but, as far as my experience goes, I do not meet with more than one or two persons who do not hold that the profession ought to be given direct representation in the Council. My object in submitting the Bill of the Association to the consideration of the Council was, that in its provisions were made for the direct representation of the profession; that the clauses were drawn and carefully considered; and that it is believed that, if those clauses be carried, then the work will be easy, and quite easy, and that there is really no difficulty in the matter; and it is with the view of drawing the attention of the General Medical Council to this question of medical representation on the General Medical Council that we wait upon you, sir, to-day. I would say the two points for which we are now contending are, first, representation of the profession in the General Medical Council, and next, the establishment of an uniform conjoint scheme of examination to be made compulsory for the kingdom.

Sir JAMES PAGET: Do you mean one for the whole kingdom, or one for each division of the kingdom?

Dr. WATERS: One for each division of the kingdom. It is a matter of detail.

The PRESIDENT: Are there any other members of the deputation who desire to offer any observations?

Dr. DAVEY: I would beg leave to say a word or two. I conceive that the propositions put forward by our Chairman are exceedingly important; and I could hardly consider it possible that any gentleman of the Council sitting around the table can do anything else than concur in the opinions expressed by Dr. Waters, as to the due representation of the profession at large in the General Medical Council. It is a matter which appears so sensible, and must certainly so impress itself on the mind of each gentleman I address, that surely no objection can possibly be taken to the matter. I look with confidence to the general support of every one present, not only of each individual member of the Medical Reform Committee, but of each gentleman holding office and representing the General Medical Council; for the one portal system in so far as applies to each division of the kingdom—that is to say, a portal in each division of the kingdom—is a matter that must recommend itself also to the conviction and opinion of every gentleman competent to exercise his judgment. At the present time, we know very well that various gentlemen enter the profession very easily, and probably it may be considered that very easy entrance into the profession results from the fact of there being so many licensing bodies. I believe the existence of such a number of licensing bodies tends very much to disparage the medical profession in the eyes of the public; and that the interests of the profession, and the well-being of the public also, will be very materially promoted by the one portal system; and furthermore promoted by the introduction of a fair representation of the body of the profession into the General Medical Council. Such are my opinions; and I do not think there is any gentleman in this room who is really opposed to the opinions expressed so far by Dr. Waters and myself.

Dr. WATERS: If I might be allowed one observation more, it is this. I believe the alternative has been submitted of what is called indirect representation; that is, that the members of every licensing body should have a voice in the election of the representative of that body in the

General Medical Council, and that that would be an improvement on our plan. After the greatest deliberation and consideration, we cannot come to that conclusion; we see no gain whatever that could be attained by it. If we take the profession in Scotland, it does not form a constituency as large as that which represents the University of Cambridge, where all the graduates have a vote in the election. Then, if we take England, where we have the College of Surgeons, we have, I believe, at least sixteen thousand members, and you have there an enormous constituency, at least as unmanageable as the whole profession of England. Then, again, many members of the profession are members of the Royal College of Surgeons and licentiates of the Apothecaries' Company, and graduates perhaps of some University; and I do not know that they are the better men because they have so many qualifications. It may be assumed that so many qualifications are taken with the view of impressing the public favourably; but they would either have to vote for the election of the representative of the several bodies to which they belong, or else they would have to make a selection. We think the simplest plan is that the profession should have its representatives, and that it should have the power of electing them; and, I believe, without that, the profession will not be satisfied. I may further say we have been issuing circulars lately, and we have had from all parts of the kingdom answers in favour of direct representation; and I do not see how it is possible for the General Medical Council to be at issue with the great body of the profession as to this matter.

Sir JAMES PAGET: I do not profess any opinion at all as to the question of direct representation, but I wish to ask a question with regard to the method of election. The election will be, of course, by proxy-papers to be sent to some central office. I do not know whether the Association would also recommend that it should be by ballot, that is, that the name of each ballot should be concealed at the same time that he voted by proxy. It would be necessary to be considered, because, so far as I know at present, that double manner of election does not exist anywhere. There is voting by proxy and voting by ballot; but I do not know whether, in any large matters, there are any instances in which ballot and proxy are both observed. I do not know whether the Reform Committee of the Association have considered that.

Dr. WATERS: The clauses which the Association has promoted are simply for election by voting-papers, and it seems to be a very simple means of accomplishing the desired end. The question of ballot never entered into our consideration.

Sir JAMES PAGET: Did it not? Is the name of the voter in every case to be given out as a person voting for this or that representative of the profession? That is a very important matter.

Dr. WATERS: So far, that is the arrangement proposed. It is not proposed that there should be ballot, but the question is not one of detail. The question is: Shall the principle be acknowledged that the profession, as a body distinct from the corporations, should be represented on the General Medical Council?

Dr. ANDREW WOOD: I would put it to Dr. Waters that, no doubt, it is a distinct principle; but, unless you can prove the details by which you are to carry out that principle, there is a difficulty in coming to a conclusion upon it. I am not giving an opinion upon it. I have my own opinion; but you said there are sixteen thousand electors in England. Now, do you propose that the sixteen thousand electors in England are to vote for the four, or are you to divide England into electoral districts? I would like you to direct your attention to that.

Dr. WATERS: That is a matter of detail. We go in for the principle. We have not thought, as far as we are concerned, of dividing England into electoral districts. We have done our best as far as our Bill is concerned, and we are sanguine that those principles for which we contend will triumph sooner or later. Two of the things for which the Association have contended have been granted; the third—the conjoint scheme—is on the point of being granted; and I believe the fourth will naturally follow, that is, a representative Council; but we do not imagine for an instant that any Bill can pass through Parliament without being more or less modified before it becomes law. The Duke of Richmond has brought the Bill into the House of Lords. I do not know whether he is sanguine as to its passing in its present shape, but it is certain that that Bill must meet with the strenuous opposition of the Association.

The PRESIDENT: I do not know whether you wish to go into the question, but can you say to what particulars in the Bill we are now all considering you object?

Dr. WATERS: We object to the permissive clauses and to the absence of representation.

Dr. ANDREW WOOD: Has Dr. Waters calculated what the expense would be of such a measure? I can tell him that, in order to obtain votes in the Universities in Scotland, at any rate, where there are, I think, two or three thousand electors, the expenses are so great

that it forms a very severe tax on the candidates—in fact, a man does not get in under two or three thousand pounds for these Universities. I observe in your Bill you state the expenses of the election are to be borne by the Council. Now, I just wish you to direct your attention to that—as to how those expenses are to be met, and whether you think such a tax upon the funds of the Council will not seriously interfere with their action?

Dr. WATERS: In the Bill it is very clearly stated that the Registrar in each division of the kingdom will have to issue circulars, and that he will receive those circulars, and that then the election will be decided by the votes in those circulars. For those expenses, the General Medical Council will be responsible, and they will be a trifle. They will be something like one canvass of the Medical Benevolent College at Epsom. We do not suppose, for instance, that we are going to have gentlemen standing up for seats in this Council who have a political career before them, as almost all the members for the Universities have, to whom the expense of an election for Cambridge, Oxford, or Edinburgh is a mere trifle. They would not regard it. They are perfectly satisfied to get, at whatever cost, a seat in the Imperial Legislature. We think that the expenses would be very trifling.

Dr. QUAIN: I wish to ask Dr. Waters whether he could not have had, in Lord Ripon's Bill of 1870, the compulsory clauses for conjoint examination, in addition to uniformity of practice, if he and the authorities he represents had not interfered to prevent that Bill from passing? And I would ask also, if he had not been offered a Select Committee to go into the question of direct representation?

Dr. WATERS: I answered that question in the observations I have already made. I said we were at the time not a Medical Reform Committee. We were a Committee appointed by the Association at Dublin, and secondly at Oxford, where the numbers were greatly increased; then at Leeds; and we were a Committee formed with a specific purpose—that of obtaining direct representation of the profession in the General Medical Council. We represented that to the Government at the time, and we told them we liked their Bill as far as it went, only in that respect we would modify it as far as regards the power given to the Privy Council over the General Medical Council; for, if we had direct representatives in the General Medical Council, then it would be a body entitled to the absolute confidence, not only of the Universities and Corporations and of the Government, but also of the profession. We thought it would be a Council—I must be pardoned for saying it—not sitting on a narrow basis; but a Council representing not only the Universities, but the public. Well, we had no power to accept the proposal on the part of the Council. I consulted with those gentlemen acting with me, and we had our amendments drawn, and we presented our amendments to the Government, but the Government would not receive them.

Dr. QUAIN: You were offered a Committee of the House of Commons to go into the whole question.

Dr. WATERS: That is perfectly true; but you must remember that Governments rise and fall, and we could not say whether that Government would be in existence in the following session or no. Then I put myself in communication with persons to whom I had access, and I spoke to a gentleman now dead, Mr. Glyn, the brother-in-law of the then Premier, and he told me we had done perfectly right in not accepting that offer of the Government.

Dr. QUAIN: Then we distinctly understand that, owing to the action of the Reform Committee, Lord Ripon's Bill was stopped; and I would ask, from that time to this, what has the Reform Committee done to advance the question?

Dr. WATERS: We have done our best.

The PRESIDENT: Dr. Quain has put a question to you, whether the Bill would have passed had it not been for the action of the Reform Committee.

Dr. WATERS: That I cannot say.

Dr. QUAIN: You take the credit for it.

Dr. WATERS: I cannot say.

Sir JAMES PAGET: I beg for myself to say that it should not be assumed that I or the whole body of the General Medical Council offer any decided opposition to direct representation. So far as I know, for many years past no opinion has been expressed on the matter; it has never been discussed since I have been a member of the Council. Now, the present Bill seems to be a piece of legislation not necessarily associated with the matter. It seems entirely open for the Medical Council to consider it fairly and dispassionately; only I may be allowed to say, when you talk of principles and details and all those matters, you are apt to suppose they are entirely distinct things. Now, many principles are made up of details, and every detail involves a great principle; therefore, whatever opinion you have to express in the matter as an expression of the profession to the General Medical Council, I should have to con-

sider whether the thing can possibly be worked—whether the details will not render the principle altogether impracticable. I do not say for a moment it is so, but, in regard to that one point about which I asked, it is very singular that a body interested in the matter could not have decided what would be the method of voting, because in the House of Commons that would be a direct question. Are we to have a system of voting combining the systems of ballot and proxy—that is to say, which reduce the responsibility of each individual voter to the lowest possible level? I do not say whether it is right or wrong, but that is a great principle in itself—the diminution of the responsibility of each separate voter by enabling him to vote secretly and by proxy. Proxy is excellent, and ballot is excellent; but, so far as I know, there is no instance in this kingdom where both are adopted. That is the principle to be decided by the Medical Council.

Mr. MACNAMARA: Is it not proposed to be by ballot?

Sir JAMES PAGET: By proxy.

Mr. MACNAMARA: But, would not proxy go directly against the ballot principle adopted by the House of Commons in its present state?

Dr. ANDREW WOOD: The Universities vote by proxy and not by ballot.

Dr. WATERS: Sir James Paget has directed a question to me. The answer is this: that the profession has gone in for voting by proxy, excluding ballot.

Sir JAMES PAGET: Excluding ballot.

Dr. WATERS: It is voting by proxy; but our object is to have everything fair and aboveboard.

Sir JAMES PAGET: Open vote?

Dr. WATERS: Open vote. That is the desire of the profession.

The PRESIDENT: I will make one observation on Sir James Paget's speech, and on one or two expressions that have fallen from Dr. Waters. Allow me to say this; and I will illustrate it by a letter which came to the office since the Council met, in which two distinct questions were put, which I had to answer. One is, what the Medical Council had ever done for the profession? and the other is, which member of the Council represented the profession? Well, I declined to give any answer to that in private; but I did give an answer in the Hall of the Apothecaries' Society—and the answer is a very simple one—that the Medical Council, appointed under an Act of Parliament to discharge special duties, has been doing its best for the profession. Whether it could have done better, is another question; but it has done its best; as an old member I may be allowed to say that, and I cannot allow, on behalf of the Council, any assumption that it has done otherwise. It is administering an Act of Parliament; and every gentleman on the Council is appointed to discharge that duty as well as he can. And then the second question, about which I think there is often a misunderstanding, is the supposition that there is no member of this Board that represents the profession. My answer in public before the Apothecaries' Society was this: "I should like the member of the Council to be named who would dare to rise in his place, and admit that he represents anything else but the profession, except it be the nation at large." It is often assumed that at this Council Board the sole motive is the representation of a particular body. I think that those who sit around this table, and during twenty years have seriously endeavoured to discharge the responsibilities put upon them, ought not to admit that; because, if they did, they would admit what was not really the case. We cannot receive any statements or representations admitting as a body that we desire less than any other of our brethren in the profession to discharge our duties, or that the whole motive power of this Council is for particular institutions and not for the country at large. I trust the Council will say I am right in saying this. With regard to the particular point Dr. Waters has brought before us to-day, I would only observe that we are called by the Government to give an opinion upon a certain number of clauses, and we are doing our best to do so. What is before the Council after two o'clock is the consideration of this document; and if this document or any other document come before us, it will be attended to with the same attention and sincerity.

Dr. QUAIN: There is nothing more important than the uniformity of examination; and I want to place the blame of not having that on some one, and that is on those parties who contrived to get Lord Ripon's Bill thrown out. That is distinct; and I do not think Dr. Waters will deny that the persons whom he represents were those who threw out that important Bill. I want simply to know what has been done since that time towards advancing any of the questions to which Dr. Waters has referred. Now, we are met again with the hope of getting another Bill, and very likely with the same result. I say, therefore, it is very much to be lamented if, for these past eight years, no actual step has been taken to promote this object. I know no step, except that a report was brought

before the meeting at Manchester, and that, by a majority so large and so decided that it led Dr. Waters and other members of that Committee to retire, the meeting on that occasion voted for, not this direct representation, but that the profession should be put on a proper footing with regard to quacks and quackery. When those gentlemen retired, the Association was content. It did not ask them to come back; but they very properly met and re-appointed themselves. I do not know that they did wrong; but they are not the voice of the British Medical Association, except indirectly. Well, since that meeting at Manchester, the voice of the Association has not been expressed. I believe the proceedings of the Association at Newcastle led to the retirement of some of its most distinguished members; but they have rejoined it in the hope that in future this important question should receive the support of the Association. I want it to be distinctly understood that the British Medical Association caused the rejection of the Marquis of Ripon's Bill. A Special Committee was offered, and one Government is bound by the acts of another.

Sir DOMINIC CORRIGAN: No, no.

Dr. QUAIN: Sir Dominic Corrigan's experience of the House of Commons has been greater than mine; but, if one Government offered a Select Committee to a public body to inquire into a public question, a following Government would never refuse it.

Mr. MACNAMARA: I would say a few words to Dr. Waters, and I am quite sure he will accept them in the spirit in which they are offered; and that is, that this Council, subject to the correction of the President, has been principally called together this session to consider the Lord President's Bill; and, as you have already stated, there is not one word as to direct representation in that Bill, nor has the Lord President asked us our opinion on that subject. As far as I understand, the session is coming to a close to-day. There is a great deal of very important matter still before us, to which the Lord President has directed our attention, and in reply to which he expects an answer. Now, if Dr. Waters could get the Lord President to direct our attention to direct representation clauses, there is no doubt that this Council should devote itself to it; but, unless it is brought in that substantial way before this Council, I think it is only my duty to tell Dr. Waters and the deputation present, that I cannot see how an answer can be given on the subject of direct representation at the present sitting of the Medical Council.

Dr. ROLLESTON: I would ask Dr. Waters upon what basis is this direct representation asked for? Now, there are two views, upon either of which a person has claimed, and may claim, to be represented. The first view is that of the University of London, that, by being represented upon a particular body, whether in the House of Commons or elsewhere, that body will be improved and made better and more efficient. That is one theory; that is Mr. Robert Lowe's view. Now, the other view is this: that whether persons by being added improve the deliberative body or not, if they have the right to be represented, it should be given to them. That is a totally different view from Mr. Robert Lowe's view. I think I have made myself plain. I have no doubt Dr. Waters will have made up his mind as to which of those two views for asking for a vote the British Medical Association thinks the more admirable. I should be glad to know, if he represents the profession as well as he represents the Association, upon which of those two views he will base his claim.

Mr. TEALE: I should like to ask Dr. Waters what the view of the Committee is on these two points, because it is when you come to details that you find difficulties in matters of this kind. Is it the opinion of the Committee that the present Medical Council should be added to, or that the members selected directly by the profession should displace an equal number of the Medical Council; and, if so, how is it to be decided which of the members of the Council go out?

Sir D. CORRIGAN: I think there is the *prima facie* objection to the manner in which the present proceedings are conducted, that the questions all come from this side. That means that we are to conduct a cross-examination of the Committee waiting upon us, but there is no provision for their asking any questions at all. I do not think that is fair. I think if one side has a right to ask questions, the other side should have an equal right to do so.

Dr. WATERS: Perhaps, it would be convenient that I should answer the questions put, because they are all fresh in our minds, and I am sure there are other members of the Committee—at least, I sincerely trust there are—who will not refrain from the expression of their views on the matter, because of my having so frequently spoken. I should like to make a few observations with regard to what has fallen from Dr. Quain. He is very anxious to fix upon me—I do not know how I am so very important a person—the rejection of the Marquis of Ripon's measure. Well, I may say that I had very able coadjutors on that occasion.

Dr. QUAIN : I said you represented them.

Dr. WATERS : I may say I had very able coadjutors upon that occasion, and I consulted several distinguished members of this General Medical Council. When the notice of the second reading of the Bill was put down on the paper in the House of Commons, I received a letter from Mr. Macnamara—I hope I am not guilty of any breach of confidence in stating it—begging my immediate presence in London to oppose the Bill (I have his letter here), and I came up immediately. I travelled up with the late Dr. Hughes Bennett, who was a member of our committee at that time; and very busy we were in the House of Commons. Mr. Macnamara was one of the most active opponents of the Bill. He induced his College on that occasion—or, at any rate, his College actually did so—to petition in favour of direct representation. The College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, did the same. I am speaking to the best of my belief. I do not know whether their object simply was to throw out the Bill; but, at any rate, such was their action, and I did not stand alone in opposition to the Bill. As to my own personal feelings, that is quite another matter. I felt I was bound to oppose the Bill. I was not acting for myself; I was acting for the Association with a distinct mission. Now, as regards Dr. Quain's glowing description of that meeting at Manchester where this resolution was passed, which, he says, represented the voice of the Association, the fact is that, at the far-end of the meeting at Manchester, when there were not thirty-five persons present, an abstract resolution took the meeting by surprise. Now, we hold that a resolution passed without notice, and by such small numbers, cannot be taken as representing the voice of the British Medical Association. It certainly did not represent the voice of the Medical Reform Committee. Now, as regards Dr. Rolleston, he puts two questions to me: either I am to lay the claim for direct representation on the basis which Mr. Lowe assigns as a good ground for obtaining it, or else I am to look for it as a right; and Dr. Rolleston says that I must accept one of these two views. I demur to that. I say the thing may be a right, and that the concession of the right by the introduction of members of the profession into this General Medical Council may not do the Council any harm. In my opinion, it will introduce into it an element which it does not now possess. I believe that the members around this board are not so acquainted with the needs and wants of the general practitioners of this country as is desirable for the good of the community.

Dr. ROLLESTON : Just specify those needs; that is what I want.

Dr. WATERS : On that account, I say the introduction of this element will benefit the General Medical Council. I think also it is a right, because the body that finds the funds by which this Medical Council is enabled to meet at an expense of £400 a day, as the President told us in his address.

The PRESIDENT : Not £400 a day, but £400 if summoned for one day.

Dr. WATERS : Well, I say the body that finds that £400 which is spent in discussing the rival merits of various corporations, whether, for instance, bodies shall be merged or not, so as to form conjoint boards for examination, has a right to be represented. Therefore, when Dr. Rolleston wishes me to select one view, I select both as entitling us to direct representation on the Medical Council. I am free to admit that the time spent here to-day has been spent agreeably and, I believe, with profit, notwithstanding the unfavourable aspect of affairs at the commencement. Dr. Quain knows I have only one object to serve and no other. I do not wish to show any disrespect to the Council; I am here simply to-day out of deference to the Council, and because I believe that the Council should move in this matter; that, as the Council is at the head of the profession in this country, it ought to be made acquainted with the desire of the profession; and that it should have, therefore, the opportunity afforded it of taking it into consideration. I hesitated about the step, because I did not want to trouble the Council too frequently; but we have allowed several years to elapse without troubling the Council. It was years ago that we appeared before them, and we come before you to-day to ask you to consider this prayer of the profession. I am very glad to have been cross-examined to-day, if by my answers I can more clearly show what the Association wishes. As regards Mr. Teale's question, that is also a matter of detail. I believe it would be impossible to carry a Bill through the House which would not meet with a great deal of opposition as to representation. The view of the Association is, that it would be better not to increase the number of members of the General Medical Council; that, as Edinburgh and Aberdeen are linked together, and only have one representative, there is no reason—I hope I shall not be deemed offensive—why the Apothecaries' Society of Dublin should have a representative to itself. I do not see why a single college should not have a representative in a city where the university of that

city—one of the most important colleges in the world as regards medical education—has a single representative. I think some of these colleges might be represented; but it is not for us to court opposition; we have had enough of it to contend with; and therefore we go in for the principle of bringing in our amendments and proposing them. If members of the House of Commons or the House of Lords should think it desirable to link bodies in representation, all well and good; we make no objection to that; all we desire is that we should have one-fourth of the Council, and the Government one-fourth of the Council; and that the universities and professions should form one-half of the Council; and we think that by this the Council would be improved. That is the deliberate opinion we have come to. We do not say we are to disfranchise this or that body. Why should we? But, if it be desirable to embody bodies in representation in the same way as Edinburgh has been linked with Aberdeen, well and good.

Dr. ANDREW WOOD : Has the Association laid those views before the Duke of Richmond?

Dr. WATERS : Yes; but he said nothing about the subject.

Dr. QUAIN : Dr. Waters has made use of a very remarkable phrase—"taxation". Now, I am not disposed to think that the fee for registration can in any sense be called taxation. A very great privilege is given for the fee paid for registration. How very different is the solicitor's annual licence! A very considerable sum; I do not know how much it is; and what representation has the solicitor for the fee he pays? It is simply a licence to practise; and a gentleman comes here, and, under the law, he cannot practise without paying a fee of five guineas. I do not think that can be called taxation. It is a fee paid for the privilege given by the legislature for the right to practise everywhere; and each of us is represented by the member in Parliament, who imposed this fee. If I have spoken so frequently now, it is because I have often talked over this subject with my friend Dr. Waters; and probably I know as much about the whole question as many do. Why I was a little annoyed in the first instance was, that the Council should be blamed for not receiving this deputation at a particular hour, when I knew that the deputation was engaged at a meeting of its own body at two o'clock.

Dr. WATERS : I most distinctly disclaim it. I said so once before, and now I rise again and say, I am here out of deference to the General Medical Council.

Dr. QUAIN : If that be the case, and Dr. Waters did not, as I understood he did, find fault with the Council for not receiving him, I am exceedingly sorry I made some of the observations I felt it my duty to make; but I was under the distinct impression that Dr. Waters said the Council would not receive him.

Dr. STORRAR : I am exceedingly desirous to be perfectly clear as to the present relations between this deputation and ourselves. With regard either to the matter or the manner of Dr. Waters, I am sure I can have nothing to criticise. His intelligence and graciousness of manner under very trying circumstances really command my thorough respect. At the same time, I think that, in so important an interview as this, it is necessary that we should be quite clear as to our mutual relations. Now, as I understand, the gentlemen here before us are not the Committee of the British Medical Association, but they are members of that committee only, and the committee, as a committee, decline to come here.

Dr. WATERS : I wish to explain the absence of a few members of the Committee. I have found myself supported almost beyond my expectations, considering the shortness of the summons and the distance those gentlemen have had to travel. I was agreeably surprised when I found myself accompanied as I have been to-day. The other members of the Committee are not here, simply through a misunderstanding. It was supposed that it was rather an invitation to me personally than to the Committee; but I think that matter has been put right.

Dr. STORRAR : I confess I understood from Dr. Waters that there were certain gentlemen belonging to this Committee who declined to be present at this meeting, in consequence of the objection they raised to the manner in which they were to be received. The consequence is, we can hardly look upon the gentlemen before us as representing the whole Committee. Another remark I have to make is this. I desire emphatically to say that I express no opinion as to the views that have been expressed upon the subject of direct representation. I would wish to look upon this as an open question to be very dispassionately considered; but what I want to know is, how far Dr. Waters is technically accurate in representing the opinions of the British Medical Association upon this point. He acknowledges that it was mainly due to the efforts of the British Medical Association that Lord Ripon's Bill was defeated. Now, it does not appear to me that any very strenuous efforts have been made by the British Medical Association from the

time of the rejection of Lord Ripon's Bill up to the present time to promote these views of direct representation; and it seems to me that there is a missing link in what we hear as regards the meeting in Manchester last year. It seems that this question of direct representation dropped out altogether. The link was broken for the time. I am accustomed, in the University of London, to deal with the great difficulty of meetings falling away towards the end; but, whether they fall away towards the end or not, the bodies are equally bound by the votes of that meeting; and the simple fact is that the question of direct representation dropped and merged in the question of strengthening the penal clauses of the Medical Act, as I understand. I know nothing but what I have heard in this room. If it did not mean that, why did Dr. Waters retire from the Committee? Dr. Waters seems to have been so much impressed with what happened at the meeting, that he withdrew from the Committee altogether, and then, under influences which one can quite understand, highly honourable to the Committee and highly honourable to Dr. Waters, he was induced to resume his place on the Committee. At the same time, I cannot help feeling that in the unity of this history there is a link missing, and we have a difficulty in actually seeing the British Medical Association before us in regard to this question. I say this, because I think it is necessary to the proper understanding of our position. I do not enter into the question of direct representation. There is a very great deal to be said in its favour, and I hope it will not be understood that I am saying one word at the present moment hostile to the principle; but I felt that this conference would not be complete without our understanding what our mutual relations were, and what was the defect, if defect there be.

Dr. WATERS: I shall be very happy to explain. At the meeting at Manchester, the report of the Medical Reform Committee was brought forward and carried. Then came a resolution, and that resolution was that, considering the difficulties attending legislation on private matters—and we are all acquainted with those difficulties—it would be better not to go in for the broad features of medical reform, but that the Committee should be instructed to frame a small Bill, in the absence of the ability to carry the greater measure, which would secure the general practitioner from the loss he sustained through irregular practitioners. I had a special objection to committing myself to go in for a Bill of that character; and this Council, knowing how difficult it is to carry any private measure through Parliament without the direct sanction of the head of the Government, will easily understand that I did not go in for that one private Bill. I would not disregard the interests of the general practitioner. I think, in his hard work, he well deserves the protection the law can throw over him; but I would not have to do with a Bill expressing that one feature only. On that ground, I retired from the Medical Reform Committee. The remaining members of the Medical Reform Committee met in London, and I was invited to attend. I thought it right and proper to attend, and the representations then made to me induced me to resume my seat at the Medical Reform Committee. In that position, I was authorised to communicate with various members of Parliament with whom I had previously been in communication, and I loyally submitted to those gentlemen—some of the most influential in the House—the measure proposed by the resolution at Manchester, and the reply I met with was that it would be fatal to the influence of the Association if we went in for that one point alone. Now, as regards the absent members of the Committee, I may say we met at Dr. Stewart's house; indeed, to his hospitality we are indebted for spending a delightful evening together, and those gentlemen who are absent stated that it was unnecessary for them to be present, because they entrusted the expression of their views entirely to me. I should not wish to repeat this, but I think it is essential in reply to Dr. Storrar. We are entirely agreed; we have no point of difference; and they knew, though their absence diminish our numbers, it was safe to entrust the expression of their opinions to me. It is in that way I am here, with the other members, as representing the Medical Reform Committee.

Dr. PYLE: I should like to ask Dr. Waters whether the feeling of the profession is not more in favour of having a Bill that would deal with the penal clauses and give them protection, than of direct representation on the Council.

Dr. WATERS: I cannot say I think so, because I do not think so. When the meeting was almost broken up at Manchester, a resolution was suddenly brought forward and carried. There had been seven hundred or eight hundred members present; but the resolution was passed at the end of the meeting, and cannot be said to represent the opinion of the British Medical Association.

Sir D. CORRIGAN: I have very few remarks to make. I think the great question before us to-day has been the direct representation of the profession on the General Medical Council. I think we have

shunted that question. Every speaker who has risen has declared that he would not give an opinion upon it. Now I will give an opinion upon it; and I must say that I do not think that the Council, as at present constituted, does represent the profession. As every one is entitled to give his opinion, I will give mine. I do not think this Council represents the profession of the United Empire. It represents corporations; it represents universities in which the profession plays a very small part and has very little influence indeed. I will not go beyond the university which I myself represent—the Queen's University in Ireland—and I say that I do not represent the profession. I am the representative of the Queen's University, and I am expected to advocate the interests of that university, but that is not the profession. How is the representative elected? He is elected by men who may happen to be medical men; that is a matter of chance. There is no positive connection between them and the work of the profession throughout the country, and when once a graduate gets a degree he is left to shift for himself, to exercise any little influence he has or not, but he has no voice in the management of this Council as to the wants or needs of the profession. I must, therefore, repeat what I said, that I think this Council requires to be amended by the introduction of direct representatives of the profession. I do not see any difficulty in it. I think a professor of an university is very much like a man in the middle of this table, or in the middle of a circus; he sees the university and the walls around it, but he sees little or nothing outside. Universities are very little better than the monasteries of old days; and I recollect, when I was President of the King and Queen's College of Physicians, and was engaged in the reform of the profession in Ireland some years ago, the appeal that was made to me was, "Oh, Mr. President, whatever you do, remember this; take care of the poor professors". That was the first object. The next was to look at the interests of the profession at large. I shall sit down, merely stating that I am an advocate for the direct representation of the profession; in what proportion I do not know, or how the particular details are to be managed; but I think it is not a question which the Council ought to shunt.

Dr. STORRAN: I must apologise for one word more. I should not have said it but for what Sir D. Corrigan has just said. I entirely dissent from some of the views which he has expressed. I represent an university, and I wish to make it distinctly understood by the gentlemen present what the position of an university representative is. It was not provided by the Act that he should be a member of the profession. If you look to section seven of the Medical Act, you will there see these words: "Members of the General Medical Council representing the medical corporations must be qualified to be registered under this Act". Now I happen to be a medical graduate and to be registered under this Act, but it would have been competent under this Act for the University of London to have sent a lay man to represent the University. This was done for an intelligent object. The view that was taken by the framers of this Act was that not only was the profession to be represented, but that the intelligent public should be represented; and I am here as the representative not only of the University, but of the public.

Dr. STEWART: I was one of those who resigned after the Manchester meeting; but, as it happens, my resignation was never accepted. I have received my summonses ever since, and have been looked upon as a member of the Committee. It is very important that the Council should understand why nothing has been done during the last eight years. Some of the most influential members of the Medical Reform Committee—among them our late much-loved friend Dr. Sibson—begged that the Committee might take no steps lest they should interfere with the success of the projected conjoint scheme of examination for England. Simply and solely in deference to them we have refrained from doing anything since then. We have, in fact, postponed our claim, which we consider a very strong one, for direct representation, in order that the efforts of the different corporations and universities in England might have fair play without any interference, in order to carry out the conjoint scheme.

The PRESIDENT: If no gentleman desire to make any further remarks, I beg, first of all, on behalf of the Council, to thank the deputation for coming here to express their views. I must recall your attention to the nature of this interview. The members of the Council, in obedience to the request of Dr. Waters of Chester, have met in the only way which he allowed as possible; namely, before twelve o'clock this day; and we have met, under those circumstances, in large numbers. We have met to receive the expression of your opinion, in order that we may deliberate upon it (not in the Council, for we are not now in the Council), and take such further steps as we can. I think I gather, as a matter of fact, that the chief object of the whole of the statements and arguments to which we have listened has been to let the

Council know what those whom you represent, whether this committee or that committee, or the British Medical Association, think of the constitution of the Medical Council. That Council is constituted in a particular way under the Act; it can act in no way except under that Act of Parliament, and can consist of no other persons than those whom the Act provides. They are discharging the only duty which they can discharge, and they are constituted in the only way in which they can be constituted. You, gentlemen, think the Council should be constituted in some other way, and that way seems to be this: that one-fourth of the Council should consist of persons elected by the medical profession, one-fourth be appointed by the Government—Crown nominees, and one-half be elected by the universities and corporations. That is your proposal, and I would venture to ask one question: Whether those whom you represent consider that the numbers of the Council, as a whole, are the numbers which you desire; whether, in the event of the entire reconstruction of the Council—and this is a most important question—it still should consist of twenty-four, or whether the numbers should be enlarged or diminished. That is the only question I venture to ask.

Dr. WATERS: We are satisfied either with the same number or with an increased number, or indeed with a diminished number; but we hope that that proportion which I have submitted to you will be preserved.

The PRESIDENT: Then the actual numbers of the Council are, in the opinion of those whom you represent, of no consequence one way or the other.

Dr. WATERS: We do not lay stress upon them. We do not say they are of no consequence.

The PRESIDENT: I need hardly remind either the members of the Council, or the members of the whole medical profession, of the principle upon which this Council was originally constituted. It is very important, in mere justice to the medical profession and to the public, and to ourselves, to bear in mind that the number of the present Medical Council was unavoidable, according to Mr. Walpole's and Mr. Cowper-Temple's view that every one of the corporations and universities should be represented, *plus* six Crown nominees. But you do not desire that number to be enlarged, and you do not ask it to be diminished; but the point is the proportion. I only wish, in conclusion, that we should bear this in mind—and I address this rather to the gentlemen who have favoured the Council with their presence to-day—that the Council are all keenly alive to the extreme importance of the duties which they have to discharge and endeavour to discharge; and that nothing would please them more than to learn how to do their work better, and for this obvious reason, that they have the work to do. If the Council can be in any way made a body to do its work better, surely all the members would desire it; and the only question is how. I am not authorised to make any remark at all. I cannot speak on behalf of the Council in any sense; but I must refer to one thing: that we are met this session to consider a particular Bill; that this is the seventh day of our sitting; and that I am not at present in a position to say whether it will be possible or not for us to go into the question of direct representation this session. I wish it to be understood that, if this matter cannot be discussed at the Council, it will be from no feeling of disrespect for the gentlemen present, or for the British Medical Association, nor from indifference to the subject, or want of conviction of its importance. We are met to consider this Bill, and whether or no this subject can come forward for deliberation by this Council I really cannot say. I think I may take upon myself to thank Dr. Waters and his colleagues for so frankly and fully laying this subject before us.

Dr. WATERS: I should like, on behalf of the deputation, to express our thanks to the President and the Council for the kind consideration they have given us at this meeting. I should have liked very much to have parted from them with a question as to what answer I am to give the absent members of my committee, just as I was asked what answer the Duke of Richmond gave to me; but I will forbear to put that question.

The deputation then withdrew.

THE MEDICAL ACT AMENDMENT BILL.

THE following circular has been issued by the Medical Reform Committee:

Queen's Hotel, Birmingham, April 2nd, 1878.

Dear Sir,—A crisis, as you are aware, has arrived in regard to medical reform, and the action of the British Medical Association and of the profession is imperatively required to frustrate the passing of a

Medical Bill which does not embody the principles for which the Association and the profession have for so many years contended.

Under these circumstances, we urge upon you the importance of petitioning the House of Lords to prevent the passing of this or any Bill which does not recognise these great principles.

With that view, we forward a form of petition for your guidance.

Unless the petition be written on one side only of a sheet of paper it will not be received.

The petition may be forwarded for presentation to any local peer; to the General Secretary of the Association; or to Dr. Waters, Chester.

EASON WILKINSON, M.D., F.R.C.P., President of the Association.

RANDLE WILBRAHAM FALCONER, M.D., LL.D., etc., President-Elect and President of the Council.

CHARLES CHADWICK, M.D., F.R.C.P., Ex-President of the Association.

ALFRED BAKER, F.R.C.S., Ex-President of the Association.

MARTIN DE BARTOLOMÉ, M.D., F.R.C.P., Ex-President of the Association.

W. F. WADE, M.D., F.R.C.P., Physician to the Birmingham General Hospital, etc.

BALTHAZAR FOSTER, M.D., F.R.C.P., Physician to the General Hospital, Birmingham.

ALFRED CAPENIER, M.D., Lecturer on State Medicine, St. Thomas's Hospital.

EDWARD WATERS, M.D., F.R.C.P.E., Chester, Chairman and Convener of the Medical Reform Committee, and Ex-President of the Association.

Form of Petition.*

The following form of petition was suggested. It must be written and not printed.

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The humble petition of the undersigned, registered medical practitioners, residing in _____ and its neighbourhood, sheweth—

That the Medical Profession, as distinct from the Universities and Corporations, has for nearly fifty years contended for medical reform, and contributed greatly to the passing of the Medical Act of 1858.

That a Bill, intituled an Act to Amend the Medical Act, 1853, has been brought into your Right Honourable House.

That, in that Bill, no provision is made for the introduction of direct representatives of the profession in the General Medical Council.

That the Bill does not provide compulsory enactments for the establishment of a conjoint board for the examination of medical candidates in each division of the kingdom, on the principle of equal fees and equal examinations; and that such enactments are indispensable, in the interests of the public, to abolish the competition downwards in the granting of medical licenses and diplomas.

Your petitioners pray your Right Honourable House not to pass that, or any other Bill, unless provision be therein made for direct representation of the profession in the General Medical Council, and for the compulsory establishment of conjoint boards of examination, on the principle of equal fees and equal examinations in each division of the kingdom.

And your petitioners will ever pray, etc.

An attempt has been made by the Medical Reform Committee to forward the above letter and form of petition, though without complete success, to every member of the profession in the United Kingdom, together with a circular asking for the plain answer "Yes" or "No" to each of two questions.

1. Are you of opinion that the medical profession should be directly represented in the General Medical Council?

2. Are you of opinion that the establishment of a conjoint board for the granting of licences to practise all branches of the profession should be made compulsory in each of the three divisions of the kingdom?

The members of the Committee whose names are attached to the above letter were unanimous as to the importance of this canvass of the medical profession, and I urge the members of the Association to send in their answers and to use their influence with those who are not members to do likewise.

Petitions should be written on one side of an open sheet of foolscap

* Instructions for the Proper Preparation and Execution of Petitions.—Every member of Parliament presenting a petition to the House must affix his name at the beginning thereof. Every petition must be written, and not printed or lithographed. Every petition must contain a prayer. Every petition must be signed by at least one person on the skin or sheet on which the petition is written. No letters, affidavits, or other documents, may be attached to any petition. No erasures or interlineations may be made in any petition. No reference may be made to any debate in Parliament.

and signed at the foot of the petition on the same side of the same sheet by at least one person. Any further number of names may be subsequently added by joining additional sheets. The petitioners should append their qualifications and appointments.

HARVEY TERCENTENARY MEMORIAL FUND.

THE amount subscribed to the Harvey Memorial Fund now exceeds £1,400. We last week noticed the circumstance that the Fellows of the Royal College of Physicians of London had subscribed £105; we to-day hail with equal satisfaction the fact that the Council of the Royal College of Surgeons of England on Thursday last contributed £105 to the fund. The Executive Committee cannot, however, as yet desist from their endeavours to add to the fund, but they are desirous of closing it at as early a date as possible. We are asked again to request the members of the profession who have not hitherto contributed to this object to kindly send their donations at once to either of the hon. treasurers (Sir George Burrows, Bart., or Mr. Prescott Hewett), or to either of the hon. secretaries (Mr. Geo. Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone), or to pay them into the account of the Harvey Tercentenary Memorial Fund at the Western Branch of the Bank of England, Burlington Gardens, London, W. Subscriptions from five shillings upwards will be very acceptable.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Dr. Reliquet's Work on the Urinary Organs.—Alterations in the School of Medicine.—Teaching of the Deaf and Dumb.—Digitalis.—Society of Professional Ladies.—Death of M. Roubaud.

ABOUT ten years ago, Dr. Reliquet published a treatise on the surgery of the urinary organs, which met with great favour with the medical public. He is now putting together the lectures he has since delivered at the École Pratique. They are being published in parts. The first part of the work, entitled *Lectures on Diseases of the Urinary Passages*, has just appeared. In his first lecture, the author treats of micturition, which function he divides into three stages or acts. The first stage consists in the filling of the bladder with urine, which he terms the normal retention of urine. The second stage begins with the sensation of the necessity for urinating; and the third completes the act by emptying the bladder. The mechanism of these different stages is fully explained; and the author follows this by considerations of the function of micturition in children and in women. Most medical men must have remarked that women retain their urine much longer than men, and I have known some women who could do so for twelve hours without inconvenience. This power of resistance is explained by Dr. Reliquet to be due to the peculiar structure of the female urethra, which is entirely surrounded by muscular fibre, from the neck of the bladder to the meatus, which latter is the only part of the canal devoid of muscular fibre; and this constitutes the great difference in the structure of the male and female urethra. But, while the power of retaining the urine is so marked in women in the normal condition, the slightest pathological cause is often sufficient to excite a frequent desire in them to micturate. This morbid tendency sometimes extends to incontinence, and even the act of laughing is sufficient to cause in women an involuntary emission of urine—a circumstance rarely or never met with in men in any condition. Dr. Reliquet next treats of the influence of the will on the act of micturition, the state of antagonism or opposition that exists between the bladder and the urethra, and the innervation of the urinary bladder. In the following lecture, the author considers the various causes that may prevent the normal emission of urine, which he groups under the head of Spasms of the Bladder and of the Urethra. Here, I must confess, I cannot follow the author, as he places under the term spasm, as the proximate cause of obstruction, the various morbid conditions that play a part in the etiology of the retention of urine. The greater portion, he states, of patients labouring under affections of the urinary passages present, in a more or less marked degree, phenomena of a spasmodic character, superadded to the lesion already existing, which derange the function of micturition. This is, so far, sufficiently intelligible; but when he asserts that spasm is the immediate cause in every case of retention of urine, even when there is some organic lesion present, either in the neck of the bladder or in the

urethra, I do not think he will find many surgeons agree with him. The *brochure* under notice concludes by some remarks on the action of chloroform on the urethra and bladder. The author states that the complete action of this substance on the sensibility of the urethra stops at the neck of the bladder, when the latter is the seat of local irritation; in the female, the action of the anæsthetic on the urethra is complete. As for the bladder, the inhalations, far from diminishing its sensibility, appear, on the contrary, to increase it, when it is the seat of some lesion; but, when healthy, the bladder dilates under its influence.

The School of Medicine is undergoing complete transformation. It is to be considerably enlarged, to about three times its present size, and it is to have a new front, monumental of its kind, facing the Boulevard Saint-Germain, also recently opened. The houses around the old building have all been pulled down, so that it will be completely isolated. The École Pratique also is to be considerably enlarged and improved. The cost is estimated at 4,000,000 *francs* (£160,000), and the buildings are to be completed in three years.

One of the most interesting proceedings one can witness in social life is the education of the deaf and dumb. For some time, the language by signs was the system in vogue in France; but, of late years, this is being replaced by what is termed the "visible speech method", not that which is known as the German method, but that introduced into France about the end of the last century by Rodrigue Pereire, one of the ancestors of the great bankers of that name. It consists of educating the pupils to imitate the various movements of the lips, throat, tongue, and teeth which are produced in speaking; and in order to give the subject an idea of the sound accompanying each letter or word, his hand is first placed on the tutor's throat while the latter is in the act of articulating aloud, and then on his own, which he is taught to imitate. He thus feels the sounds, as it were, and pronounces words which he cannot hear himself. This method is utilised even for the education of young children who are gifted with speech.

A very interesting discussion lately took place, at a meeting of the Société de Thérapeutique, on the therapeutic influence and mode of administration of digitalis in disease. Most of the speakers gave the preference to a cold infusion of the leaves over any other preparation, and were almost unanimous in condemning digitalin as being dangerous and unreliable, as it does not possess the diuretic properties contained in the leaves. Dr. Héraud, who brought the subject to notice, recommends the following preparation: Macerate, for twelve hours, twenty-five *centigrammes* of the powdered leaves of digitalis in two hundred *grammes* of cold water. This is then strained, and the patient is directed to take it in five or six doses, in the twenty-four hours, at some distance from meals. This dose, he said, should never be exceeded, if we wish to avoid its poisonous effects; and the quantity he prescribes is quite sufficient to produce the full therapeutic action of the drug, beyond which it is needless to push it. Dr. Héraud considers digitalis one of the best diuretics known in affections of the heart; whereas it is useless where there is no cardiac lesion, as, for instance, in cirrhosis, albuminuria, etc.

A certain number of ladies in Paris, of different nationalities, are endeavouring to get up a society for the benefit of their own sex, the object of which, as the prospectus declares, is to facilitate the study of medicine and of other arts among themselves, and at the same time to render their relations with one another more intimate and useful than at present obtains among them. The Society, which is designated "Société des Femmes Professionnelles", is to meet once a month, and is to be composed of a committee of seven members: president, vice-president, treasurer, secretary, and three other members, chosen by the society. Ladies registered as students of a college or university, those destined for literary instruction or the arts, or those belonging to any of the liberal professions, are eligible as members.

I regret to have to announce the death of Dr. Felix Roubaud, who, with M. Simmonet, whose death was noticed in the JOURNAL about two months ago, founded the *France Médicale*, one of the leading medical journals of Paris. Dr. Roubaud was born in 1820, and took his degree in 1844, when he selected for his inaugural thesis "The Passions". He was of a very active turn of mind, and looked much older than his years. He was the author of several works; but he was more given to politics than to medicine, which contributed not a little to his ill success as a practitioner.

TESTIMONIAL.—THE inhabitants of Belper have, at the instigation of its leading inhabitants, generously subscribed to a testimonial fund in favour of Mr. Johnston, who, for a period of more than twenty years, has practised at Belper. The money raised was expended in a brougham, which was publicly presented to Mr. Johnston on Saturday week, accompanied by many gratifying demonstrations of esteem.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

At a meeting of the Committee of Council, held at the Freemasons' Tavern, Great Queen Street, London, on Wednesday, the 17th day of April, 1878—Dr. FALCONER, President of the Council, in the Chair—Resolved: That the Financial Statement for the year ending 31st December, 1877, as audited by Messrs. Price, Waterhouse, and Co., be received, adopted, and in accordance with By-law 33, published in the JOURNAL.

FINANCIAL STATEMENT FOR THE YEAR ENDING
DECEMBER 31ST, 1877.

Revenue Account, or Profit and Loss for the Year ending Dec. 31st, 1877.

DR.]	£	s.	d.	£	s.	d.
Editor .. .. .	..	..	..	500	0	0
Sub-Editor .. .. .	..	..	..	150	0	0
Contributors .. .. .	..	..	..	1174	19	1
Journal: Printing.. .. .	2987	9	0			
Paper	2099	4	5			
Postage	873	5	3			
Address Bands	173	7	7			
				6133	6	3
Wood Engraving .. .. .	..	..	..	91	5	3
Reporting .. .. .	..	..	..	68	5	0
Sundry Journal Expenses:						
Editor's Postage	14	13	2			
Newspapers	13	14	3			
Parliamentary Papers	2	16	2			
Telegrams	14	2	6			
Wages of Boy	26	6	0			
Cleaning Offices, and Sundries	18	8	7			
				90	0	8
Rent of Editors' Rooms .. .. .	..	..	..	22	16	0
Scientific Grants, 1877-8 .. .. .	..	..	..	300	0	0
Special Grant for the Investigation of Hydrophobia and Rabies .. .. .	..	..	..	100	0	0
Committees .. .. .	..	..	..	8	13	6
Legal Expenses .. .. .	..	..	..	5	8	0
Auditors' Fee .. .. .	..	..	..	42	0	0
General Secretary .. .. .	..	..	..	450	0	0
Rent .. .. .	..	..	..	85	0	0
Furniture .. .. .	..	..	..	33	8	6
				201	7	6
Miscellaneous Printing:—						
Stationery, Envelopes, Paper, etc.	33	11	6			
Circulars and Printing in connection with Subscriptions	7	15	0			
Ditto, in connection with Advertisements	20	5	0			
Association Printing	76	4	0			
Ditto, Annual Meetings, Reports of Committees, etc.	38	18	6			
Printing in connection with Editor's Room	11	12	6			
Reprints	9	12	6			
Association Medal	3	8	6			
				249	7	6
Salaries and Wages .. .. .	..	..	..	410	17	4
Postage .. .. .	..	..	..	165	11	10
Sundry Office Expenses:						
Travelling Expenses of General Secretary	15	19	8			
Receipt Stamps	2	0	0			
Carriage on various Parcels	1	7	9			
Telegrams	2	6	6			
Cleaning Offices	15	8	8			
Assistance and Copying	73	6	2			
Commission on Advertisements	3	10	9			
Journals bought (out of print)	5	5	3			
Sundries	48	3	5			
Coals and Gas	4	10	10			
Loss through late Clerk	77	8	6			
				87	9	6
Stationery	42	5	8			
Bill-Heads, Ledgers, Account Books	5	5	9			
Pens, Ink, Paper, etc.	33	11	1			
Office Copying Press	6	7	0			
				104	19	0
List of Members .. .. .	..	..	..	139	16	6
Association Medal for Distinguished Merit .. .. .	..	..	..	15	0	0
Addresses on Parchment do. .. .. .	..	..	..	4	7	0
Bank Charges .. .. .	..	..	..	0	13	9
Do. .. .. .	..	..	..	5	0	9
Branch Charges .. .. .	..	..	..	4	18	8
				10,639	10	10
Subscriptions—Losses from Death, etc. .. .. .	..	..	..	713	4	1
Advertisements—Discounts and Allowances .. .. .	..	..	..	286	7	7
Sales, Journals returned .. .. .	..	..	..	12	12	1
Profit for the year, carried to Balance-Sheet .. .. .	..	..	..	1207	18	6
				£12,859	13	1
CR.]	£	s.	d.	£	s.	d.
Subscriptions .. .. .	..	..	..	7689	3	2
Ditto, arrears of former years .. .. .	..	..	..	16	18	6
Advertisements .. .. .	..	..	..	4263	19	10
Sales .. .. .	..	..	..	411	1	5
Interest—one year on £3132 os. 6d. Consols .. .. .	..	..	..	92	15	10
Balance on Scientific Grants returned, and amount unused .. .. .	..	..	..	185	3	6
Discounts and allowances on printing and paper accounts and stamps .. .. .	..	..	..	200	10	10
				£12,859	13	1

Summary of Receipts and Payments for the Year ending Dec. 31st, 1877.

DR.]	RECEIPTS.	£	s.	d.	£	s.	d.
Cash in hand on January 1st, 1877:—							
At London and Westminster Bank	£2162	13	10	
At Office	124	14	9	
				2287	8	7	
Subscriptions	7200	13	5	
Advertisements	3854	6	2	
Sundry Sales of Journal	399	12	2	
Interest	69	9	7	
				11,524	0	4	
Balance on Scientific Grants returned	127	3	6	
				£13,938	12	5	
CR.]	PAYMENTS.	£	s.	d.	£	s.	d.
Editor	500	0	0	
Sub-Editor	112	10	0	
Contributors	1127	3	5	
JOURNAL: Printing	2832	0	4	
Paper	1098	18	9	
Address Labels	160	0	7	
Postage	864	5	3	
				5824	4	11	
Wood Engraving	91	5	3	
Reporting	71	8	0	
Sundry Journal Expenses	90	0	8	
Rent of Editor's Room	32	14	0	
				122	14	8	
Scientific Grants—1877-1878	313	15	0	
Special Grant for the Investigation of Hydrophobia and Rabies	100	0	0	
Committee Expenses	20	6	6	
Auditors' Fee	42	0	0	
Legal Charges	57	1	5	
General Secretary	450	0	0	
Salaries and Wages	410	17	4	
Rent of Offices	85	0	0	
Furniture	6	10	0	
Postage	165	11	10	
Sundry Office Expenses, etc.	257	19	4	
Miscellaneous Printing	231	1	9	
Bank Charges	5	0	9	
Branch Charges	4	18	8	
Stationery	91	13	10	
List of Members	102	6	6	
Association Medal for Distinguished Merit—Wyoon	36	15	0	
Engrossed Addresses ditto—Dodswell	15	0	0	
				10,245	4	2	
Purchase of £1573 11s. 7d. Consols	1500	0	0	
Cash in hand: At London and Westminster Bank	2143	8	4	
At Office	49	19	11	
				2193	8	3	
				£13,938	12	5	

Balance-Sheet, 31st December, 1877.

DR.]	LIABILITIES.	£	s.	d.	£	s.	d.
Editor	125	0	0	
Sub-Editor	37	10	0	
Contributors	357	0	9	
Cheques unrepresented	8	2	0	
JOURNAL: On Printing Account	£769	12	10	
On Paper	231	17	9	
				1001	10	7	
Reporting	9	9	0	
Association Medal for distinguished merit	103	1	6	
Committees	2	5	0	
General Secretary	112	10	0	
Rent of Offices	21	5	0	
Ditto of Editor's Room	6	9	0	
Furniture	33	8	6	
Miscellaneous Printing	47	11	10	
Subscriptions paid in advance	327	13	4	
Due on Advertisements	38	9	10	
Wood Fund	25	0	0	
Sundries	31	14	8	
				2288	1	0	
Balance on 1st January, 1877	4241	13	3	
Profit for year from Revenue Account ending Dec. 31, 1877	1207	18	6	
				5449	11	9	
Total of excess of Assets over Liabilities	£7737	12	9	
CR.]	ASSETS.	£	s.	d.	£	s.	d.
Subscriptions	889	19	4	
Advertisements	447	4	10	
Sundry Sales	21	17	5	
Interest	46	7	11	
Balance due on Scientific Grants	13	15	0	
Furniture	125	0	0	
Consols (£3132 os. 6d.)	3000	0	0	
Cash in hand: At London and Westminster Bank	2143	8	4	
At Office	49	19	11	
				2193	8	3	
				£7737	12	9	

Stewart Fund, 31st December, 1877.

TRUSTEES—W. P. Husband, Esq. (Treasurer), Dr. A. P. Stewart,
and T. B. Carling, Esq.

Now *totum* earned and invested in the name of the British Medical Association.

Dr.]	£	s.	d.
To Balance	406	6	0
Interest on Deposit Account	£3	0	0
Ditto on £400 Caledonian Stock	7	18	0
Balance due to Bank	10	18	0
	3	9	8
	£420	14	6
Cr.]	£	s.	d.
By purchase of £400 Four per Cent. Caledonian Debenture Stock	420	14	6
	£420	14	6

We have examined the above accounts for the year 1877, with the books and vouchers of the Association, and find the same to be correct.

PRICE, WATERHOUSE, & CO., 44, Gresham Street, E.C.

April 12th, 1878.

The remainder of the proceedings of the Committee of Council of the 17th instant will appear in next week's JOURNAL.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 9TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

Myxœdema.—Dr. ORD showed two cases illustrative of the condition to which he had given the name myxœdema. The main points relative to it were, that it was met with in adult women (both the patients shown were females); they had very much of the aspect of persons in an advanced stage of renal disease, with a flush on the cheek and pallor round the eyes; their speech and gait were slow and uncertain, and their thoughts were slow. They had scarcely any trace of thyroid gland. There was a collection of fat about the clavicles; and the connective tissue was infiltrated with a soft solid œdema containing much mucin—very little of which was found in ordinary œdema or in healthy skin. The mucous œdema was found also on the heart and other internal organs. It agreed with what Sir W. Gull had termed cretinoid disease in adult women.

ON SOME MINUTE POINTS IN THE ANATOMY OF THE KIDNEYS, AND THEIR RELATION TO THE PATHOLOGICAL FEATURE OF URINARY CASTS. BY REGINALD SOUTHEY, M.D.

THE continuous system of the urinary tubules was first described by the author, and traced from their commencement in the papillæ renales up to the Malpighian bodies. He said that the tubuli uriniferi thus commenced in primary excretory oval orifices in the medullary cones, which measured from 0.3 to 0.19 millimètre in diameter. The short trunks into which these opened had no membrana propria, but were set in and bounded by fibrous connective tissue; they each split up into rectangular running branches or gathering mains, and from them perpendicular mounting branches were distributed, which quickly split up again into ascending stems or collecting branches of the third order. These collecting tubes were first branches which could be made out to possess a delicate membrana propria, and to be distinctly lined with a low sessile columnar epithelium, and to present lumina. They measured from 0.0501 to 0.0510 millimètre in diameter; and, while bifurcating at the margino-medullary level into a number of branches, these were all of nearly the same calibre. The collecting tubes curled over into the tortuous tube districts, and became the tortuous tubes, enlarging in size considerably, measuring on an average 0.0201 or 0.033 millimètre, while the epithelium lining their membrana propria nearly filled up their bores. The tubes, however, did not retain their tortuous or glandular characters for long, but turned back into the straight tube columns from which they started, and dropped as Henle's down-loops in juxtaposition with the collecting tubes. These down-loops were the narrowest tubes of all (0.008 to 0.009 millimètre); they were transparent looking, and lined with a flattened and pavement epithelium, surmounted by slightly projecting nuclei; they retraced their passage into the convoluted columns, and once again gradually enlarged in diameter, and acquired the attributes of tortuous or secreting tubes proper. If these diameters and the relation of the secreting system of tubes to the collecting system, the former being directly united to the latter by very narrow midway canals, were considered, it would be ob-

vious that anything like a desquamative shedding of epithelium from the secreting tubes could not pass into the collecting tubes. Further, the size and shape of all casts were found to correspond with the excretory system of renal tubuli. Their most fertile source, Dr. Southey believed to be the collecting tubes or ascending straight tubes of the third subdivision; in these were found the ordinary urate infarcta of new-born children, and the granular and fibrinous casts of chronic renal degeneration. The fine fatty streakings and lime deposits of old persons were seen more strictly limited to the transparent midway channels or down-loops. The largest old fatty granular casts, consisting of cellular debris, leucocytes, fat-dottings, and urinary salts, were doubtless cast or moulded in the gathering mains close to the orifices of the papillæ, but could not be held to be secretions from the tortuous secreting tubes deprived, as had been by some supposed, of their epithelial linings. The author said that the value of casts in deciding the diagnosis, and estimating the advancement of renal diseases had been much overrated, their different forms and appearances were derived in part from the materials of which they were composed, but in greater part were due to the length of time during which the gelatinised plugs of fibrinous material derived from the blood-serum had resided in the passages whose mould they took, the degree in which they had been soaked with urinary salts and stained with urinary pigments, and became degenerated. After many years' vain search for them, nothing like a desquamative shedding of the epithelium lining a tortuous tube had ever been observed by the author; and, although red and white blood-cells, leucocytes, and escaped nuclei had been constantly observed in acute nephritis entangled in fibrinous plugs, actual linings of the straight collecting tubes with their low sessile columnar epithelium had, as such, never been recognised by him. To form any clinical inference as to the nature and extent of renal disease from the sediment of the urine and tubal casts was about as unsafe as forecasting the issue of bronchitis or pneumonia by the expectoration; it was not that the casts or the character of the expectorated matters had no clinical value, but they had a relative one only. In renal disease, the casts should be appraised side by side with the diurnal excretion of urea, and considered in reference to the quantity of albumen excreted at different periods of the complaint.

Dr. GEORGE JOHNSON said that he differed from Dr. Southey in regard to much—indeed, nearly all—that he had said in his paper. He understood that Dr. Southey held that casts formed in the convoluted tubes could not escape through the excretory tubes. If it were so, the study of casts in the urine would be practically useless. Dr. Southey assumed that all convoluted tubes passed through the narrow loops; but this had not been shown, and Dr. Johnson very much doubted that it was so. The statement must be founded on imperfect observation. It was quite certain that casts formed in the convoluted tubes did escape with the urine. The evidence that many urinary casts were formed in the convoluted tubes was indisputable; for instance, in the case of blood casts, the result of hæmorrhage following the use of turpentine, etc. Here it was tolerably certain that the hæmorrhage was from rupture of the Malpighian capillaries, allowing the blood to escape into the convoluted tubes. Again, many casts, especially those of the pure hyaline variety, were more or less convoluted when first passed, proving that they had been moulded in tortuous and not in straight tubes. The white cell-casts were also sometimes very numerous; now, the leucocytes must have escaped from the Malpighian capillaries into the ends of the convoluted tubes; for, on examination after death, the epithelium of the convoluted tubes was found entire, and not displaced by the leucocytes, as it would be if the leucocytes passed through the basement membrane and epithelium of the tubes. Again, fatty disease of the kidney was limited to the cortical portion; and here the urine contained hyaline casts and cells filled with oil-globules, with enlarged and altered cells of the convoluted tubes. The cells of the excretory tubes were rarely, if ever, found to contain oil-globules, while those of the cortex were full of them. Dr. Southey said that he had never seen an epithelial cast of the convoluted tubes; and denied that there was any process in the kidney analogous to desquamation. But cases were constantly met with in which a desquamative process was going on in the kidney, as in cases of scarlet fever and in cases of jaundice when bile was passing off by the urine. The fact that so many casts of different kinds which must have been formed in the convoluted tubes were found in the urine, seemed to show some defect in Dr. Southey's notions regarding the minute anatomy of the kidney. If all the convoluted tubes passed into Henle's loops, every case of inflammation of the kidney must soon be fatal from blocking of the tubes and suppression of urine. Dr. Southey had said that the tubes were not denuded of their epithelium in acute (desquamative) nephritis. Of course they were not; nor was the skin denuded of epidermis in the desquamation following scarlet fever. The old cells of epithelium or of epidermis were

pushed off by newly formed cells beneath. As regarded the size of the casts, there was no doubt that large hyaline casts were moulded in the convoluted tubes; and they were of very uniform size. The small hyaline casts corresponded with the diameter of the free canals of the convoluted tubes retaining their cell-lining; and they varied in size with the condition of the epithelium. The state of the epithelium of the tubes varied in different cases, being sometime swollen and sometimes shrunk and flattened; and small hyaline casts, being moulded in the free canals of the tubes, naturally assumed the size of the canals in which they were formed. All this afforded evidence that casts formed in the convoluted tubes escaped and appeared in the urine, and, therefore, was opposed to the idea that all convoluted tubes passed through Henle's loops. Dr. Southey had said that large hyaline casts were most common in acute disease; Dr. Johnson found them most often in advanced cases attended with atrophic changes in the kidney. The presence of an abundance of them in the urine indicated that atrophy was making rapid progress, and that suppression of urine was not far off. It was quite true that they did appear in acute cases; but much less frequently, and in smaller numbers.—Dr. ANDREW believed that Dr. Johnson's view as to the formation of casts was correct.—Dr. R. D. POWELL asked if it were necessary that all the casts formed should escape from the kidney. Might not some remain and be absorbed, as occurred with the deposits in pneumonia?—Mr. HOWSE had seen, in cases of acute desquamative nephritis from scarlatina, whole tubes filled with perfectly clear cells. They contained no nuclei, and very probably might break down and become absorbed.—Dr. SOUTHEY said that a great deal of matter was probably removed by absorption in acute nephritis, just as in pneumonia. Dr. Johnson had surely seen the excretory tubes blocked with granular casts. It was not correct to assume that the casts were formed in the upper parts of the tube. As to the swollen epithelium producing small casts, the casts being moulded in the tubes, it was a hypothesis not in accordance with experience. Clear transparent casts were found in Henle's down-looping tubes. Much had yet to be made out in regard to disease of the kidney.

ON A GROUP OF SYMPTOMS (OPHTHALMOPLÉGIA INTERNA) INDICATIVE OF DISEASE OF THE LENTICULAR GANGLION.

BY JONATHAN HUTCHINSON, F.R.C.S.

After briefly alluding to the anatomy of the lenticular ganglion, the author stated that its destruction by disease might be expected to be followed by paralysis of three distinct muscular structures, the dilator of the pupil, the constrictor of the pupil and the ciliary muscle. Under such circumstances, the pupil would become motionless and the patient losing the power of accommodation would be unable to read with spectacles. For this condition, involving paralysis of all the muscular structures within the eyeball, the term *ophthalmoplegia interna* was suggested, whilst that of *ophthalmoplegia externa* was proposed in contradistinction for cases in which all or most of the muscles moving the eyeball were involved. The author expressed his belief that examples of both these conditions were met with occasionally in practice, and that the features of each were peculiar and of great interest to neuro-pathologists. His conjecture was that when *ophthalmoplegia interna* existed alone, that is, unattended by paralysis or defect of any of the external muscles of the eyeball, that the disease was in all probability in the lenticular ganglion itself. In venturing upon this diagnosis, as great importance was to be attached to the absence of some symptoms as to the presence of others. If disease existed implicating the nucleus or any part of the trunk of the third nerve, and this paralysing the constrictor of the pupil, there must necessarily be defect of some of the external muscles of the eyeball. The paper next proceeded to narrate the details of eight cases in which the condition referred to was present. None had afforded an opportunity for dissection; and the diagnosis for the present must, therefore, be held to be conjectural only. It was observed, however, that the cases bore a very close resemblance to each other. In none of them was the patient seriously ill, and in but two were there definite indications of implication of other parts of the nervous system. In none did the disease of the nervous system whilst the patient was under observation extend: a fact which might, it was suggested, be in part accounted for by the fact that specifics were used in all. Of the eight cases, in five both eyes were affected. It appeared highly probable that syphilis was in most the remote cause. In three out of the eight, there was no history of syphilis, but in none of these were the facts conclusive as to the negative. All the patients were of an age at which syphilitic affections of the nervous system are common. The oldest was forty-four; the youngest was twenty-seven. In one case, the author had himself attended the patient for severe syphilis four years before the eye-symptoms began. Attention was especially asked to the fact that in many cases the paralysis of the iris preceded that of the ciliary muscle, and almost always in excess of it; and fur-

ther that, under treatment, the ciliary muscle might regain its power whilst the iridoplegia persisted. In no single case was the failure of accommodation the first symptom. A suggestion was made as to the possible association of this group of symptoms with the early stage of locomotor ataxy, especially with that form of it which appears to be connected with syphilis.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 16TH, 1878.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

DISEASES OF THE LYMPHATIC SYSTEM.

Relations of Cancer to Lymphatic System.—Dr. HOGGAN exhibited some microscopic sections, and said this was but a part of the whole life-history of cancer, which could not be introduced then. The specimens were taken from a case of cancer of the skin following the ligature of a mole under the left nipple. It was a very bad type of cancer, and the patient died in eight months from the operation. It illustrated different forms of cancer. In the sweat-glands, it was encephaloid; another part was scirrhous; and a third pigmentary. His conclusions were: 1. When the lymphatic glands are affected, the lymph-vessels are filled with cancer-cells; 2. The lymph vessels on the distal side of the tumour are also filled with cancer-cells; 3. All the lymphatics around are filled with cancer-cells; 4. There are no vessels opening into the cancer masses; 5. Though there are cancer-cells in the lymphatics, the epithelial lining is unaffected at first; 6. The epithelia became affected, being softer, so as to take the silver solution; 7. Groups of wandering cells are necessary to the development of cancer-cells in the lymphatics; 8. Fixed cells undergo the cancer-change; 9. Cancer-cells form from wandering cells; 10. Secondary tumours do not affect the lymphatics, because they are already filled with cancer-cells, even on the distal side; 11. There is no evidence of the lymphatics affecting the activity of cancer. He then gave the histology of a lymphatic gland, and said wandering cells enlarged in the meshes of the glands.

Cases of Lymphadenoma.—Dr. DOUGLAS POWELL showed, for Mr. J. H. PORTER of Netley Hospital, two characteristic photographs from cases of Hodgkin's disease and some sections of the spleen from a case of lymphadenosis. The first case was that of a driver in the Royal Artillery, aged 35, of intemperate habits. Soon after enlistment, he contracted a chancre, followed by a scaly rash and sore-throat; and, two years before his admission into Netley Hospital, he had a second attack of syphilis, with sore-throat. One month after the healing of the second chancre, the glands in the left supraclavicular region began to swell, but were neither painful nor tender. The glands on the right side soon became affected; and six weeks later, the right axillary glands enlarged, then those on the left side, over the ramus of the jaw, and in the occipital and maxillary regions. The sore-throat disappeared as the glands enlarged, but dryness and harshness of throat remained, with spasmodic cough. On admission, the patient was weak, but fairly nourished. The hair on the scalp was thin, and there was no hair on the face. The body was covered with a scaly syphilide. A photograph handed round showed well the glandular enlargements; and attention was drawn to the water-jug represented at the patient's side as evidence of the constant thirst with which he was afflicted. The swellings were hard and nodular, but painless and movable. The front of the chest, the scrotum, the right foot and leg, were oedematous. The patient was unable to lie down from the pressure of the cervical tumour causing dyspnoea and paroxysmal cough. The liver and spleen were not enlarged. The blood showed no lack, either in number or colour, of red discs, but a notable increase in white corpuscles, viz., eighty in a square one-hundredth of an inch. The temperature and urine were normal. The disease progressed steadily, uninfluenced by any treatment, to death.—Case 11. A corporal of the 12th Regiment, aged 23, was admitted in February 1878. There was no family predisposition or illness prior to enlistment. In May 1874, he was in hospital twenty-one days with inflammation of the glands of the groin, consequent upon pulling off a small wart from the penis. In 1874, he had gonorrhoea. In December, May, and September, whilst at Calcutta, he was treated for rupia and psoriasis by mercurial baths and other remedies. In March 1877, a small lump appeared under the lower jaw on the left side, then a similar enlargement on the right side, both gradually increasing in size and spreading downwards to the clavicle and round to the back of the neck. The glands of the groins and axilla became enlarged, and gradually increased to their present size. This patient was still living, and his present state was well shown in the photograph, which contrasted remarkably with one taken two years previously. He had greatly emaciated, although the appetite was morbidly great. The stools were

not excessive in quantity; the urine, slightly albuminous, contained no sugar. The patient's skin was of an uniformly dusky brown colour, greatly thickened and deeply wrinkled over the head and occiput by solid cedema. The glandular enlargements, well shown in the photographs, were nodulated, soft to the touch, not adherent to skin or tissues, and quite free from pain or tenderness. This patient, too, had lost all hair from the body, and had but little remaining on the scalp or face. The spleen had lately become slightly enlarged, otherwise the internal organs, except the kidneys did not appear to be affected. Dryness of throat and thirst were very marked, and the patient could not lie down without causing severe spasmodic cough. The blood, carefully examined by Dr. Boileau, showed an excess of white corpuscles; but, as in the former case, nothing approaching to leukaemia. The spleen of the third case was banded round. It presented innumerable points of lymphomatous growth, and was greatly enlarged. All the internal glands of the body were enlarged. The lungs were invaded from the mediastinum; and the pleurae, pericardium, and calvarium were bespattered with small nodular growths. The liver was also affected. This patient had been invalided from India for ague, and had died quite suddenly. There was no history of syphilis.—The PRESIDENT said the relations of lymphadenoma to syphilis were interesting.

Sections from Cases of Lymphadenoma.—Dr. CHARLEWOOD TURNER exhibited for Dr. SUTTON some drawings and sections from cases of lymphadenomatous and allied conditions. In the first case, there were the enlarged glands of Hodgkin's disease; where there was white new material set amidst hyperæmic patches in the spleen. In another, the spleen from a case of lymphatic disease was delineated. It was enlarged by white opaque masses. The third was an enormous spleen from a boy aged 10, where the glands were not enlarged. The spleen weighed four pounds and a half; there was a history of ague. In other two cases, the kidneys were enlarged. In a boy with Hodgkin's disease, there was general glandular enlargement, and the spleen rather large. The kidneys weighed nineteen and nineteen and a half ounces respectively. The second section was from a case where there was a large spleen. In another case, the vessels of the brain were affected, being full of leucocytes. Some glands in lymphadenoma were hard, and others soft; and this occurred sometimes in the same patient. This was really due to the stage of the disease in each gland. In one case, the enlargement of the glands had nearly disappeared at death. In another case, the spleen grew less. Where there were nodular masses in the viscera, the disease was usually widespread. When the spleen was enlarged, the other viscera, as the liver and kidneys, were affected. Three cases had been recorded where the spleen and glands were not affected in leukaemia. In one, the liver was chiefly affected by an adenoid growth, with intercellular structureless matter. There was also a large amount of fibrous material. Small tubercular bodies were scattered over the peritoneum. Adenoid growths differed from tubercle in the more orderly organisation of their cell-elements; the centre of tubercle was also of a dark colour.—The PRESIDENT remarked that the views last expounded were not in unison with the general tenour of the discussion, and were full of interest.

Lymphadenoma with Tubercle.—Dr. DICKINSON referred to the relations of tuberculosis to lymphadenoma. He showed a drawing of a spleen. It came from a lad aged 18, who had a strong tuberculous history, family and individual. He was scrofulous in youth. There were lumps on both sides of his neck, each twice as large as his fist. There were large glands in both axillae and both groins. He had high temperature, reaching 102 degs. at nights. His lungs furnished evidences of tubercle. He soon died of acute tuberculosis. Miliary tubercle was found in the lung, kidneys, and brain. On microscopic examination of the glands, it was hard to distinguish betwixt lymphadenoma and tubercle. In some there was caseation. In one, suppuration had taken place. Clinically, the case was one of lymphadenoma; microscopically, of tubercle. Lymphadenoma occurred in some parts, and tubercle in others. The second case, in a child, so closely resembled the one described that he would not take up the time of the Society in describing it.

Spleen and Glands from a Case of Lymphadenoma.—Dr. GARLICK related briefly the history of this case. They came from a boy aged 10, who had enlarged glands on the left side of the neck. His spleen was enlarged. His temperature was high, ranging from 102 deg. in the morning to 104 deg. in the evening. He had diarrhoea. The blood was pale. Later on, there was diminution of both white and red corpuscles. The liver, lungs, and glands were enlarged at death. The cervical glands had undergone some caseation, as had also the bronchial glands. There was new growth in the spleen. There were masses in the liver, with an increase of the reticulum and some giant-cells.

Tibix from a Case of Lymphadenoma.—Mr. MACNAMARA exhibited

the tibix from a case of lymphadenoma in a boy aged 9. There were enlarged glands on the right side of the neck, of scrofulous character, which continued to grow, and before death reached an enormous size. There was no suppuration, but they looked like a sarcomatous tumour. The liver and spleen were not large. The boy died of pleurisy. He injected the femoral artery in water to examine the medulla of the leg-bones. In the blood, there was no increase of white corpuscles. He found that the injection had not penetrated beyond the larger branches of the nutrient arteries of the bones. The open spaces were filled with a cellular growth like those in the glands. They resembled the bones in tubercular affections. These growths caused pressure on the sinuses, and so the injection could not pass. The osseous structure was unimpaired. The cell-growth penetrated into the epiphyses. The deeper layers of the periosteum contained the descendants of cartilage-cells; and it was from these that the callus grew, and also from these nodes are formed. These cartilage-cells extended into the medulla. This growth spread out like a malignant disease. It was a specific disease, quite unlike ordinary enlargement of the spleen, which was common among the natives of India, in whom lymphadenoma was unknown. Tubercle, too, was rare among them.

Lymphadenoma with Struma.—Dr. MORRISON related a case of this nature. It occurred in a girl aged 7, who had Hodgkin's disease. She was a twin; and her twin sister died of the same disease after an injury to the head. All the children of the family were strumous; and the mother was debilitated by rapidly repeated pregnancies.

Dr. PYE-SMITH said that the first cases of leukaemia were described as a development of pus-cells in the blood. Virchow's term of leucocythæmia showed a right appreciation of the nature of the malady. Pathology could add nothing. The question was (1) whether the leucocytes swamped the red corpuscles; or (2) whether there was a relative increase from diminution of the red corpuscles. It was certainly not the latter. There was an increased production of leucocytes from the hypertrophied spleen. When the leucocytes from leukæmic cases were watched in the warm stage, it was seen that they did not possess amoeboid movements. This might be from imperfect development from rapid formation. These white corpuscles did not develop into red, and so accumulated in the blood. In Hodgkin's disease, there was no leukaemia except in a few rare cases. In nearly all, there was inflammation about the lymphatic glands; and there was pyrexia. The leucocytes gather in the glands in allied forms to Hodgkin's disease. He would suggest the term "lymphosis" for Dr. Gowers's "lymphadenosis". There was an anæmia myogenetica, as in Mr. Macnamara's case. There were cases where glands were enlarged with anæmia, as the tonsils, for instance, as was the case with the glands ordinarily affected. He then referred to the case of idiopathic anæmia detailed by Sir William Gull and Dr. Dickinson at the last meeting. It was a fatal anæmia without lymphoid disease, quite different from ordinary anæmia, in that iron did no good whatever. He said essential anæmia was fully described by Dr. Addison in 1855, though the fact seemed to have escaped the attention of some recent foreign writers, who had not added one important fact to Dr. Addison's description.

Dr. MOXON said that no doubt, as it had been assumed by the Society that the diseases brought together formed a natural group or class, there must be good and sufficient reasons for this. But these reasons had not yet been made very apparent. Their claim to relationship he supposed to be chiefly through their extending over a certain selection of organs, namely, the spleen and the lymphatic glands. Dr. Goodhart had spoken intelligently of this as mere malignant generalisation, as if it were ordinary spread of malignant disease. But Dr. Moxon supposed that, if in Hodgkin's disease the tumours of the glands were associated with secondary tumours in the lungs and liver, nothing very special about them would ever have been heard. But the spleen was comparatively rarely a seat of secondary growths in ordinary malignant disease, and then only to a slight extent, and in the form of round bold masses of spreading tumour. In Hodgkin's disease, however, there was a remarkably frequent implication of the spleen, and the masses were not like ordinary malignant tumour; they were angular looking pieces rather than round tumours. And it was no doubt by the curious common association of seat in glands and spleen that the diseases grouped for discussion were connected. But, even this common bond of harmony left Dr. Moxon in wonder how idiopathic anæmia could have been cast into the group; for idiopathic anæmia was not attended with disease of the spleen or glands. It was the very simple thing that Addison had well described it to be, as just stated by Dr. Pye-Smith. He had been disappointed with the effect of the discussion, which he had hoped would have been in accordance with the etymological signification of the term—to shake apart; so that these diseases should have been so shaken apart as never to come together again. He was glad to hear the President decide that the evidence showed that there

was no leukaemia in Hodgkin's disease. That, indeed, was abundantly clear. It was true that a moderate augmentation of the white cells in the blood was a frequent thing in many diseases; and such an augmentation to a small extent would occur in Hodgkin's disease, but nothing like a true leukaemia. Take, as an example, what might have, but for an accident, been used as a typical example of that false kind. A lad was sent into Dr. Moxon's ward, a few days ago, as a case of leukaemia lymphatica, or leukaemia with Hodgkin's disease. On carefully counting the white cells, however, they showed only one to twenty-seven red; and when the boy died it was found that the disease of the glands was true cancer, and it spread to the liver, not the spleen. Such a case was a type of the few confusing cases which gave rise to the false reports of lymphatic leukaemia. They were very rare, not less rare than such cases as Dr. Dickinson had just shown, of a mixture of lymphadenoma with tubercular disease in the same subject. Such a case Dr. Moxon showed some years ago. These cases were not allowed to confuse tubercle with lymphadenoma. Neither should a few doubtful mixed looking cases confuse Hodgkin's disease with leukaemia. In fact, a small increase of white cells in the blood no more constituted leukaemia than a small increase of sugar in the urine constituted diabetes. Dr. Moxon would venture to maintain his own view of leukaemia. He did not accept Virchow's view of a leukaemia made from the glands, and another leukaemia made from the blood, to which of late had been added a third leukaemia made from the marrow of the bones. This view was founded, it was true, on the best modern teaching as to the origin of blood-cells; but he ventured not to be satisfied that all was known about the origin of blood-cells. It was assumed they arose in one's neck and armpits and groins in glands, placed apparently to stand in the way against gonorrhoea, scarlatina, and such like; and that they arose in the spleen—a very different looking organ, very differently placed; and lately it had been taught they arose in bone-marrow. The evidence was of two kinds. First, some—Rouget and Kölliker for instance—were said to have seen the change of white lymph-cells into blood-cells. He had great respect for microscopic observation, but preferred, for so large a question, some means in which other senses could go to the help of the eye labouring down a microscope. The other evidence was this question—Since the glands are always pouring lymph-cells into the blood, where do they go if they do not turn red? The answer was not far now, that it was known that white cells wandered out of the blood into the lymph-spaces, so that there appeared to be a circulation of white cells into and out of the blood. Indeed, this theory of white blood-cells turning flat and dark was too simple. Dr. Moxon had watched the division of white cells in the blood of the larval oniscus, and seen the whole process of the division, and he believed the blood to be more independently alive than Virchow's theory of leukaemia and the modern physiology of the blood supposed. He believed that in true leukaemia the blood itself was primarily diseased, so that Dr. Hughes Bennett in his first impression of his case was much more right than was usually supposed when he called the disease suppuration of the blood. The blood increased the number of its white cells, and these outwandered in greater numbers into the tissues and got into the lymphatic channels; and, if from any accident they could not pass the glands, there was a swelling of these, secondary in its nature, but deceiving Virchow into the view of "lymphatic leukaemia". Then the spleen was an organ ready always to sympathise first in difficulties of circulation, and when the white cell-blood went round with trouble in the spleen, it was accumulated with excess of the white cells. In the hard channels of bones, the veins could not swell with the thickened blood, so that the blood stagnated in the marrow, and white cells passed out into the marrow, whence the story of marrow-leukaemia. Thus all the facts of leukaemia were to be deduced from a haemal pathology of the disease; and the enlargement of the spleen, and occasionally of the glands, of leukaemia was altogether different from that of Hodgkin's disease. But Hodgkin's disease, without any association with leukaemia, was a most interesting disease, because of its implication of the several lymphatic structures. Dr. Moxon would regret the losing sight of its peculiarities in a general term like lymphadenoma. Indeed lymphadenoma would not serve the purpose of the name Hodgkin's disease, which was useful in keeping before the profession a recognition of the remarkable series of chronic diseased changes to which the name applied. The swelling of glands, especially those in the neck and the implication of the spleen, etc. But lymphadenoma was a much more inclusive term. Thus the Committee on Morbid Growths had applied the term to a case of cancer of the bones. Hodgkin's disease was but one of the forms of lymphadenoma, and this form of it was a large glandular tumour behind the peritoneum, extending down the lacteals to the intestines, and invading the intestine with the effect of widening it and causing diarrhoea. This form of intestinal disease, Dr. Moxon believed, must be set down

amongst the causes of fatal chronic diarrhoea, and he had before drawn attention to it without wanting to attach his name to the disease. True these diseases had the same micro-anatomy, but he could not help thinking too much might be made of such a fact, whose importance is still under the microscope. He had been much interested in the admirable report, by the President and Dr. Sanderson, in vol. xxi of the *Transactions*, upon a case of lymphadenoma of the neck, spleen, etc.; but he thought the able description rather went against that term; for the structure was exceedingly simple, almost as simple as simple as blood-clot. Dr. Sanderson, however, fixed his attention on a certain concentric arrangement about vessels, and identified this with the adenoid tissue of His. Concentric arrangement around vessels was common to many forms of pathological action. Tubercular meningitis and lupus showed it; so did even that sclerotic change which Sir W. Gull and Dr. Sutton plentifully illustrated last year. Dr. Moxon thought that the pathological value of the microscopic kinds of likeness could be well measured by looking at what Virchow included under his lymphoma. He puts there leukaemic tumour, tubercle, typhoid intestine and scarlatinal tonsil. What was the good of a criterion of likeness that juxtaposed all these things, so wholly dissimilar in all essential bearings, in their genesis, their characters, their course, and their results? To be mutually lymphoid was on the very outskirts of any true relationship. For a tissue to be lymphoid was much the same as for a crystal to be rhomboid, as far as either fact was *à propos* of the true nature of the respective substances. The cause which started Hodgkin's disease might be one thing, and the cause which started retroperitoneal lymphadenoma a thing as different as scarlatina from leukaemia. What was wanted was to draw our pathology always into closer union with clinical significance, even if the morphological alliances of clinically and pathologically distinct disorders had to be partly set aside.

CORRESPONDENCE.

THE TITLE OF DOCTOR.

SIR,—I observe that, in your issue for the 30th ultimo, you speak of it as a "grievance" that "the great proportion of English medical men are debarred from the use of the title of Doctor"; and you infer that the chance offered by the Duke of Richmond's Bill should be availed of to place that title at the disposal of all licensed practitioners. I beg permission to remind you that it is already entirely open to them, if they are prepared to gain it by the requisite study; and I certainly do not regard it as any "grievance" that a person who declines the trouble, delay, and expense of winning such a decoration, should be denied the right to wear it. I perfectly understand your complaint that licentiates of Durham, St. Andrew's, and the Queen's University are permitted to call themselves M.D., while those of other Colleges—quite as deserving of the title—are not so permitted; but I altogether deprecate your remedy for the anomaly by levelling down; and I maintain that, on the contrary, the Duke of Richmond should level up by means of an enactment that no person should be granted a Doctorate in Medicine until he had previously taken a full degree in Arts. You are aware that, up to a recent period, the state of things was that which I suggest, and you will admit that the affix M.D. conveys to the general public the impression that he who uses it is an University man, and that he combines with his medical qualification the liberal education demanded from an Arts' graduate. You may also, probably, be aware that the General Medical Council has affirmed the proposition that the M.D. should not be granted to any but the holder of a full Arts degree.

I, therefore, submit that the use of the letters M.D. by any University, to indicate a mere licence to practise, amounts to the obtaining of professional credit for their licentiates from the public upon an unjustified pretence; and that it ought to be, therefore, forbidden. Medical men covet the M.D. and the title of "Doctor". Why? Because they know that it carries with it the *prestige* of an University education, and that that *prestige* counts for something in the competition for high-class practice. Is it reasonable that they should demand that *prestige* without earning it? And, if they acquire it on such terms, how long will the Doctorate continue to carry with it the least public estimation? Already the most subordinate positions in the profession are occupied by *soi-disant* M.D.s; and it is sufficiently evident that, if all licentiates are to be dubbed M.D., that title will, in a few years, possess no more value as a distinction than L.R.C.S. or L.F.P.S. What, then, will the profession have gained? And will not a loss have been sustained by the abrogation of a title which has been so long sought for as an University honour?—I am, sir, yours, etc.,

ARCHIBALD H. JACOB, M.D. Dub. Univ., F.R.C.S.I.

23, Ely Place, Dublin.

THE UNIVERSITY OF DURHAM AND THE M.D. DEGREE.

SIR,—The discussion that has from time to time taken place in your columns as to the title "Dr.," and the demand there is amongst men already in practice for some way to gain undisputed right to the use of that title, has so far led to no practical result.

I am one of the many who suffer under what is to me an unfortunate disability in this matter. Unable to spend time and money during my student career for the attainment of a degree at the London University, and, being a student at a London school, shut out from the Scotch Universities, after some years of practice, I find that the M.D. would be of considerable service to me, and I am ambitious to wear an honourable degree. The disability is here: I must either wait till forty (ten years), or perhaps till fifty, for the chance of being one of ten at an University across the border, or pay a visit in ten years to the University of Durham, or take a journey to the Continent; in this last case, not being able to register my degree. At thirty, I am busily employed, and should have to scheme much to do systematic reading for an examination; and, by the time I am forty years of age, spare moments will be few, and my opportunities for cultivating the kind of practice I seek have greatly lessened, perhaps have gone. I have debated a visit to the Continent, but would cheerfully wait if there were any hope, at an early period, of the Universities of England coming to our help. I would venture a suggestion towards the removal of this disability. The University of Durham has already opened its doors to qualified practitioners, of fifteen years' standing and of the age of forty. The standard of examination seems a good one, and the degree one that might be worn with honour; but the concession does not go far enough. Cannot the University, without in any way deteriorating from the quality of the degree, throw it open to all medical men of eight or ten years' standing, after the fashion of the modified examination for the Fellowship of the Royal College of Surgeons? It would be a stimulus to work also to have, in connection with the examination, a pass-list and an honours-list; and it would be well to make some reduction in the fee, which, in the case of many with growing families and growing expenses, is at present almost prohibitive. Such alterations would enhance the value of the degree and increase the number of applicants. A move of this kind, on the part of the University of Durham, would confer a boon on many aspiring practitioners; it would tend to the increase of knowledge, by holding out a reward just at the time when the mind is most vigorous and practice is being shaped; and would most certainly not be unfair to men who earned perhaps a better degree, so far as extent of book learning is concerned, but with less matured mind and judgment.

I hope that this suggestion will gain the attention of those able to help.—I am, yours truly,
April 5th, 1878.

M.R.C.P.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

SIR,—Will you read the enclosed copy of correspondence relative to the coming election of the Council of the College, and give it space in the BRITISH MEDICAL JOURNAL, with any remarks you may think right?—Yours sincerely,

GEORGE POLLOCK.

36, Grosvenor Street, W., April 11th, 1878.

Copy of Letter to Mr. Pollock.

"Edinburgh Chambers, 12, King Street, Manchester.

"Dear Sir,—There is a strong desire on the part of many distinguished Fellows of the College of Surgeons to see Mr. Lund elected to the forthcoming vacancy in the Council of the College as a representative of Provincial Fellows. He has for many years occupied a prominent, and of late a foremost, place among surgeons in Manchester, and for more than a quarter of a century has been actively engaged in lecturing and hospital work. His position in the scientific world, and his many and valuable contributions to surgical literature, are too well known to need mention by me.—Sincerely hoping you may be induced to sign the enclosed memorial, I am, my dear Sir, yours truly,

"April 5th, 1871."

"S. MESSENGER BRADLEY.

[Here followed a copy of the requisition to Mr. Lund, which was published in last week's JOURNAL.]

Copy of Mr. Pollock's Letter to Mr. Bradley.

"35, Grosvenor Street, W., April 11th, 1878.

"Dear Sir,—I beg to acknowledge the receipt of your circular relative to the election of Mr. Lund to the Council of the College of Surgeons. In reply, will you allow me to say that I have always steadily refused to be nominated for the Council, as I consider the 'certificate

of character' required by the Charter, and the usual canvassing that takes place prior to the elections to the Council, derogatory to the profession? The College of Physicians does not require or permit anything in the shape of the former, and would condemn, if not punish, anything approaching the latter.

"The canvassing that has been permitted and undertaken by some of the candidates for seats in the Council is really a disgrace to the Fellowship.

"Entertaining the feelings I do, you will understand my objection to signing any paper in reference to the coming election in behalf of any candidate. No one will be more pleased to see Mr. Lund a member of the Council than myself. I have the highest opinion of his work and worth as a surgeon. But, in my opinion, whatever that may be worth, his election should not be dimmed by private or public solicitation of votes.

"I think this subject one of so much importance, that I have enclosed copies of the correspondence to the medical journals.—Believe me, yours faithfully,

GEORGE POLLOCK.

"S. Messenger Bradley, Esq."

THE CIRCULAR OF THE MEDICAL REFORM COMMITTEE.

SIR,—It is very fortunate for me, as having to receive, read, and collate the answers to the circular issued by the Medical Reform Committee, that all who receive it do not reply at such great length as Dr. Gairdner, and do not consider it necessary to drag the career of the late Emperor of the French or equally irrelevant affairs into the arena.

Dr. Gairdner gives us his opinions about the late Emperor in a very offhand manner, and dismisses with a sneer the one ruler of France who, while proving himself the fast friend of England, raised the material prosperity of his country to such an unexampled pitch that, notwithstanding the extortionate exactions of Germany after her crushing defeat, France still remains one of the great powers of Europe, equally prepared with England itself for every eventuality.

Dr. Gairdner may or may not be aware that many of the wisest heads in Europe believe that France was saved from the Red Republic and Communism by the *plébiscite* which made the so-styled "Man of Sedan" the arbiter of the destinies of his country during a period of twenty years, and the founder of Italian unity.

I demur, however, *in toto* to Dr. Gairdner's attempt to place the members of the medical profession of the United Kingdom on a level with the ignorant peasantry and wild town-population of France. There is nothing in common between them but that instinct which, having guided the French to save their country from anarchy, will, I hope, also guide the profession in this country to bring something like order out of the conflict of interests and of disorder in which some of the licensing corporations have so long kept us.

The question of medical reform is not new to the Association. You, sir, have clearly shown, in your article in the JOURNAL of the 13th instant, that, but for the action of the Association, there would have been no Medical Act of 1858. The principles advocated by the Committee were advocated by the Association before the passing of that Act; they have been repeatedly approved and laid down since; they are included in the drafted Bill of the Association.

The Medical Reform Committee in the present day follows the example of the Medical Reform Committee in existence before 1858 in suggesting and printing a form of petition for the use of those, but of those only, who agree with the Committee. There seems no probability of Dr. Gairdner being beguiled into adopting it. Further, in issuing the circular the Committee had truly only one object. They desired to ascertain, as far as in them lay, the desire of the profession on the two points mooted, and for that reason did not confine it to the members of the Association. No better mode of proceeding could well be devised.

Well, the circular was cast forth. Dr. Gairdner replies, as he states, as 1-20,000th part of the profession. If the remaining 19,999 are to answer at equal length, my work becomes simply impossible. Dr. Gairdner has not made me a direct return; but, from his letter, I presume I am right in recording him thus.

1. Are you of opinion that the medical profession should be directly represented in the General Medical Council? *Answer:* Yes; but do not see how. *Ergo*, doubtful.

2. Are you of opinion that the establishment of a conjoint board for the granting of licences to practise all branches of the profession should be made compulsory in each of the three divisions of the kingdom? *Answer:* Certainly not.

I sincerely hope that all other members of the profession who agree with Dr. Gairdner, and who have not yet returned the circular, will be content with Dr. Gairdner's exposition of their case, and reply in the simple, short, and, to me, more satisfactory manner, which I have ventured to indicate.—I remain, dear Sir, yours faithfully,

EDWARD WATERS, Chairman of the Medical Reform Committee.
Chester, April 23rd, 1878.

FATAL CASE OF CARIES OF EXTERNAL MEATUS.

SIR,—With reference to the case with the above title, published in the JOURNAL of last week, Dr. Gumpert, the physician in attendance on the patient, has kindly pointed out one or two inaccuracies in my report, which I had not seen since forwarding it for insertion last November.

I need hardly say that my opening remarks applied to this class of affections in a general sense, and by no means to Dr. Gumpert's diagnosis, which was perfectly accurate, and the full nature and gravity of the case pointed out to the relatives at once. The statement that this patient had syphilis is incorrect, and, together with the remark, that the illness began on Saturday (it was a day later), are errors for which my notes—written from memory on the day of the patient's death from Dr. Gumpert's account—are responsible. I regret that Dr. Gumpert had not an opportunity of revising the history of this case before publication.—I am, etc.,
F. M. PIERCE.

Manchester, April 24th, 1878.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on April 18th.

Chevers, Norman, H.M. Indian Army, of Tavistock Road: diploma of membership dated January 8th, 1841.

Donald, Deputy Inspector-General John, of Wilmslow, Cheshire: September 4th, 1835.

Freer, Walter Carless, of Birmingham: October 5th, 1841.

At the same meeting of the Council, the following gentlemen were elected Fellows under Section V of the Charter of 18th Victoria, relating to members of the College of twenty years standing.

Fayer, Sir Joseph, K.C.S.I., F.R.S., Granville Place, W.: diploma of membership dated July 9th, 1847.

Pemberton, Oliver, of Birmingham: April 12th, 1847.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 17th.

Andrew, John E., Victoria, Australia

Anand, George, Melbourne, Australia

Atkinson, John M., Winchester (London Hospital)

Berry, Frederic H., Anwell Street, E.C. (Guy's Hospital)

Colenso, Robert J., Phillimore Gardens (St. Bartholomew's Hospital)

Evans, Edward T., Llanfalon, Glamorganshire (Middlesex Hospital)

Fardon, Edward A., Droitwich, Worcestershire (Middlesex Hospital)

Giles, Bernard F., Canonbury (Guy's Hospital)

Higgs, Alfred, Leicester (London Hospital)

Lavis, Henry J. J., Stalbridge, Dorset (University College)

Lockwood, Charles B., Stockton-on-Tees (St. Bartholomew's Hospital)

Nicholson, James E., Tours, France (St. Bartholomew's Hospital)

Sylvester, George H., Tonbridge (St. Bartholomew's Hospital)

Four gentlemen were approved in Surgery; and, when qualified in Medicine, will be admitted members of the College. Five candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 18th, 1878.

Burnie, William Gilchrist, Bradford, Yorkshire

Rickitt, John Dennis Thorpe, Wainfleet, Lincolnshire

Smith, Kenneth Rawlings, Oak Villa, Stamford Hill

Wells, Charles, Hillside, Stowmarket

MEDICAL VACANCIES.

THE following vacancies are announced:—

BELGRAVE HOSPITAL FOR CHILDREN—House-Surgeon. Applications to be made on or before May 15th.

BRISTOL ROYAL INFIRMARY—House-Surgeon. Salary, £100 per annum, with board, furnished apartments, and washing. Applications to be made on or before May 1st.

BROMYARD UNION—Medical Officer and Public Vaccinator for the Parish of Cradley. Salary, £50 per annum, and fees. Applications to be made on or before May 4th.

GERMAN HOSPITAL, Dalston—Honorary Assistant-Surgeon. Applications to be made on or before May 1st.

GLOUCESTER GENERAL INFIRMARY—Surgeon and Assistant-Surgeon. Applications to be made on or before May 30th.

GREAT NORTHERN HOSPITAL—Ophthalmic Surgeon. Applications to be made on or before May 6th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Assistant-Surgeon. Applications to be made on or before May 16th.

LEITH HOSPITAL—House-Surgeon and Assistant-Surgeon. Salaries, £70 and £60 respectively, with board. Applications to be made on or before May 15th.

LIMERICK UNION—Visiting Medical Officer for the Workhouse. Salary, £75 a year. Candidates must be over 23 years of age, and must attend personally at the day of election; viz., May 8th.

LIVERPOOL DISPENSARIES—Three Assistant House-Surgeons. Salary to commence at £108 per annum, with fire, gas, and attendance. Applications to be made on or before the 30th instant.

METROPOLITAN FREE HOSPITAL, Commercial Street, E.—Two House-Surgeons.

SHEFFIELD PUBLIC HOSPITAL and DISPENSARY—Junior Resident Medical Officer. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before May 6th.

STROUD GENERAL HOSPITAL—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, and washing, and £30 per annum in lieu of stimulants. Applications to be made on or before May 15th.

TAUNTON UNION—Medical Officer and Public Vaccinator to the Churchstanton District. Salary, £52 per annum, and fees. Applications to be made on or before the 28th instant.

UNIVERSITY COLLEGE, London—Professor of Materia Medica. Applications to be made on or before May 15th.—Surgical Registrar. Applications to be made on or before May 6th.

VICTORIA HOSPITAL FOR CHILDREN, Chelsea—House-Surgeon. Salary, £50 per annum, with board and lodging. Applications to be made on or before May 18th.

WILTS COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £110 per annum, with board, lodging, attendance, and washing. Applications to be made on or before May 15th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*BODDY, H. W., M.B., appointed Assistant-Physician to the Clinical Hospital and Dispensary for Children, Manchester.

GRUBBARD, R. Henry, L.D.S.R.C.S. Eng., appointed Dental Surgeon to the Royal Albert Hospital, Devonport.

*MASSIAH, B. J., M.B., appointed Resident Medical Officer to the Convalescent Hospital, Chendle, Manchester.

SOUTHAM, F. A., F.R.C.S., appointed Resident Surgical Officer to the Manchester Royal Infirmary.

STEELE, G., Esq., appointed Resident Medical Officer to the Manchester Royal Infirmary.

TOMKINS, Henry, M.D., appointed Resident Medical Officer to the Monsal Fever Hospital, Manchester.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

BIRT.—On April 15th, at Stourbridge, the wife of *George Birt, M.B., of a son.

MARRIAGES.

BINDLEY—JACQUES.—On April 12th, at Remenham, Henley-on-Thames, Philip Bindley, M.B.Lond., to Sarah Bessie, only daughter of the late William Jacques, of Clifton.

LAVIN—WIGAN.—On April 24th, at St. George's, Hanover Square, by the Rev. William Falconer, M.A., Rector of Bushey, Herts, assisted by the Rev. Charles Phillips, M.A., Vicar of St. Matthew's, Oakley Square, *Dr. Drury Lavin, late of Park House, Bushey, to Sophia Matilda, widow of Alfred Wigan, Esq., of Heatherden, Iver Heath.

DEATHS.

*JACKSON, Thomas Carr, F.R.C.S., on April 23rd, at 91, Harley Street, Cavendish Square, aged 55 years.

*MACPHERSON, Robert Samuel, M.R.C.S.L., L.K.Q.C.P.I., of Birmingham, on April 7th, aged 39 years.

MOORE.—On Easter Day, April 21st, at 40, Fitzwilliam Square West, Dublin, Ellic (Elsie), aged 23 years, the beloved wife of *John William Moore, M.D., and only daughter of the late John Ridley, M.D., of Moore Hall, Tullamore, King's County.

DONATIONS, ETC.—The Misses Brooke have given £500 to the Hospital for Incurables, near Dublin, which, with a previous donation, makes a total of £700 contributed to this institution.—The late Mr. William Coates has bequeathed £200 to the Belfast Royal Hospital, and £100 to the Belfast Hospital for Sick Children.

An illuminated address was recently presented to Dr. Richard Lord by the Church Coppenhall Horticultural Society on the occasion of his leaving Crewe, where, besides being a very active member of the Society, he has occupied the position of Medical Officer of Health.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
- TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
- THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.
- FRIDAY** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY....** St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.**—Medical Society of London, 8.30 P.M. Mr. Mason, "Case of Congenital Deformity of Rectum" (living specimen); Mr. Thomas Bryant, "On the Surgical Treatment of Intestinal Obstruction"; with Two Cases of Enterotomy.
- WEDNESDAY.**—Obstetrical Society of London, 8 P.M. Specimens: Sections of an Uterus on the first day of Menstruation, shewing Desquamation of the Decidua; Section of Dysmenorrhoeal Membrane (Dr. Cory); Fractured Fœtal Skull (Dr. Poole); Case of Hand-behind-Head Presentation (Dr. Dryden). Papers: Dr. Braxton Hicks, "Case of Cesarean Section"; Dr. Potter, "Case of Pregnancy complicated with Malignant Growth in Vagina and Rectum"; Dr. R. Cory, "Membranous Dysmenorrhœa";—Royal Microscopical Society, 8 P.M. Mr. A. D. Michael, "On new British Cheyleti".
- THURSDAY.**—Harveian Society of London, 8.30 P.M. Dr. Buzzard, "A Case of Blepharospasm"; Mr. Edmund Owen, "A Case of Epithelioma of Rectum"; Dr. John Williams, "Cases of Fibroid Tumour treated by Hypodermic Injection of Sclerotic Acid".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

UNCOMMON FORMS OF DISLOCATION.

SIR.—Under this heading, in the *JOURNAL* of April 6th, Mr. Robson mentions dislocation of the jaw occurring during an attack of hysteria. Though such cases may not be recorded by the authorities Mr. Robson quotes, I do not think they are unknown to the majority of practical surgeons. As a case in point, I may mention the following. Some time ago, I was hurriedly called to see a lady who was reported to be *in articulo mortis*. The friends stated that two days previously she had had a fit, which was immediately followed by facial distortion (the mouth remaining widely open), and inability either to speak or swallow. A medical man had been called in, and pronounced the case a "severe attack of apoplexy", and administered a turpentine enema. The history of the attack was clear, and left no doubt whatever that hysteria had to answer for the evils the lady suffered. Dislocation of the jaw was plain, and, under the persuasive influence of a little manipulation, the (so-called) apoplexy vanished, the drawn features returned to their normal position, the power of swallowing, so necessary to life, and the power of speaking, almost equally necessary to womanhood, were happily recovered. It was the end of a little fairy tale.

I may add, that the enema did not prove of any absolute value in this case, nor that its administrator has since been remembered in the prayers of an ungrateful patient.—I am, etc.,
E. ARKOLD BIRCH, F.R.C.S.Eng.
Manchester, April 1878.

J. N.—Mr. Howard Marsh, Mr. Berkeley Hill, and Mr. Barwell, have lately published reports of cases successfully treated by Sayre's suspension method and plaster jacket.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MEDICAL ETIQUETTE.

SIR.—Under the above heading, you have published a paragraph in your issue of the 20th April (p. 583) relating to my advertisement of scale of charges. You state that you will be very happy to publish the opinion of any medical authority on the subject; but before making any remark on that head, permit me to repeat that your libellous paragraph of the 6th instant, which was of a most malicious character, and which you have now followed up by another, to the effect that I have done something very wrong, as not being "consistent with the generally accepted notions of professional propriety among the medical profession in this country", has been used directly to damage my professional character; and that, as you have been informed through my solicitor, W. M. Skinner, Esq., of Sunderland, the paragraph of the 6th instant has been copied from your *JOURNAL* into the *Sunderland Daily Echo*, with a manifest intention to damage me. I beg also to inform you that copies of that paper, with the paragraph marked, have been sent to some of my country patients, and to one gentleman in particular, upon whom I had performed lithotomy. As my solicitor has informed you, medical men have asserted that, through your paragraph, I would lose my licence and be struck off the *Register*. Therefore, for the sake of justice, and to prevent having the question settled in a court of law, I demand from you an apology, published in your *JOURNAL*, to the effect that I have not acted against the rules and discipline of the Apothecaries' Society, or any other society to which I am amenable. I claim to know what true professional propriety in this country is, as well as the editor of any medical journal. Have I not finished a full curriculum of four years at the College of Medicine, Newcastle-upon-Tyne, University of Durham? You say your Association claims to uphold a high standard of professional propriety amongst medical men. I claim to do the same. But are you now doing it in the way it should be done? Has not your Association admitted, and does it not admit as members, medical men who style themselves "Doctors", and have "Dr." on their doorplates and elsewhere, without ever having passed an examination as such at any university, and, therefore, of course holding no doctor's diploma? Not only so, but other members of the so-called medical profession, who never passed an examination in chemistry, do or did hold office in your Association. I was once, as you know, a member of it, and the reason why I left it was, that its order of professional propriety was not high enough for me. You would refer me for an opinion on the subject of my advertisement (published in self-defence) to the Council of your Association. I know that many highly educated men of the most unexceptionable professional mark and standing are members of it; but that does not alter the fact, that the Association includes an abundance of self-styled doctors who have no good title to be called such. I therefore decline to be judged by such an anomalous body, or to square my conduct according to its *dictum*. Those who live in glass houses should not throw stones. I thank Heaven that neither you nor your Association are any legal authority, nor have you any power to give a legal opinion. As to your second proposed reference—to the Council of the Apothecaries' Society—I have nothing to do with that body. When I presented myself to its Courts of Examiners in 1868, I satisfied these gentlemen, and passed my examination, receiving, therefore, my diploma. In accordance with the Society's Royal Charter, I have a right to publish my scale of charges, whether spontaneously or in self-defence, and I need no further reference. I have the letter of the law and the spirit of good law, which is justice and common sense, to protect me; and as I claim to have as legitimate a professional standing as any medical man in England, I shall defend my professional character wherever, whenever, and by whomsoever impugned, before the highest court of appeal that exists.—I am, yours truly,

GUSTAV ABRATH, M.D., etc.; late Voluntary Surgeon at the War Hospitals, Courcelles, Investing Army, Metz; Medical Conductor of a Sanitary Train Railway between Pont-à-Mousson and Saarburg; Eisenbahn Erappen-Arzt Third Army at Epervan; Medical Member of the Royal Evacuation Commission of the German Army at Epervan; Physician and Surgeon to the Military Hospital at Strassburg.

Sunderland, April 23rd, 1878.

AN OLD ASSOCIATE (Pontpool).—We are inclined to think that the master is liable for the servant; and if the message summoning an Old Associate were delivered by one of his agents in his name, there can be little doubt on the subject.

"COMMISSIONS."

SEVERAL correspondents forward us copies of the subjoined enclosure, with expressions of such indignation as may naturally be aroused by an insult of the kind. We cannot understand how the author of this circular can permit himself to make offers so grossly insulting to the respectable members of the medical profession. The statement with which the circular opens is one which cannot be read without disgust; but it must be taken for what it is worth, and in connection with the circumstances in which it is made a part of an advertising circular. There are black sheep in all callings, and the author of this circular may have had dealings with them, but this does not justify his insulting the respectable members of the profession in his district by addressing such offers to them.

"Dear Sir,—For a considerable period it has been my practice to remunerate medical men for the honour they do me in recommending me to their patients. Finding that this system begot a feeling of mutual confidence, I have determined, in every case of recommendation by medical men, to present them with a fourth part of the sum received. I estimate my profits at fifty per cent., and in every case I shall allow twenty-five per cent. to the medical man recommending me. I need scarcely add, that my system is one combining nature with utility, and renders mastication an easy and comfortable performance. I may here state that my attention has been very much directed to the regulation of children's teeth by means of invisible gold plates, thus arresting the deformities of the mouth, which would otherwise take place. I may add, that in consequence of the attention bestowed, I invariably give perfect satisfaction. This is a subject well worthy your consideration, as it is astonishing the sums I pay even to men in comparatively small practice. It is desirable that in every case you will instruct your patient to hand me your card or name and address.—I am, yours very truly, —, Surgeon Dentist.—P.S. On completion of a case or operation, I will immediately forward you a cheque for the percentage due."

ERRATUM.—In the *JOURNAL* of April 6th, page 489, column 1, line 7, for "oligopyrenæmia", read "oligapyrenæmia".

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

KOUMISS.

SIR,—I do not think that "A Physician" is confounding the really fermenting koumiss and the spirituous liquor distilled from mare's milk, which is of an intoxicating character. In referring to Dr. Jagielski's book on *Koumiss and its Use in Medicine*—at present, I am told, out of print—I find on page 8 that "the koumiss of the Kirghises is prepared from mare's milk in summer, but during winter (when mare's milk fails them) from cow's milk, and this they call airen, argen, or argan. The koumiss which contains a greater quantity of spirit is called ariva". The fresh koumiss they call soumal, the old koumiss. The Kalmucks call it tchigan, and others araca, but koumiss is the Tartar name for the fermented mare's milk. The fresh mare's milk is called by the Kalmucks *jouven-ousoun*, and the fresh cow's milk *oukiren-ousoun*. In their tents, where they live, they distil a spirit from koumiss, which they keep all the year round in stock. They usually keep their mare's milk in a bag made of horse's hide undressed, which, by being smoked, acquires a degree of hardness. Its shape is conical, somewhat triangular, from being composed of three different pieces, set in a circular base of the same hide. The sutures, which are made with tendons, are secured with a covering on the outside, with a doubling of the same skin, very closely fastened. It has a rather dirty appearance and disagreeable smell. These leather bags they use both for the preparation and transport of koumiss on their vans. They usually cover these bags with a woollen cloth, a thick rag, or a large sock, but so that the stick at the lower end (made in a manner of a churn-staff, and used for agitating the viscid liquor) may be in sight and at hand. In some parts, they transport it on the backs of camels, supposing that the continuous agitation gives a better flavour and stronger taste to the koumiss, which they spare for particular occasions, as weddings, for the entertainment of good old friends, etc., where old koumiss is of greater value, being more advanced in fermentation, stronger, and more exhilarating.

The best koumiss is manufactured in the government of Osenberg, especially on the large estate of Testefier, in the village of Kilimow, in the district of Beleber. In the government of Stavropol, Taurien, and on the Caucasus, the koumiss is not so well prepared, and has an unpleasant effluvia of horse perspiration, as even the best sorts of koumiss prepared from mare's milk always have more or less, but to which patients soon grow accustomed.

I have myself seen many formulae for making koumiss from cow's milk or ass's and goat's milk, but I think that, since the koumiss is so well prepared in London by Messrs. Edwin Chapman and Co., we should use their preparations with all the confidence which, according to my own experience and that expressed by many members in your valuable *JOURNAL*, their various preparations merit. There is no doubt that particularly their medicine koumiss answers well in cases of gastric catarrh, vomiting, bronchitis, consumption, albuminuria, etc.; and the patients usually like it at once, or get soon accustomed to its prolonged use, if necessary.—I beg to enclose my card, and remain, dear sir, yours obediently,
April 1878.

MEDICUS.

MENSTRUATION AND THE CURING OF MEAT.

SIR,—I thought the fact was so generally known to every housewife and cook, that meat would spoil if salted at the menstrual period, that I am surprised to see so many letters on the subject in the *JOURNAL*. If I am not mistaken, the question was mooted many years ago in the periodicals. It is undoubtedly the fact, that meat will be tainted if cured by women at the catamenial period. Perhaps the fact is not so generally known, that meat cured by men suffering from gonorrhoea or syphilis will also be spoiled. Whatever the *rationale* may be, I can speak positively as to the fact.—Your obedient servant,
Wm. Storr.
Linslade, April 8th, 1878.

D. M. R.—Fairlie Clarke on *Diseases of the Tongue*, and Morell Mackenzie on the *Use of the Laryngoscope*.

MUSCÆ VOLITANTES.

SIR,—I have been for some time a sufferer from what are called *muscæ volitantes*, and having read several authors on the subject, and performed many experiments on myself, I beg to offer you the following explanation of their origin. *Muscæ volitantes* appear to occur only in weak eyes, or those which water freely from long gazing at any object. They pass slowly downwards over the field of vision, and disappear until the eyes are blinked, when they once more appear and vanish as before. They occur on standing at some luminous object, as a window. My theory is, that they are caused by molecules of conjunctival secretion, slowly gliding over the anterior surface of the cornea, becoming renewed upon the surface of the membrane at each closure of the lids in the act of winking. Does not their circular and watery appearance justify this supposition? If you will kindly give this publicity in your columns, perhaps some of your many readers may suggest a remedy for this distressing affection.—I am, sir, your obedient servant,
F. R. GREENWOOD, M.R.C.S.

St. Bartholomew's Hospital, April 15th, 1878.

MR. E. MATTHEWS (Redhill).—We have no information on the subject.

MR. HUME-ROTHERY AGAIN.

IN reference to this gentleman's letter in the *Standard* of April 6th, on the subject of compulsory vaccination, we beg leave to refer to a paragraph in *Punch* of April 13th, which runs as follows. "Shall we deal with fools according to their folly, or bray them in the mortar of penal law, whether their folly depart from them or not under the braying? Such is the question raised on Mr. Pease's Bill for limiting the cumulative penalties under the Vaccination Act. Mr. W. E. Forster and Mr. Gladstone in favour of second reading of the Bill; Lord R. Churchill, Dr. Playfair, and Mr. *Punch* against, and the Bill thrown out—as it deserved to be—by 271 to 82. Fools cannot be allowed to perpetuate and disseminate small-pox. The only amendment of the law Mr. *Punch* would sanction would be one authorising compulsory vaccination of children, where parents had neglected to protect their little ones from the one plague against which science has reared an impregnable barrier, behind which—though many from ignorance and carelessness neglect it—only fools that are fanatics, and fanatics who are fools, obstinately refuse to shelter. Consideration to them is cruel and wrong to their children. And to prevent this the law must take order."

NEMO (Torquay).—A memorandum on the subject of the construction and arrangement of temporary fever or epidemic hospitals has been prepared and issued by the Medical Officer of the Local Government Board, from whom copies may be obtained on application.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following were the questions on Anatomy and Physiology submitted to the candidates at the written examination on March 29th, when they were required to answer at least four (including one of the first two) out of the six questions. 1. Describe an act of respiration, and the changes which the blood and air undergo. 2. Describe the mucous membrane of the dorsum of the tongue. 3. Describe the ethmoid bone and its articulations. 4. Describe the scalenus anticus muscle, its attachments and relations. 5. Describe the course, relations, and branches of the anterior tibial artery from its origin to the ankle-joint. 6. Describe the dissection required to expose the trunk of the musculo-spiral nerve. Give its branches and their distribution.

The following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the candidates for the membership at the written examination on April 12th, when they were required to answer at least four (including one of the first two) out of the six questions. 1. Describe the axillary artery, its course and relations. Supposing this vessel to be ligatured in its third part, how would the collateral circulation in the arm be carried on? 2. What are the differences between the coverings and relations of an oblique and a direct inguinal hernia? What are the risks attending the operation for strangulated bowel in either case? and how would you avoid them? 3. Describe the disease usually called fistula lacrymalis, its causes, and the treatment to be adopted for its relief. 4. Describe and explain the symptoms of fracture of the spine, with compression of the cord, in the middle dorsal region. How would you treat such a case? 5. What do you understand by the healing of a wound by the "first intention"? what by the "second intention"? Describe the nature of the process in each case. 6. What is a hæmatocele? under what circumstances may it occur? Give the treatment you would adopt immediately, or in a chronic case.

The following were the questions on the Principles and Practice of Medicine. 1. Describe the symptoms, course, and sequelæ of diphtheria, and state the treatment you would adopt in the various stages. 2. What are the pathological conditions leading to hemiplegia? State the prominent differences in the symptoms according to the locality of the lesion. 3. Give a list, and the average doses for the adult, of the vegetable and saline purgatives contained in the *Pharmacopœia*, specifying their various modes of action. Write out a prescription in full for a single draught.

CERTIFYING FACTORY SURGEONS.

SIR,—You will much oblige me by publishing in the *BRITISH MEDICAL JOURNAL* this correspondence, as I believe that it throws light on a subject of importance to certifying factory surgeons.—Your obliged,
HERBERT M. MORGAN.

Lichfield, April 17th, 1878. "Wolverhampton, April 6th, 1878.
"Dear Sir,—The Lichfield Brewery Company have applied to me respecting a charge you have made for examining three boys, for which you have charged 2s. 6d., in addition to 6d. for each boy. A short time ago, a resolution was passed by the chief inspector, that in places where there were never more than five persons under the age of sixteen, these might be taken to the surgeon's house and examined there for 6d. each, without the 2s. 6d., which is to be paid when the certifying surgeon goes to the factory. I am afraid that I have omitted to explain this to you before. Personally, I prefer that the certifying surgeon should go to the factory; but as the regulation exists, persons who come under it have a right to avail themselves of it.—I have told the Brewery Company that it is my fault for not explaining it to you.—I am, yours truly, G. S. L. BLENKINSOPP.—Dr. Morgan."

"Lichfield, April 8th, 1878.
"Dear Sir,—I beg to thank you for your courteous letter, informing me of an alteration in the fees payable to certifying factory surgeons, of which I was in total ignorance. If I have your meaning correctly, the present regulation is as follows. An employer, who has not more than five young persons on his premises, may send one of them to me to be examined for a medical certificate of health, for which examination and certificate he tenders me the handsome fee of *sixpence*. I hope that I am mistaken, and that no such insult to the medical profession has been authorised by the chief inspectors; but if such be the case, I must ask you to at once accept my resignation of the post of certifying factory surgeon for Lichfield, and to notify the same to the proper authority. I reserve the right to publish this notice and your reply in the medical papers.—Yours faithfully, HERBERT M. MORGAN.—G. Blenkinsopp, Esq."

"Wolverhampton, April 9th.
"My dear Sir,—In reply to your note, I enclose you a memorandum issued by the inspectors in 1871. As far as has come to my knowledge, very few have availed themselves of the sixpenny fee, owing to the trouble of taking the persons to be examined, or of sending some one with them, to the house of the certifying surgeon. As regards your resignation, I should be glad if you would defer it till I have an opportunity of seeing you, though, if you desire it, I will forward your letter to Mr. Redgrave.—Yours faithfully, G. S. L. BLENKINSOPP.—H. M. Morgan, Esq."

"Lichfield, April 10th, 1878.
"Dear Sir,—I am much obliged to you for your note and enclosed printed memorandum. I must ask you to accept my resignation forthwith, as I cannot submit to receive sixpenny fees; at the same time, I will continue to act for you for the next month or so until you can make fresh arrangements with another surgeon, so that you may not be put to inconvenience by my sudden resignation; but I shall dismiss the sixpenny cases after certifying without taking any fee. In conclusion, let me thank you for placing a disagreeable communication in as pleasant a form as you could personally.—Yours faithfully, HERBERT M. MORGAN.—G. Blenkinsopp."

HEADACHES.

SIR,—In reply to an inquiry from Brighton as to how headaches, supposed to arise from the overstimulating quality of the air, should be treated, a correspondent from Liverpool advised giving up stimulating food and drink, including tea. Now, I find that when the air is overstimulating from dryness, weak tea has a tendency to induce skin-moisture, and to relieve the heart and the head, while coffee and cocoa are more suitable to moisten weather; and this seems to agree with the indications of national taste. The inhabitants of the dry regions of Central China, and Russia, drink tea. In the moister climates of Italy and France, cocoa and chocolate are preferred. In the medium climate of Germany, coffee largely prevails. We observe, too, that the tea-plant grows in upland districts away from the sea, coffee at a moderate height not far from the coast, cocoa in low shore districts and islands.

There seems to be some connecting link of suitability between the food produced by a climate and the natives thereof, or of similar places. I have no doubt much of our English taste for tea arises from the artificial house-climate produced by carpets and fires.—Yours faithfully,
Jo. C.

MATERIA MEDICA EXAMINATIONS.

SIR,—I fear lest the discussion upon this subject should die away, leaving us still doubtful how much of botanic and pharmaceutical detail may safely be omitted from our teaching. Dr. Farquharson's letter was generously conceived in the interests of the students; but the interests of the lecturers themselves may furnish arguments for reform also. They can scarcely lecture with energy upon matters which they, in common with their hearers, consider really valueless. May I, therefore, attempt, if no one else will do so, to revive the question, What shall materia medica lecturers teach? Perhaps if it were desired of any one that he should propound a general theory of examinations, he would say that they should test the capacity of a man for doing the work he proposed to do by actual observation of how he did it. This plan is now partially followed in the clinical and practical work expected of candidates in medicine and surgery. It may be reasonably extended to materia medica. In his future career, the medical man may even yet find it necessary—at least occasionally—to dispense medicines himself. He must, of course, know how to prescribe them; and he must, as far as possible, know what change each drug is capable of effecting, in varying quantities, in any or all of the body-tissues. It is unnecessary to point out how a practical examination based upon these requirements should be conducted, further than to suggest that in those parts of the examination which are representative of life circumstances, in which books will usually be at hand, and in which instant action, and, therefore, ever present knowledge is not required, books of reference may be consulted by the candidate, the object being to find whether he will be able to do his work under these very conditions. And inasmuch as the examination is, on the present hypothesis, to represent the actual requirements of practice, not less nor more, the candidate should not be expected to remember now what he will not need to remember hereafter; nor, on the other hand, should he be allowed to pass if he forget now what it is essential he should always remember hereafter. What medical man knows to what "natural order" nuxvomica belongs, or of what avail has this memory been to him? Concerning the extrication of strychnia, the same may be inquired: but the appearance, the precise action, the dose, the purity, and the chemical and physiological compatibilities of strychnia are relations of it with which the brain of every student should be deeply impressed; and there is little doubt that the concomitant introduction of almost useless relations deadens the impressions that it is so desirable these other relations should make upon him.

To take an example from the inorganic series of drugs—iodide of potassium—it would be a relief to both teachers and learners to neglect its mode of preparation, and to attend only to those of its qualities or properties which are of positive moment to therapeutists and prescribers. And why should they not? For no other reason than that the students may possibly be asked at an examination a question demanding knowledge upon that point. To whom shall we appeal? What examining bodies, what individual examiners, will plainly tell us that henceforth we may leave the general chemical knowledge which such questions involve to be dealt with in the chemistry lectures and papers? We surely do not suppose that students can keep these things long in their minds: it is enough if they have ever comprehended the general principles of chemical science upon which such details are based. Now that therapeutic science has such vastly greater proportions than formerly, when text-books on materia medica contained very little else than applied chemistry and botany, these latter must yield in place as they do in practical importance. The time has come for reform: why should it be for another day delayed?—I am, sir, your obedient servant,

T. CHURTON, M.D.

Leeds, April 1878.

MR. M. M. BRADLEY may have observed that a similar communication in somewhat more detail had been earlier received from Dr. Duffey, and was published.

MR. R. BRYDEN (Uffculme).—The notice was inserted at page 551 of the JOURNAL for April 13th.

DIALYSED IRON.

SIR,—I should not have troubled you with any reply to Messrs. von Glehn and Sons' remarks on my observations on dialysed iron, were it not that they contain a curious blunder, to which I might be supposed to assent if I were silent. They say "nitrogenous food is colloid, but it is absorbed none the less; and the hydrated oxide of iron cannot, therefore, fail to be at once acted upon by the acid of the gastric juice and rendered capable of absorption." Is it possible that Messrs. von Glehn think that the iron is converted into a peptone? I can attach no other meaning to their remarks; but such a view is really too ridiculous to need discussion. The dialysed iron is incapable of absorption as a solution; but as, on dilution with ordinary water, it all becomes precipitated in gelatinous flocculi, it no doubt is in this condition in the stomach. If the "London Physician's" experience have led him to think this a good form of administration, it is in direct contradiction to that of other physicians in and out of London.—I am, sir, your obedient servant,

JOHN CAVAFY.

THE following communications have been handed to the General Manager:—Dr. W. R. Hughes, Liverpool; Commander Blount, London; Dr. H. Donkin, London; Mr. Henry G. James, Beverley; Dr. J. W. Moore, Dublin; Dr. C. B. Ball, Blaenavon; Dr. R. Bowles, Folkestone.

A PECULIAR CASE.

SIR,—I should be obliged if you would give publicity to the enclosed observations, soliciting from your numerous readers any remark which might tend to elucidate the diagnosis and treatment of this peculiar case.

A. C., a boy aged 10, born of healthy parents, had no disease up to the age of nine. He then had a slight attack of gastritis, which was cured in ten days. He always was and is of a lively disposition, is intelligent, and in every respect healthy. About a year ago, on returning from school, he had an attack of hicough, which lasted for a few minutes, and repeated three or four times a day. This lasted for two or three months; after which, the hicough was replaced by a peculiar cough, which also lasted for two or three minutes each time, was repeated three or four times a day, and also lasted two or three months. At this time the cough was replaced by bleating like a sheep, which symptom he has had until now. He bleats on rising in the morning, takes a shower-bath and bleats again, has breakfast and bleats twice until one o'clock, then again at 6 P.M.; after which he stops until the next morning, continuing every day, and at the same hours more or less. He sleeps well, and immediately after the attacks is as merry and well as any other child. This is the information given by the father, who is a very intelligent man. I was asked to see the boy to-day for the first time. On going upstairs, I heard him bleat three times. This was the end of an attack: immediately afterwards, he came and spoke to me as if nothing had happened. He speaks with a hoarse voice, evidently from the effects of the bleating. In answer to my questions, he told me he knew when the attack was coming, but could not help it. He runs away to the back of the house, where he is least heard, and begins. He is perfectly conscious, can walk about during the attack, and has no convulsion or fit of any kind. Several medicines have been tried, to no purpose. Sea-baths during

four months at the seaside reduced the bleating to once a day, and then lasted about half a minute instead of two or three. During this time his hoarseness almost disappeared.

I heard of a similar case in a young girl a few years ago, whom I did not see, but whom I heard whining and barking like a young dog. I was told that these attacks came on at intervals of five or six hours, between which she was quite well.—I am, etc.,

March 30th, 1878.

SEMPER VIGILANS (Member).

MIDWIFERY ENGAGEMENTS.

SIR,—I should be glad if you or some of the members of the Association would give your opinions on the point of engagements to attend in midwifery. I have seen the point discussed several times, but cannot recollect that any settled decision was arrived at, as to whether, if a medical man were engaged to attend a woman in her confinement and not sent for at the time, he had a right to claim his fee or not. I know that some county court judges will order the fee to be paid, but the uncertainty of the law is proverbial. It has happened to me three or four times lately to have been engaged to attend and then not to be sent for at the time, and I have not been certain what I ought to do about claiming the fee. I did claim half the fee from a man to-day, and he flatly refused to pay it, so I would be glad to have some advice on the matter. I know that a great many women engage a doctor to attend them in their confinement, and do not mean to send for him unless it turns out to be a difficult case, and then they refuse to pay any extra fee, so I am very strongly of opinion that every woman that engages a doctor to attend in her confinement ought to be made pay the fee whether she sends for him or not.—I remain, sir, yours obediently,

ROBERT E. BURGESS, M.D.

Frampton-on-Severn, Gloucester, April 13th, 1878.

DR. GILLES (Runlet).—Squire's Companion to the Pharmacopœia would suit best.

PLUGGING THE NOSTRILS.

SIR,—Mr. F. Davison seems to have misunderstood my suggestion respecting plugging the nostrils, for I fully appreciate the value of Bellocq's cannula, as well as that of his old pensioners the gum elastic catheters. I think, however, that Mr. Davison will find, as I stated, that the soft or worm-catheter is much easier of introduction and more expeditious than either of the others. Mr. Davison must have been fortunate in meeting with cases of epistaxis requiring only one plug. I have had difficulty after using two, even when aided by iron, tannin, and ergot as adjuncts.—I beg to remain, sir, yours very faithfully,

T. T. FRANKLAND.

ENQUIRER.—The degree of M.D. may be obtained without residence, by a duly qualified practitioner (such as M.R.C.S. Eng. and L.S.A.), from the Universities of Durham, St. Andrew's, or Brussels, under conditions which may be obtained from the authorities of those institutions. Our correspondent will also find the conditions on which the two British Universities above named grant the degree in the Educational Number of the BRITISH MEDICAL JOURNAL (September 8th, 1877); and those relating to the University of Brussels in communications from correspondents in various numbers of the JOURNAL.

A MEDICAL CHRONOGRAPH.

SIR,—In the JOURNAL of April 6th, a watchmaker inquires whether "a watch so constructed as to beat audibly in unison with the average healthy pulse . . . and having a hand describing the full circle of the dial . . . would be considered an advantage?" For obvious reasons, there would be no advantage in such an arrangement. There would, however, be an advantage in what I am about to suggest. Let quarters of minutes only be marked by audible sounds. A watch so constructed would not only enable the medical man to count the pulse in the dark, but it would also allow him to pay greater attention to its quality while in the act of counting than is possible for him when under the necessity of closely observing the watch-dial at the same time. Matters might be arranged so that the sounding apparatus could be thrown into and out of gear at will.—I am, etc.,

April 1878.

ARTHUR LEARED, M.D.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fishers Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

COMMUNICATIONS, LETTERS, etc., have been received from:—

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SEQUEL

OF

A CASE OF ABNORMAL DISPOSITION TO SLEEP, ALTERNATED WITH CHOREIC MOVEMENTS.*

By W. T. GAIRDNER, M.D.,

Professor of Medicine in the University of Glasgow.

In August 1875, I reported to the Medical Section of this Association, then meeting in Edinburgh, a "case of abnormal disposition to sleep, alternated with choreic movements", which communication was afterwards published at length in the *BRITISH MEDICAL JOURNAL* for October 30th, 1875, page 547. At page 229 of the same volume appears a brief abstract of the case, with some remarks by Dr. Clouston. In recording the case in detail, especially as regards the history, I was aided by copious notes based on information obtained for me by the ordinary medical attendant, whose name and locality were, however, for certain reasons partly stated at the time, and still more pressing now, purposely suppressed. The case was generally regarded as extremely interesting, if not almost unique, in its associated phenomena; the only ones nearly resembling it which came to my knowledge being one of which I had private notice by Dr. Clifford Allbutt, and the one briefly alluded to by Dr. Clouston in his remarks. In surveying the details of history and symptoms as a whole, it was impossible to avoid the analogy with chorea as respects the motor phenomena; but the psychical features of the case were extremely baffling, and did not fit in with the described or personally observed characters either of catalepsy, ecstasy, lethargy, hysteric coma, or mesmeric hypnotism; the distinctions from all of these being more or less elaborately traced in the paper referred to. To the question that naturally occurred, Is this girl a malingerer? a negative answer was returned, on the double ground of want of apparent motive, on the one hand, and disability, on the other. It was held that "anything like premeditated deception or scheming, acted out consistently for so long a period as in this case, would imply powers as well as motives for deception which seem to be wholly absent". I am not ashamed of this conclusion as emerging from the facts then known to me, however much it may be brought into doubt by some that I have now to relate.

An apparently unsophisticated girl, living in strict retirement with her two aunts, visited by and visiting no one; menstruating regularly, and "subject to no known cause of hysterical derangement"; enjoying (apart from her peculiar symptoms) fair bodily health, "cheerful and even lively, presenting no trace of exaggerated self-consciousness, and no dramatic or imitative faculty"; having no religious or metaphysical prepossessions, and never having "been in any way made an exhibition of, either in public or in private":—such were the conditions apparently presented to our view in 1875.

I confess that I fail to see even now what motive could have been devised or suggested adequate to sustain the hypothesis of a long course of deliberate and most consummate acting, extending over three whole years continuously, and never for one moment departed from in sleep or waking, or amid any of the more ordinary incidents of an uneventful life, so far as to permit a well founded suspicion of imposture or a detected incongruity. Yet that the impulse to deceive existed, we now know too well from the sequel presently to be recorded. At what precise point conscious deception came to be superadded to abnormal action of the mind and motor centres, I believe we do not now, possibly we never can, know. But I think we may easily draw one conclusion from the whole case, and it is this, which, I think, gives the sequel of it so great, if so sad, an interest for us in the Psychological Section. Surround this simple and unemotional girl with the early impressions and the religious machinery, so to speak, of the Roman Catholic Church; accredit her with a quasi-miraculous mission; let her feel in its strongest form the unwholesome excitement begotten of crowds of unreasoning votaries; and then let her be initiated into the moral code which counts all things admirable and praise-

worthy which are done from overwhelming religious emotion—*ad majorem Dei gloriam*—give these conditions, and you have the elements as complete as could be desired for a history like that of Louise Lateau. Introduce her, with proper preparation, into a mesmeric circle, and you have the "Eliza" of Dr. Gregory, the famous clairvoyante hand-maiden of Miss Martineau, the Okeys of Dr. Elliotson. Through what process of change for the worse the transition from a physically diseased to a morally depraved nature is accomplished, it is often hard to say; but here we have the basis, the raw material, so to speak, of such accomplished and skilled performers as those I have mentioned presented in its most elementary form; something which bears the same relation to them as do the crudest and commonest of spirit-rapping marvels in the present day to the matured and oft-repeated feats of the best trained "mediums", or the capital imitations of these by Messrs. Maskelyne and Cooke. And, in writing these words, I am reminded that it would be morally impossible for my tongue to utter them, or for my pen to note them down, were it not for the practical certainty that they can do no harm to the subject of my present narrative. I share, in regard to her case, the conviction expressed in regard to it by one of the ablest specialists of my acquaintance, presently to be quoted, viz., that physical disease laid the foundation upon which the superstructure of attempted deception was built up. The object of this sequel to her case is not to judge or to condemn, but to furnish materials for science and for the practice of the medical art.

At the time when I first saw her, M. T. had been about two years subject to the peculiar interrupted somnolence and to the chorea-like movements described in the former narrative. At the time of the paper read to the Association in 1875, she was eighteen years of age, and had passed three of these years in abrupt transitions from a state of (apparently) dreamless and motionless sleep of the most profound character to waking moments characterised invariably and constantly by the peculiar motor phenomena described at length in the paper. On looking over the case now, with the increased knowledge since obtained of it, I find nothing to modify in the statement of the facts so far as they came under my own observation. The head-shakings, the agitations of the features and limbs as described, were totally distinct from the familiar ones of the hysteric, epileptic, or any other general convulsion; they were also "quite distinct from the tremor of paralysis agitans or of mercurial poisoning", and "wholly devoid of any dramatic character or apparent significance". The sheer tedium and monotony of the business, one would think, would have worn out the patience of a malingerer more effectually than any severities practised could have done in the way of cure or of detection. Fancy a deliberate scheme of imposture, whose only resources were to go about shaking the head, twitching the left side of the face, and jerking the right arm during every single waking moment for years together, in season and out of season, the only relief obtained being, momentarily, when the attention was strongly roused, and more completely, indeed usually completely, during sleep. Add to this that the falling into and coming out of sleep were almost instantaneous, and never varied in their character or in the absolute naturalness of their expression, and you have in summary the case as presented in 1875. Some of the incidents might, indeed, be open to doubt, and were at the time mentally discounted as possibly the result of imperfect observation; e.g., the eight days' sleep on one occasion without taking food or spontaneous evacuations. But this rested wholly on the testimony of her aunts, not even on her own (as she seemed to be wholly unconscious of it); in fact, I never once heard her spontaneously refer to any of the more striking facts of her own case, nor did she appear at all anxious to talk about them, or in any way whatever to obtrude them on our notice.

About a year after my first communication was written, I received the following interesting letter from Dr. —, the ordinary medical attendant, who first brought M. T.'s case under my notice.

July 12th, 1876.

"Dear Dr. Gairdner,—I intended calling on you long ago to tell you about our interesting patient at —, but somehow never had time.

"For some time after you saw her, there was very little change in her symptoms, except that she began to lose appetite and to get weaker, so that she did not care to move about so much, or go out to the garden, as she was accustomed to do. You remember, when you saw her, she had an eruption on her forehead something like erysipelas; this continued for four or five months, more or less; it would heal up for a day or so, then appear again in the form of large vesicles or bullæ, which would burst, heal up, and appear again in regular succession.

"After this had appeared on her forehead for a month, the back of her right hand became similarly affected, and it gradually spread up the arm to a little above the elbow. The arm is still affected, but

* Read in the Section of Psychology at the Annual Meeting of the British Medical Association in Manchester, August 1877.

the brow has been free for the last three months. It is a kind of pemphigus. Another peculiar feature, which I have never before seen, is a peculiar discoloration which appeared under both eyes about four months ago. At first, it had only a dusky colour, such as is usually seen in a person who is sick or bilious; but gradually it became darker until now it is quite black, like a negro's skin; it is not like ecchymosis, but is more like a deposition of pigmentary matter. A slight degree of it is sometimes seen over both cheeks. Her appetite has been gradually leaving her for the last six months, and, within the last three months, she has not been able to retain her food; no sooner does she swallow it than she puts it up; it is more a regurgitation than a vomiting, as far as I can make out, for I have never seen her put up her food; but her aunt tells me that, whatever food she is forced to take (for now it is a matter of compulsion), it has hardly time to be down when it is put up. She has retained no food for a fortnight, and I really cannot understand how she possibly survives.

"But the most remarkable phenomenon which is now presented by this most extraordinary case is her breathing. Two months ago, I noticed that she breathed in a spasmodic manner; there was no difficulty in the expiration; but there seemed to be a spasm of the glottis which prevented inspiration. She had to wait some seconds till the spasm gave way before she could inspire. She said 'she could not breathe when she willed', but could only take a breath when the spasm relaxed. This is now constant and more marked; she can only articulate a word during expiration, and has to wait for relaxation of the spasm before she can articulate the next word. Again, every second or third day, usually in the evening, she has an attack of extreme spasm of the glottis, producing something like laryngismus stridulus. Unfortunately, I have not seen her in any of these paroxysms; but her aunt tells me that to witness it is dreadful. She seems fighting for breath; her eyes stare; she clutches at anything, and seems on the point of suffocation, when suddenly the spasm relaxes, and there is a long crowing inspiration, which is so loud as to be heard outside, and this goes on for two, and sometimes three, hours, when it gradually relaxes and she falls asleep. This paroxysm has begun during sleep, and she has had to be awakened to prevent suffocation. She does not fall asleep so frequently as she did. I do not expect she can live many days, and thought that, as you were interested in her case, you, perhaps, would like to see her; but it must be soon."

On receiving this letter, I made a visit to the patient without any previous notice to her, and almost the first glance at the externally visible facts of the case assured me, not only of the accuracy of Dr. —'s description of these, but that an element had become apparent which, although to a professional eye easily enough detected, required to be warily approached, and (as regards the relatives at least) very delicately handled. I sat down by her bedside and asked a few ordinary questions, in presence of her aunts, about the appetite and digestion, general strength, rejection of food, and so forth. It was evident that no ideas had entered into the minds of her nearest relatives and constant attendants as to any voluntarily induced phenomena, or any volitional control over those now or previously existing. I took care not to disturb this feeling by any unguarded expression, and framed all my inquiries so as to elicit from the patient herself, if possible, what she could and what she could not do. Yet it was evident, on a very brief inspection, not only that the head-shaking and chorea-like symptoms were to a great degree controlled, but that the new symptoms connected with the respiration above described were of the order generally familiar to medical men as hysterical, and, in point of fact, largely controlled by the will. I then approached the subject of the pigmentary deposit around the eyelids. "Can it not be washed off?" I asked, as if doubtful on the point. No one had ever tried to wash it off. "Give me a bit of clean white linen rag." This was brought. I tore it up, took a small strip, and deliberately wiped off the black marks from one of the eyes, amid some manifestations of shrinking, as though from tenderness of the skin. "Oh; I will not hurt you at all; you see I am very careful, but you see also it comes off quite freely. You can keep it quite clean if you like." This was a new discovery to the aunts, obviously. "Now, let us try the other side. Another piece of rag, if you please; for I want to see exactly what this colour is, and how soon it will come back. The skin is quite clean now, and here is all the colour on this rag. There is no broken surface at all there." By this time, I was morally certain of the fact that the pigment was nothing else than carbon externally applied; but it was agreed that we should make this doubly sure by a microscopic and chemical examination of the soilings on the portions of rag which I took away with me. I expressed to her aunts the belief that it would be necessary to place her under the care of a physician specially skilled in strange nervous disorders, and so the interview closed, as I intended, without any suspicions expressed on either side, though perhaps not without an unex-

pressed feeling on the part of the patient that she was suspected. Two days afterwards, I returned with Dr. Yellowlees, and the remainder of the history may be told in his very striking and pathetic words, it being understood that, in the interval, a careful examination had proved to demonstration—1. That the pigment was mere carbon in a fine state of division; 2. That it was mixed, but not organically incorporated, with the microscopic elements of the epidermis. These facts were ascertained for me by Mr. Ferguson, Professor of Chemistry in the University.

"Dear Dr. Gairdner,—I find it impossible to report in the ordinary manner the history of Miss T., while she was under my care; for the treatment was so entirely moral in character, and so directly personal in its administration, that the first personal pronoun recurs with offensive frequency. I prefer, therefore, to put it in the form of a letter, where 'I' may seem less obtrusive, or may at least be better tolerated than in a more formal record.

"When I first saw her in consultation with you and Dr. —, she was a very pretty but fragile girl, and her face had a strange weird look from the blackening of the suborbital areas. Her head was in constant motion (partial rotation) while she answered your questions, which she did intelligently, though in a scarcely audible voice. Conscious that she was being watched by the stranger you had brought with you, her face flushed; she looked at me with a fixed gaze of inquiry and apprehension, and then there gradually came on one of her usual 'fits'.^{*} The movements of the head became greater, the eyes rolled, the breathing was embarrassed and gasping, and there were irregular jerking movements of the limbs and of the whole body. These symptoms continued for several minutes, then gradually subsided, the patient passing into what looked like a calm deep sleep, in which, it was said, she would continue for hours, and from which she could be awakened only by shouting her name into her ear. During the seizure, her friends were much distressed, and expressed the most anxious solicitude on her behalf.

"After the sleep had continued for some time, she was aroused by the usual method, other ordinary means having been tried in vain. She awoke with a slight start, looked bewildered for a few moments, then seemed as if she had suddenly remembered our presence, and immediately answered questions as calmly and correctly as before. Some dark pigment was removed from under the eyes by wiping the surface firmly.

"I believed the nervous disturbance to be entirely functional, or what we call 'hysterical', for want of a better name, and recommended, as the first and indispensable step, that she should be removed from her home and from too sympathetic friends to new surroundings, and to the care of nurses accustomed to such cases. When assured that this would be the first step towards recovery, she readily consented to reside under my care, and Dr. — brought her to her new abode. On arrival, the pallor of her countenance was so great as to be manifestly artificial, the shaking of the head was constant, and one of the 'fits' very soon occurred. There could be no doubt as to the character of this fit. The gradual beginning, the very safe and easy way in which she slid from her chair to the floor, the brevity of the fit when two seemingly indifferent doctors were the only witnesses, and the ease with which she was roused from the subsequent sleep, were very significant. Not less so was a special message sent by her through the doctor about forwarding a dress of a particular colour which she had omitted to bring.

"For some days, little was done beyond observing her symptoms and gaining her confidence. Constant movement of the head, even when she might have thought herself unobserved, frequent fits, extreme loathing of food, vomiting after every meal, frequent short cough, and occasionally jerky spasmodic breathing, were the chief symptoms. The fits occurred twice or thrice daily, and she was extremely thin and weak.

"The discovery of some tooth-powder carefully wrapped by itself explained her deadly pallor on arrival, which, of course, ablution had satisfactorily removed. The right forearm was covered with a thick dry cake of what seemed to be old eczematous exudation; its removal by poulticing revealed an almost healthy surface, and restored the use of an arm which she thought beyond cure.

"When observation had been continued long enough, and a suitable opportunity seemed to have arrived, I bade the nurse stand by the door, assumed as much quiet decision in tone and manner as I could, and had a conversation with her like the following.

"I have told you that you will get better, but you cannot believe it. I am going to prove it to you to-day. I wish to tell you some-

^{*} These "fits" differed considerably from anything observed when I first saw the patient, and especially in their affecting the respiration. See Dr. —'s letter, quote above.—W. T. G.

thing which will show you that I perfectly understand your illness, and will enable you to believe what I say. Those dark circles under your eyes were painted by yourself.' A start and an instant denial. 'Do not repeat that denial, please; I *know* it. You got some black stuff and rubbed it on.' More denials, but with flushed face and conscious look. 'I *know* it as well as if I had seen you. I will prove to you that I know it. Your paleness on the day you came here was only tooth-powder which you had rubbed on your face.' No denials now, but a startled look, tearful eyes, and helpless silence. 'I do not tell you this to hurt your feelings, nor to give you pain, neither do I need to tell your friends about it; but I wish to show you that there is no mystery in your case.' The conviction was complete, and her confession was unreserved. She told me that she had darkened her eyes with the lead from her pencil, and that she had done it because her friends thought it denoted biliousness, and so did not insist on her taking food, to which she had extreme repugnance, on account of the sickness and vomiting which eating produced. She declared her intention to tell her kind friends all about it as soon as she was well, and was anxious to know if you knew all.

"This was the right mood, so, of course, I went on with as much quiet emphasis as possible. 'You know from this that I understand your case, and now I tell you that you can perfectly control your other ailments; that the fits, the shaking of the head, and the vomiting must cease. They are not needful; they prevent you from getting well. You have the power to stop them, and I wish you to do so.' She promised to try, and, of course, she succeeded in all but the cough, which unhappily was more than nervous. Within a fortnight, I was able to report to Dr. — in these words: 'No preternatural sleep, no choreic movements, no shaking of the head, no vomiting, no fits; up and out every day.' The persistence of the cough was unfortunately due to lung-disease. When made aware of this, her friends took her home again, and she died a few months afterwards.

"I trouble you with no comments; but it is due to the memory of our most interesting patient to express my full belief that her attempts at deception did not result from moral obliquity, but were as purely the product of disease as the abnormal sleep and the eccentric movements.—Yours very faithfully,
D. YELLOWLEES.
"To Professor Gairdner."

It seems only necessary to add to this impressive narrative a very few lines. I never saw M. T. again. Her anxiety to be informed if I were a party to Dr. Yellowlees's profound insight into her case remains, so far as I am concerned, unsatisfied. No word of reproach was ever uttered to her or about her by any of her medical advisers; and to this hour, I believe, her relatives remain in ignorance of the strange revelations that took place when she was in the hands of strangers, and the marvellous effect of a few words, faithfully and firmly spoken, in rousing the latent healthy instincts of a "mind diseased". Had this poor girl lived in an age when demoniacal possession, or witchcraft, or the "evil eye" remained a part of the popular creed, her disease and her cure, if published abroad, could scarcely have escaped one or another of these interpretations. As it was, she died an ordinary death from phthisical exhaustion, and her death-bed was undisturbed either by superstitious fears or by any unusual manifestations of moral emotion. The only remark she made to her faithful and attentive ordinary medical adviser which could, however remotely, bear the construction of a kind of half-guilty self-consciousness, was that she had been "very foolish". And I think, on the whole, that no humane judge familiar with the secrets of what has been recently called "spiritual pathology", certainly no skilled medical judge, looking at the facts of her sad case from the medico-psychological point of view, would be inclined to condemn her in any harsher terms than these. This simple narrative, impersonal and without lengthened commentary, will prepare for us all that is needful of an experience fraught with inexpressible human interest, though the subject of it, seeking neither praise nor blame, remains for us but the shade of a shade.

CRICKHOWELL.—The death-rate in this district was 22.4 per 1,000 in the year 1877, and of children under one year 3.96 per 1,000 inhabitants. This death-rate is considered very favourable by Mr. Hill, who also especially notices the small mortality from zymotic diseases, although measles prevailed during the summer to a considerable extent. Only one case of small-pox occurred; and, as the patient exposed himself in a public place, he was summoned and convicted. The rest of the community escaped, as Mr. Hill believes, from the re-vaccination of a large number of inhabitants. The want of proper sleeping accommodation is especially mentioned, as well as the imperfect water-supply and overcrowded state of the churchyard.

CLINICAL LECTURES

ON

THE VARIETIES OF PHTHISIS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By C. THEODORE WILLIAMS, M.A., M.D., F.R.C.P.,
Physician to the Hospital.

LECTURE IV.—FIBROID PHTHISIS.

GENTLEMEN,—In our last lecture, we considered the form of phthisis arising from catarrhal pneumonia, of which the principal features were alveolar epithelial proliferation, leading to caseation, irritation of the alveolar wall, and consequent tuberculosis, progressive consolidation, and excavation. We now turn to a very different group of patients, in most of whom the phthisical disease may be traced to inflammation attacking the pleura and interlobular tissue, and thence reaching the parenchyma. Here we have interstitial pneumonia, as it is called, as the basis of the disease, instead of catarrhal pneumonia; and its development and after-changes give rise to the very important features which mark the fibroid variety of consumption. The principal pathological element is fibrosis, which, while it is present to a greater or less extent in most cases of chronic phthisis, is the most important feature in fibroid phthisis, and its preponderance and effect on the lungs and circulation largely influence the history of the patients of this group.

By the term fibroid phthisis I would signify cases of phthisis in which fibrosis is the main feature; and therefore I do not enter on the question of its being primary or secondary, though it is for the most part secondary in instances I have seen. Fibroid phthisis, then, would include all that Dr. Andrew Clark intended when he communicated his admirable paper to the Clinical Society, and, in addition, cases where tuberculosis has supervened. There are two principal modes of origin: firstly, from attacks of pleurisy and pleuropneumonia; secondly, from chronic pneumonia resulting from long-continued irritation of the lungs through the inhalation of various kinds of dust or grit, such as prevails among fork-and-knife-grinders, colliers, and buttonmakers. The history of symptoms in the first group may be sketched as follows. A patient has an attack of pleurisy with effusion, from which he recovers with absorption of fluid; but percussion shows dulness over the whole side and somewhat feeble respiration. The patient recovers, but experiences dragging pains in the side; a dry hacking cough, somewhat paroxysmal in character, with little expectoration; and the breathing, always short, becomes still more so on exertion. There is emaciation, and often night-sweats. These symptoms increase; and a few months later we find marked immobility of the affected side, still dulness throughout, and now considerable shrinking; the circumference of this side, whether taken at the level of the second rib, or of the nipple, or of the ensiform cartilage, measuring one or two inches less than the healthy side. On auscultation, we notice the breathing to be very deficient in some parts, and in others bronchial and sometimes cavernous in character; but generally there is everywhere absence of true vesicular breathing. Careful percussion of the opposite side of the chest shows the line of resonance to extend beyond the usual limit, passing to the edge of the sternum, and often an inch or two farther, demonstrating that the contraction of the affected lung has caused the healthy one to be drawn across in order to fill up the void. Other organs are likewise displaced. If the left lung be affected, the heart is tilted, not necessarily upwards, as where a cavity is contracting, but outwards. The stomach rises, its note being audible as high as the fourth rib. The heart is not only displaced, but is uncovered by the retreating lung; and the right auricle and ventricle are clearly distinguished by their pulsations, while the right lung is drawn across to the left side to the extent of one or two inches. If the right lung be affected, the left may be drawn over; and the area of resonance may extend as far as the inner half of the right clavicle, and the line drawn thence sloping towards the middle of the sternum. The heart is transposed, and its impulse may be traced in the fourth interspace on the right side. The liver rises up to the fifth rib, and shrinking of the chest-wall takes place as on the other side. In these patients, the pulse is generally slow, and the temperature seldom rises above the normal, and is often subnormal. When the temperature rises over 100 deg. Fahr., it signifies that something besides fibrosis is going on. The cough is troublesome, and often induces vomiting; and the expectoration becomes more and more difficult, and in time, on account of retention, foetid. Meanwhile the dyspnoea increases, the other lung

becoming involved; signs of obstructed circulation appear; dropsy of the extremities takes place, and rapidly increases; the urine becomes albuminous and of low specific gravity; and the patient dies either of dyspnoea or of blood-poisoning, his death contrasting strongly with the ordinary termination of consumptive disease. After death, we find a lung contracted to the size of a man's fist, with enormously thickened and adherent pleura and widely dilated bronchi, with interlobular septa much increased in size and encroaching on the lung-structure, which seems to be replaced by a hard fibrous tissue, mottled with grey in parts, deeply pigmented, and resembling cartilage in its resistance to the knife. Embedded in this structure are found caseous and cretaceous masses, or, again, excavations of various sizes; the walls of these and of the dilated bronchi being rigid and inelastic from the presence of the fibroid material, and thus affording some explanation of the difficult expectoration and consequently troublesome cough. Besides these changes, we may find the other lung the seat of tuberculosis, though this is not necessary; but commonly the bronchial glands are hardened and deeply pigmented. There is often amyloid disease of the liver and spleen, and frequently a granular condition of the kidneys.

Such is fibroid phthisis; but we must bear in mind that its principal element—*fibrosis*—is brought about by interstitial pneumonia arising from (1) unresolved croupous pneumonia, or (2) from the irritation of the alveoli by hard particles, as in colliers' phthisis, or (3) from pleurisy. We find a large development of fibroid tissue, causing a thickening of the alveolar walls, and afterwards filling up and obliterating the alveolar spaces themselves; and besides this, there is an enormous increase of the interlobular connective tissue in all its various ramifications, and especially in the parts surrounding the large vessels and bronchi as they pass to the lobules.

The microscope tells us that the growth is either fibro-nucleated or densely fibrous, and presents the characters of cicatricial or scar-tissue. But, though this fibrosis is apparently the same in whatever part of the lung it may occur, it is not so in reality; for Dr. Green has shown that, while the fibrosis of the interlobular septa does not caseate and break down into cavities, that of the alveolar growth does, because the former is amply supplied with blood-vessels, and the latter is destitute of them; and this gives us an important means of distinguishing between the two.

It is needless to say that cases of fibroid phthisis differ widely, according to the amount of lung involved, the presence of cavities, the state of the bronchial tubes, and the amount of elastic lung available, which materially influence the symptoms. We will now consider a typical case.

Isabella C., a married woman aged 29, a dressmaker, was admitted under my care April 18th, 1871, and gave the following history. She had lost a cousin on her mother's side from consumption. For three years she had had cough and expectoration, and about two years ago noticed that she was emaciating. Hæmoptysis to the extent of four ounces came on soon after the beginning of the illness, and to the same amount three months later; and again, after two months, in February 1869, two ounces were coughed up, but none since then. She had had night-sweats, which ceased before admission; and she once for two weeks suffered from diarrhoea. Latterly she had complained of increasing shortness of breath, which had become very troublesome. In September 1869, she became an out-patient under Dr. Douglas Powell, who found flattening, dulness, and cavernous breathing in the upper right chest anteriorly, and tubular respiration and moist crepitation over the posterior base. He observed that the left lung was enlarged, and extended to the right of the sternum; and he detected crepitation at the apex and along the posterior surface. Dr. Powell's diagnosis was a cavity in and contractile disease of the right lung, and granulations in the left. In October 1869, she was admitted into the hospital under Dr. Cotton, when the right lung was found to be in the same condition; but in the left harsh blowing respiration had taken the place of the humid crepitus. She remained in the hospital for three months, taking phosphorated oil alternately with quinine and other bitters, and gained seven pounds and a half in weight, the physical signs remaining the same. After this, she continued better for some time; but the symptoms returned, and her increasing shortness of breath caused her to apply to the hospital, where she was admitted under my care in April 1871. Her cough was very troublesome; expectoration frothy; tongue clean; bowels regular; catamenia absent for two years; great emaciation, especially of the thorax. The right side of the chest was considerably smaller than the left, the shoulders greatly depressed, and the upper portion of the chest fixed. Marked depression was visible in the upper right front as low as the third rib, this space being decidedly resonant. Cavernous breathing was heard under the clavicle, though chiefly below the sternal end. From the

fifth rib downward, there was absence of breathing and marked dulness, not removable by change of position. Posteriorly, cavernous breathing was audible in the right inter- and supra-scapular regions. The heart's sounds were more audible over the lower portion of the sternum than in the cardiac region, and the apex could not be felt. It was, therefore, concluded that the heart was displaced towards the contracted side. The diagnosis was contractile or fibroid disease of the right lung, with some excavation of the upper portion, and displacement of the left lung, liver, and heart towards the affected side. The patient was ordered cod-liver oil and quinine, but she did not improve; and on April 27th the evening temperature, which had been normal, rose to 100 deg. Fahr.; and three days later the morning temperature rose to 101 deg. Fahr., and then remained between 100 and 101.6 deg. Fahr., with the exception of one day, till May 4th. The patient became weaker, and the breath shorter. Sonorous rhonchus and harsh breathing were audible in the left lung. On May 15th, the morning temperature fell to 98.4 deg. Fahr., and the evening to 99 deg. Fahr.; the pulse being 100, respirations 40. After this, the morning and evening temperatures varied between 98 and 98.5 deg. Fahr.; and on May 20th the breath became very difficult, crepitation being audible at the base of the left lung. Dyspnoea increased, and the patient died on the 25th.

The *post mortem* examination was made by my then clinical assistant, Mr. William Rose, in the presence of Dr. Powell and myself; and the following account is taken from our notes.

The body was greatly emaciated. There was marked concavity from the right clavicle to the second rib, and general shrinking of the whole right side of the chest. On removing the cartilages, the right lung could not be distinguished at first, but was afterwards found contracted to a third of its normal size, occupying the axillary and lateral regions, and not extending lower than the fifth rib. The heart was drawn over to the right side of the sternum, the apex being slightly to the left of the ensiform cartilage. The liver, which was much enlarged, was drawn up, and, owing to the retraction of the right lung, had become superficial below the fifth rib; it did not extend far below the margin of the ribs. The left lung stretched across the median line as far as the costo-sternal articulations on the right side, this being the case as low as the third rib. The right lung, weighing 20½ ounces, was universally adherent to the chest-wall; the pleura, with intervening adhesions, being on an average half an inch thick, and thickest over the diaphragm, where it contained in its interior a great deal of fibro-gelatinous material. The texture of the lung itself was dark grey, traversed by whitish fibrous bands proceeding from the pleura, interlobular septa, bronchi, and vascular sheaths. In the upper lobe were the remains of an old cavity into which some bronchial tubes opened, their mucous membrane seeming to terminate at its entrance. The cavity appeared to have undergone contraction, and was divided by numerous fibroid septa stretching across it, separating it into smooth-walled loculi which communicated with each other. The left lung was much enlarged and congested, the edges being highly emphysematous. It contained some cheesy nodules, around which were miliary tubercles of recent date. In the portion drawn over to the right side was a small cavity of the size of a walnut, which corresponded to the area of the cavernous respiration heard under the right clavicle. The heart was large; the right ventricle slightly dilated; valves healthy. The liver and spleen were both lardaceous; kidneys healthy.

In this case, the shrinking of the right lung had caused a void, which atmospheric pressure had filled in various ways. The chest-wall was contracted; the liver pressed upwards the heart to the right of the sternum, and the upper part of the lung into the right chest. Owing to the portion of the left lung containing a cavity, it gave rise to cavernous sounds under the right clavicle, from which it was naturally concluded that the cavity existed in the *right lung*, whereas—strange anomaly—it really was in the *left lung*, though in the right chest. The portion of the lung would doubtless during respiration have reached further to the right side, and thus given rise to cavernous sounds over a larger area of the right chest than appeared in the *post mortem* examination. The fact of the remains of an old cavity in the right lung might explain the cavernous sounds heard by Drs. Cotton and Powell at an earlier period; and it might be suggested that these physicians listened to the sounds in a different cavity from the one I directed my attention to; but this is improbable, from the fact that Dr. Powell even then detected the presence of the left lung to the right of the sternum; and this displacement would hardly have occurred without a retraction of the right lung, including its excavated upper lobe, to the axillary and lateral regions of the chest, where, if anywhere, the cavernous sounds from this source would have been audible. The condition of the pleura indicated that the disease originated in an attack of pleurisy, and that the contractile tissue had slowly extended

since, gradually obliterating the lung and giving rise to increasing dyspnoea. Death was probably caused by the congestion of, and eruption of miliary tubercle in, the left lung, by which the remaining breathing surface was further reduced in extent. The rise of temperature between April 27th and May 4th was undoubtedly due to the tuberculosis. The case may be considered a typical one of fibroid phthisis; the dyspnoea and the changes in the shape of the thorax being very well marked, and the life-history and *post mortem* record filling up almost every link in the evidence.

I have notes of a somewhat similar case, where the left lung was the seat of fibroid phthisis, and caused a remarkable amount of displacement of the neighbouring structures. In this patient, the left side measured two inches in circumference less than the right; the spine was curved, the convexity being towards the right; the left shoulder was depressed; and the physical signs denoted an old cavity at the apex of the left lung, and nearly entire absence of breathing over the rest of the side. The right lung was drawn halfway across the left chest, the heart's apex tilted to the left, and the stomach raised as high as the fifth rib. The right lung was healthy. The patient died from abscess of the brain, and *post mortem* examination exactly confirmed the diagnosis of the state of the lungs indicated by the physical signs. The left lung contained a small cavity at the apex, and consisted of a hard fibroid mass, impermeable to air, and occupying hardly a third of its proper area, the rest of the space being filled up by the encroachments of the adjoining organs, as had been described during life. This patient lived four or five years from the date of the first symptoms, and might have lived much longer but for the cerebral disease, which seemed quite unconnected with the pulmonary lesions.

The *prognosis* depends on the amount of lung involved in the fibrosis, and on the rate of its contraction. Where half a lung, or at the most one whole lung, is permeated by alveolar fibrosis, and where this process is limited by the white bands of interlobular tissue—where, in fact, matters remain at a standstill—there the patient may live for years, provided he limits his exertions in proportion to his breathing powers, and does not place himself under circumstances to induce a fresh inflammatory attack or necrobiosis in the old fibrotic lesion. The patients who trace their disease to pleurisy seem to have the best chance of life, for their cases last longer than those arising from pure interstitial pneumonia. I have records of two cases, one lasting ten years and the other fifteen, each of which commenced in pleurisy. In both of these, excavation took place; but their health remained tolerably good until the opposite lung was attacked. In other instances, fibrosis has proceeded rapidly, permeating the whole lung, and, by obstructing the vessels, inducing dilatation of the right side of the heart and dropsy of the abdomen and lower extremities, the kidneys usually becoming affected towards the close of life. It is remarkable how general the rule appears to be that, when fibrosis predominates over the other morbid processes, the life-history of the case becomes at once changed; the typical consumptive character is lost; obstruction to the respiration and circulation, with accompanying dyspnoea and dropsy, close the scene, contrasting sharply with the termination of catarrhal phthisis or scrofulous pneumonia. It will be seen that the prognosis, therefore, depends on the amount of lung involved. Fibrosis saves one patient; it saves another by limiting the area of consumptive disease, and thus preventing fresh absorption and tuberculosis.

Treatment.—Our objects in the treatment of fibroid phthisis are—first, to limit the area of disease, and to prevent any fresh portion of the lungs becoming involved either by fibrosis or by inflammation; secondly, to maintain, or possibly to raise, the standard of nutrition in the patient, and thus obviate any tendency to necrobiosis in the fibroid material. The patient must avoid all great exertions, which lead to lung-congestion, and should live in an equable atmosphere, to guard against fresh catarrh or pneumonia. The dry warm climate of the Riviera, or, again, the still drier one of Upper Egypt, have been found most useful for this purpose; and many of these cases have lived on for years by wintering in these localities. The improvement of the nutrition must be attempted by the usual antiphthisical treatment, such as cod-liver oil, strychnia, the mineral acids and bitters, and plenty of easily assimilated food. The preparations of iodine have been recommended as likely to promote absorption of the fibroid material and counteract the advance of fibrosis; but in my hands neither these nor any other drugs have sufficed for this purpose, though I have seen great improvement take place in the general condition from steady perseverance in the use of the hypophosphites of soda, lime, or iron, and even of the less powerful phosphates and dilute phosphoric acid. The local inflammations of the pleura and lung are best combated by counter-irritation with blisters or strong iodine liniments, and by promoting free expectoration. Where cavities or dilated bronchi exist, it is not uncommon to find foetid sputum, adding still more to the irritation, and

only evacuated by fits of coughing which close with vomiting. Here the stimulant expectorants, such as compound tincture of benzoin, tolu, and turpentine, are the most likely to relieve; while much may be done by antiseptic and stimulant inhalations of tar, creasote, carbolic acid, and thymol. The increasing dyspnoea and cardiac asthenia can be temporarily relieved by spirit of ether, by carbonate of ammonia; and the dropsy by purgatives and diuretics; but, if the obstruction in the lung have reached this point, we cannot hope for more than a temporary improvement by any medical aid.

PATHOLOGICAL ILLUSTRATIONS OF THE LOCALISATION OF THE MOTOR FUNCTIONS OF THE BRAIN.*

By RINGROSE ATKINS, M.A., M.D.,

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THE object of the following communication is to record several cases which have come under my observation illustrating the localisation of cerebral disease, and tending, I believe, to show that the facts elicited by experimental research have a direct applicability to human pathology.

The experiments of Hitzig, Ferrier, Nothnagel, Schiff, Carville, Duret, and many others, are now universally known; and, although many varying explanations have been advanced by different schools of physiologists to account for the phenomena, yet, in the main, the broad fact that stimulation of certain regions of the cerebral cortex is followed by definite movements has been established on a firm basis. The results of these experiments have shown that, in the convolutions bounding the fissure of Rolando in man and those surrounding the crucial sulcus in the dog, cat, etc., there is a zone, the excitation of which causes movements on the opposite side of the body, and the destruction of which causes disorders of voluntary motion, or even persistent paralysis, while in regions closely related to these no such effects are produced. Since these facts became known, their application to human pathology has been a matter of the deepest interest and importance. Dr. Hughlings Jackson, from whom, if I may so speak, the "doctrine of localisation" took its inception, has recorded many cases illustrating the effects of localised lesions of the cortex in the production of definite symptoms varying in extent according to the position of these lesions; the recent annals of the various French scientific societies abound with similar records, and the almost daily observations of M. Charcot and his pupils at the Salpêtrière tend universally in the same direction. In addition, the histological researches of Betz, verified by those of Mierzejewski, give a kind of anatomical confirmation to these results by showing that, in the vicinity of the fissure of Rolando, and particularly in the paracentral lobule (the internal free surface of the ascending frontal and ascending parietal convolutions in the great longitudinal fissure), there exist large pyramidal cells similar to those of the anterior cornua of the spinal cord. As the result of his extended pathological observations, M. Charcot has now mapped out on the cortex of the human brain regions, destructive lesions of which cause paralysis more or less extensive, according to the extent of surface affected. These regions closely correspond to those mapped experimentally by Ferrier on the monkey's brain; and, in order to illustrate this clearly, I here exhibit a prepared hemisphere of the human brain in which the so-called *motor zone* is coloured black, while the non-motor region is white, the individual convolutions being indicated by different coloured discs lettered to correspond to this index. From this preparation, it can be seen that the motor zone includes the ascending frontal and ascending parietal convolutions (anterior and posterior central of Ecker), the posterior terminations of the three frontal, the anterior edge of the postero-parietal (superior parietal lobule, Ecker), and that of the inferior parietal lobule. The non-motor zone comprises the anterior portions of the three frontal convolutions, the posterior parts of the postero-parietal and inferior parietal lobules, the three occipital and three temporo-sphenoidal convolutions, together with those at the base of the brain and the island of Reil. Of course, between these two regions, there can be no hard and fast pathological line of demarcation drawn, the motor region insensibly blending into the non-motor and extending probably in one brain farther than in another, according, it may be, to the size and configuration of the individual convolutions.

The cases I am now about to relate are illustrations of lesions occurring in the non-motor and motor regions, and they tend, I believe, to

* Read in the Section of Psychology at the Annual Meeting of the British Medical Association in Manchester, August 1877.

support M. Charcot's views, that in man lesions within the motor zone are accompanied by motor disturbance, while lesions in the non-motor areas produce no such symptoms. Taking first the non-motor region, the three following cases afford examples.

CASE I. *Glio-sarcomatous Tumour of the Left Temporo-sphenoidal Lobe; Softening of Middle Portions of Superior Middle and Inferior Temporo-sphenoidal Convulsions; Circumscribed Hemorrhages into Softened Tissue: no Motor Symptoms.*—N. C., female, aged 80, died on March 25th, 1876. She had been an inmate of the asylum for many years, suffering from quiet dementia. She continued in good health up to a short time before her death, and to the last possessed normal power over the limbs and various muscular groups, for a few days previously being somewhat dull and lethargic, but sinking gradually without any further symptoms becoming apparent. On removing the scalp, a bulging was observed on the surface of the left parietal bone, near its lower border. The calvarium was thinned and with difficulty removed, owing to its inseparable adhesion to the dura mater. On forcibly removing the bone, the latter membrane was seen to be almost incorporated with it, so firm were the adhesions; and attached to the inner surface of the parietal, inferiorly, was a flattened tumour as large as a small apple, growing from the lateral surface of the left temporo-sphenoidal lobe, about the centre of its superior and middle tier of convolutions. This tumour was incorporated with the brain-substance, and was soft and of a reddish-grey colour. Subsequent microscopical examination showed it to be glio-sarcomatous in its nature, consisting of numerous widely dilated thin-walled vessels and masses of round ovoid and elongated cells closely aggregated, without any appearance of intercellular substance. These cells contained granular nuclei, and varied in size, some being as small as the nuclei of the neuroglia, while others were as large as those found in sarcomata occurring elsewhere. The groups of cells appeared to be arranged concentrically around the vessels, and interspersed amongst them were many large sized round cells (giant-cells). On the separation of this tumour, a softened cavity was disclosed deep in the substance of the temporo-sphenoidal lobe, as large as a good-sized walnut, and containing whitish curdy matter. The brain-tissue around this cavity was broken down, and above it were found two fresh circumscribed globular blood-clots as large as hazel-nuts. The pia mater generally was anæmic, and contained clear fluid beneath it; ramifying in it were very beautiful congeries of tortuous vessels filled with blood, closely resembling injected Malpighian bodies in the kidney. The membrane stripped easily, and the convolutions beneath were wasted and separated by broad and shallow sulci, but presented no further localised lesions. A section through the centrum ovale showed the brain-substance to be anæmic; an oval patch of a reddish colour blending with the surrounding tissue existed in the posterior part external to the posterior cornu of the lateral ventricle. The lateral ventricles, opto-striate bodies, and basal ganglia were normal in appearance. The arteries at the base of the brain were atheromatous in patches. Microscopical examination of the grey matter from the frontal parietal and occipital convolutions showed the larger nerve-cells to be in the second and third stages of pigmentary degeneration.

On this chart of the hemisphere (fig. 1), I have indicated the external

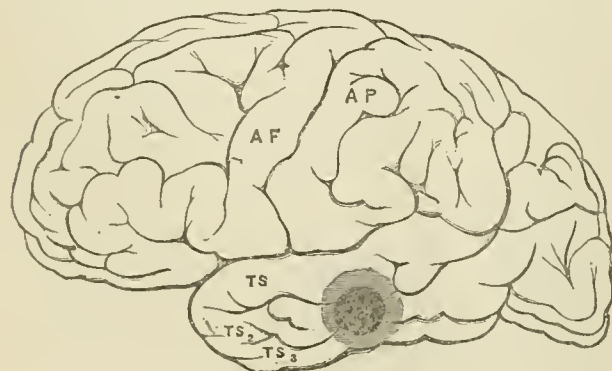


Fig. 1.—Glio-Sarcomatous Tumour of Left Temporo-Sphenoidal Lobe; Softening of Middle Portions of Superior Middle and Inferior Convulsions; Circumscribed Hemorrhages into Softened Tissues.

site of the tumour by a black disc, while the zone of softening around it has been coloured yellow. From this, then, it can be seen that the lesions were strictly confined to the temporo-sphenoidal lobe, and, though they originated in a morbid growth, regarding which great

caution must be exercised, from the fact that such growths may displace tissues without destroying them, and thus produce indefinite phenomena, yet, from the isolated position of the tumour here, being separated from the remainder of the hemisphere by the Sylvian fissure, and from the fact that, though it did lead to destroying lesions of the adjacent brain-substance, no motor symptoms appeared, I think the case may be made use of for the purposes of this study.

CASE II. *Localised Deposit of Lymph on Dura Mater over Posterior Portion of Postero-Parietal Lobule of Left Hemisphere; Adhesion of Membranes; Superficial Erosion of Cortex: no Motor Disturbance.*—P. S., male, aged 66, died on September 9th, 1876, of diarrhoea. This patient had been an inmate of the asylum since April 1868, suffering from chronic dementia. Beyond the dulness and hebetude consequent on his mental condition, he presented no symptoms calling for special note; there were no motor disturbances, the man being able to move about freely until he became affected with the diarrhoea to which he eventually succumbed. On *post mortem* examination, the calvarium was soft under the saw; about four ounces of sanious serum escaped during the removal of the brain. The dura mater was strongly adherent to the frontal bone, requiring considerable force to separate it, which was, however, done without tearing the membrane. Over the posterior portion of the postero-parietal lobule of the left hemisphere was an irregularly ovoid patch of thick and shaggy organised lymph larger than a crown-piece, forming a growth on the inner surface of the dura mater, and inseparably connected with the latter membrane; this was slightly adherent to the pia mater, and the latter to the cortex of the postero-parietal lobule, leaving, when stripped from it, a patch of superficial erosion, which I have coloured blue on this chart (fig. 2). The convolutions generally were



Fig. 2.—Localised Deposit of Lymph on Dura Mater over Posterior Portion of the Postero-Parietal Lobule of Left Hemisphere; Adhesion of Membranes; Superficial Erosion of Cortex.

somewhat atrophied, but no further gross lesion existed. Microscopical examination showed the nerve-cells to be affected with pigmentary degeneration.

In this case, the cortical lesion was superficial and strictly confined to the postero-parietal lobule. In several of the cases recorded or alluded to by M. Charcot, in which motor disturbances existed, this region was found affected; but other and undoubtedly motor regions were also implicated. As there were here no motor disturbances whatever, this case would seem to indicate that, when involved alone, disease of this region will not give rise to such symptoms.

CASE III. *Softening of Gyrus Supramarginalis and Centre of Occipital Convulsions of Right Hemisphere; no Motor Disturbances of Left Side; Lesions of Left Hemisphere causing Aphasia and Right Hemiplegia.*—In this case, which I have already fully recorded elsewhere (*Journal of Mental Science*, October 1876), there were "foyers" of softening occupying the gyrus supramarginalis and portions of the occi-

pital convolutions of the right hemisphere, while no motor disturbances at the left side manifested themselves, the lesions in the left hemisphere sufficiently accounting for the motor disturbances at the right side. The lesions in the right hemisphere are indicated on this chart. (Fig. 3.)

Turning now to the motor zone, the following cases are illustrations of lesions occurring there, and accompanied by motor disturbances.

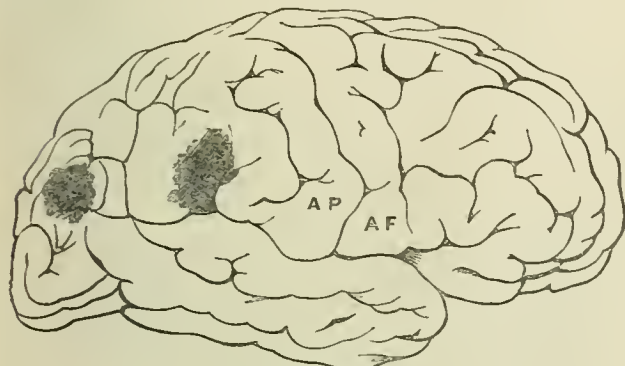


Fig. 3.—Softening of Gyrus Supramarginalis and Centre of Occipital Convolutions of Right Hemisphere.

CASE IV. Meningeal Hæmorrhage; Pressure on Left Ascending Frontal, Ascending Parietal, and Edge of Inferior Parietal Lobule; Right Hemiplegia.—M. N., female, aged 62, died on March 27th, 1876. She had been an inmate of the asylum for six years, suffering from chronic insanity, with periods of maniacal excitement. About a week before her death, she complained of a feeling of general weakness and undefined pains about the chest, which, however, could not be traced to any apparent cause; her appearance was florid and healthy, and, beyond some slight general weakness, she had no loss of motor power over the limbs. On March 25th, 1876, she became noisy and troublesome; and, two days afterwards, about eleven o'clock in the forenoon, while sitting quietly before the fire in the day-room, she suddenly slid off the form and became semi-unconscious. On being placed in bed, she was found to be semicomatose and paralysed on the right side, the limbs being quite flaccid. When spoken to loudly, she was able to mutter indistinctly; but did not appear to comprehend what was said; the face was cold and collapsed; the pulse slow and weak. The coma gradually deepened, and she sank in about two hours.

Necropsy.—The skull was asymmetrical, the right parietal eminence bulging; the calvarium was soft and easily sawn through. The dura mater was intimately adherent to the left half of the frontal bone, and was thickened and opaque, especially over the right hemisphere, where its inner surface was lined with a thin layer of gelatinous material easily scraped off with the scalpel, and probably the decolourised remains of a former hæmorrhage. The great longitudinal sinus contained a partially decolourised thready clot. The right middle meningeal artery was atheromatous, and appeared torn in several places. There was much hypostatic congestion of the vessels of the pia mater over the posterior lobes of both hemispheres. On the left hemisphere, confined to the lower half of the ascending frontal, the ascending parietal, and portion of the anterior edge of the inferior parietal lobule, a soft clot lay on the pia mater, from which it readily separated. On removing the brain, the surface of the bones forming the anterior and middle fossæ of the left half of the skull were covered with a very thin layer of recent blood-clot, which extended from the olfactory groove on the ethmoid, along the orbital plate of the frontal bone, the petrous and lower part of the squamous plate of the temporal, and the inferior and lateral surfaces of the occipital. This extravasation was in great part little more than a colouration of the osseous dura mater with blood; it was somewhat thicker at the olfactory groove, and had insinuated itself beneath the left olfactory nerve, where a small elongated coagulum was also found. This extravasation had probably been continuous with that found lying on the convolutions, and was effused from a ruptured meningeal vessel, which, however, could not be found. The convolutions generally were atrophied and diminished in consistency, especially those of the parietal lobe of the left hemisphere, where, at the junction of the gyrus angularis and gyrus supramarginalis (Ecker), a depression as large as the top of a finger existed, over which was a bulla of clear yellow fluid (fig. 4). On section, the brain-substance was anæmic; the grey matter was thinned, especially in the occipital lobes. The ventricles and commissures were normal, and the opto-striate bodies

plump and regular; the basal ganglia were healthy. The left internal carotid artery was atheromatous; the basilar and vertebrals were studded with similar patches. Microscopical examination in the recent state showed the larger ganglion-cells to be in an advanced state of pigmentary degeneration, and, in some instances, in what appeared to be a condition of calcification.

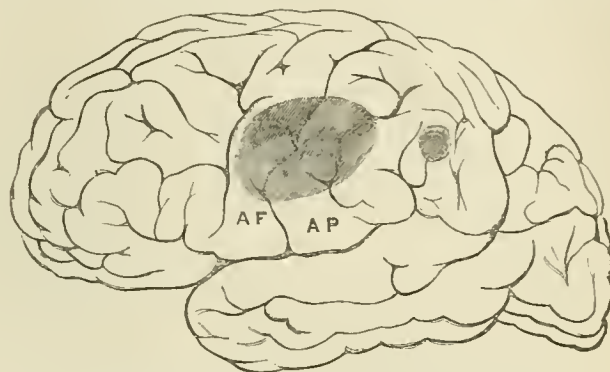


Fig. 4.—Meningeal Hæmorrhage; Pressure on Left Ascending Frontal, Left Ascending Parietal, and Edge of Inferior Parietal Lobule.

In this case, an acute apoplectic seizure occurred, the necropsy revealing recent meningeal hæmorrhage; hence there can, I think, be no doubt that this lesion and the paralysis which supervened stood to each other in the relation of cause and effect. Now, although the extravasated blood was effused over a considerable extent of surface, yet it was only on the ascending frontal and ascending parietal convolutions, and in the olfactory sulcus, that it had assumed the characters of a regular clot, and was attached to the surface of the brain; hence I think it equally certain that to the pressure or presence of the clot in this portion of the motor region the right hemiplegia was due, the extent of the paralysis and the fatal result being probably accelerated by the already weakened and degenerate condition of the nerve-centres generally, which were in consequence unable to bear up against the sudden shock.

[To be continued.]

SPONTANEOUS RUPTURE OF THE SPLEEN.*

By E. MARKHAM SKERRITT, B.A., M.D.Lond.; M.R.C.P.;

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IN the following case, splenic apoplexy, and consequent rupture of the capsule of the spleen, took place under what I believe to be very rare and, perhaps, unique conditions. The case is of interest clinically, and also has a medico-legal importance to which a recent trial in India calls special attention.

The patient was a shepherd fifty-three years of age, admitted into the Bristol General Hospital on July 4th. He stated that, up to two months before admission, he had enjoyed good health; then he began to suffer from nausea and pyrosis, and entirely lost his appetite. He had done no work for six weeks. A month before admission, he had an attack of epistaxis, which lasted about twenty-four hours, during which time he lost much blood. Since this, he had noticed a sensation of beating in the upper part of the abdomen. Just before admission into the hospital, another severe attack of epistaxis came on; the patient was, however, able to walk up into the ward without help.

When I saw him next day, he was almost blanched from loss of blood, but cheerful and anxious to give all the information in his power. The heart's impulse was weak, and there was a faint systolic apæmurmur; the pulse was feeble and the vessel degenerate. The abdominal aorta was pulsating to a marked degree, but no distinct dilatation of the vessel could be made out; a systolic *bruit* was plainly heard in the vessel, but was found to be only due to pressure. There was no pain or tenderness in the abdomen.

I concluded that there was no aneurism of the aorta, and that the pulsation and *bruit* were due to the anæmic condition consequent upon the loss of blood.

Soon after 9 P.M. the same day, the patient, who up to that time had

* Read before the Bath and Bristol Branch.

seemed no worse, was suddenly seized with great dyspnoea and symptoms of collapse, which ended in death in less than an hour.

POST MORTEM EXAMINATION.—There was a large quantity of dark fluid blood in the peritoneal cavity. There was no aneurism. The capsule of the spleen was greatly distended; on the anterior aspect of its peritoneal surface there was a rent an inch long, through which the finger passed into a large space full of fluid blood. At first sight, it seemed as if the enlarged spleen were split longitudinally into two halves, which were separated along their whole length by this layer of fluid blood about an inch and a half thick; it was found, however, that the capsule had been stripped off the whole peritoneal surface of the spleen by blood effused between it and this surface, and that one of the apparent halves before mentioned was simply a firm layer of dark clot, about three-quarters of an inch thick, forming a thin cake applied closely to the inner surface of the capsule, and separated from the spleen itself by the layer of fluid blood before described. The exact source of the hæmorrhage could not be found. The splenic substance was of a brick-red colour, and very soft and pulpy (there had been considerable *post mortem* change). The spleen and clot together were eight inches long, five inches and a half broad, and three inches and a half thick, and weighed twenty-six ounces. The rest of the organs were very æmic, but otherwise healthy.

REMARKS.—Rupture of the spleen is not a very uncommon occurrence; but almost invariably it is caused by external violence, such as blows, crushes, falls, wounds by fractured ribs. Instances have been met with, however, where the organ has ruptured spontaneously; in conditions where it is intensely congested, as in typhus, cholera, and the cold stage of ague, where it is probable that weakened texture has been combined with extreme congestion. But I have been unable to find any record of a parallel case to the one that I have related, where, at the time of the rupture, the patient was suffering from no acute disease, and had been quietly lying in bed for hours.

If we consider the state of the spleen *post mortem*, we see that the first event was hæmorrhage within the capsule, giving rise to the large clot before described, which, from its characters, must have been formed some time before the fluid blood was effused and the capsule gave way. There was the following sequence:—first, hæmorrhage between the spleen and the capsule; then cessation for a time; then more blood poured out, and in such quantity that the capsule gave way. Hence the actual rupture of the capsule was secondary and accidental.

Was there any congestion of the spleen as the first event? I think not; rather the opposite. The man had just been blanched by severe epistaxis, and there is no reason to suppose that the spleen would be other than æmic, like the rest of the body. The conclusion must be that the same weakness of vessel that caused the repeated bleeding from the nose led to the hæmorrhage into this organ, especially as this occurred at a time when the force of the circulation had been much reduced by loss of blood.

I now turn to the medico-legal aspect of the case. Some months ago, a trial took place in India which excited much interest. The following short account I take from a medical periodical. "A curious medico-legal point was involved in a recent trial for manslaughter in Ceylon. A coolie was treated with some severity by the superintendent of a plantation, and died almost immediately from rupture of the spleen. The man had had fever lately; the spleen was large and soft. It was urged for the defence that the spleens of coolies sometimes rupture spontaneously on severe muscular exertion; that the exertion of running away might have ruptured the spleen; and that death would not be the direct result of the action of the accused. This theory was discountenanced by the medical witnesses, and we think rightly. An accident so rare, and *even doubtful*, as such rupture of the spleen must be, cannot be allowed weight in the presence of evidence of direct violence. The Chief Justice ruled that the rupture was distinctly the result of the violence. The prisoner was found guilty." If I remember rightly, the exact occurrences were these. The coolie received a box on the ear and fell down; he then got up, ran away, climbed over two walls, and, in so doing, fell from the top of one or both of them; he then quickly became collapsed and died. Here was plenty of muscular exertion; besides that, the fall from the wall represented a greater degree of violence than did the previous simple fall of the coolie off his feet. If the assault caused the rupture, it did so indirectly only by causing the fall; for there was no direct violence to the abdomen. And, if this were enough to produce the laceration, how much more were the muscular exertion and the accident that followed, with which the accused had nothing immediately to do! It seems to me also improbable that a man with a ruptured spleen would run away with the activity that this coolie showed.

With regard to muscular exertion as a cause of rupture of the spleen, cases illustrating this have occurred in this country; thus Sir James

Simpson refers to three cases of fatal rupture which occurred respectively during the pregnant, the parturient, and puerperal states; in each instance, after some unusual exertion. Another case is recorded in the *BRITISH MEDICAL JOURNAL* for 1874, by Mr. Atkinson of Leeds, where the accident was apparently due to violent vomiting set up by indigestible food.

The case I have related differs from all those that I have been able to find recorded in this important particular: that there was entire absence of any special muscular exertion; for the patient had, in fact, been in bed for hours before the rupture occurred. And I think that I am warranted in concluding that this instance has established the fact that rupture of the spleen may occur purely spontaneously, in the absence of any condition ordinarily associated with congestion of the organs, and apart from all external violence or special muscular exertion.

CLINICAL MEMORANDA.

CROUP: DIPHTHERIA: TRACHEOTOMY.

As Dr. Bowles of Folkestone has mentioned my name, among others, as holding some rather decided opinions (I hope not dogmatic ones) on the subjects specified above, perhaps he will excuse me for offering a few remarks on his very interesting cases published in the last number of the *JOURNAL*, and which I think may readily be explained in accordance with the pathological views now, as he states, fast gaining ground.

He has described three cases, two of which were fatal, tracheotomy being performed in both, but in neither of which was there any *post mortem* examination. Thus it is not absolutely certain what the disease really was; but, considering that Dr. Bowles distinctly saw the diphtheritic patches on the tonsils in each case, and that both of them died rapidly and unexpectedly, even although tracheotomy was successful, there is little doubt in my mind that the disease in both cases was diphtheria, first of the fauces and then of the larynx and trachea. His third case, which was most skilfully treated and was successful in its result, I believe to have been one of severe infantile laryngitis. It is true that Dr. Bowles says that "doubtless false membrane already existed" on the second day of the illness, but he gives no evidence of its existence; and, indeed, he distinctly states that he carefully examined the throat for false membrane on two succeeding days, and found none. It was not till ten days after the operation of tracheotomy had been performed, and after abundance of mucus and muco-pus had been discharged through the wound, that it is stated that on expiration, "false membrane was seen flapping through the wound". But as none of this false membrane ever escaped, and as the child was convalescent in two or three days afterwards, is it not possible that a part of the lining membrane of the trachea, or even of the integuments, may have presented the appearance of false membrane? It is certainly contrary to all experience that a tube of false membrane should be present in an infant's windpipe on January 20th, and that all bad symptoms should disappear and the tracheotomy-wound be closed on the 24th. The false membrane, if it existed, must have been discharged or extracted before the patient could recover.

It is by no means alleged, by those who maintain that the so-called membranous laryngitis is really laryngeal diphtheria, that ordinary laryngitis is not a dangerous disease in some instances and never requires tracheotomy. The narrowing of the glottis in young children renders laryngitis, with its complication, œdema glottidis, a very formidable malady. What is alleged is that such cases are far less serious than laryngeal diphtheria, and that in the worst of them, as is shown in Dr. Bowles's third case, the operation of tracheotomy has a much greater chance of success. There is no false membrane, and there is no specific poison; the absence of which conditions reduces laryngitis to the level of an ordinary inflammation.

R. H. SEMPLE, M.D., F.R.C.P. Lond.

NOTE ON THE INCUBATION OF MUMPS.*

ON November 17th, 1877, I was asked how long a lady, who had accidentally been thrown in the way of mumps three days previously, need fear lest she had contracted the disease. Never having thought about the incubation of such a slight and usually home-treated ailment, I hazarded "a fortnight"; but was annoyed eighteen days afterwards to find I was wrong in my guess. I then consulted all the books on which I could lay hands, with the following result. Medical and surgical text-books both describe parotitis; but Tanner (sixth edition), Erichsen (sixth edition), Trousseau (Sydenham Society's edition),

* Read before the Norfolk and Norwich Medico-Chirurgical Society.

Watson (fourth edition), Bryant (first edition), Roberts, Maursell and Evanson (1842), Gregory (1828), Forsyth (1826), make no mention of the incubative period; while Gay and Harley (*Hooper's Vade Mecum*) quote a medical student who succumbed a fortnight after contact, and Ringer (Reynolds's *System of Medicine*) gives it at from eight to twenty-two days. I, therefore, venture to think my cases worth recording as carefully observed facts, though I must leave it to others to attach their proper importance to all but the first and undoubted case.

On November 14th, 1877, Miss O., aged 18, called at a house where mumps was epidemic, twenty miles from her own home, where no case existed. She did not enter, but spoke to and nursed a child then complaining of stiffness about the jaws, and who had evident parotid swelling the next day. She returned home; was exposed to no fresh case, and was considering herself safe, when, on December 5th, twenty-one days after, she had a severe attack. No quarantine was enforced; but it was not until December 29th, or twenty-four days after this, that the next case occurred. Then, on January 16th, twenty-nine days after his return from school with a clean bill of health, and consequent entry into an infected neighbourhood, a third case occurred in the person of a brother aged 10. From this date, the cases occurred too irregularly to be of any value for my purpose, and I abandoned the investigation.

ALAN REEVE MANBY, M.R.C.S. Eng., East Rudham.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MANCHESTER ROYAL INFIRMARY.

LARGE AXILLARY ANEURISM, CURED BY DIGITAL COMPRESSION.

(Under the care of Mr. LUND.)

FOR the following report we are indebted to Henry Tomkins, M.D., Senior House-Surgeon.

A. L., a widow, aged 60, was admitted into the Manchester Infirmary on March 4th, 1878, under the care of Mr. Lund, with a large aneurism of the right axillary artery. The history she gave of it was as follows. About twelve months ago, she was engaged in washing some clothes, when she was suddenly seized with a sharp stinging pain, which appeared to strike down the right arm, followed by tingling and numbness of the limb, which soon became cold, somewhat livid in colour, and swollen. It was immediately rubbed gently, and wrapped up in flannel. The next morning, the numbness and pain had gone, and the arm had recovered its natural warmth, but was still considerably swollen. In the course of some little time, the swelling also disappeared without her seeking any medical aid; and with the exception of much loss of power in it, she noticed nothing particularly wrong until July, when she accidentally discovered a swelling under the clavicle and also in the axilla, but did not observe any pulsation in it. During the past three or four months, the arm had gradually become weaker and painful on movement. Six weeks ago, she had an attack of bronchitis; and it was not until her medical attendant was examining her chest for this, that she had any idea of the serious nature of her injury. He explained it to her, and at once ordered her to keep perfectly at rest in bed, limited her diet, and gave her large doses of iodide of potassium. Pressure was also attempted to be used by means of bags of shot applied to the subclavian artery.

On admission, a large swelling was observable immediately beneath the right clavicle, two inches in breadth, extending beneath the pectoral muscles in the course of the axillary artery, and projecting about an inch and a half into the axilla; it was soft, with strong expansile pulsation, the pulsation being at once arrested by pressure on the subclavian artery; a loud *bruit* was heard on auscultation. Movement of the arm caused considerable pain; the radial pulse on the affected side was fully as strong as that in the left arm; and there was no marked difference exhibited in the tracings obtained by the sphygmograph from the two sides. The patient, a spare woman, was in fairly good health; had never had any serious illness; there was no history or evidence of syphilis. The left carotid artery appeared somewhat dilated, but not to any such extent as to warrant the term aneurismal. The other arteries of the body were apparently normal, nor were there any signs of calcification in them. There was no arcus senilis. It was decided to attempt a cure by means of digital compression; and for this object, four of Mr. Lund's dressers volunteered for service. At

2 P.M. on the day of admission, compression of the subclavian artery by means of the thumb was commenced and kept up continuously until 12 o'clock midnight; this the patient bore without much inconvenience, complaining only of some slight soreness at the seat of pressure and a little numbness of the arm. At the end of this time, there was not much appreciable difference in the condition of the aneurism; it was if anything rather firmer, the swelling not feeling quite so soft, but the pulsation was still strongly marked, and the radial pulse beat apparently as fully as before. The digital compression being discontinued, it was attempted to control the circulation through the night by means of a conical bag of shot resting upon the subclavian artery; this, however, only partially effected that object. A quarter of a grain of morphia was administered subcutaneously.

March 5th.—The aneurism was decidedly firmer, and the radial pulse, although distinct, was much weaker. This also was well shown by the sphygmograph. The patient was kept strictly on Tuffnell's diet; and ten-grain doses of iodide of potassium were administered thrice daily.

March 6th.—Digital compression was again commenced at 1.30 P.M. and continued until 9 P.M. At the end of this time, the pulsation was considerably diminished in the aneurism, its expansile character having quite disappeared; the radial pulse was also very feeble. The patient complained much of soreness at the spot where pressure was applied; the limb was also very numb. A quarter of a grain of morphia was given subcutaneously, and the shot-bags were reapplied.

March 7th.—The aneurism this morning was completely solidified; not a trace of pulsation could be detected either in it or in the radial pulse. The arm was quite warm. She complained of nothing but numbness.

From this time, the patient was kept perfectly at rest on the above treatment until the 20th; the arm was then allowed to be used a little, and she was permitted to get up, she herself feeling perfectly well. She was discharged on March 24th quite cured, the tumour having decreased in size and become quite firm, and all trace of pulsation having disappeared in both it and the radial and ulnar arteries.

ST. VINCENT'S HOSPITAL, DUBLIN.

CASES OF DISEASES OF THE KNEE.

(Under the care of Dr. MAPOTHER.)

CASE I.—Edward Kane, aged 32, groom, was admitted on September 4th, 1877, for disease of the left knee, at the request of a practitioner who thought excision advisable. Acute pain, starting of the limb, and loss of sleep, had tormented him for over two months. The joint was found to be greatly flexed, and exquisitely tender; but there was little swelling, the bones and cartilages being the structures evidently affected. The limb, placed on an angular splint, was gradually extended, and blisters were freely applied in front. Five grains of blue pill and two of opium were given every night. Salivation began on the seventeenth day, with complete relief from pain; and the same treatment was kept up for a fortnight. For two months subsequently, he was given iodide of potassium internally, and the knee was strapped with mercury and ammoniacum plaster spread on leather. On February 1st, 1878, he was discharged with scarcely any stiffness remaining.

CASE II.—Ellen Kelly, aged 13, was admitted on January 18th for disease of the left knee, which had begun seven weeks before. There was some evidence of a strumous taint. The joint was slightly flexed, not painful, but greatly swelled by thickening of the synovial membrane, and effusion into its cavity. Different spots were alternately blistered, and salivation was produced with the protiodide of mercury on the tenth day. During the fourth and fifth days of the treatment, strapping with mercury and ammoniacum plaster was employed; and she left hospital on February 27th, without a trace of disease.

The above cases illustrate the use of mercury in various articular affections—a mode of treatment introduced by O'Beirne (*Surgical Society of Ireland*, 1834, and vol. v of *Dublin Journal of Medical Sciences*).

CASE III.—Mary Kearnan, aged 5, was admitted on December 13th, 1877. The right hip and knee were flexed to the utmost, and any attempt at motion was excessively painful. The left carpal bursa, as well as that over the olecranon, and several of the phalangeal joints, were tender and swollen. All these sites had been attacked eight months before, sharp fever coexisting. The case was believed to be one of rheumatic gout, notwithstanding the age of the patient and the absence of hereditary predisposition. The patient having been chloroformed, the hip and knee were extended, great force being needed and much cracking being heard and felt during the operation. The joints

were kept straight along a Liston's splint. Full doses of iodide of potassium, citrate of lithia, and cod-liver oil were prescribed. After ten weeks, the case was discharged, the limb being straight and painless, but considerably stiff at both the joints.

CASE IV.—Thomas O'Neill, aged 45, labourer, was admitted on December 14th, 1877. For three months, he had suffered from pain and stiffness in the right knee, but swelling only began three weeks before. The limb presented a most peculiar aspect. From the inner surface of the head of the tibia, a tumour, as large as an orange but more conical, projected. It was firm and slightly elastic, save at one point of the size of a pea, where fluid evidently existed. The skin was purplish, and the superficial veins distended. For five or six inches above the inner condyle of the femur, another tumour extended; but being covered by muscle, its characters were ill-defined. The patella was pushed outward, but was movable, and there was no effusion into the joint. Severe pain was endured, especially at night. A few days after admission, the skin ulcerated over the soft point alluded to, and free hæmorrhage ensued, which was checked by pressure and turpentine. The case now appeared very like one of encephaloid disease, the more so as the glands at the saphenic opening were enlarged; but that it was tubercular caries of a rapid form, soon became evident by profuse suppuration and the disintegration of the cancellous tissue in the epiphyses of the femur and tibia. Amputation was urged, but persistently refused by the patient and his relatives. He died on March 18th, 1878, from exhaustion.

An unusual bursal tumour has just been admitted, the patient being a woman, aged 72. Starting from the sac behind the ligament of the patella, it pushed that bone outwards, projected over the inner and back part of the joint, and attained the size of a cocoa-nut. A seton was passed through it, and the progress of the case so far has been satisfactory.

ULSTER EYE, EAR, AND THROAT HOSPITAL.

EXTRACTION OF STEEL AND IRON FROM THE EYE BY THE MAGNET.

(By W. A. McKEOWN, M.D., Surgeon to the Hospital.)

THE following cases will doubtless be of interest taken in conjunction with that recently brought before the Clinical Society of London by Mr. McHardy.

CASE I.—Dawson B., aged 24, smith's helper, applied to me at the Hospital on January 16th, 1877. He stated that, three days previously, his right eye had been wounded by a small piece of metal. I observed that the iris was attached to the lens at the outer part of the pupil by recent lymph, and that there was a small limited opacity of the lens. There was a small clear metallic body sticking at the margin of the adherent pupil. I made a small section of the cornea, more peripheral than the pupil, introduced a pair of iridectomy forceps, seized the body and a little piece of iris, but the body slipped from my grasp, and was sliding out of my reach. Fortunately, I had anticipated such an untoward event, and took care to have a pointed permanent magnet at hand. I introduced it into the wound. The metal was instantly attracted and extracted. The patient continued under my observation till February 16th. The opacity of the lens remained limited to the point wounded. I believe that the wound in the capsule was closed by lymph and healed. I have not seen or heard from the patient since.

CASE II.—Moses E., aged 32, millwright, consulted me at the Hospital on November 20th, 1877. He stated that, three-quarters of an hour before his visit, his right eye had been wounded by a chip of steel from a hammer. I observed a wound a little more than a line long in the ciliary region just at the corneo-sclerotic junction. One end of the wound penetrated the anterior chamber, as shown by the evacuation of the aqueous humour and a slight displacement of iris towards the wound. The wound was quite clean, and no foreign body was visible. The media was clear. The ophthalmoscope did not disclose the presence of any foreign body. I put the point of the magnet cautiously into the wound, and at once it proved the presence of metal within the sclerotic by the click and the attraction. By a little patient and careful use of the magnet, the metal was brought into the wound, and the end of it exposed so far as to enable me to grasp it with forceps. Having caught it, I easily extracted it. The fragment was a thin piece about one and a half lines long, one line in width at one end, and half a line at the other end. The patient recovered completely, and returned to work on December 10th following.

There can hardly be a doubt that the magnet saved the eye in both cases. In the first case, to have followed the sharp fragment with forceps would probably have inflicted irreparable damage, and indeed the body might have got out of the way altogether. In the second

case, the metal would but for the magnet probably have remained undetected, and have afterwards lighted up destructive inflammation. Even had it been detected, it would not have been possible, but for the magnet, to extract it without enlarging the wound, and that is not desirable in any part of the eye, much less in the ciliary region. By the magnet, the diagnosis was established, and the extraction was accomplished in the most delicate way.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

DIPHTHERIA AND LACTIC ACID SPRAY.—Dr. H. Beyer of Long Island City reports two cases of severe diphtheria successfully treated by the local application of dilute lactic acid in the form of a spray. He recommends the adoption of this remedy in all desperate cases of the disease.

DIET AND MEDICATION IN SACCHARINE DIABETES.—In the opinion of the medical officer of the Pennsylvania Hospital (as reported in the *Boston Medical and Surgical Journal* for March 21st), the best diet for a diabetic patient is: for breakfast, eggs, and any kind of meat or fish (except oysters), gluten bread, and tea or coffee with milk and without sugar; for dinner, tomatoes, lettuce, onions, spinach, string beans, meat, light sour wine, and lemons, or perhaps oranges, but none of the sweet fruits; for supper, about the same as for breakfast. None of the starchy foods, no alcohol, and no sugar, should be allowed. Among drugs, opium is the most valuable. Of this a large amount can be taken daily without producing any of the symptoms of poisoning. In one case, as many as seven grains were given *per diem*. This large amount of the drug had no deleterious effect further than the production of constipation. The opium directly, by diminishing all the secretions, or more probably by its action on the nerve centres, relieves the excessive thirst and voracious appetite, and diminishes the amount of urine and of sugar in the urine. In one case, the daily amount of urine was reduced from twenty-eight to eleven pints *per diem*. The total quantity of contained sugar was also reduced. Ergot, which acts in simple diuresis almost like a specific, may be used in saccharine diabetes with much profit in doses of one drachm of the fluid extract four times a day. Where the skin is rough and dry, jaborandi is of great value by reason of its diuretic powers. If jaborandi be used, the use of theopium and ergot must be stopped for the time being.

THE ALKALOIDS OF OPIUM.—The recognised opium-alkaloids are sixteen in number. The effect of each differs from the rest or from that of opium itself. Dr. Isaac Ott (*Journal of Nervous and Mental Diseases*, January 1878), reports a large number of experiments which, taken in conjunction with previous knowledge, lead him to conclusions summarised thus. 1. Cryptopia is narcotic; it excites and then depresses reflex action by an effect on the spinal cord, reduces the power of the motor nerves, abolishes sensation by an action on the spinal sensory ganglia, and lowers the heart-beat by an action on its muscular structure. 2. Thebaine is a spinal convulsant; it has no action on the motor or sensory nerves or on striated muscle. It reduces the heart-beat by an action on that organ, and increases blood-pressure by stimulating the cerebral vaso-motor centres. 3. Codeia is a narcotic and spinal convulsant; it produces a veratroid contraction of striated muscle, and depresses the heart-beat by an action on the cardiac muscle. 4. Chlorocodide is a tetanic agent. 5. Apocodide produces vomiting, coma, and death. 6. Narceine is soporific to cold-blooded animals, but not to man, and is a spinal convulsant. It does not destroy the motor nerves, as they act on thrusting a probe down the spine. It produces veratroid contraction of the muscle, and reduces the heart-beat by stimulation of the peripheral end of the pneumogastric. 7. Papaverine is narcotic and convulsant; the convulsions being partly spinal and partly peripheral, the latter, it is highly probable, from an action on the muscle. It diminishes the heart's contractions by peripheral action on the cardio-inhibitory apparatus. It also causes veratroid contraction of the muscle. 8. Narcotine is non-narcotic, and a spinal convulsant; it produces veratroid contraction of striated muscle, and is a very active agent to decrease the beats of the heart by an action on the cardiac muscle. 9. Cotamine is soporific, and paralyses, like curare, the motor nerves. 10. Hydrocotarnine is narcotic and convulsant. 11. Hydrochlorate of cotarnamic acid is a convulsant, and paralyses the pneumogastric. 12. Laudanosine and laudanine are tetanic agents. 13. Morphia is a

narcotic and spinal convulsivant. It produces veratroid contraction of muscle and reduces the heart-beat. 14. Oxymorpha has an action like morphia, only weaker. 15. Apomorpha is an emetic; it excites and reduces spinal reflex excitability, and diminishes the number of cardiac contractions. 16. Meconine is narcotic to cold-blooded animals, but not in doses of two grains by the stomach in man. It causes hyperæsthesia and paralysis of voluntary motion with general relaxation. It also produces a veratroid contraction. The opium-alkaloids all have a dominant action on the nervous system, causing first, increased exaggerated functions, and, if the dose be large enough, a paralysis of them. In the warm-blooded animals, this action is both on the spinal cord and on the cerebrum.

MEDICINE.

ABSCESS OF THE HEART.—Abscess of the heart is not a very rare termination of myocarditis; and pyæmic abscess has been noted by Schroetter, Klob, Stanley, Latham, Bennett, etc. The following case, however, reported by Drs. Creveling and Button of Auburn (*New York Medical Record*, March 1878), is somewhat unique. Thomas Brennan, aged 63, entered the State Prison June 6th, 1877. On the 9th, 12th, 22nd, and 29th of the same month, he complained of cardiac pains, which were sometimes relieved by anodynes, and sometimes passed off without treatment. On July 15th, he was again attacked; the pains grew rapidly more severe, and did not leave him until his death (Nov. 30th). At the necropsy, the pericardium was found closely adherent over the entire surface of the heart; the endocardium was normal, showing no signs of inflammatory changes. A hard mass was discovered in the wall of the right ventricle, extending from about the middle of this cavity to near the top of the auricle, and encroaching somewhat upon both these cavities. On opening into the tumour, an ounce or more of laudable pus escaped, the greater portion of which lay opposite the upper half of the right ventricle. The abscess had not pointed, or given any other sign of spontaneous rupture. The external wall was about a quarter of an inch thick; the internal a trifle less. The whole amount of pus was situated in the muscular structure of the right side of the heart, which was still firm, giving no evidence of softening or degeneration; nor was there any indication of endocarditis or valvular disease.

ALCOHOLIC AMAUROSIS.—Dr. Arens (*Centralblatt für Heilkunde*) reports the case of a man, thirty years old, in other respects always healthy, who awoke one morning totally blind in both eyes. The patient himself regarded a three days' excessive indulgence in alcohol as its cause. The eyes were widely opened, fixed; the pupils were dilated and immovable; the ophthalmoscopic appearances were normal. The pulse was frequent, soft; the heart was normal. Sensibility and motility were intact in all the extremities. Large doses of Hunyadi János water, rest, diet, and cold water compresses on the head for four days, completely restored the vision.

NOTES ON NERVE-DISEASE.—In the *Centralblatt für die Medicin. Wissenschaften* is a summary of some interesting observations by Berger. The first relates to an early symptom of tabes dorsalis, which is described by Berger as consisting in the disturbance of the perception of pain of such a kind that stimuli of slight intensity, as well as tactile impressions of a slightly painful kind, such as needle-pricks, are perceived normally; but that more severe and often very strong stimuli produce no greater pain. This analgesia in respect to excessive stimuli may be present before other symptoms of tabes appear, and is of semeiotic importance. This peculiarity, as a common rule, is especially perceived in the skin of the lower extremities, and may finally be observed on the whole cutaneous surface and even on the mucous membranes. It appears to be a symptom depending on an initial lesion of the grey substance.—In a patient suffering from severe symptoms of vertigo, from which he was only free while lying on his back, no other symptom of brain-disease could be perceived, whilst other signs pointed to an intense gastro-duodenal catarrh. The treatment of the latter affection stopped the vertigo. A brother of the patient had already suffered for several years from the same complaint, which had become chronic.—Among the progressive and acute forms of bulbar paralysis, Berger distinguishes a form which appears among children from three to five years old—an apparently congenital disease of speech. The children speak very deficiently, as compared with their apparently normally developed intelligence and sound hearing. There is here an arrest of development of the bulbar centre of hearing, paresis of the bulbar nerves presiding over articulation and deglutition. There is often found, in these cases, paresis of one-half of the

body. In some cases, the individuals belonged to a family afflicted with neuropathic conditions; in another, there were found many congenital signs of degeneration (deficient phalanges, deficiency of the pectoral muscle of the right side, and webbed fingers). Continuous electric treatment has good influence. In the course of years, the condition is apt also to improve spontaneously.

SURGERY.

TRANSPLANTATION OF THE URETHRA TO THE PERINÆUM.—In the *Archiv für Heilkunde*, Heft vi, 1877, Dr. Wedemeyer reports a case of cancer of the penis, in which Professor Thiersch amputated that organ. After amputating at about the level of the pubic bone, and checking the hæmorrhage, a catheter was introduced into the urethra; an incision was then made along the raphe of the scrotum to the perinæum, thus dividing the scrotum into two equal parts and exposing the urethra, the anterior termination of which was loosened from its attachment in the pubic arch for a distance of about four-fifths of an inch. A small incision was now made in the perinæum between the posterior extremity of the scrotal wound and the anus, an inch and a half in front of the latter; the urethra was drawn through this opening, and its walls fastened in the borders of the wound. The operation was made under Lister's spray. Fourteen months after the operation, the patient reported himself as perfectly free from all inconveniences. He could project his urine forward at an angle of 45 deg. from the vertical line.

TREATMENT OF ANEURISM OF THE AORTA BY ELECTRO-PUNCTURE.—At the meeting of the Paris Société de Thérapie on March 13th, M. Dujardin-Beaumetz stated that this method of treatment has been becoming general in France. Since last July, the operation has been performed three times; on two patients in M. Potain's wards, and on a patient of M. Ball's. A very marked improvement was obtained by this method in all the cases. The aneurisms were all of the thoracic aorta—two were seated at the origin of the aorta, and formed sacs occupying the left side of the thorax; a third was situated at the dorsal region, and originated in the descending portion of the arch of the aorta; in the latter case, the tumour was the cause of paraplegia. Five applications were made at intervals of three weeks, and produced a diminution in the paraplegia, and a great lessening of the pulsations. These aneurisms were not accompanied by any cardiac change. The method of operation was the same in all the cases; positive currents only were used on the needles inserted in the tumour, the negative pole being applied on the thigh. M. Dujardin-Beaumetz is inclined to believe that electricity acts here by setting up inflammation on the sac rather than by directly bringing on coagulation of the albumen and fibrin. He thus explains the tardy setting in of improvement, which only comes on from a week to a fortnight after the application of electricity. Summing up the facts known up to the present time, M. Dujardin-Beaumetz is of opinion that, taking the harmlessness of electro-puncture into consideration, this plan should take its place in ordinary therapeutics, and that it is the best of all treatments recommended up to the present time; he, however acknowledges that ice and iodide of potassium must first be tried. Ice applied externally also acts by setting up inflammation in the sac, and not by directly coagulating the blood; it has, in fact, been demonstrated that cold retards coagulation of the blood. Iodide of potassium administered internally is the only remedy which has afforded certain cures. At the same meeting, M. Paul stated that he had recently seen a case of aneurism of the brachio-cephalic artery in a syphilitic patient, which was cured by the use of iodide of potassium. M. Edouard Labbé also pointed out that M. Potain had observed an analogous case. M. Bucquoy also mentioned that he had seen two cases of very remarkable improvement in aneurism of the aorta, by the use of iodide of potassium and ice.

OBSTETRICS.

RETENTION OF THE PLACENTA.—Dr. Hervieux, Physician to the Paris Maternity Hospital, reports a case of retention of the placenta in the uterus for twenty-one days after an abortion at the sixth month. The case reported (*Archives de Tocologie*, Dec. 1877) is one of great interest. It demonstrates that—1. The placenta may, after abortion or premature accouchement, remain for several weeks in the womb without undergoing change, and consequently without giving rise to any phenomena of putrid infection; 2. Expectant treatment may, in cases of prolonged retention of the placenta, be followed by an excellent final result, and in some cases have advantages over forced delivery.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 4TH, 1878.

CONFERENCE OF HOSPITAL MANAGERS.

THE proposition to hold a Conference of Hospital Managers, made in these columns recently by Mr. Henry C. Burdett, and warmly recommended by Mr. Custance, the Secretary of the Metropolitan Hospital Sunday Fund, and Mr. T. Holmes, Chairman of the Out-patient Reform Committee of the British Medical Association, has, after these professional endorsements, been submitted to public discussion, and has been received with great favour, as having obviously great economical advantages, and being likely to prove extremely useful and attractive to the charitable public, and probably beneficial in the end to all the institutions concerned.

It is, however, to be feared, if all that we hear be true, that many of the hospitals will oppose any such scheme, and for mixed reasons. The majority of the managers, we are informed, object to publicity; and, should a formal proposal be made to some of the metropolitan charities, unless the views of these gentlemen be modified, they will refuse to take part in any Conference if reporters are allowed to be present. Others, again, object to move in the matter on the ground that they have perfected their system of management, and that such a Conference can do them no good, as they have little or nothing to learn from their neighbours. Others, again, object altogether to any such movement; because they regard all outside interference, no matter how modified a form it may assume, as utterly foreign to the welfare of these charitable institutions. These, and several other minor arguments, will have to be got rid of before anything like a real Hospital Conference can be held. For our part, we are fully convinced that these objections, which, for obvious reasons, will probably never be seriously and publicly put forward by the authorities of any charity as a ground for refusing to attend the Hospital Conference, constitute strong arguments in favour, not only of such a movement as is now proposed, but of a Royal Commission of Inquiry. Those who object to publicity must have some strong reason for wishing to avoid it; and the animus which all attempts at reform excite in the minds of some influential supporters of our public charities would be ridiculous if it were not a serious, and, we fear, a growing evil, leading to great abuses. Be this as it may, however, we counsel whoever may be induced to attempt to organise the first Hospital Conference to insist upon it being, in every sense of the word, a public one, based upon the broadest and widest principles, and including, as far as possible, not one group or a series of groups, but all the hospitals: endowed or unendowed; with and without medical schools; metropolitan and provincial. Each institution, with one hundred beds and upwards, desiring to be represented at the Conference, might fairly be invited to send the chairman of the committee of management, a representative of the honorary medical staff selected by his colleagues, and its principal paid official. Institutions with less than one hundred beds might reasonably be content to be represented by the chairman of their managing committee. In this way, a Conference could be called which would embody representatives of all the views, the experience, and, we may add the blemishes, of our present hospital system. Such a Hospital Conference, so constituted, commanding as it would do the confidence of the public, and insuring a fair and full discussion for every point of practical importance connected

with the management and conduct of the hospitals of this country, must result in great benefit to the vast interests at stake. We, therefore, hope, in spite of the preliminary difficulties which will have to be overcome, that some practical steps will at once be taken in the matter. Why should not the treasurer of one of the endowed hospitals, in conjunction with the chairman of one of the voluntary charities, summon a preliminary meeting of the representatives of all the metropolitan hospitals having medical schools? In this way, the views of the more influential and representative of the hospital managers might be ascertained, and the subject could then be fairly discussed on its merits. We shall hope to hear that one of the treasurers in question has consented to allow some such preliminary gathering to assemble in the board-room of one of the Royal Charities.

Turning, now, to the subjects which such a Conference might fairly be asked to consider and discuss, one is embarrassed at once by their number and importance. Hospital finance and hospital accounts would, of course, form one of the most interesting sections. In the former, it might be shown, to many a metropolitan hospital manager, how the county infirmary manages, without large invested funds, to keep out of debt. Glasgow, for example, might teach the London Hospital a lesson of thrift, which the latter institution could profitably study. The working population of the port of Glasgow subscribe £6,000 a year to the Infirmary there; whereas the same class of the population, which in London supplies nearly all the accident cases, subscribes practically *nil*. Here is surely one striking example of the profit to be derived from a knowledge of how our neighbours minister to their own necessities. The thrift of Glasgow might well be imported to the East of London. Doubtless a distinct organisation, on the Glasgow model, if fairly and patiently nurtured, would give the London Hospital, in ten years, an income from the port of London not far short of £10,000 *per annum*.

Take, again, the matter of hospital accounts. It recently happened that the editor of one of the Charity-guides hit upon the expedient of publishing an alphabetical and comparative table, showing the relative income and expenditure of all the London hospitals. What was the result? A careful examination of the published statements of accounts, issued by these institutions—no two of which were based upon the same principles—convinced him of the hopeless nature of the task he was attempting; because no tables that he could thus prepare would constitute a reliable basis of comparison. In this matter, the Council of the Hospital Sunday Fund have done much good; but the value of their work is neutralised by the fact that they have not the courage to publish the returns made to them by the metropolitan hospitals. We hope, however, that this year wiser and more liberal views will prevail with the Hospital Sunday Fund authorities; and that they will give to the world the results of much labour, which, under existing circumstances, is comparatively useless.

Take, again, the question of supply. We do not say it will ever be possible to carry out any such scheme; but it would, at any rate, be interesting to hear the views of hospital managers generally upon the question of raising the voluntary income of all the metropolitan hospitals, for instance, by one common agency. For our own part, we believe a vast saving in expenditure might be secured by the establishment of a central office for all the London hospitals, from which the voluntary income might be collected; and in this way duplicate and multiple appeals might be abolished. In the same way, following the example set in Paris by the Sisters of Mercy, a central store might be established in London, at which all the hospitals might purchase, at a little over cost price, every article of consumption from an egg to a wooden leg. An arrangement of this kind would tend to reduce the large discrepancies as to relative cost of patients which at present exist between one hospital and another. Any one purchasing at the store would have a guarantee that the article supplied was not only of moderate price, but the best and most suitable of its kind. Under existing circumstances, we have found one hospital giving a hundred per cent. more than another for the same necessities in daily use. It was

only a fortnight ago that our attention was called to the fact that, whereas the cost per week of each in-patient at one of the metropolitan hospitals was but 19s. 7d., at another it amounted to £3 19s. 8d. The discrepancy of these sums surely suggests food for reflection. Mr. Timothy Holmes has well pointed out that a Hospital Conference would create more enlightened views on subjects of hospital management, as well as on that of hospital finance. There are questions, such as that of medical teaching, which, though of the greatest public importance, are relegated entirely to medical men; while the general administration of the hospitals, though of the greatest medical importance, is regarded as the exclusive province of laymen.

Again, the general question of the uses and abuses of hospitals, and especially of the out-patient departments, would form an interesting subject for discussion. By means of a Conference, it might be possible to arrive at some practical solution of this question, and to secure a general trial of the new system. At the present time, reforms of this character are usually left to outside bodies, who, having no control over the hospitals or influence with the managers, find it impossible to carry through any scheme, however excellent, or to secure the adoption of any reform, however urgent.

If a Conference were held, the reproduction of exploded abuses would soon cease. At the present time, much money is annually wasted upon plans which, were the practical experience of all the hospitals available, would soon be saved for better purposes. Take Parian cement as an instance. It has been proved over and over again to be most porous, absorbent, and expensive; yet it would not be difficult to find that large sums have been expended to procure it for some recently built hospital, because the managers believe it to possess exactly the opposite qualities. They manage these things better in America. When the plans of Dr. Billings were accepted for the Johns Hopkins Hospital at Baltimore, he was sent to Europe by the trustees to ascertain if any, and if so what, portions of his plans had been tried at the various hospitals, and with what results. In this way, he was enabled to modify and improve his designs, and, without great expense, to put many of his schemes to the test of practical experience.

But why multiply examples? In all respects, a Hospital Conference would prove most interesting, instructive, and beneficial. Many theories would be exploded; many reforms would be made popular; and much needless extravagance and waste of public money would be prevented. If we are to have a parliamentary inquiry into the management of our hospitals, nothing could better conduce to a clear understanding of the subject, could better pave the way for a public inquiry, or even possibly render such an inquiry unnecessary, than a Hospital Conference. Under all the circumstances of the case, we hope Mr. Burdett's proposal will secure the public and professional attention and support it justly merits.

CONSULTANTS' ETIQUETTE.

Is there in London, or in Great Britain, any "pure" consulting physician or consulting surgeon? By which we mean any physician or surgeon whose professional occupation it is to receive patients only in consultation with another practitioner, as a barrister receives, advises, and acts for clients only in consultation with a solicitor or a junior at the bar. This question, which we have mooted before in these columns, is again suggested by a letter from a graduate of the London University in general practice, on "Consultants' Professional Etiquette". He complains that, in two cases, patients at the time under his treatment were prescribed for by "consultants", who were aware that these patients were under his care at the time, without any communication being made to him. Our correspondent complains of this as being unfair to him and to his patients, and describes it as a breach of "consultants' professional etiquette". In our opinion, he is correct in describing the course of which he complains as a breach of etiquette. It is, however, one which is, we believe, not uncommon, and which arises out of the

practice which widely, if not universally, prevails of combining the functions of consultation practice with those of ordinary family and general practice. If a patient call upon a general practitioner of the class ordinarily so described, and at the same time inform him that he is under the treatment of a neighbouring practitioner, it is well understood that it is his duty either to propose a consultation with that practitioner, or, if any valid obstacle to such consultation exist, to communicate any opinion which he forms, or any medical treatment which he advises, by letter to that practitioner. On the other hand, the waiting-rooms of a London hospital physician or surgeon in good practice are filled with patients, some of whom come to him as their sole medical attendant, some are receiving fitful and occasional attendance from a family medical adviser, and some are actually under the treatment of the latter. Now, there seems little doubt that the obligations of the hospital physician to communicate with the family practitioner in attendance are the same as those of the neighbouring practitioner consulted under similar circumstances would be; but there is, as our correspondent's letter illustrates, reason to believe that that obligation is often very imperfectly fulfilled. This does not certainly arise from any general unwillingness to conform to a high standard of ethical propriety, but from the indefinite character of the professional relation of the consulting physician to the patients who call upon him. Hybrid relationships breed mongrel results. Between the patient who calls and frankly adopts the "consultant" as his sole personal adviser for the occasion; the patient who calls with "his medical man"; the patient who calls with a letter from "his medical man"; the patient who calls at the request of his medical man, or with his consent, and with the expectation of the latter to see his patient at once again with a letter expressing the consultants' opinion; and the patient who, being dissatisfied with the results of his former personal attendant in a particular instance, desires to change his adviser and take "higher advice"—there are many shades of difference; and, in the course of an active morning's work, consultants are sometimes apt to disregard the finer *nuances*, and with results such as our correspondent describes. A guinea fee will not remunerate a busy physician for diagnosis, prescription, and a descriptive letter to a practitioner, which, under such circumstances, may involve further correspondence. But a patient who calls under the circumstances described by "M.B." is very apt to consider that as the proper *honorarium*. By treating a patient who calls alone and without a letter from his doctor as his own, the consultant is probably for the moment more likely to consult his own pecuniary interests; and, although very few London hospital physicians or surgeons are not willing to place conformity to established professional customs above pecuniary considerations, still the unconscious bias of other palpable considerations is evidently to obliterate the faintly seen lines of a course which, by stripping the case of all superficial details, become more distinct. We believe that these misunderstandings of which our correspondent speaks arise very commonly from the hybrid position of consultants, who are, as a general rule, almost as much general and family practitioners as consultants, with the distinction that the larger number of patients call at their houses and pay an uniform guinea fee.

Whether it might be feasible, or whether, if feasible, it might be desirable, to establish a class of "pure consultants" in the medical profession, is a question which is, we think, ripe for discussion. Such men would, on application to their Colleges, receive recognition as "consulting physicians" or "consulting surgeons", as barristers of more than ten years' standing and recognised position may, upon application to and with the approval of the Lord Chancellor, be "called within the bar", or "take silk", as it is called. They can then only "lead". They have precedence and seniority; they receive higher fees; but they must always have associated with them in every case a junior. The opinion of a consultant of this recognised position would be dignified and well marked. His consulting fees would be larger;

his time would not be taken up with trivial cases. He would receive full particulars and prepared details of the case for consultation, and would give a written opinion in all necessary detail, as counsel do. His fees would be marked on his medical report from a higher standpoint and over a larger range. He would not be fagged to death with trivial cases; he would not be forced to retire from hospital work and clinical teaching just at the time that his abilities and experience had ripened to their highest maturity. He would have time to continue scientific and literary labours; and the most eminent practitioners would be less overwhelmed with an exhausting mass of ordinary cases; they would have more time for other than routine work, and would be more truly leaders. Their incomes would not be less; their lives would be longer; their work of the highest and most noble kind; and their sphere of action would be defined in a most satisfactory sense.

UNQUALIFIED ASSISTANTS.

THE Lord Mayor of Dublin has been moved to some indignant observations, by discovering incidentally that a practitioner in that city employed an unqualified assistant. He is reported to have said, among other things, that he should like to know the mode in which those compounding departments of the profession were carried out; whether those young gentlemen had passed qualifying examinations, and whether they had received a diploma. He always understood that young gentlemen engaged in mixing medicines should pass through an examination, and get a certificate from the proper authorities. As a public servant, he should like to know whether the prescriptions sent into medical establishments were compounded by gentlemen who had obtained a proper certificate or authority, and whether there was any check on those young gentlemen. He was surprised that no means had been adopted to protect the public from having their medicines improperly compounded; and, as far as he was personally concerned, such a state of things would put him on his guard in future.

There is here a certain mixture of questions as to the employment of unqualified assistants by medical men and by chemists and druggists—customs both of which largely prevail in England, but of which the first at least is very rare in Ireland. The *Medical Press*, commenting upon the Lord Mayor's observations, says:

"It will hardly soothe the indignation or allay the surprise of the Lord Mayor and the Dublin public, to learn from us that the employment of young men to whom the practice of medicine is a dim vision is one of the commonest of occurrences; that in England a considerable proportion of the doctoring amongst the working classes is done by assistants who are employed *because* they have had no regular education and possess no qualification, and therefore cannot enter into rivalry with their masters; that there is nothing unusual in the doctoring of large and populous districts in the manufacturing counties by three or four such unlicensed assistants, who are in charge of separate establishments, and supposed to be under the ownership of one general practitioner; that it is a practice for some general practitioners who work in this line to sign certificates respecting the causes of death of persons whom they have never seen alive; and that, in fact, law and custom allow the life and death of thousands of persons to be entrusted to unqualified assistants who have learned most of what they know upon the vile bodies of their masters' clients, and who pursue their experiments upon such bodies under the cloak of their masters' qualification. The chief magistrate of Dublin is horrified at the notion of death-doses being dispensed to his fellow-citizens by ignorant and careless boys. What would he say if he realised the vision of such young gentlemen not only making up the medicine, but prescribing it themselves?"

This is a very unqualified and overdrawn statement; but it puts forward, in words which we should be glad to see contradicted, some of the most obvious objections to the employment of unqualified assistants; and side by side with these observations of the Dublin writer upon the utterances of the chief magistrate of that city we may put the following remarks of Mr. Bushby, one of the most experienced of our metropolitan magistrates, at the close of a baby-farming case where there were suspicions of systematic foul play.

"He felt it necessary to make some remarks upon the certificates of death which had been produced before him. Although the certificates were intended for the Registrar-General only, it was much to be regretted that, the medical gentleman called in to attend the child Dugoy being merely an assistant, Dr. Flack should think his account of the cause of death sufficient warranty for the issue of a certificate of death wherein Dr. Flack certified, 'I attended'. Mr. Bushby believed, of course, that it was done without any evil intention; but thought it was a matter for very great regret that, although the certificates were intended only for the Registrar-General, a medical gentleman of position should certify what was not strictly true."

The medical profession is asking now for an amendment of the Medical Act which shall give more effectual protection to the public and profession against the dangers of medical practice by unqualified persons. How can this be fairly done if such evidences exist of the encouragement of unqualified practice by members of our own body? We are claiming that unqualified persons shall not wear borrowed plumes of apparent qualification, and this for our protection and that of the public; but what is this except another phase of the practice against which we are seeking legislation?

ANTI-VACCINATION STATISTICS.

WE have thought it of some importance to examine the recent statements made by Mr. Hume-Rothery, who styles himself President of the National Anti-Compulsory Vaccination League, in which he puts forth startling figures regarding the prevalence of small-pox in the French and German armies during the war of 1870-71. These figures, he observes, ought to induce every one "to promote a measure for the speedy and entire repeal of the unjust and cruel Vaccination Acts". As in many other instances, where figures are used, not for arriving at a just conclusion, but for promoting a particular object, the numbers quoted are so partially given, and in such an indistinct manner, while much that would explain them is kept back, that they are made to propagate error among those who have not the opportunity or do not care to take the trouble of analysing them. Instead of enlightening, they serve the unworthy purpose of deceiving the unwary reader. Mr. Hume-Rothery, in writing of the small-pox which prevailed at the time of the Franco-German war, mixes up the statistics of the deaths from this disease in the respective armies with those which occurred among the civil population in Prussia, and among French prisoners in the country, in such a way that it is difficult to separate them without special care; and he quotes the general order in the French army, which requires every French soldier on entering a regiment to be revaccinated, as a proof that the 24,000 deaths, which have been recorded as having resulted from small-pox in the French armies during the war of 1870-71, all occurred among revaccinated persons at that particular period.

Now, what are the facts regarding the war of 1870-71 in this regard, and what is the evidence as to the protection afforded against small-pox by vaccination in the German army? We can gather some valuable information on the latter point from the statistics, carefully collected from official records, by General-Arzt Dr. Roth and Ober-Stabsarzt Dr. Lex, in their *Handbuch der Militär-Gesundheitspflege* (vol. iii, Berlin, 1877, page 360, etc.)

As to the French army, it is undoubtedly true that the rule is for every French soldier, without exception, to be revaccinated on joining his regiment. This regulation was enforced in the Imperial army up to the outbreak of the war; but afterwards, when large levies were hastily collected, and especially among those which were raised after the collapse at Sedan, but little attention was paid to it, and it may be said for the time to have fallen practically into abeyance. It is well known how largely the civil element entered into the composition of the so-called "Army of Defence" of Paris during the siege; and how impossible it was at the time to carry out military regulations, with even an approach to strictness, in a great part of it. In this army, the mortality from small-pox, during the first siege, amounted to 67.6 per thousand; while in the generally well protected German army, surrounding the city, the mortality from it was almost *nil*. During the

whole war, the mortality in the German army, though brought into close contact as the troops were on all sides with the disease, amounted only to 0.3 per thousand. The fact was, that small-pox was prevalent in the civil population of several departments of France in 1870; and, among these subjects of the disease, it was notorious that vaccination had been very imperfectly attended to, partly from heedlessness, and not a little from opposition on the part of some of the more ignorant priests to the practice. Under the trying circumstances of the war, the measures which would have been taken in more quiet times to prevent the spread of the disease were neglected; it was widely disseminated by recruits among the armies of France; and, when large bodies of French prisoners were carried into Germany, it became epidemic there also, and gave rise to a considerable mortality among the people in that country. But, in the German army, the mortality from small-pox always remained relatively small; the aggregate presenting, as before mentioned, a ratio of 0.3 per thousand of troops.

The history of vaccination in the Prussian army offers remarkable evidence of its prophylactic power against the disease of small-pox, and affords a strong protest against the statements advanced by members of the society over which Mr. Hume-Rothery presides. Vaccination, or revaccination in case of the previous performance of vaccination, was first ordered to be adopted as a regulation in the Prussian army of 1831, but difficulties were met with from several directions in carrying out the order, and it was not until 1835 that it was systematically executed. When once the due performance of the measure was secured, its beneficial results were made manifest beyond all reach of cavil; whereas, in the ten years 1825 to 1834, the number of Prussian soldiers who had died from small-pox was 496, the number in the following ten years, from 1835 to 1844, was only 39. In the next ten years, 1845 to 1854, the number was still further reduced to 13; and from 1855 to 1864, only 12 deaths from small-pox occurred in the Prussian army. The next decade was interrupted by the great, though comparatively short war of 1866, between Prussia and Austria, and, in this year, there were 8 deaths among soldiers from small-pox; but, as shown by the sanitary statistics emanating from the Prussian War Office, all these eight fatal cases occurred in soldiers who from the circumstances of the time had not been revaccinated. In the following year (1867) only two deaths occurred in the Prussian army from small-pox, and during the years 1868 and 1869 only one in each year. Surely, when the liabilities to occasional errors in the operation of vaccination from some imperfection in its performance, or from defect in the quality of the vaccine lymph, is taken into account, no stronger evidence could be adduced to show the efficacy of vaccination in warding off the disease of small-pox and modifying its severity in case of its occurrence, than that which is brought to light by the foregoing statistics. The war of 1870-71 was exceptional in respect to the vast numbers of the troops, and especially of what may be strictly regarded as the civil population temporarily employed as soldiers, that were brought into the field, the vast area over which the military operations extended, the length of time during which they were carried on, and the fact of their being actively pursued throughout the winter; so that the presence of a large proportion of men who had not been revaccinated on joining the German armies, not to mention the neglect of other precautions, can be no matter of surprise. Yet, even under these circumstances, notwithstanding the exposure to a wide-spread epidemic of small-pox in France and among the French prisoners carried into Germany, the mortality from this disease among the men in the German army only amounted, as already shown, to 0.3 per 1,000. Among the general population of the country, the proportion of deaths after the epidemic had been introduced from France, was considerably greater, viz., 2.4 per 1,000. The difference between the proportion of deaths in the civil population of Prussia from small-pox, and the relatively small ratio in the army, year by year, after the practice of revaccination was introduced into it, is one of the most striking facts in the history of vaccination in that country. In one year, in 1848, when there were as many as 4,691 deaths from small-

pox in the civil population of the country, there was not a single death from the disease in the whole Prussian army.

Mr. Hume-Rothery has thought fit to place at the head of the letter which has given rise to these remarks, the title of the "Vaccination Craze"; but what condition of craze can be assigned to that person who, with all the proofs before him of the protection against a most contagious and loathsome disease that the wonderful discovery of Jenner has offered to mankind, still persists in doing all in his power to deprive the world of its benefits? As the late Dr. Parkes has well observed: "He who impedes vaccination is committing an unjustifiable offence against the community in which he lives, and if that community realised all the facts of the case, it would not tolerate his conduct for a day".

OUT-PATIENT HOSPITAL DEPARTMENTS.

SIR WILLIAM GULL's motion, at the recent meeting of the Charity Organisation Society, in favour of the establishment and extension of Provident Dispensaries, together with the lucid and convincing arguments he advanced in support of his proposition, once more draws attention to the urgent necessity of hospital reform.

The experience of thirty years' close attention to the diseases of the poorer classes, fifteen of which were passed at Guy's Hospital, has taught Sir William Gull that the present system of out-patient relief pursued at the hospitals is highly unsatisfactory, or, as he himself expressed it, "a disgrace to any civilised community". This is strong language; yet the speaker is no sciolist.

It is a notorious fact that a fractional part only of the out-patients who crowd the London hospital doors can obtain more than a few hurried words of advice from the medical staff, let alone careful diagnosis or treatment; yet so rooted is the conviction among the poorer and uneducated classes that skilled medical treatment is to be found at the hospitals only, that thither they flock, often after a weary and painful journey, necessitating the loss of a day's work or the neglect of household duties, only to receive instructions to return for treatment some other day. To make matters worse, the greater part of those presenting themselves for gratuitous medical relief stand far more in need of the friendly services of the butcher and baker than of the physician or surgeon; many others are not in such straitened circumstances as to warrant their application for either gratuitous advice or treatment, and the scant time at the disposal of the medical staff is sorely wasted and trespassed upon, at the expense of *bonâ fide* and more serious cases requiring immediate and close attention. To obviate, then, these abuses—the necessity of the painful tramp to the hospital, the weary and anxious time wasted in the densely packed waiting-rooms (undoubtedly tending to aggravate the patients' disorders)—no less than to afford some relief to the overtaxed and totally inadequate medical staff, Sir William Gull once more urges the immediate establishment and extension of Provident Dispensaries throughout the metropolis. With this aid, in place of the present loose and slipshod method, or rather want of method, in administering out-patient relief, a proper and carefully organised system might be at hand to meet the exigencies of every case, the more grave of which could be treated clinically at home. The same tale has been told over and over again by the late Sir William Fergusson, by Dr. A. P. Stewart, by Mr. Timothy Holmes, and by other leading members of the consulting branch of the profession, as well as by Dr. Joseph Rogers, Mr. Nelson Hardy, Mr. Stephen Alford, and other representatives of the class of general practitioners in the metropolis, not to speak of their provincial *confrères*. In an interesting and extremely able paper read before the Metropolitan Counties Branch of the British Medical Association (see BRITISH MEDICAL JOURNAL, March 16th, 1878), Mr. Timothy Holmes pointed out that at the hospitals admission is too indiscriminate, so that a number of persons are admitted beyond the powers of the institutions properly to deal with; and that it is impossible, in those hospitals attached to medical schools, to give that instruction which

the students ought to derive from the out-patient practice. As a consequence of this excess of numbers, the poor are made to wait an inordinate time for the advice given; and such advice, when obtained, is often hurried and worthless. Mr. Holmes also shares the general views of the profession when he states that indiscriminate out-patient relief pauperises, and thus tends to demoralise, the persons to whom it is administered, and deprives medical men of a substantial part of the fund from which they draw their subsistence: an injustice and an injury both to the givers and to the receivers.

Sir Charles Trevelyan, by his warm advocacy of the extension and establishment of Provident Dispensaries, and by his carefully prepared arguments and statistics, all bearing in favour of the scheme in project, is the mouthpiece of a vast portion of the lay community. Having the amelioration of the working classes at heart, they are strongly in favour of the abolition of gratuitous medical relief, and of the adoption of provident institutions, as being eminently calculated to bring about a healthy independence and a stricter observance of hygienic laws, the simplest of which, under the present state of affairs, are woefully neglected.

It may be fairly assumed that Provident Dispensaries will turn out to be of substantial advantage to the profession at large; and it is beyond doubt that their extension will deal a staggering blow to the pernicious custom of chemists and other unqualified persons of prescribing for the poor and working classes, and thus damaging and encroaching illegally upon the legitimate rights of the qualified practitioner.

THE ARMY AND NAVY MEDICAL SERVICES.

We have authority to state that the naval medical service is in urgent need of medical officers, and advertisements have been issued inviting candidates to offer themselves for examination. It is understood that such candidates as come forward and can pass the examination will not go to Netley for the usual training, but will at once be appointed to duty in ships about to be commissioned. We are unwilling to take any advantage of the necessities of the public service, nor would we say anything which would prevent men from coming forward to fulfil its requirements at a period which may possibly prove to be one of national emergency. We feel no doubt, indeed, that if any real necessity arises, young medical men will prove not less patriotic now than before, and, overlooking shortcomings, respond to the call. We cannot help observing, as this is, indeed, the proper time to observe, that the Lords of the Admiralty, like the Secretary of State for War, have incurred a very serious responsibility in failing to keep that service in so efficient a condition as to be able to command the requisite number of officers for the requirements of the service without, on the first occasion of emergency, having recourse to special and urgent appeals. It has long been notable that the claims of the medical officers of both services have been too often treated with a certain superciliousness and neglect; that, when the necessity for some improvement of the terms of service has been forced upon the authorities, it has been yielded with a niggardly and grudging hand, and that such reserves and deficiencies have prevented it from being accepted as a settlement of the question at issue. It is to the neglect and ill-treatment of this service, and to this alone, that their present unpopularity with the medical profession must be ascribed; and to this cause it is due that we now find both services inefficiently manned, and that the heads of both departments are unable to command a sufficient staff for the purposes of the army or of the navy. No doubt, the medical profession will, on this as on previous occasions, distinguish itself by a generous patriotism; but if it omit to insist, as a preliminary, upon the improvement of the conditions of service in such a manner as might prove embarrassing to the public service, it will at least have established a claim to a prompt and generous consideration of those causes of dissatisfaction which have led to the present depletion of the ranks of the services.

THE ARMY MEDICAL DEPARTMENT.

We publish in another column a letter addressed to the Chairman of the Parliamentary Bills Committee from the War Office, inquiring as to the average earnings of young men entering the medical profession, with a view, probably, to establish a standard which shall regulate the War Office in determining the financial conditions required to make the Army Medical Department attractive. Probably, some of our readers will assist by suggesting data for furnishing the answer. It is, however, tolerably clear that it must be very difficult to establish any average, and that widely different estimates are likely to be formed, according to the different experiences which suggest them. We shall, however, of course, be very happy to give the assistance asked in the form laid down; though we doubt whether more than merely accessory information can be gathered in this way towards the satisfactory re-establishment of the conditions of service in the Army Medical Department.

A MORTUARY properly fitted and furnished has just been erected in the grounds of Mile End Workhouse, in the place of the small shed which has for a long time been used for the purpose.

THE *conversazione* of the Pharmaceutical Society of Great Britain will take place on Wednesday evening, May 15th, at 8 o'clock, at the South Kensington Museum.

THE President and Council of the Medical Society of London have issued invitations for a *conversazione* to be held in the Society's rooms, 11, Chandos Street, Cavendish Square, on Monday evening next. Previously to the *conversazione*, at 8.30, Dr. Alfred Carpenter will deliver the annual oration; the subject being, "Alcoholic Drinks, as Diet, as Medicine, and as Poisons".

MR. ROBERT CHARLES MOON, surgeon, and Mr. Charles Darnley, chemist, have been committed for trial, after magisterial inquiry, on the charge of administering drugs with the felonious intention of procuring abortion. In the case of Moon, the result having been fatal, the charge assumes a very serious aspect indeed.

MR. SAMUEL WOOD, who has been for a long series of years surgeon to the Salop Infirmary, has lately resigned, and has been appointed honorary surgeon to the Infirmary; and Mr. W. Eddowes has been appointed to succeed him in active duties. A warm vote of thanks was passed to Mr. Wood for his long and valuable services to the institution.

DR. DYKE, Medical Officer of Health for Merthyr Tydfil, in reporting on a recent outbreak of typhus in Dowlais and Merthyr, ascribes its extension to the uncleanness and want of ventilation of the houses, and recommends the inspection of every house in the parish, and the institution of the necessary measures to compel the owners to provide the means of sufficient ventilation.

DR. CHARLES BEAUME, a French physician settled in Crete, has retired with the insurgents into the mountains, and is doing his best to help the wounded with skilful medical assistance. The difficulties of his task appear to be great, and the hospital appliances at hand are few; but the brave Frenchman is described as being nothing discouraged, but toiling on with lighthearted energy in his kindly professional work.

AN excellent suggestion made by Dr. J. Lawrence Hamilton in the *Times* of April 29th, that the Directors of the South Kensington Museum should set aside space in the Building Materials Department—for the exhibition of suitable specimens and models showing faulty materials, slovenly careless workmanship or scamping, and the various causes of deterioration in building materials on land and in the construction and fitting of ships—has, we are informed, been adopted.

DR. E. SYMES THOMPSON commences, on Tuesday, May 7th, a series of Gresham lectures on Hæmætica.

DR. COLAN, the senior medical officer under Sir George Nares in the late Arctic Expedition, and who upon his return was promoted to the rank of Deputy-Inspector General of Hospitals, was recently sent on duty to the hospital at Jamaica. His friends will regret to learn that he has suffered from an attack of yellow fever, contracted in his unremitting attention to a fatal case which was treated in the hospital. He is now happily convalescent.

ON Tuesday last, April 30th, Dr. Benjamin Howard made a series of demonstrations at the College of Surgeons of England, before several members of the Board of Examiners in Anatomy and Physiology, showing the effects of change of position on the relations of the upper air-passages. Dr. Howard explained, by means of anatomical preparations, a simple method of securing complete elevation of the epiglottis, independent of forcible traction of the tongue, which he considers needless for the restoration of asphyxiated persons, and based on false theories. He also showed how a free air-way may be maintained from the posterior nares to the glottis quite independently of any position of the tongue. These principles will shortly be made public. The demonstrations were attended to with great interest, Mr. Wood and several other of the examiners entering into a lively discussion on several of the points brought forward by Dr. Howard.

WESTMINSTER HOSPITAL.

DR. ALLCHIN, F.R.S.E., who had previously held the Lectureship on Practical Physiology and Histology with much distinction, has been elected to the chair of Physiology, on the resignation of Dr. Maclure. Mr. Murrell has been appointed Lecturer on Histology and Practical Physiology. The lectures—eighty in all—on this subject, we are glad to see, have been divided into a summer and a winter course. The division of this course is an excellent innovation, as it enables students to take a course in the summer, and so relieve their overcrowded winter curriculum. The lectures on *Materia Medica* and *Therapeutics* are to be included in the second summer course. This is a step towards the reform we have long advocated in these columns; and we congratulate the School upon its courage in introducing this modicum of reform. Dr. Allchin has been elected Dean, in the place of Mr. Cowell, resigned.

READING THE BAROMETER.

THE excessively large amount of rain which fell on the 10th and 11th of April was remarkable, not only for the amount, but also for the short time in which it fell, as about two and a half inches fell between 9 P.M. on the 10th and 9 A.M. on the 11th. The total fall recorded at several stations on the north-west of London was nearly three and a quarter inches: about two and a half inches at Tottenham, Stoke Newington, and Hackney, less at Croydon, and two and three-quarter inches at Greenwich. The barometer-readings were unusually high for such a heavy rain, and the fall in the barometer was very small at the time, only about one-tenth of an inch, which took place before midday on the 10th, so that few persons expected rain. The readings from before midday on the 8th to about the same time on the 10th were the same, viz., 29.9 inches; but a rather quick fall had occurred on the 7th and early part of the 8th. The wind was easterly, which accounts for the high barometer, and consequently misled those who look to the barometer as almost necessarily indicating dry or rainy weather, accordingly as it is high or low. The barometer merely indicates the varying weight of the column of air at the locality where it is placed, and is far more closely associated with the direction of the wind than with rain-fall, as it is usually high with northerly, north-easterly, and easterly winds, and low with southerly, south-westerly, and westerly winds. As south-westerly winds reach us from the sea, the air is more highly charged with moisture than when easterly winds blow, which come to us from the land. A fall in the barometer, with easterly and north-

easterly winds, is an indication of approaching change of wind or of heavy rain, especially if the rain do not occur soon after the fall. To make a reasonably accurate forecast of the weather, we must, therefore, take into consideration the curve described by the barometer-readings for some days before (this is now published in most daily newspapers), and the direction of the wind, and, if convenient, the variation in the temperature; and not merely look at the barometer, and say to ourselves it stands at "fair" or "fine", and it will, therefore, be fine weather. In this case, the wind being easterly from the Saturday to the Friday following, the fall in the barometer on the Sunday was significant of change, and possibly of rain. In all cases, the opinion has to be framed rather on the rise and fall of the barometer than on its height at a given time. We hope this will be satisfactory to those who have written to us on the subject.

HYDROPHOBIA FROM THE BITE OF A CAT.

ON Saturday last, an inquest was held by the Manchester city coroner on the body of Eliza Jane Holloway, aged 26, who died two days previously in the Manchester Royal Infirmary, and a verdict of "Death from hydrophobia from the bite of a cat" was returned.

THE HISTORY OF THYMOL.

DR. LEWIN, assistant at the Pharmacological Institute in Berlin, writes to us from Berlin in respect to a remark in a recent number of the JOURNAL relating to the first researches on thymol. He gives us the following historical details. Thymol was, he says, first found and described not by Lallemand, but by Kaspar Neumann, in the year 1719. In respect to its uses in medical practice, Paquet (*Bulletin Général de Thérapeutique*, 1868) first mentions that he had used it in a few cases as an antiseptic, on the recommendation of the pharmacist Bouillon (*ibid.*, page 508). It is stated in Paquet's communication that he experimented with a "syrupy preparation", therefore with that which was certainly not pure thymol, which has a beautiful crystalline form. The first investigation of this material was conducted by Dr. Lewin, on the recommendation of Professor Liebreich, in the Pharmacological Institute of the University of Berlin, and is reported in the *Centralblatt für die Medicinischen Wissenschaften*, May 1875, as well as later in Virchow's *Archiv*, Band 65, 1875. From this research there arose at once the modern extended practical application of thymol, as Ranke (*Volkmann's Sammlung Klinischer Vorträge*, No. 128) and other practitioners have already mentioned.

THE RUSSIAN ARMY IN ASIA.

DR. GEORGE STOKER, Chief of the Ambulance at Erzeroum, writes to us under date March 24th: The sanitary condition of this place and the health of the garrison are now becoming as serious a question to the Russians as it was to the Turks. The city is, so to speak, saturated with typhus, which decimated the Turkish ranks; and it is now ravaging the Russian ones. There are very few drains in the city, and nearly all of those that do exist are uncovered; the houses of the poorer inhabitants are totally unprovided with sewers of any kind, and the refuse of such houses is buried, during the winter, in the snow in front of the houses: now that the spring has set in, and the snow is melting, the state of affairs is easier imagined than described. At present, there are about 1,800 Turkish sick and wounded here; while, out of the 12,000 Russian troops comprising the garrison, there are about 3,000 in hospital, most of them suffering with typhus; the mortality is between 150 and 200 *per diem*. There is a dreadful scarcity of Russian doctors here, and a good many of those that do exist are ill from overwork or typhus. I am attending one now who, before he was taken ill, was supposed to attend 286 of his battalion who were sick, the strength of the battalion being about 1,000 men. The fact is, that these soldiers are for the most part worn out with the hardships of a long campaign, and, once they are attacked with typhus, they have no strength to resist the fever, and die off. The Russian Sanitary Commission has been working here for the last two weeks; its attention has been especially directed to cleansing and disinfecting the grave-

yards. During the siege, between 15,000 and 20,000 bodies were interred within the fortifications. These were for the most part buried in large trenches, containing about 50 to 100 bodies, each covered over by only a very thin layer of earth; during the melting of the snow, the scanty covering was washed away from the graves, and a most repulsive stench and spectacle were the result. The graveyards were the common resort of the town dogs, who feasted there on human remains. The Commission has caused all these graves to be uncovered, and a layer of lime about eight inches deep to be placed over the bodies, and the graves then filled in to a depth of about three feet with dry clay. Thus it is hoped that the horrors of a plague or cholera will be averted. Our hospitals are going on very well. I send you statistics of operations performed in the Yeni Khan Hospital since February 6th. Out of twelve operations (six amputations of the forearm and wrist, and six of the leg)—eleven being for gangrene and one for necrosis—only one death occurred, in a case of amputation at the lower third of the leg. In two of them, gangrene spread, but it was afterwards controlled, and the patients eventually recovered; in one, the gangrene had destroyed all the muscles of the palm: I applied pure carbolic acid, and the wound granulated without any bad symptoms occurring. The dressing used was marine lint steeped in carbolic lotion; the ward where the patients were was fumigated each day with carbolic acid; no sutures were applied in any of these cases.

OPHTHALMIA IN DISTRICT SCHOOLS.

DR. JOSEPH ROGERS, reporting on the condition of the children at the Westminster Union Schools, Wandsworth Common, where ophthalmia had been somewhat prevalent of late, but is now succumbing under the effective measures adopted by the medical officer, stated that he had looked into all the matters connected with the preservation of the health of the children, and judiciously recommended an increased diet for them, that already in use being lower than those at the Marylebone Schools at Southall, North Surrey District School, Anerley, St. Pancras School, Leavesden, and the Newport Market Refuge School.

THE EURYDICE.

WHILST the relatives of the unfortunate officers and men who foundered with the *Eurydice* are watching with intense anxiety the measures taken to raise the vessel, and trusting that there will be for them the last melancholy satisfaction of attending at the Christian burial of their beloved ones, it may be useful to recall some of the circumstances of another similar naval historical event, of greater magnitude and of equally sad coincidences, the capsizing of the *Royal George*, at Spithead, in August 1782. On that occasion, a crew of three times the strength of the *Eurydice* were submerged. The Naval Hospital at Haslar was then, as it is now, the mortuary to which corpses were consigned for burial, but only seventeen out of so many arrived there; while the bodies of thirty-five, picked up afterwards in such a state of decomposition as to preclude identification, were buried in Kingston churchyard, near Portsmouth. How can this disappearance be best accounted for? Probably it may be that drowning in such sudden calamities is neither by exhaustion nor by cramp, but by suffocation, the result of water rapidly finding its way, in the few last gasps, into the lungs and into the stomach also; which, together with the weight of the sodden garments, renders the body specifically heavier than sea-water. Thus there is no tendency in it to rise again to the surface until, by decomposition, the tissues have become infiltrated with gases. But, where crustaceans abound, these gases escape through lacerations of the surface made by them, and buoyancy is thus precluded. In still waters of tideless harbours, in cold winters, corpses have been known to lie for seven or eight weeks on the muddy bottom, until the season of higher temperature has caused putrefaction to commence; and possibly, had there been any lacerations of skin, they would never have risen at all, but would have collapsed and undergone decomposition on the mud or oozy bed of the harbours. Both the *Royal George* and the *Eurydice* sank in tideways, with very

strong currents, which, from the first instant, swept constantly through the hatchways and open ports with searching effect; so it may be surmised that many unattached flexible masses lying in their course would be carried away and rolled into deeper waters or on to the shore. It is a remarkable feature in the *Eurydice* that so few of the watch on deck floated away from her, and that so very few corpses have been anywhere found. This may perhaps be explained on the suddenness of the struggle for life in the water, and the vortex created by the sinking ship taking them with her to the bottom; and the same reasons will apply *à fortiori* to the watch off duty and between decks. We think that, by calmly reflecting on such ideas, the minds of those who are now in eager expectation may be brought to a tone conducive to submission to many disappointments on clearance of the vessel; and this has induced us to comment on the distressing calamity that has overwhelmed so many households in grief.

ARMY MEDICAL OFFICERS' SERVANTS.

A CORRESPONDENT, referring to our remarks in the JOURNAL of April 20th, on the allowance granted by the War Office to medical officers in lieu of soldier-servants, observes that even if soldier-servants were allotted to medical officers, there would still be great difficulties to contend against under the present system of limited service in the army. He asserts that the combatant officers in regiments cannot now get good servants of the old type; that they are not to be obtained. The young unmarried men who chiefly fill the ranks of the army do not like to give up their spare time to service, which they would otherwise be spending in relaxation with their comrades; and, in many instances, if they consented to act as servants, would be constantly remanded to their regimental duties for some military fault or other. The working or private clothes bought for one man would not suit another, and thus the men would become sources of continual annoyance and expense. Under these circumstances, the only way in which the "servant difficulty" can be overcome is to increase the allowance to medical officers for a civilian servant; and every one must admit that the present grant of one shilling *per diem* is a very paltry and inadequate one for the purpose. In time of war, the medical, like other officers, must have military servants; no ordinary amount of pay would suffice to compensate civilian servants for the risks and discomforts, if not positive deprivations, to which they must inevitably be exposed under the circumstances of a campaign of any long duration.

PHYSICIANS' REWARDS.

THE *Levant Herald* of the 11th April publishes a letter from a correspondent, detailing an interesting ceremony which took place on the 5th April, on board the Italian mail-steamer, when, at the request of the Governor of Salonica, a party of medical officers visited the ship to bid farewell to Drs. Crookshank and Hope, and to express the best thanks of the Government for the valuable services the British National Aid Society had rendered to the Turkish wounded. Colonel Temple Bey, who accompanied the party, expressed his high appreciation of the zeal and energy of all the medical officers engaged under the Red Cross, and was the bearer of a letter containing similar testimony from the Governor-General. Dr. Crookshank was also the recipient of a testimonial of the most gratifying character, voted unanimously by his medical *confrères* at Salonica, which ran as follows. "We, the undersigned medical officers of the Salonica hospitals, beg to thank you and your colleagues, Drs. Hope, Lightfoot, and Jolly, for the valuable assistance, alike material and personal, you have rendered to the Turkish sick and wounded, in a time of extreme need. We are anxious to bear our testimony to the promptness with which you commenced your work on arriving in Salonica. We have marked your untiring assiduity, your unselfish devotion, and your earnest sympathy towards the numerous wounded committed to your care. We have admired the facility with which you surmounted those many incidental difficulties always found where wounded soldiers are accumulated. We desire to congratulate you on the brilliant success which has attended your efforts in your

operative treatment of the wounded. We cannot forbear to mention our warm appreciation of the judicious liberality, combined with economy, with which you have distributed the very valuable stores so kindly given by the British National Aid Society."

THE MARTIN MEMORIAL.

INSPECTOR-GENERAL W. C. MACLEAN has issued a circular, from the Royal Victoria Hospital, Netley, stating that, shortly after the death of the late Sir Ranald Martin, C.B., a meeting was held in London, to take measures to perpetuate the memory of this eminent military physician. Many of the leading members of the medical profession were present and took part in the proceedings; and it was determined to raise a sum of money sufficient to give a gold medal to be competed for, twice a year, by the candidates for commissions in the medical services of the British and Indian armies, and the Royal Navy, in the Army Medical School—the medal to be awarded to the candidate taking the first place in military medicine. A sum of money amounting to £361 16s. was accordingly subscribed. Suitable dies for the medal were prepared by Messrs. Wyon, the well-known medallists; and (after paying the cost of these) the money remaining was invested in the names of Sir William M. Muir, K.C.B., the Director-General of the Medical Department of the Army, and Professor W. C. Maclean, C.B., of the Army Medical School. Three medals have been given since the institution of this prize; but the trustees regret to say that, to enable them to go on giving a gold medal each session without touching the capital, a farther sum of £70 is required for investment. The trustees appeal to the friends of the late Sir Ranald Martin, and in particular to the medical officers of the three services—old Netley men—to assist them by subscriptions (limited in this country to ten shillings, and in India to five rupees) to carry out the original purpose for which the medal was founded. The above-named trustees will be happy to receive contributions.

CONVEYANCE OF THE SICK.

A CORRESPONDENT of the *Times* writes on April 23rd:—Every one will admit that the present system of conveyance of sick and injured persons to hospitals is very objectionable. It is not possible, of course, to calculate how far the spread of infectious diseases prevails through the employment of hired vehicles. In New York, an excellent system exists. It is the intention of the Order of St. John to make an effort towards introducing here a system of ambulances to meet this want, by establishing at certain places centres where vehicles can be despatched at a moment's notice to any district wherever an accident or case of sickness may occur. It is to be hoped that the public will lend a helping hand to a work which is so important for their welfare.

THE ST. JOHN'S AMBULANCE ASSOCIATION.

THE principal local centre of this Society yet established is at Woolwich, and there, as well as at Chelsea and Sevenoaks, classes for men and women are held weekly. A class for men is just completing its course at the Custom House; whilst at Paddington there is a class for ladies. Maidstone, Brighton, and Worcester, we are informed, are following in the same direction; and new classes are about to be opened at the Albany Street Barracks, the Duke of York's School, and at Lavender Hill, Hackney. At Paddington, too, a class for men is ready to commence training. The instruction is given by members of the medical staff in a popular and practical manner. At the termination of each course of lectures, which is dependent on the instructors, there is an examination, attendance at which is quite optional on the part of the pupils. Those who can pass to the satisfaction of the examiners receive a certificate to the effect that they are qualified to afford first assistance to persons injured by accident or otherwise. And at the recent meeting of medical authorities, it was resolved that the various hospital committees shall arrange to supply higher instruction to the certificated pupils of the Association. Not only has the St. John Ambulance Association a considerable guarantee fund ready for the outbreak of any war in which the British military forces may be engaged,

and a steam-yacht kindly placed at its disposal by the Marquis of Conyngham for the conveyance of its *personnel* and *matériel*, but the roll of the Society already includes the names of one hundred and twenty-seven persons qualified as physicians, surgeons, dressers, storekeepers, dispensers, nurses, and bearers, of whom seventy-two are willing to take service abroad, as a supplement, if necessary, to the Army Medical Department. Of eighteen surgeons on the list, eleven have seen active service in the field. The Association already possesses a few ambulance carriages of the best and newest patterns, and the excellent two-wheeled litter patented by the Order of St. John; and a larger number of useful stretchers and other ambulance necessities are being rapidly distributed throughout the kingdom. Sir Richard Wallace, Bart., M.P., has subscribed £500 to the guarantee fund of the Ambulance Association.

RESTORATION OF THE APPARENTLY DROWNED.

THE School Board of London have, on the application of the National Life Boat Institution, decided to instruct all their scholars, now numbering 111,000 children, in its important directions for the restoration of the apparently drowned. The leading principles of these directions for the restoration of the apparently dead from drowning are founded on those of the late Dr. Marshall Hall, combined with those of Dr. H. R. Silvester. No one can doubt the great usefulness of giving such instruction to the children. At the same time, it might with advantage have been delayed, as at this moment there is a considerable belief that Dr. Howard's method is an improvement on that of the two gentlemen previously mentioned. Dr. Howard has been for some time under a promise to contribute to these pages a report of the demonstrations of his method which he gave at the last annual meeting of the British Medical Association, but, like many other men, finds himself most busy when engaged in holiday-making, as his occupations during his stay in Europe prove too onerous to leave him time to fulfil this engagement.

SCOTLAND.

THE MORTALITY STATISTICS OF GLASGOW.

DR. JAMES B. RUSSELL, the Glasgow Medical Officer of Health, has just issued the mortality statistics of that city for the past year. The population within the municipal boundary, estimated as at the middle of the year, was 546,921. Of deaths, there were 13,758, or 25 per 1,000; and of births, 21,179, or 38 per 1,000. The natural increase of population was, therefore, 7,421, or nearly 14 per 1,000. Of the great classes of diseases, the following is a list ranged according to the proportion in which they contributed to the total deaths: Consumption and acute diseases of the lungs, 5,285; nervous diseases of children, etc., 1,904; scarlet fever, measles, whooping-cough, croup, and diphtheria, 1,260; diarrhoeal diseases, 263; fevers, 262; small-pox, 11; and unclassified diseases, 4,773. The death-rate for the year was lower than the average for ten years—29.9 by 1.8; this being the lowest death-rate on record. On comparison with the eight "principal towns of Scotland", the mortality was exceeded by Paisley and Leith; and with the twenty "large English towns", by six, including Manchester, Liverpool, and Birmingham.

ABERDEEN UNIVERSITY.

THE ceremony of capping, in connection with the late medical graduation, took place on Thursday, April 24th, in Marischal College, Aberdeen; Dr. Pirrie, the Principal, presiding. The following were promoted to the degree of M.D.: R. R. Alexander, Hanwell Lunatic Asylum; Alexander Baird, Perth; R. S. F. Barnes, London; David Bower, Murrayfield, Edinburgh; Robert W. Burnet, London; James Cameron, Hendon, Middlesex; Charles Creighton, Cambridge; J. T. Crowden, Wisbech, Cambridgeshire; Charles Davidson, Coventry; D. P. Duirs, Dipton, Newcastle-on-Tyne; R. T. Hales, Holt, Norfolk; E. J. W. Hicks, London; H. J. Hott, Bromley, Kent; F. W.

Jackson, Broadstairs, Kent; F. H. Kyngdon, Sydney, New South Wales; Alex. McPherson, Haslingden, Manchester; R. J. Morice, Palmerston, South Australia; Wm. Morrish, Peckham, London; D. A. Patterson, Aden; J. M. G. Pirrie, Aberdeen; M. Poignand, Islington, London; J. Rodger, Aberdeen; W. T. Sheppard, Liverpool; James Simpson, Aberdeen; J. H. Simpson, Rugby; H. B. L. Smith, London; Henry Watson, Norwich; Robert Wharry, London; E. A. White, Malmesbury, Wilts; Alexander Williams, Tarland. The John Murray Medal and Scholarship was awarded to Alexander Milne Henderson as the most distinguished graduate of his year.

GLASGOW UNIVERSITY.

THE General Council of the University of Glasgow have elected the Duke of Buccleuch to the office of Chancellor, vacant by the death of Sir William Stirling Maxwell. It was stated at the meeting that, in order to take advantage of the Marquis of Bute's gift of £45,000 for the erection of the Central Hall of the University, a further sum of £25,000 would have to be expended, and an appeal was made for subscriptions. The library of the late Sir William Hamilton has been secured for the University of Glasgow by the liberality of twenty-one private gentlemen, each of whom had come forward and offered to give £100 for this object. This library is one of the most unique and perfect private philosophical libraries in Britain, or indeed in Europe.

VACCINATION.

At the Sheriff Court, Paisley, on the 25th ultimo, the Rev. John F. Potts, minister of the New Jerusalem Church, Glasgow, and residing at Mount Florida, was fined one pound and twenty-five shillings expenses, with the option of imprisonment for ten days, for refusing to allow his daughter, who had been born on July 30th, 1876, to be vaccinated. The defender explained that he refused from conscientious scruples, as it was his conviction that the operation did more harm than good.

CLINICAL EXAMINATION IN ABERDEEN.

A PROTEST has been lodged with the Senatus of the University of Aberdeen in reference to the clinical examination. The protest is signed by the whole of the gentlemen who graduated, and a good deal of strong feeling appears to exist on the subject; originating, in part at least, it is said, in the circumstances that among those who failed to pass in the clinical examinations—which are, of course, oral and not written—are several admittedly good students. These gentlemen's names are not, however, added to the protest, which has been promoted by those who passed and have graduated. The terms of the protest are as follows:

"To the Venerable the Senatus of the University of Aberdeen.

"The Petition and Protest of the undersigned graduates of the University of Aberdeen against the examiners appointed by the aforesaid Senatus in Clinical Surgery, as after mentioned, humbly sheweth, that your petitioners complain of the manner in which the examinations in Clinical Surgery in your University were conducted by the examiners appointed by you, and in particular that the questions put to the different candidates differed in degree, and were unsatisfactory as a test, and that the more especially as regards the qualification for honours and merit. Your petitioners are persuaded that a different system should henceforth be pursued, and your petitioners humbly suggest that it would be well that you should recommend to the present examiners to give a greater variety of cases and cover more ground in their questions. And your petitioners will ever pray."

IRELAND.

THE operation for ovariectomy was performed in two Dublin hospitals—the Coombe Lying-in and the Richmond—last week. The result in both cases was, unfortunately, unsuccessful.

A DEATH from small-pox has taken place at Drumsillagh, Cavan. The deceased had recently arrived from Dublin; and, it is supposed, had contracted the disease in that city.

WHOOPIING COUGH has been unusually fatal in Dublin during the March quarter, no less than eighty-two deaths having been recorded for this disease, against thirty-five in the preceding quarter.

MEASLES.

THIS disease has been very prevalent for a considerable time in various parts of Ireland; and although in Dublin during the first three months of this year, only about half the deaths occurred from that of the preceding quarter, yet the deaths registered (75) are above the average. In Belfast, for the same period, 42 deaths took place; in Cork, 49; and in Waterford, 65. In the last named town, measles with whooping-cough caused the deaths from the principal zymotic diseases to amount to the excessively high rate of 13.5 per 1,000 persons.

NURSES FOR THE SICK POOR OF BELFAST.

THE fourth annual meeting of the friends of the Society for Providing Nurses for the Sick Poor, was held last week in Belfast. This is a valuable organisation, and although recently established, has made satisfactory progress and performed a considerable amount of useful work by annually relieving a large class of sufferers. The objects for which the Society has been formed is to nurse the sick poor in their own houses; to give instruction in disinfecting and other sanitary matters; to teach the relatives of invalids the simple rules of nursing, and how to prepare food in a wholesome manner; also, to supply the nourishment that may be necessary for the recovery or well-being of patients in cases where they are too poor to procure it themselves. During the past year ending 1st March last, 607 sick persons were visited by the nurses, of whom 357 were sent by medical practitioners in the various districts allotted to the nurses. Each nurse visits the doctor of her district at the dispensary once a week, to receive his orders respecting old patients and to take new ones. Also, when necessary, she reports symptoms to him in any critical case. Among the patients thus attended to during the year, were many severe surgical cases, 161 consumptive patients, 22 cases of cancer, etc. During the twelve months, above 13,500 quarts of milk were given to the sick, besides beef-tea, arrowroot, eggs, and puddings; whilst beds, bedding, easy chairs, air-cushions, and medical appliances, were lent out when required. The expenses for the year amounted to £560; and by this sum, upwards of six hundred cases of suffering were relieved. The late Dr. Henry M. Johnston took a great interest in the Society; and by his will, a considerable sum of money has been placed in the hands of trustees, to be used as they may direct for the relief of the sick poor, the preference to be given to those suffering from phthisis and cancer, and living in those districts where his professional life had been chiefly spent.

PRESENTATION TO DR. GORDON OF BELFAST.

ON last Saturday, the past and present pupils, colleagues, and friends of Dr. Alexander Gordon, Professor of Surgery in the Queen's College, Belfast, presented that gentleman with an illuminated address and full-size portrait of himself. The address congratulated Dr. Gordon on the results of his professional labours for the past thirty-seven years, and in flattering terms referred to his work as an independent investigator, an ingenious inventor, and an original thinker; and assured him of the high regard in which he was held on account of his discoveries in surgery, his intimate knowledge of the whole field of medical science, and his great success in teaching and in instilling into the minds of his pupils that spirit of thoroughness which eminently characterised his own investigations. His researches on fractures and dislocations had gained for him imperishable laurels in those departments of surgery, and secured for him, years ago, the highest place as an authority on fractures of the clavicle and radius, the Gordon splints being now in use wherever enlightened surgery prevails. They begged to present the oil portrait to the Queen's College, as a slight token of their appreciation of his labours in raising its School of Surgery to the high position it at present occupies. Dr. Gordon having replied in appropriate terms, and a vote of thanks having been passed to the

President of the College for presiding, the proceedings terminated. The portrait, which has been placed in the Examination Hall, is by Mr. Hooke, and is stated to be a very accurate likeness, and to be possessed of great artistic merit. Dr. Gordon is represented as lecturing, holding in one hand a fractured bone, to which he is directing the attention of the class, whilst on a table close by there is delineated a fracture put up with Gordon's splints. There will be a copy, half-size, presented to Mrs. Gordon when completed.

THE DUBLIN ORTHOPÆDIC HOSPITAL.

A SPECIAL meeting of the friends and supporters of this well managed institution was held last week to consider the propriety of purchasing premises adjoining the hospital, with the view of enlarging it. The Right Hon. the Lord Mayor was in the chair; and, from the *ad interim* report presented by the House Committee, it appeared that both the demands on the accommodation of the hospital and the support it was receiving were increasing. They, therefore, recommended the purchase or hire of the adjoining house, a large building containing seventeen rooms, the owner of which had expressed his willingness to sell. Want of funds, however, stood in the way; but finally the House Committee were empowered to purchase or hire the premises, as they might deem expedient.

THE SMALL-POX EPIDEMIC.

IN consequence of the serious proportions the epidemic has assumed in Dublin, the Guardians of the North Dublin Union have, thanks to the prompt action of their chairman, prepared sheds at Glasnevin for the reception of patients and convalescent cases. These sheds are exceedingly well situated, being quite apart from the city although easily accessible. Hitherto, most of the cases of small-pox have been at the south side; but latterly, the disease has made its appearance on the north side also. Already, both acute and convalescent cases have been admitted to these sheds, and a medical officer—Mr. J. W. Mullen—appointed to their charge. The regular accommodation provided for small-pox patients by the hospitals proper, has in most cases been already exceeded. In two of these institutions, the disease has, we regret to say, spread to other patients within their walls. The cases of small-pox under treatment in the six principal hospitals on the 20th ult., show a considerable increase on the number for the week ending on that day. They amounted to 203, or 34 more than on the previous Saturday; 110 cases were admitted during the week, and 8 died.

WOOD-PAVEMENT FOR HOSPITALS.

CERTAIN streets in which some of the Dublin hospitals are situated being lately prepared for paving, efforts have been made, in the interests of the patients, that wood-pavement should be laid before them instead of the noisy stone. The Committee of the Corporation having charge of the streets, have heretofore not felt warranted in recommending the adoption of wood-pavement, in consequence, it would seem, of its greater expense, and from want of satisfactory evidence as to its durability. An opportunity has accordingly been lost, in one case at least, of affording an incalculable boon to the inmates of an hospital—Mercer's—which immediately abates on a street through which there is a heavy traffic day and night, and which receives a large number of accident and other serious cases. Attention, however, has again been drawn to the subject in connection with the Rotunda Hospital. The auxiliary portion of this hospital, viz., that in which ovariotomy and other important operations are performed, and which provides accommodation for "chronic" cases, is only six feet from the street. Patients have complained much of the noise from even the ordinary pavement; and as the street in which it is situated is being at present paved with stone, it is to be hoped that the Committee will accede to the strongly expressed opinion of the medical staff of that institution, supported as it has been by general professional opinion, and substitute wood-pavement, even if for no more laudable object than an experimental trial.

MEDICAL TEACHING IN THE UNIVERSITIES.

It was the late Dr. Parr, we believe, who rose up and said, "I will contund mine enemy in a pamphlet"; and, in modern history, the winged words of these *libelli* have often done greater things than heavier artillery. By pamphlets despotisms have been tempered; by Tract 90 the face of Oxford and of England was changed; and by pamphlets and post-cards the policy of our present Government has been shaken. We do not apologise, therefore, for keeping silence until the first reading of another recent pamphlet is over, and until its readers and our own are prepared to express some matured opinion upon its subject and contents. The subject of medical education at the old universities has indeed been discussed in our columns with vivacity, and by one correspondent at least with something more than vivacity; nor have we forborne to take our own part in this controversy. Moreover, but a few days have elapsed since the Board of Medical Studies at Cambridge have published their recommendations to the University: recommendations the result of eighteen months' most serious consideration, which, if carried out, will lead to a revolution in its medical teaching. It has been lately said that Cambridge is less given to thinking aloud than her sister (Professor Jack, *Fortnightly Review*, April 1878), and these important proposals have been developed in silence. Dr. Michael Foster's pamphlet *On Medical Education at Cambridge*, though not written at the suggestion, nor even with the connivance, of the Board of Medical Studies, is, then, most happily timed, and deals with this matter in a masterly and forcible way, and with the hand of one who has been long enough engaged in active teaching at Cambridge to know its work and powers, and yet not committed to it so early in life as to have lost his freshness of observation. Whether we permit ourselves to agree with the author throughout, or whether we restrain our acceptance of his arguments, we find, at any rate, that he commands our attention and our serious thought.

No less a question is raised by Dr. Foster and by our own correspondence than that of the whole use and meaning of an university: to wit, are the old universities centres only of general and liberal culture, or are they to contain also in themselves the means of special and of technical education? The word technical education has been used of late to signify practical education or the cultivation of the hand and eye; but it more properly means education in an art. Are the old universities, that is, to complete the general training of the mind only, or are they to adapt their sons to professions and handicrafts? During most of the present century, it has been held by those in power that the former function alone is theirs. We undertake, they say, to make you a scholar and a gentleman; it is not for us to aid in the conversion of your brain into a bread-winning machine. They complain of the utilitarian spirit of the age:

"hæc . . . sæcula . . . sunt ingrata camænis,
Ipse licet venias musis comitatus, Homere,
Si nihil attuleris, ibis, Homere, foras."

They may admit that a man must live, and that it is not ill indeed that some of their children throw themselves into the world and hasten after riches as churchmen, lawyers, physicians, or engineers. The life of the world may require them, but the highest life is devotion to pure knowledge and contentment with the endowment of daily bread. None can hear this saying without emotion; it appeals to that which is highest in man; but rough experience has thrust it aside, and, like many another noble dream, its *désillusionnement* comes with years. The hands are the hands of the modern professor, the voice is the voice of the cloister.

Dr. Foster points out very clearly the outcome of this ascetic doctrine. He says (page 21): "The presence in the University of a strictly professional and technical element would be, as indeed it in past times has to some measure been, a direct benefit of no small amount. From the very constitution of the human mind, the pursuit of knowledge for its own sake, when carried on by means of any complex organisation, is apt to become degenerate. The individual inquirer is, in most cases, preserved by the salt of his own enthusiasm from decomposing influences, but not so societies. There is always a tendency in an institution devoted to pure learning either to exaggerate the repose which the pursuit of knowledge needs until it becomes absolute stagnation, or, on the other hand, to fret the wholesome discussions which stimulate inquiry into idle disputations about trifles. Where the spark either of some practical object or of an irresistible personal impulse is wanting, the means always runs the chance of being honored as much as, or even more than, the end. The practical man to whom the end is all

and all, and the means only a means, is in such an assembly a corrective of almost inestimable value. And the University in this respect obeys the law of other societies. Granting that there is amongst us a very large amount of rightly directed intellectual activity, we must all confess to the existence of a tendency to academic repose broken by academic wrangling. Speaking for my own line of work, I feel convinced that the future study of physiology will suffer greatly at Cambridge, unless it be kept straight by the presence of a practical medical element; and what is true of one branch of learning is probably true of all, as it certainly will be to the benefit not only of the medical profession, but also of all other technical occupations, that the men employed in them should be brought up side by side with those to whom abstract truth or general culture is all in all."

We give this extract in full, in the conviction that herein lies the root of much difference of opinion concerning the modes and means of university education, nor could any words of ours add to the force of it.

But, it may be objected, granting the development side by side of research and of applied science is wholesome for both, yet neither Oxford nor Cambridge can, in the nature of things, offer adequate instruction in the professions. We have to consider this objection only in so far as it concerns the profession of medicine. To begin, such was not the forecast of the founders of medical chairs at various dates in these universities. When some of them were founded, surgery was scarcely even an empirical art; but, in medicine, a Regius Professorship was founded in both universities by Henry VIII, and the medical endowments of Dr. Caius were made a few years later; the Lee's Readership at Christchurch was founded in 1755; the Aldrichian Professorship of Medicine in 1803, and the Downing Professorship in 1800. Various as these dates are, it may still be urged that circumstances have much changed even since the last of them, and that use of them became impossible, which before was possible and desirable. Now, it would appear, as regards Oxford, at any rate, that whatever holds good at present has held good in the past; for we suspect that, since Oxford was a foundation, it has never bestowed more than ten medical degrees in any one year; it is not true, then, that men have deserted the old universities for the new, as expenses increased as tests became relatively more galling, and as locomotion became more easy. The truth is rather that Oxford and Cambridge fail, and have always failed, to offer the inducements to students of medicine which are offered by other schools. At neither university has a school of medicine ever been duly organised, and now it is loudly asserted, first, that the means for such an organisation do not exist, or, secondly, if they exist in a measure, that the results of such an organisation would not justify the outlay, or be worthy of the universities or of the nation.

If we admit that a wealthy university should be the seat of universal knowledge, and if we admit that abstract and applied learning should, for the sake of each, develop together, we must carefully examine these assertions, and the authority upon which they are made. In respect of authority, we find a curious division. Oxford, as a whole, supports them, and Cambridge, as a whole, denies them. The Regius Professor of Medicine at Oxford supports them; the Regius Professor at Cambridge denies them; the Linacre Professor supports them; the Trinity Praelector denies them. Indeed, the Professor of Anatomy of Cambridge is the only Cambridge authority who supports them, and yet he would not only teach pathology at Cambridge, but would initiate men there in practical medicine and surgery, *e.g.*, in bandaging, manipulation, stethoscopy, and general principles; in a word, he would detain men until their second M.B., but thinks any further teaching in midwifery, medicine, and surgery would be a third-rate affair. Dr. Foster's argument, that medical education at Cambridge might be complete and excellent, is therefore supported by every competent authority in Cambridge save one, and even Dr. Humphry is but a partial dissident. The curiously opposite view taken at Oxford is too well known for repetition; but, to show how widespread it is, we will pass over these well known opinions of Professors Acland and Rolleston to add, of our own personal knowledge, that the views of these distinguished men are largely shared by their juniors.

Authorities being thus divided, we must examine the assertions for ourselves. The question is one of so great importance that we do not hesitate to give up a large part of our columns to the discussion of it; but, on the other hand, we are bound, by heavy demands upon our space, to be brief where brevity is possible. After close inquiry, the arguments against the organisation of schools of medicine in Oxford and Cambridge seem to revolve themselves about one only; *viz.*, the allegation of the inadequacy of the local hospitals. Before entering into this, let us agree that an Oxford or Cambridge training is invaluable to a physician or surgeon, whereupon we may presume that the longer the University can retain its medical pupils the better, if they

are working to advantage. Now, any difficulty of teaching clinical medicine or surgery does not affect the teaching of the earlier subjects: of human anatomy, of physiology, of pathology, and of elementary medicine and surgery. It is far from convincing to reply that the facilities for such teaching will spring up where the teaching is needed; and that the absence of them in Oxford and Cambridge is proof of a want of demand. On the contrary, such growth in Oxford has been deliberately crushed, and foundations like the Lee's Readership have been so misapplied* that we cannot but think some remedy at law must be possible. We shall carry our readers with us when we say that human anatomy, physiology, and pathology, for instance, could be taught far better at Oxford and Cambridge by the occupants of well endowed chairs, than in London by the young physicians who use such chairs only as means to other ends. Oxford, in her desponding way, tells us that neither for anatomy nor for pathology can material be had. Surely, this is the argument, not of a vigorous but of a spiritless community. Oxford is surely as well able to secure material as Cambridge; and Dr. Foster (page 23) foresees no difficulty in obtaining materials for pathology, and, from personal knowledge of Dr. Bradbury, we may venture to assert that, during the four or five years in which he has lectured upon pathology in Cambridge, he has had plenty of material. Surely, if not autogenetic, it can be imported, and the neighbouring asylum and workhouses may always be laid under tribute. As to subjects for dissection, we may say that nearly all teachers are agreed that far too much time is taken from physiology to be given to topographical anatomy; but, even if we allow the fullest measure to anatomy, we deny that the difficulty of obtaining subjects is greater at Cambridge or Oxford than in every other school. But such material will not come to those who sit and sigh for it. We know a good deal about the dissecting-room at Cambridge, and that the forty or fifty men at work there complain of no lack of material. The distinguished professor of anatomy took care that no difficulties should stand in his way. By slow and careful but determined efforts, Dr. Humphry won to his side the guardians of unions and the magistracy, and so gained the unclaimed over a radius of many miles, nor did he rest until he obtained that alteration of the Anatomy Act which enables teachers to preserve subjects during the summer months. If the hospitals be defective, their deficiency up to this point is a positive advantage; for, as Dr. Foster says (page 13), "some men flit from the dissecting-room to the hospital, and from the hospital to the physiological laboratory; and they cannot find time to grasp any one of the three subjects, on account of the pains they are taking to lay hold of the other two. In the end, they find they have learned none of the three". Nothing can be truer or more needed than this stricture; but we hasten to add that, at Cambridge, it is wholly undeserved; undeserved, that is, so far as tutorial wishes and admissions are concerned.

Up to a certain point, then, the absence of a clinical hospital is even a gain, and the Board of Medical Studies have recommended to the University of Cambridge the endowment of a Professorship of Pathology, without right to practise, with a stipend of £700 *per annum*, and with a demonstratorship and laboratory. In Oxford, a professor of human anatomy should likewise be founded out of the Lee Fund.† We presume that, like the Trinity Praelector in Cambridge, the Magdalen lecturer would take charge of physiology in Oxford. *Materia medica* and therapeutics form the subjects of the Downing professor, and a like professor will be needed in Oxford, if the latter university is not to be deprived by her sister not only of all her medical students, but also of those students of science who intend to graduate in medicine.

Against the teaching of medical studies up to this point, and against the foundation and probable success of such chairs—chairs only to be rivalled by those in the University of Edinburgh—there is, so far as we know or can learn, but one more argument. It is said that the best men will not take posts which will not lead to practice. Now, we think such chairs ought not to lead to practice, and we should only permit the professors of medicine and surgery to practise, because we think their teaching would suffer in vigour and variety if they were restrained to hospital experience. We think that the counter-attractions of increasing practice are a great injury to the teaching in the London schools, and are of opinion, therefore, that the university professors should have stipends which, with a proportion of fees, would give them clear incomes of £1,000 *per annum*. Now, is it true, as even Dr. Foster fears, that the very best men would decline these

* *Vide* BRITISH MEDICAL JOURNAL, January 19th, 1878, page 95.

† The recommendations of the Oxford Commission are published in the *Times* for April 28th. A friendly critic will call them tentative; a hostile feeble. They seem to us even less adequate than the reported resolutions of the meeting of Oxford dical graduates lately held in London.

chairs? Dr. Foster suggests that they might be held for a few years by men who through them would seek to make reputations commanding enough to secure practice in case of their removal to large towns in their later years. Surely, those who speak thus largely overrate professional incomes and underrate the toil and sacrifices by which such incomes are won. A professorship even of £800 *per annum*, with a laboratory and demonstrator, obtained, say, at the age of 30, would at least compensate the student, who, to the love of research, might sacrifice the privilege of waiting in an expensive house on no income to speak of till the age of 40, of then taking his luck of public favour, and of making, perhaps, some four or five thousand a year until his health and vigour fail. Nay, is not one thousand *per annum* likely to be a strong attraction to those more ardent inquirers who would prefer an assured, if comparatively moderate, income, with leisure for work and for academic and social delights, to a scramble after five or ten times the amount in fees: fees gained at the sacrifice of private study, of teaching opportunities, of leisure, of vacation, and of all the amenities of life! We do not know what such men as Dr. Lockhart Clarke and Mr. Parker would say on this matter; but we should be much surprised to find them against us.

[To be continued.]

ARMY MEDICAL SERVICE.

THE following letter has been addressed by the Right Hon. Colonel Stanley, Secretary of State for War, to Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee of the British Medical Association.

“War Office, 27th April, 1878.

“Sir,—In considering the valuable reports which have been received from the several medical teaching bodies on the circumstances which tend to deter eligible candidates from coming forward for the Army Medical Service, the Committee appointed to inquire into the subject would be greatly helped if they had before them a trustworthy estimate of the average earnings, under ordinary circumstances, of medical practitioners in civil life. I am, therefore, directed by Secretary Colonel Stanley to request that, on behalf of the British Medical Association, you will favour him as soon as possible with an estimate, on the enclosed form, of the average earnings in question.—I am, sir, your obedient servant,

RALPH THOMPSON.”

Estimate of the Average Earnings of a Civil Medical Practitioner.

(1.) Period of Career.	(2.) Average Annual Earnings.	(3.) Charges of a Professional Nature, which have to be met out of the Earnings shown in column (2).
One year after obtaining diplomas.		
Ten years after obtaining diplomas.		
Twenty years after obtaining diplomas.		
Age 50.		
Age 60.		
General Remarks.		
Signed.....		
Date.....		

HARVEY TERCENTENARY MEMORIAL FUND.

THE additions to the Fund during the past week amount to nearly £100, and include the following contributions. From the Town Council of Folkestone, fifty guineas; the Obstetrical Society of London, twenty-five guineas; and the North of England Branch of the British Medical Association, five guineas. We are asked again to request the members of the profession who have not hitherto contributed to this object to kindly send their donations at once to either of the hon. treasurers (Sir George Burrows, Bart., or Mr. Prescott Hewett), or to either of the hon. secretaries (Mr. Geo. Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone), or to pay them into the account of the Harvey Tercentenary Memorial Fund at the Western Branch of the Bank of England, Burlington Gardens, London, W. Subscriptions from five shillings upwards will be very acceptable.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT a meeting of the College on April 25th, a portrait of the late Dr. P. M. Latham was presented by his daughter, and thanks were voted.

A communication from Liège was read, stating that a public ceremony would be held in June, when a bust of Professor Schwann was to be placed in the University Museum, and inviting some representative of the College to be present.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE annual meeting of this District will be held at Canterbury, on May 16th, at 1.30 P.M.

It is proposed that after the meeting the members will visit the County Asylum at Chartham, permission being kindly afforded by Mr. R. Spencer, the Medical Superintendent.

WM. KNIGHT TREVES, F.R.C.S., *Honorary Secretary.*

Margate, April 29th, 1878.

METROPOLITAN COUNTIES BRANCH.

A SPECIAL General Meeting of this Branch will be held at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, May 15th, at 4 P.M.

1. To receive and (if thought proper) to adopt an amended code of By-laws for the Branch.

3. To consider the Bills for the Amendment of the Medical Act (1858) now before Parliament.

An Ordinary Meeting of the Branch will be held at the same place on Wednesday, May 22nd, at 8 P.M., when papers on Vaccination will be read by Dr. E. C. Seaton and Dr. J. Greene of Birmingham.

Further particulars will be given in the circulars convening the meetings.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*
W. CHAPMAN GRIGG, M.D. }

57, Doughty Street, W.C., May 2nd, 1878.

NORTH OF IRELAND BRANCH.

A MEETING of this Branch will be held on Friday, the 17th instant, at 12 o'clock, noon, in the Board Room, Belfast Royal Hospital.

JOHN MOORE, M.D., *Honorary Secretary.*

Belfast, May 1st, 1878.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

AT a meeting of the Committee of Council, held at the Freemasons' Tavern, Great Queen Street, London, on Wednesday, April 17th, 1878: Present, Dr. R. W. FALCONER (President of Council), in the Chair, Dr. E. Wilkinson (President), Mr. W. D. Husband (Treasurer), Dr. T. Clifford Allbutt, Mr. Alfred Baker, Mr. J. Wright Baker, Dr. M. M. De Bartolomé, Dr. Louis Borchardt, Mr. Callender, F.R.S., Dr. Alfred Carpenter, Dr. Chadwick, Dr. J. W. Eastwood, Mr. W. A. Elliston, Dr. B. Foster, Mr. R. S. Fowler, Dr. E. L. Fox, Dr. W. C. Grigg, Dr. C. Holman, Mr. Arthur Jackson, Dr. D. J. Leech, Mr. E. Lund, Mr. Frederick E. Manby, Mr. Frederick Mason, Dr. Edwin Morris, Mr. R. H. B. Nicholson, Dr. Charles Parsons, Dr. Procter, Dr. Edward H. Sieveking, Dr. A. P. Stewart, Dr. W. F. Wade, Dr. E. Waters, and Mr. C. G. Wheelhouse:

The minutes of the last meeting and of the special meeting were read and found correct, with the exception of recording the vote upon the female question as unanimous at the special meeting of the Committee of Council, which was amended.

Read letter of apology for non-attendance from Dr. Duffey.

Read letter from Mr. George Stanger, asking for support, together with the opinion of Mr. Day, Q.C., in reference to the case of the Apothecaries' Company v. Shepperley.

Resolved: That under the circumstances of the case, the sum of £25 be voted towards the expenses of the litigation in the cause of the Apothecaries' Company v. Shepperley.

Read letter from Mr. G. Eastes, Honorary Secretary to the Harvey Tercentenary Memorial, asking for a grant in aid of the funds of the memorial.

It was moved:

That the sum of £25 be granted for the promotion of the Harveian Memorial.

The motion having been put from the Chair, the same was declared to be lost.

Read letter from Mr. Napper, Secretary to the West Surrey District of the South-Eastern Branch, forwarding resolution, of which the following is a copy :

"That in the opinion of this meeting the admission of ladies to the membership of the British Medical Association is not desirable."

Similar resolutions were also read from Dr. Eyton Jones, of the North Wales, and Dr. Shettle, of the Reading Branches.

Resolved : That the one hundred and fifteen candidates for admission whose names appear on the circular convening the meeting be elected members of the Association.

The minutes of the Journal and Finance Committee of to-day's date were read, and also of the Subcommittee of the Journal and Finance Subcommittee.

Resolved : That the minutes of the Journal and Finance Committee of to-day's date, together with the minutes of the Subcommittee of the Journal and Finance Committee, be approved, and the recommendations carried into effect.

The minutes recommended that tenders be obtained from five builders for the alteration of the premises in the Strand, and that the quarterly accounts be paid.

Resolved : That the financial statement for the year ending December 31st, 1877, be approved, adopted, and published in the JOURNAL (see page 625).

Resolved : That the President of Council, the President, and Dr. Foster be appointed a Subcommittee to draw up the Annual Report.

Dr. Carpenter, the Chairman of the Committee appointed for obtaining legislative restrictions for habitual drunkards, brought up the report of that Committee of to-day's date. The minutes contain a letter from the Home Secretary stating his inability to receive the deputation in consequence of a press of business; also a recommendation from the Committee that the Home Secretary be urged to receive a deputation.

It was moved :

"That the minutes of the Committee for obtaining legislative restrictions for Habitual Drunkards, of to-day's date, be approved and the recommendations carried into effect."

Whereupon an amendment was moved :

That the minutes of the Committee be approved; but that a written statement, instead of a deputation, be sent to Mr. Cross, the Home Secretary, as requested by him.

The amendment having been put from the chair, the same was declared to be carried.

Read letter from Dr. Moore of Belfast, with copy of by-laws of Belfast Branch.

Resolved : That, in accordance with By-law 40, the North of Ireland Branch be recognised as a Branch of the British Medical Association.

Resolved : That the Committee of Council desire to welcome very cordially the North of Ireland Branch as an important addition to the Association, and they trust that it may be the means of extending the Association in the North of Ireland, and also of increasing the friendly intercourse of the Irish with the English and Scotch members of the profession. The thanks of the Association are hereby given to Dr. Moore and others for their great assistance in founding the Branch.

Also from Mr. Gayleard, of Jamaica, together with the by-laws of the Jamaica Branch :

Resolved : That, in accordance with By-law 40, the Jamaica Branch be recognised as a Branch of the British Medical Association.

Resolved : That the Committee of Council welcomed with great pleasure the first Colonial Branch of the British Medical Association.

Resolved : That a Subcommittee be appointed to consider the various by-laws now placed before the Committee of Council, consisting of the President of Council, Dr. Wade, Dr. Allbutt, Dr. Leech, and Dr. Parsons.

It was moved :

"That the questions now submitted to the Committee regarding the privileges of lady members, which have been approved by Mr. Upton, be submitted to counsel in accordance with the instructions of the General Meeting of the 2nd instant."

"That the questions relating to the privileges of the female members of the Association be referred to Mr. Bosanquet, of the Oxford Circuit, for settlement, and, when settled, they be referred to Mr. Benjamin, Q.C., for his opinion."

Whereupon an amendment was moved :

That the subject be referred to a Subcommittee, consisting of the President of Council, Dr. Chadwick, Dr. Sieveking, Dr. Wade, Dr. Parsons, Dr. Borchardt, to which was subsequently added the name of Dr. Holman, with power to act in the matter.

The amendment having been put from the chair, the same was declared to be carried.

Read : Resolution from the Metropolitan Counties Branch, of which the following is a copy :

Extract from Minutes of Meeting of Council of Metropolitan Counties Branch, held January 26th, 1878.

"Resolved : That the Council of the Metropolitan Counties Branch beg to suggest to the Committee of Council of the British Medical Association that, in making arrangements for new premises, provision should be made for a central reception-room for the members of the British Medical Association."

It was moved :

That the consideration of the subject of the provision of a reception room in London be referred to the Premises Subcommittee.

Whereupon an amendment was moved :

"That the consideration of this question be deferred for future discussion."

The amendment having been put from the chair, the same was declared to be lost.

Whereupon a second amendment was moved :

"That the Committee of Council are unable at the present to entertain the question of providing a reception room in London for the general members of the Association, but, as soon as the business premises are in successful operation, the Committee of Council will be prepared to consider—first, financially, whether the funds of the Association can afford such an annual outlay; and, second, whether such a reception room would be a sufficient advantage to the provincial and distant members as to induce the Committee of Council to recommend the scheme for adoption."

The amendment having been put from the chair, the same was declared to be carried.

It was then proposed as an amendment :

"That the Committee pass on to the next business;" which was declared to be carried.

Read communication from Mr. R. Middlemore, Birmingham, offering £500 to found a prize to be awarded every three years to the author of the best essay on the scientific and practical value of the improvements which have taken place in ophthalmic medicine and surgery.

Resolved : That the warmest thanks of the Committee of Council of the British Medical Association be forwarded to R. Middlemore, Esq., of Birmingham, for his very liberal donation of £500 for the foundation of a triennial prize, to be awarded for the best essay on the scientific and practical value of the improvements which have taken place in ophthalmic medicine and surgery, and that it be termed the Middlemore Prize.

Resolved : That a grant of £25 be made to the Manchester Subcommittee of the Out-Patient Reform Committee towards the expenses of procuring the information from the various provident dispensaries in Manchester.

Resolved : That the thanks of the Association be given to Dr. Waters for the promptness of his action in the matter of the Medical Reform and the Medical Acts Amendment Bill now before Parliament, and that he be reimbursed the amount that he has expended.

HOSPITAL OUT-PATIENT REFORM COMMITTEE.

THE following extracts from the Minutes of Proceedings have been forwarded to us for publication.

At a meeting of the Committee appointed at the Annual General Meeting of Members at Manchester, August 10th, 1877, held at the Office of the Association, October 9th, 1877—Present : Mr. TIMOTHY HOLMES (in the Chair), Dr. Borchardt, Mr. Nelson Hardy, Dr. Robert Lee, and Dr. Joseph Rogers.

Read resolution of Annual Meeting, of which the following is a copy :—

"That a Committee, consisting of the following gentlemen, be appointed, with full authority to use the influence of the Association to procure such changes in the administration of out-patient relief at hospitals as they find necessary, and that the working of the present system of Provident Dispensaries in Manchester be carefully investigated and reported upon, viz. : Dr. Eason Wilkinson, Dr. A. P. Stewart, Dr. Alfred Meadows, Mr. T. Holmes, Dr. J. R. Lee, Dr. Joseph Rogers, Dr. Ford Anderson, Mr. Nelson Hardy, Dr. Brierley, Dr. Haddon, and Dr. Borchardt."

Read letter from Dr. Brierley, of which the following is a copy :—

"City Road, Manchester, October 8th, 1877.
"Sir,—I regret that I cannot attend the meeting to-morrow of the Committee of Out-door Hospital Reform. It seems to me the Provident System is that by which we shall best remedy existing evils. Careful investigation into all applications for medical aid should be made by a paid official. It is not necessary that Provident Dispensaries be supplied before such inquiry is made into the circumstances of patients, for we have proved here that a very small percentage of those refused at the free go to the provident society. The conclusion, of

course, is—they seek aid from an ordinary practitioner, which is the most whole some effect one could wish, from watching the cases seeking relief for nothing. I have already said the scheme has utterly failed here. This is no fault of the principle, but bad management. There is an entire want of harmony between the profession and the public, which is a great obstacle in the working of the scheme.—I remain, yours,
"F. FOWKE, Esq."

"JAMES BRASSEY BRIERLEY."

Moved by Mr. HARDY, seconded by Dr. ROGERS, and

Resolved: That Dr. Eason Wilkinson, Dr. Brierley, Dr. Haddon, and Dr. Borchardt be appointed a Subcommittee to investigate the question of the working of the Provident Dispensary System in Manchester, and to report to this Committee at a future meeting:

1. Whether there is any evidence of improper cases admitted to the benefits of the Institution.

2. Whether the working of the Institutions has proved satisfactory, (a) to the medical officers of the Institutions, (b) to the medical profession at large in Manchester.

3. What has been the effect on the Free Charities which co-operate with the Provident Dispensaries, and on those which do not.

4. What relations prevail between the Provident Dispensaries and Sick Clubs.

5. Whether the working of Provident Dispensaries is satisfactory to their lay members.

6. What is the present system of Out-door Poor-law Medical Relief in Manchester, and how does it affect the Provident Dispensary System.

Resolved: That the Subcommittee be requested to give information upon the foregoing questions, and any other that they may find desirable.

Resolved: That a statement be prepared to lay before the Court of Aldermen, and the Colleges of Physicians and Surgeons.

Resolved: That Mr. Hardy and Dr. Lee be requested to draw up a statement to lay before the Court of Aldermen and the College of Physicians and the College of Surgeons, and to forward it to the Chairman.

At a meeting, held on Thursday, November 29th, 1877—Present: Mr. TIMOTHY HOLMES (in the Chair), Dr. Ford Anderson, Mr. Nelson Hardy, Dr. Robert Lee, Dr. Joseph Rogers, and Dr. A. P. Stewart: The minutes of the last meeting were read and found correct.

Read letters of apology for non-attendance from Dr. Eason Wilkinson and Dr. Brierley.

Read letter from Charity Organisation Society, asking that the petition to the Court of Aldermen be deferred till after a deputation to the London Hospital Committee from the Charity Organisation Society, and asking for the assistance of the British Medical Association.

Resolved: That the co-operation of the Committee with the Charity Organisation Society in the matter be given as far as possible.

The statement of Mr. Nelson Hardy and Dr. Robert Lee was then considered; and, after a few alterations, was adopted.

Resolved: That the Secretary be instructed to write to the Court of Aldermen, requesting to be informed when it would be convenient to them to receive a deputation relative to the management of the City Hospitals.

Resolved: That Mr. Ernest Hart be invited to accompany the deputation to the Court of Aldermen.

At a meeting held on Wednesday, the 9th day of January, 1878—Present: Mr. TIMOTHY HOLMES (in the Chair), Mr. Nelson Hardy, Dr. Robert Lee, Dr. A. P. Stewart, and Dr. Eason Wilkinson.

The minutes of the last meeting were read and found correct.

The Secretary reported that, in reply to this application to the Court of Aldermen, the following letter had been received.

"Guildhall, E.C., 6th January, 1878.

"Sir,—In reply to your communication of the 2nd inst., I have to inform you that, should your Committee desire to approach the Court of Aldermen, it must be by petition, to be presented by a member of the Court of Aldermen, and of which notice must be given at this office three clear days before the Court, and the signature of the member who will present it must be endorsed thereon. I enclose form of petition, in case your Committee desire to proceed in the manner above indicated. At the same time, so far as I am able to understand the Committee's object, it is right I should state that the Court of Aldermen have no jurisdiction in the matter.—I am, sir, your obedient servant,

"JOHN P. M. NORTON.

"To the General Secretary, British Medical Association,
36, Great Queen Street, W.C."

And in consequence a petition had been prepared, of which the following is a copy.

"To the Right Honourable the Lord Mayor and Court of Aldermen.

"The humble petition of the undersigned representative members of the British Medical Association, a body numbering over seven thousand members,

"Sheweth,—That, on behalf of that Association, we desire to

ask the assistance of your Right Worshipful Court in our endeavours to procure a reform of certain abuses which have crept into the administration of the large metropolitan hospitals, particularly as regards their out-patient departments. We need hardly remind you that after the suppression of the 'religious houses' by Henry VIII, the care of two of the largest of these hospitals—namely, St. Bartholomew's and St. Thomas's—was specially confided to the authorities of the City in response to the petition of Sir Richard Gresham, Lord Mayor, who pleaded for the poor, needy, sick, and indigent persons lying in every street, and undertook on the part of the City that if their petition was granted, these sick and indigent persons should be 'refreshed, maintained, and healed of their diseases, frankly and freely, by physicians, surgeons, and potycaries'. We are fully aware that these hospitals have ceased to be so directly under the control of your Right Worshipful Court as they once were; but we cannot help noticing that whenever any such important step as the election of a Treasurer to one of these Royal Hospitals has to be taken, your influence, as forming a large portion of the body of Governors, has a most important share in deciding the result (as in the recent instance of St. Thomas's Hospital); and we therefore do not suppose that you would desire, if you could, to divest yourselves of all responsibility for the management of these hospitals.

"The two errors in the administration of out-patient relief at hospitals, to which we desire to draw your attention, have arisen, as it seems to us, through a disregard of the undertaking given by Sir Richard Gresham, on the part of the City, that these hospitals should be kept especially for the poor and indigent, and that the patients treated at them should be treated by properly qualified physicians, surgeons, and apothecaries.

"The latter of these two points we consider of the utmost practical importance. The popular impression is, that hospitals are places where those who are sick or injured have only to apply, in order to obtain the best medical advice and medicines, and where the most skilled physicians and surgeons render their personal assistance to all who apply. However true this may be as regards the in-patients, it is certainly not true with reference to the out-patient department of large hospitals, in which the number of qualified medical men is usually quite inadequate to do any but a small proportion of the work; the inference being that the remainder is done by unqualified students, or some other persons not appointed for the purpose.

"The system has thus become, to a certain extent, one of deception on the public, the sick being attracted to hospitals by the names of famous physicians and surgeons on their medical staffs, and being treated, when there, too often, we have reason to believe, by students in their second or third year of study, or at least by persons whose names are not before the public.

"The loss of time to poor working men and women, caused partly by this inadequacy of the medical staffs, and partly by the indiscriminate admission of all classes who like to apply at these departments, is something almost incredible—four, six, or even eight hours being not unfrequently lost in attendance and waiting for medicines, where two at the utmost ought to be sufficient.

"Your petitioners consider that it is neither creditable to the City of London nor to their own profession, that such blots as these should remain on the administration of our great medical charities, and therefore ask that you will either receive a deputation from them on the subject, or refer the matter to a committee, at which they may be heard.

"And your petitioners will ever pray.

(Signed) "T. HOLMES, Chairman of the Committee of
the British Medical Association on
Hospital Out-Patient Relief.

"M. A. EASON WILKINSON, M.D.

"A. P. STEWART, M.D., F.R.C.P.

"ALFRED MEADOWS, M.D.

"ROBERT J. LEE.

"JOSEPH ROGERS, M.D.

"J. FORD ANDERSON, M.D.

"H. NELSON HARDY."

Signed by Mem-
bers of above
Committee.

Resolved: That Mr. Holmes be requested to write to Sir Sydney Waterlow, asking if he would endorse the petition.

Resolved: That copies of the memorial be sent to each alderman, previous to the presentation of the petition to the Court.

Dr. Eason Wilkinson reported that as it took a long time to complete the report of the Subcommittee on Manchester Provident Dispensaries, in consequence of the number of institutions to be communicated with, it was not at present ready for presentation to this Committee. Circulars had been sent out to various institutions.

Mr. Hardy referred to Mr. Holmes's letter in the BRITISH MEDICAL JOURNAL, and suggested that it would be as well to circulate a copy of

it to each member of the Committee, and ask their opinion about adopting it as the future basis of the Committee.

At a meeting held on February 26th, 1878—Present: Mr. T. HOLMES (Chairman of Committee, in the Chair), Mr. Hardy, and Dr. Meadows. The minutes of the last meeting were read and found correct.

Read letter from Dr. Brierley, of which the following is a copy, viz.:

"Out-door Hospital Reform, Subcommittee of the British Medical Association, City Road, Manchester, Feb. 25th, 1878.

"My dear Sir,—At a meeting of the above Committee, held here on the 8th inst., letters were read from several medical officers of the Provident Dispensary Staff in this place, but no information of a definite character was forwarded. Ultimately, it was resolved that the only effectual way of getting the desired result was to employ a paid officer to visit the whole of the families at their own residence, and make inquiries as to the amount of weekly earnings, position, etc.

"The estimated cost of this work is £40 to £50; and I am instructed to ask you if the Association would feel inclined to lay out such a sum for the purpose.—Yours faithfully,

"JAS. BRASSEY BRIERLEY."

The Chairman then read the letter that he proposed to send to Sir Sydney Waterlow.

Mr. Hardy read letter from Alderman Sir William Rose, declining to present the petition to the Court of Aldermen.

Resolved: That Alderman Sir William Rose's letter be entered on the minutes.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE sixth ordinary meeting of the session 1877-78 was held in the Queen's College, Birmingham, on March 14th, 1878. Present: Mr. SAMPSON GAMGEE, President, in the chair, and thirty-nine members.

New Member.—Mr. F. S. Goulder of Dudley was elected a member of the Branch.

Communications.—The following communications were made:

1. Mr. LAWSON TAIT: Specimens of Thymol and Thymolised Lint.
2. Dr. MALINS: An Ovarian Cyst.
3. Mr. H. G. LOWE: Loose Cartilages from the Knee-joint.
4. Mr. H. M. MORGAN: Obstetric Tractors.
5. Mr. H. M. MORGAN: India-rubber Ring for Midwifery Forceps.
6. Mr. H. R. KER: A paper on Black Country Experience, Medical and Surgical.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

THE first meeting for the present year was held at the New Kentish Hotel, Tunbridge Wells, on Friday, March 29th: F. MANSER, Esq., in the Chair. Twenty-two members and visitors were present.

Next Meeting.—It was decided that the next meeting be held at Lewes in the end of May; and that Mr. W. CROSSKEY be invited to take the chair.

Communications.—The following communications were made:

1. Dr. FAIRLIE CLARKE: Case of Diffused Melanotic Cancer originating in a Black Mole.
2. Dr. MILNER BARRY: Dr. Southey's Trocar and Cannula.
3. Dr. RANKING: Membranous Dysmenorrhoea.

The Harvey Tercentenary Memorial.—A letter from the Committee of the Harvey Tercentenary Memorial Fund was read and ordered to be referred to the Council of the South-Eastern Branch, recommending them to take it into their favourable consideration.

The Dinner took place at the New Kentish Hotel. Twenty-two sat down: Mr. F. MANSER in the Chair. After explanations from Dr. C. HOLMAN, a resolution expressing confidence in the Committee of Council of the Association and approval of the course they had pursued was agreed to unanimously.

WEST SOMERSET BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, April 11th, at 5 P.M.: SAMUEL FARRANT, Esq., President, in the chair.

Dinner.—A good dinner was, as is usual at these meetings, the prelude to the business of the evening.

Letters of Regret.—Letters from ten members accounting for their absence, were laid before the meeting.

Representatives of the Branch.—Samuel Farrant, Esq., Taunton; F. J. C. Parsons, Esq., Bridgwater; and Dr. Kelly, Honorary Secretary; were elected as representatives of the Branch in the Council for the year 1878-79.

Question for Discussion.—The question of which notice had been sent to each member a month previously, viz., "Is the use of water desirable in dressing wounds?" was put from the chair to each gentleman present. A written answer from Dr. Cordwent, who was not able to attend, was read by the secretary. The weight of opinion and argument, as expressed in the answers given, was to the effect that it is not desirable to use water for dressing fresh healthy wounds.

Communications.—The following communications were made:

1. Case of Transposition of the Thoracic and Abdominal Viscera, by G. W. RIGDEN, Esq. The patient attended, and submitted himself for examination.
2. Compound Dislocation of the Astragalus and Removal of the Bone, by SAMUEL FARRANT, Esq. The dislocation was caused by the patient falling from some height. He was admitted into the Taunton and Somerset Hospital with the bone hanging by some tendinous shreds under the outer ankle. There was no fracture of either tibia or fibula. The wound healed perfectly, and there was no perceptible deformity from the loss of the bone. The patient attended, and exhibited his foot.

Autumnal Meeting.—Mr. STEPHENS of Ilminster proposed that the autumnal meeting should be held at Ilminster. The question was postponed to the summer meeting.

New Members.—Two new members were proposed.

STAFFORDSHIRE BRANCH: ORDINARY MEETING.

THE second ordinary meeting of this session was held at the London and North Western Hotel, Stafford, on Thursday, February 28th, 1878; present, Dr. ARLIDGE, President, in the chair, and twenty-two members.

New Members.—The following members of the Association were duly elected members of the Branch: Dr. Beales (Congleton), Dr. Edgar Flinn (Browhills), Mr. McAlldowie (North Staffordshire Infirmary).

The Dental Practitioners' Bill.—A memorial in opposition to the above was considered, and afterwards signed by all the members present; and it was resolved that the memorial be at once presented to the House of Commons.

Communications.—1. Dr. J. H. TYLECOTE read the notes of a recent case of Pneumonia followed by Phlegmonous Erysipelas of the Left Foot and Leg, and two months after convalescence by an Abscess of the Buttock and Cellulitis of the thigh.

2. Mr. R. GARNER read notes of a case of Parturition complicated with Procidencia.

3. Mr. VINCENT JACKSON read a record of a case of Stretching of the Outer Digital Nerve on the flexor aspect of the left forefinger.

Alteration of Rules.—The meeting having been made special, Mr. FOLKER proposed alterations in Rules 4, 9, and 13. All were carried.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: SPRING MEETING.

THE spring meeting was held at the Joint Counties' Lunatic Asylum, Carmarthen, on April 4th; Dr. A. DAVIES, Ex-President, in the chair, in the unavoidable absence through illness of the President, J. TALFOURD JONES, M.B. Eighteen members were present.

Dr. Hearder kindly provided luncheon for the members on their arrival.

New Members.—Fourteen new members of the Association, and sixteen of the Branch, were elected.

Grants of Money.—On the recommendation of the Council, it was resolved unanimously:

1. That £3 3s. a-year be subscribed to the Medical Benevolent Fund.
2. That a contribution of £3 3s. be made in support of the case of "Apothecaries' Company v. Shepperly".

Harvey Tercentenary Memorial Fund.—It was resolved, on the motion of Mr. WATHEN, that a donation of two guineas be subscribed to this fund; and that the Secretary, in forwarding it, should express the strong opinion of this Branch that, whatever monument or statue be erected to Harvey's memory, should be placed in some part of the metropolis, and not in any provincial town, however identified with his early history, as a national homage to his claims as a great discoverer.

Branch Subscriptions.—It was resolved: "That defaulters of two years and upwards be informed that, in the event of non-payment of their subscriptions on or before the next annual meeting at Neath, their names will, however reluctantly, be struck off the list of members."

Representatives on the General Council.—The following were elected: J. G. Hall, Esq.; Dr. Sheen; Evan Jones, Esq.; H. N. Davies, Esq.; Dr. Hearder; J. H. Wathen, Esq.; Dr. Edwards; Pearson R. Cresswell, Esq.

Communications.—1. Mr. H. NAUNTON DAVIES (Cymer) showed a Spina Bifida Cyst which had been successfully removed by Ligature and Amputation.

2. Mr. H. N. DAVIES also showed a specimen of Addison's Disease of the Suprarenal Bodies, from a case in which there had been a greenish-brown colour of the abdomen and cheeks. Both suprarenal bodies were adherent to the surrounding parts. The left was almost entirely disorganised into a cheesy matter; the right was hard and fibrous.

3. Mr. DAVIES also showed a portion of Indurated Carbonaceous Lung from a Collier.

4. Mr. E. R. MORGAN (Morrison) read a case of Paralysis after the application of a Plaster to the Nape of the Neck by an Unqualified Person.

5. Mr. J. G. HALL (Swansea) read a case of Fibroid Tumour growing from the upper surface of the Uterus, removed by abdominal section: death.

6. Mr. J. H. WATHEN (Fishguard) read Hints on the Treatment of Neuralgia, mentioning more particularly the hypodermic injection of morphia and the use of tetrachloride of carbon.

7. Mr. WATHEN also showed an improved Splint for the Treatment of Fractures and Injuries of the Leg, made by Arnold and Son. It is light, inexpensive, and can be shut up into a small compass.

8. Dr. HEARDER (Carmarthen Asylum) read notes of some peculiar Abnormalities about the Heart in an Epileptic.

9. Dr. HEARDER also showed some cases of Hæmatoma Auris in Insane Patients, and the favourable results of treatment by blistering.

The British Medical Journal.—The following resolution, on the motion of Mr. E. R. MORGAN, was passed unanimously: "That this Branch begs to suggest to the Journal Committee that in future the JOURNAL be issued to the members with the pages cut, unless there are substantial financial reasons for not doing so."

An Appeal on behalf of the family of the late Mr. J. L. Thomas of St. Clears was made, and a letter on the subject was read from Mr. Dyke (Merthyr) by Dr. Hearder. It was resolved that the matter be postponed till the annual meeting.

Visit to the Asylum.—An interesting visit was then paid to the wards of the Joint Counties' Asylum, under the able guidance of Dr. Hearder, the Superintendent; and afterwards the members and visitors dined together at the Royal Ivy Bush Hotel, Carmarthen.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 23RD, 1878.

WILLIAM WOOD, M.D., Vice-President, in the Chair.

Ophthalmoplegia Externa.—Mr. JONATHAN HUTCHINSON showed two patients who had paralysis of the muscles of the eyeball, and consequent inability to move the eyes. He proposed for the condition the name of ophthalmoplegia externa.

ON TRANSVERSE CALCAREOUS FILM OF THE CORNEA. BY EDWARD NETTLESHIP, F.R.C.S.

THE disease, a somewhat rare one, had been described by various authors, but chiefly in its local relations. The chief objects of the paper were to draw attention to some points in the natural history of the disease which may throw light on its causation, and to confirm the statements of earlier writers, especially Dixon and Bowman, as to the good results of local treatment in suitable cases. A thin film of crystalline, chiefly calcareous, substance was formed beneath the anterior corneal epithelium; it could be chipped off in little flakes, leaving the underlying cornea clear. It was limited to the parts habitually uncovered by the lids, and when complete it formed a broad nearly transverse stripe terminating at each end a little within the lateral boundaries of the cornea. The symptoms as a rule were very slight, and there were generally no complications, even when the disease was of many years' standing; but sometimes chronic iritis and glaucoma came on. Occasionally, ulceration took place on the diseased patch. It seldom began in both eyes at the same time, but was almost invariably symmetrical in the end. The film was formed slowly, and might continue to increase for some years. The disease was one of middle and advanced life; and its subjects, almost without exception, were males. Occupation seemed to have no direct influence. The morbid ten-

dencies of the patients, so far as they were known, led the author to suggest that, in regard to causation, excess of uric acid in the blood furnished the most likely explanation from the constitutional side, though local peculiarities not yet understood were necessary as determining causes. Several new cases with naked eye and microscopic drawings were given. The paper was supplemented by abstracts of all the published cases (fifteen in number) known to the author; and in some of these (recorded some years ago by Dr. Fairlie Clarke) the present condition of the patients had been ascertained.

Mr. H. POWER had seen several of these cases, and had always considered them gouty. In one, there was whitish matter along the lids. Portions of the membrane on the eyeball could be picked off with the point of a knife, like the shell of an egg. This could be done with ease. Little irritation followed. He had also employed glasses with a small central hole in them, but patients did not like the restricted field of vision.—Mr. HUTCHINSON did not think the cases so closely connected with gout as Mr. Power believed. Probably there were many causes at work, mostly indications of senility. The condition reminded him of Dupuytren's contraction of the palmar fascia, where the exciting causes were numerous, but all probably neurotic. It was a question whether there was not some connection between that malady and the one now described.—Mr. NETTLESHIP was not aware that gout had been referred to in Messrs. Bowman and Dixon's cases. He had no note of the condition of the palmar fascia. He had, since the paper was written, seen another case in a woman who had only one eye affected. It was of long standing. She was not gouty, but had become hemiplegic.

THE TREATMENT OF SEVERE ARTERIAL HÆMORRHAGE FROM PUNCTURED WOUNDS OF THE THROAT AND NECK, ESPECIALLY CONSIDERED WITH REGARD TO LIGATURE OF THE EXTERNAL CAROTID ARTERY.

BY WILLIAM HARRISON CRIFFS, F.R.C.S.

The paper discussed the treatment to be adopted in cases of severe arterial bleeding, that had resisted all simple means, and in which operative measures became necessary. The class of case included punctured wounds about the angle of the jaw and through the mouth, hæmorrhage from the tonsils, or from cancer of the tongue or mouth, secondary hæmorrhage after surgical operations, etc. The treatment usually adopted in these circumstances had been a ligature upon the common carotid. Upon analysis of a considerable number of cases, it was found that, after this method of treatment, rather more than half the patients died. The causes of these deaths were approximately as follows: rather more than 30 per cent. from brain-symptoms; the same proportion from recurrence of the bleeding; and the same from other causes. It thus appeared that one-third of the deaths were directly due to ligature of the carotid, and that in another third the operation had proved useless for arresting the bleeding. The brain-symptoms appeared to result from the already anæmic brain having a considerable portion of its blood-supply suddenly cut off. Hæmorrhage occurring from the original wound (after ligature of the common trunk) must either be due to the blood coming as a regurgitant stream brought down the internal carotid, or to blood being brought through the fine anastomoses of the terminal branches. Experiments and facts were narrated in the paper to show that in a certain number of instances the bleeding was due to a regurgitant stream through the internal carotid, or to the blood brought to the proximal end of the wounded vessel by the inferior thyroid. A table accompanying the paper showed how the bleeding vessel, wounded in the situation described, had most commonly proved to be the external carotid or one of its branches, a wound of the internal carotid being of rare occurrence. The cause of the high mortality following ligature of the common carotid artery having been discussed, ligature of the external carotid about half an inch from the bifurcation was recommended as likely to prove a safer and more efficient method of controlling the bleeding. The grave danger of cutting off the blood-supply to the brain was avoided by this operation, while at the same time the chance of recurrent hæmorrhage was diminished in proportion to the number of instances in which it occurred as a regurgitant stream. The objections raised to the operation were: 1. The fear of secondary hæmorrhage from the proximity of large branches; 2. That, should the wounded vessel prove to be the internal carotid, a ligature upon the external would be an useless operation. The first objection was answered by reference to cases narrated by M. Guyon, showing the rare occurrence of secondary hæmorrhage from the external carotid. The second was met by the comparatively few instances in which the wounded vessel had proved to be the internal carotid. Moreover, should the mistake occur, it was not beyond remedy, for a ligature might still be placed on the common trunk at its bifurcation; on the other hand, no remedy could be found for a patient

dying in a comatose condition, caused by obstructing the internal carotid on account of a wound of the external carotid or one of its branches.

Mr. HOLMES only remembered one case where the wound was through the mouth. A child was carrying a pointed stick of some kind when the injury was inflicted. He thought the internal carotid was wounded, and so tied the common carotid. The child did well. These are the cases where surgeons think it best to tie that vessel. If a tonsillar branch of the external carotid artery were wounded, then it would be a good plan to tie that vessel, but he could not think it was always so.—Mr. MORRANT BAKER spoke of a case he had seen where a man was injured by the stem of a tobacco-pipe entering the walls of the mouth near the tonsils. Much bleeding followed, and the man really died of this. He tied the common carotid. In this case, tying the external carotid would have been of no use. Still, he thought Mr. Cripps's plan seemed a good one.—Mr. CRIPPS had only collected seven or eight cases of puncture through the mouth. In only one of these was the internal carotid artery wounded. In most instances, the vessel wounded was the tonsillar branch of the facial.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 12TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Bilateral Paralysis of the Posterior Crico-Arytenoid Muscles.—Dr. FELIX SEMON read a paper on this disease. He began with a few physiological remarks, explaining its pathogenesis. The size of the glottis seen in the living was larger than the same seen in the dead subject. This difference was due to the expanding force of the posterior crico-arytenoid muscles. In cases of bilateral paralysis of these muscles, the glottis was reduced at first to the size found after death, the so-called "cadaveric" position of the vocal cords; later on, however, the narrowing was still more developed, in consequence of the secondary "paralytic contraction" of the antagonists of the paralysed muscles. Finally, the glottis was reduced to a mere linear slit, the vocal cords nearly touching each other. The consequence of this grave change was dyspnoea in so characteristic a form that, even without the laryngoscope, one could diagnose with a great amount of probability bilateral paralysis of the posterior crico-arytenoids, if this dyspnoea were present. Its peculiarity consisted in the fact that it was exclusively an inspiratory one, while expiration was effected without difficulty, and the voice remained quite unimpaired. Dr. Semon remarked that the complete freedom of expiration which existed, even when the inspiratory dyspnoea had led to very grave changes in the circulation and other secondary symptoms, was most remarkable, and wanted some better explanation than could be given at the present time. He then proceeded to the communication of the case. The patient, an inspector of the Metropolitan District Railway, aged 32, had enjoyed good health until two years ago. Having been subject to several severe colds, he was one day attacked by violent cough, followed by slight dyspnoea. Although this symptom disappeared quickly at that time, it had from that date appeared more and more frequently. At the present time, the breathing was permanently somewhat impaired. Cough with consequent deep inspiration was sure to bring on a more or less severe attack of dyspnoea. Lately, some other symptoms had appeared. The patient was drowsy; he complained of weakness, itching, numbness, and fibrillar convulsions in both legs, especially in the left, and sometimes of slight incontinence of urine. He was then introduced; and Dr. Semon showed that there was slight ptosis of the left eyelid; that the left pupil was smaller than the right; the left nasolabial fold more distinctly visible than the right, and the left oral angulus a little lower than the right. Further, the uncertainty in the patient's gait was shown. Dr. Semon then demonstrated the laryngeal symptoms: permanent slight inspiratory dyspnoea, which was much increased when the patient was told to cough, easy expiration, and unimpaired voice. He also described the laryngoscopic appearance of the glottis: the rima glottidis much smaller than normal; complete approximation of the vocal cords during phonation; if deep inspiration were intended, the cords separated only a very little from each other, and returned at once to their former close approximation. The act of separation was effected not by a continuous movement, but by several oscillations. This condition was illustrated by drawings; and, after the meeting, was shown laryngoscopically to members of the Society. This case was the sixth observed within the past two years by Dr. Semon in the Hospital for Diseases of the Throat and Chest, Golden Square. As the disease was a very rare one, he briefly communicated his experiences relating to the age and sex of the patients, the duration of the disease, the differential diagnosis, the etiology, prognosis, and treat-

ment. All the patients were men between thirty and sixty; and, with one exception, they had suffered between eight months and two years before they came to the hospital. The exception occurred in a case which proved without doubt that there existed a functional paralysis of the posterior crico-arytenoids, similar to the functional paralysis of the adductors of the vocal cords often seen in hysterical women. Dr. Semon then said that there was generally no serious difficulty in distinguishing between the disease under consideration and spasm of the glottis, but that it was in some cases quite impossible to make during life a differential diagnosis between paralysis of the posterior crico-arytenoids and ankylosis of both arytenoid cartilages. This was proved by examples. With regard to the etiology, he said that one of his six cases resulted from functional disorder, one from compression of both recurrent nerves by firm connective tissue (proved by the *post mortem* examination), two from catarrhal influences, and one from perichondritis (proved by the *post mortem* examination). The last case, shown to-night, was of special interest in this respect. He had looked upon the other nervous symptoms mentioned before as a very interesting, but merely accidental, coincidence with the paralysis, for the long time which had elapsed between the beginning of the latter and that of the other symptoms, as well as the integrity of the other organs supplied by the pneumogastric nerve, seemed to prove to him that there was no organic connection between the two groups of symptoms. But Dr. Hughlings Jackson, who had seen the case with him, thought that there was no doubt that the paralysis was due to central disorder, probably to a wasting process in the medulla oblongata. One case of this kind had of late been described by Penzolat. The prognosis seemed to be favourable in cases of functional paralysis; in all others, at least, very doubtful. With regard to the treatment, Dr. Semon thought that functional paralysis did not require other than constitutional treatment. Owing to the complete failure of all other remedies experienced here and abroad, in recent cases of purely neuropathic character, the direct application of electricity to the paralysed muscles might be tried, although all observers agreed that it did not prove itself as useful as in other paralyses. No percutaneous application should be instituted, inasmuch as the irritation of the healthy fibres of the vagus supplying the antagonists would lead simply to stronger contraction of those and still more marked narrowing of the glottis. In accordance with all other observers, Dr. Semon urgently recommended in all the more developed cases the early performance of tracheotomy. Even the small number of observations at present showed that, owing to the gradual poisoning of the blood by carbonic acid, the chances of recovery after the operation were the worse the longer it was postponed. If performed in time, it not only saved the patient's life, but also restored him to health with the only disagreeable modification that in all probability he had to wear his tube for ever. Dr. Semon concluded by returning thanks to Mr. Callender, Dr. Hughlings Jackson, Dr. Morell Mackenzie, and Dr. De Havilland Hall for their valuable assistance in making up his reports.

The PRESIDENT said that, having been permitted to read Dr. Semon's communication, he might say of it that it was one honestly worked out in the direction encouraged by the Clinical Society, showing how, by precise observation, facts of detail might be and should be carefully recorded. There were many points of interest in the paper; but he might perhaps select one of great importance, namely, the question as to the local or general nature of the affection. It was, of course, easiest to refer the truth to some one of the local causes named by the author; but it was at the same time evident that the general ataxic condition of the patient required attention. With reference to a central origin for the paralysis, it had been suggested that the affection, which, by the way, was bilateral, might be due to some change in the medulla, affecting the origin of the pneumogastrics; but, granting the origin of the nerves in the portion of the brain named, it seemed difficult so to differentiate as to justify the assumption that, whilst the nerves in their greater distribution retained their normal functions, a few of their fibres, supplied to the muscles affected, had lost all that which one recognised as nerve-force. This was but one point suggested for consideration, but, lying as it did at the root of the explanation of the cause of the malady, it seemed to him one of great interest for discussion.—Dr. DOUGLAS POWELL thought that one point of interest in Dr. Semon's case was the evidence it gave in favour of the view that, in some cases of mediastinal tumour, the dyspnoea arose from paralysis of the vocal cord rather than from spasm. Here was a case in which the dyspnoea was solely due to the paralysed cords being sucked together, by atmospheric pressure, during any strong inspiratory effort. He was rather surprised that, with such frequent paroxysms of dyspnoea, the lungs had not become congested and oedematous; and he could not but think that even a slight attack of catarrh might prove dangerous. He wished to know whether, in view of the very hazardous

present state of the patient, Dr. Semon did not contemplate the necessity of laryngotomy.—Dr. SEMON, in reply, said that he quite agreed with Dr. Powell that, theoretically, one would expect serious changes in the lungs in consequence of the gravely altered conditions of respiration. Practically, however, this did not appear to be the case. He had made two *post mortem* examinations in such cases; in one of them, it was true, chronic pneumonia was present, but this was without doubt due to primary pulmonary affection; in the other, there was only slight hyperæmia and uncommonly dark colour of the blood, the lungs being healthy in all other respects. In the case of the patient shown to-night, there was certainly no lung-disease. With regard to Dr. Powell's remarks on the treatment, Dr. Semon was very glad that they agreed so fully as to the necessity of tracheotomy being performed early in the case.

Electrolytic Treatment of Epulis.—Mr. NUNN read a paper on this subject, giving particulars of four cases, one of which had been under the care of Dr. McOscar of Argyll Street. A series of casts showed the progress made from time to time in the shrinking of the growth in that instance. Of the first case, that of a middle-aged lady, the following details were mentioned. 1. The number of sittings was large, about twenty. 2. The number of cells used was seldom more than six, often only three. 3. The tumour bled freely at first, on puncture with the electrodes. 4. The tendency to bleed diminished in a remarkable manner as the tumour decreased. 5. The pain caused by the electrolytic current was in proportion to the number of cells employed. 6. The pain was unbearable when the electrodes touched the periosteum of the jaw. 7. Pain ceased immediately on withdrawal of the needles. 8. As the tumour shrank, the expanded alveolus resumed its normal shape and size. 9. An injection of chloride of zinc into the tumour, at one of the sittings, produced such subsequent pain that the experiment of injection was not repeated. The patient was now wearing artificial teeth with comfort, and was free from all inconvenience. In the second case, casts were taken to show the appearance of the alveolar border after electrolytic treatment, compared with the result of removal by the ordinary operation. The patient had been operated on by the late Mr. De Morgan, in the Middlesex Hospital, for epulis of the lower jaw, and by Mr. Nunn for epulis of the upper jaw. In the latter instance, the patient was not incapacitated from attending to her duties even for a day, while the loss of normal tissue was considerably less. In Dr. McOscar's case, the diminution of the growth was followed by great improvement in the patient's general health, and by the disappearance of swelling and tenderness at the angle of the jaw and down the side of the neck. The fourth case was still under treatment. Mr. Nunn referred to a Clinical Lecture of Mr. Cæsar Hawkins, delivered at St. George's Hospital, for a description of the difficulties of the ordinary operation. As regarded the apparatus employed in the electrolytic treatment of tumours, "Leclanché" cells, with platinum electrodes, had been found most convenient, as gold itself was too soft, and steel electrodes were seldom sufficiently well gilded to escape oxidation at one pole. Mr. Nunn expressed his indebtedness to Dr. Julius Althaus for his first lesson in the electrolytic treatment of morbid growths.

Mr. MAUNDER said that the subject of Mr. Nunn's communication, electrolysis of tumours, was well worthy of consideration. Unfortunately, the process appeared to be both painful and very tedious; and he thought the choice of the method of operation, whether as above described or by the knife and bone forceps, must be left to the determination of the patient. His experience in the surgery of the jaws, somewhat extensive, had taught him that hemorrhage in operations for epulis need not be considered in the decision, supposing the tumour to be cut out, as it ought to be, and not cut into.—Mr. H. MARSH's experience of the treatment of nævi by electrolysis was disappointing; so that such method of treatment had now fallen out of use at the Children's Hospital.—Mr. PUGN THORNTON had treated nasal polypi by electrolysis; but the method was extremely tedious.—Mr. GOLDING-BIRD had not tried electrolysis upon epulis, but on subcutaneous nævi he had been as unsuccessful as Mr. Marsh. Cutaneous nævi of small area he had destroyed, but thought that the mere laceration of the blood-vessels by the needles had very much to do with the subsequent disappearance of the growth. There were two ways of employing the electrolytic process: one in which "indifferent" electrodes, as platinum or gilt steel, were thrust into the tumour; another in which the positive electrode was of a metal, as zinc, that was itself altered by the electric current, and so a further electro-chemical change was introduced. In the former plan, the only electro-chemical action was that produced upon the salts in the tumour, bringing about an alteration in nutrition; in the latter, the chlorine from the decomposition of the chloride of sodium in the serum of the blood was attracted to the positive or zinc electrode, and chloride of zinc was formed. Thus was added to the electrolytic action proper that of a powerful caustic; and, used in this

way, it was scarcely, if at all, more painful than the simple passage of the electric current with "indifferent" electrodes. He recommended this method to Mr. Nunn as a more expeditious one for destroying epulis. He had employed it extensively, and with great success, in the destruction of scrofulous lymphatic glands.—Dr. ALTHAUS said he was surprised to hear that there had been so much disappointment experienced with regard to the effects of electrolysis in tumours. He had no personal experience concerning the electrolytic treatment of epulis, but in many other tumours the result had been most satisfactory, and not nearly so tedious as had been said. He thought that the mode of application must have had a good deal to do with the different results obtained, as the different action of the positive and negative pole was not yet generally understood. In nævus more particularly, he had had very good results where other surgical operations, such as the ligature, nitric acid, and vaccination, had failed. In naso-pharyngeal polypus, several continental surgeons, such as Professor von Bruns of Tübingen, had been very successful. In bronchiole, the ablest and boldest surgeons sometimes refused to operate; and he instanced a case in which the late Sir William Fergusson had sent a patient, who was in imminent danger of suffocation from pressure of the tumour on the pneumogastric nerve, home to die, without attempting any operation; this patient was subjected to electrolysis when nearly moribund; he was out of danger within a few days, and in a few months the tumour was entirely gone, and had not at present returned. In the presence of such results, to which a good many others could be added, he felt sure that electrolysis would always retain a footing in operative surgery.—Mr. GOLDING-BIRD appreciated the advantage of both poles being inserted into the growth; but thought that the caustic effect of the chloride of zinc produced at the positive pole should not be neglected.—Mr. H. MARSH had introduced both needles into the nævi treated by him.—Mr. NUNN, in reply, said that he had had large experience in the treatment of nævi by electrolysis, and had found great benefit result. The injection of chloride of zinc itself produced great pain in a case of epulis. The disease in this case could not have been eradicated with the knife without much trouble and possible loss of blood.

Psoriasis treated by Chrysophanic Acid.—The PRESIDENT said that Mr. Hutchinson had sent to the meeting a patient for the inspection of the members. He was the subject of psoriasis. The disease on one half of the body had been treated with chrysophanic acid ointment, and was cured; the other half had been treated with tar ointment, and that portion of the eruption still persisted.

Hammer-Toes and Plantar Bunion.—Mr. NUNN read a paper on these subjects. The first case reported was that of a stoutly built man, aged 39, who was admitted into the Middlesex Hospital with a suppurating bursa over the head of the metatarsal bones of the third and fourth toes. Accompanying this condition was a retraction of the phalanges on to the dorsum of the foot (extreme extension of the proximal, with flexion of the distal phalanges). There had been, some six years previously, a severe contusion of the foot, which had, however, disabled the patient only for one week. It was suggested that the retraction of the phalanges had existed prior to the receipt of the injury, although the supuration of the bursa might have been directly caused by it. A cast of the foot was exhibited to show that, in persons who had the phalanges retracted in the manner described, the rolling action of the foot in walking, spoken of by the physiologists, must come to an untimely end, ceasing at the head of the metatarsal bones, instead of continuing, as it ought normally, to the tips of the toes. Thus undue pressure and friction fell on the heads of the metatarsal bones. The second case was that of a lady, who, after a severe gastro-enteric attack in 1872, became the subject of very marked lordosis in 1873, the spine having curved forwards to such a degree that the patient's height was lessened by four inches. She was seen by Mr. Nunn in 1874 on account of the condition of her feet. The whole of the right inferior extremity was found imperfectly nourished, and the four outer toes had become retracted on to the dorsum of the foot. Great inconvenience was experienced by the patient from the contact of the flexed toe-joint against the upper leather of her shoe. Mechanical support was provided for the spine; and shampooing, baths, and faradisation had been diligently persevered in with satisfactory result. Instead of being quite crippled, the patient could now take fairly long walks; but there remained, nevertheless, to some extent, the retraction of the toes. The question was: Of what nature was the retraction of the toes in such cases? Reference was made to the position of the fingers in cases where the interossei had been paralysed by the section of the ulnar nerve near the wrist, and to the views of M. Duchenne as to the function of the interossei muscles. The author expressed his opinion that, at least one factor in the deformity under consideration was a disturbance in the innervation, or of the nutrition of the interossei of the foot; and that the source of such mischief was frequently spinal—either from interfer-

ence with the function of the spinal cord by curvature of the vertebral column itself, or from some morbid condition of the cord, or of the nerves. The author submitted that the existence of the retraction of the phalanges, *i.e.*, the condition known as hammer-toes constituted a symptom which should direct the attention of the surgeon to the spine. The same might be said of valgus, or flat foot. Dr. Little, in his admirable contribution on Orthopædic Surgery in the third volume of Holmes's *System of Surgery*, first edition, wrote at page 610: "A slight degree of flat foot is common in girls, especially of the upper and middle classes." It was precisely in the sex and in the classes specified by Dr. Little that spinal curvature was common; it was, therefore, suggested that the flat foot was the result of spinal disorder, and not simply a local weakness. The author indicated as examples of the faulty nutrition and innervation of single muscles, strabismus and writers' cramp; and he stated that faulty nutrition of single muscles of the leg very frequently took place, and that ordinary bunions of the great toe was due more to an atrophic state of the extensor longus pollicis than to any dislocating action exerted by a badly made shoe. As a directly practical suggestion, an inspection of the shoes of the patient should be made; and, in the event of it being found that the sole was unduly worn across the middle of the foot, the condition of the spine should be inquired into. The paper concluded by saying that, if the spinal curve were not the origin of the deformity of the limb, it would, if neglected, certainly exaggerate the mischief, and would give rise to symptoms that would be unintelligible; and that, consequently, treatment would fail from the want of a rational basis.

The PRESIDENT said that, as regarded the atrophy of muscles in talipes, however much one might operate and use mechanical appliances, the old position of parts was subsequently very apt to be resumed.—Mr. MAUNDER remarked that Mr. Nunn's paper was highly suggestive, but somewhat alarming; and he trusted that, in a very large majority of cases of hammer-toe, Mr. Nunn's pathology would prove to be incorrect, especially as he (Mr. Maunder) had operated upon four contracted toes in the persons of three relatives with the happiest results, dividing the flexor tendons. These children's aptitude for play was remarkable. If Mr. Nunn meant to imply, by speaking of the toes as extended, that the extensor tendons should be divided to remedy the deformity, Mr. Maunder was sure that such an operation would be a failure. The explanation of plantar bunion offered was certainly reasonable.—Mr. W. H. BENNETT thought one of the most interesting points in the paper was that concerning the condition of the nervous system, and of sensation in the affected limb. In some cases of suppurating burse, the sensation in the leg was nearly lost. In one instance, after amputation at the ankle, the patient subsequently returned with considerable anæsthesia in the limb. But there was in that case no idea of disease of the spinal cord.—The PRESIDENT suggested that cases of "perforating ulcer of the foot," described by French authors, seemed to be somewhat similar in their conditions to these cases of suppurating bunion of Mr. Nunn.—Mr. G. BROWN had had a case in which bunions on each foot had suppurated and led to ulceration and necrosis. That patient had had syphilis, and eczema of each leg.—Mr. B. ROTH had treated such cases of "hammer-toes" with stockings with toes, like the fingers of gloves.—Mr. NUNN, in reply, said that he thought the "perforating ulcer of the foot" of French authors was more of the nature of elephantiasis. Tenotomy would probably be of much use in the case he had brought forward. The position of the toes was due to paralysis of the interossei, which were extensor muscles of the toes; therefore, the proper course of treatment would be to divide the flexor tendons. Did not that condition of hammer-toes which began at puberty indicate something amiss with the nervous system, either in the cord or the nerves?

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 6TH, 1878.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

New Form of Metrotome.—Dr. GALABIN showed a modified form of Dr. Peaslee's instrument. The principle was the same as that applied in Civiale's urethrotome, and in that of Sir Henry Thompson. It was especially applicable for incision in cases of stenosis of the internal os, although it might be used for the external os. The advantage was that it divided both sides equally, to an exact and very moderate extent; while Simpson's or other similar metrotomes were apt either to cut too deeply, or, if the operator were timid, not deeply enough. It could also be introduced through a very small canal; while the single- or double-bladed metrotomes were usually made larger than the ordinary sound, and could not be passed in the cases which most required incision. In the modified instrument, the tube was made round instead of

flat, which much facilitated its introduction. A spring was also introduced within the instrument, which prevented the blade from sliding forward prematurely, and returned it after use.—Dr. AVELING had for many years used an instrument very similar to that shown by Dr. Galabin. As a rule, he preferred metrotomes which cut only in one direction.

Fibro-Cystic Disease of Uterus.—The report of Dr. GALABIN and Dr. HERMAN on the tumour shown by Dr. THOMAS CHAMBERS at the last meeting of the Society was read, together with Dr. Chambers's account of the subsequent history of the case and of the *post mortem* examination. Sections of the tumour under the microscope were also exhibited by Dr. Galabin. These showed its structure to be that of a fibro-myoma, having very numerous and wide interspaces between the bundles of fibres. The subsequent history of the case, as given by Dr. Chambers, told that the patient died twenty-six hours after the operation. At the necropsy, the bladder was found to be very much elongated, and appeared to have been drawn upwards, as if by the ascent of the tumour, so as to form a cone-shaped cavity, the cone being involved with the tumour so intimately as to escape recognition during the operation. The result was the ensnaring of a small piece of the cone or fundus in the ligature which embraced the whole stump. Although the bladder was not inflamed, it was but fair to suppose that the injury it sustained contributed greatly to the result.

Tubes for Injecting the Uterus after Parturition.—Dr. HAYES showed a new form of tube which he had devised for the injection of the uterus after labour or abortion with a solution of Condy's fluid, or other disinfectant, and also for the injection of hot water. The advantages of this tube were its non-flexibility, its increased length, enabling it to reach the fundus easily, and the number of perforations in its extremity, so that the fluid was discharged into the uterus in the form of a spray, which ensured the whole of the uterine cavity becoming bathed by the fluid.—Dr. ROGERS had a precisely similar tube made for him twenty years ago. It was constructed of the same metal, and was perforated in the same way.—Dr. CLEVELAND had never heard of the short tubes condemned by Dr. Hayes being used for injecting the uterus. They were only intended for washing out the vagina.—Dr. MURRAY thought that the tube for intra-uterine injection should have large apertures in preference to small ones, which were very liable to become clogged up. He had used for many years a vulcanite tube of the same length as that shown by Dr. Hayes. In accordance with the views he had expressed, it had large apertures.—Dr. FANCOURT BARNES exhibited some vulcanite tubes which had been devised by Dr. Robert Barnes for injection of the uterus with solution of perchloride of iron after abortion. They contained pieces of sponge soaked with the solution, which was made to ooze slowly out through eyelet-holes at the end of the tube by means of a piston. The alleged danger of forcing the fluid through the Fallopian tubes into the peritoneal cavity was thereby obviated.

Uncorncd Uterus.—Dr. HERMAN exhibited a specimen of an uncorncd uterus. The uterus lay close to the right pelvic wall. The right Fallopian tube and ligaments were short, but otherwise normal. The left ovary was high up on the left side near the internal abdominal ring. The left canal of Nuck was very large, and a thick fibrous band proceeded from the ovary down this canal. The end of this band presented an enlargement, which was more vascular than the rest. A thin but firm and strong fibrous cord, between two and three inches in length, united the ovary to the upper part of the rectum. On the surface of the pelvic peritoneum, a flat band of slightly diverging fibres could be seen running from the cervix uteri in the direction of the left ovary. Both ovaries showed signs of having discharged ova. The patient was unmarried, and aged forty-nine. It was stated by her sister that she had ceased to menstruate for three years, that the flow had always been scanty, and that she never complained of pain. She died from capillary bronchitis.

On Traction by the Lower Jaw in Head-last Cases.—Dr. MATTHEWS DUNCAN contributed a paper on the subject. He commenced by saying that by the traction referred to two objects were professed to be gained—flexion of the head and extraction. Attempts to secure these objects by the fingers applied to the fossæ caninæ were in vain, because the force in a right direction available by such procedure was of too small amount. Besides traction of the lower jaw, there were two other sources of power: first, pulling by the feet or otherwise through the spine; this was the paramount force: second, expression, which, by mere strength of the accoucheur's arm, might be estimated as from 30 to 40 lbs., or, using the weight of the accoucheur's body, might reach 100 lbs. The dangers attending spinal pulling and expression were very considerable. Those of the latter method were as yet but little known. Danger in head-last cases, where the base of the skull was in the brim of the pelvis, was not from compression of the cord,

but from asphyxia and from inhalation of solid and fluid matters into the lungs. Speedy delivery was often desirable, and lower jaw traction deserved consideration when there was obstruction requiring the use of force, and when the other forces were not sufficient. Injuries resulted in two of Dr. Duncan's four experiments with lower jaw traction; separation of the two halves of the bone in one case in which 58 lbs. were suspended on it, and laceration of the inside of the mouth with distortion in another. The force applied through the lower jaw, acting as it did chiefly through the maxillary joints, was favourably applied for producing extraction, but not for producing flexion, because of the nearness of the joint to the centre of the head's motion, the bitemporal diameter (in a contracted brim). The whole force so applicable might be more than 58 lbs., and might certainly all be used in cases of dead children, or children certainly doomed to death, or in cases where the head was left *in utero*. Further experience was required to show how much could be safely used in a living foetus. Lower jaw traction did not produce considerable flexion of the head. Flexional efforts were seldom required. The paramount dragging by the spine, as it acted in a case of contracted brim behind the centre of the head's motion, annulled or undid any slight flexion produced by the lower jaw traction. But spinal pulling could easily be made to produce flexion after the head's passage of the brim by giving it a proper direction; and at this time flexion was essential.—The PRESIDENT said that years ago he used to practise and to teach the drawing down of the head, by applying the fingers of one hand to the canine fossæ and pressing up the occiput with the other hand. But it was now learnt from Dr. Duncan that it was not possible to achieve much by this method, nor, indeed, did it appear from his paper that much more could be done by traction on the lower jaw.—Dr. FANCOURT BARNES stated, with regard to the application of the forceps to the aftercoming head, that he had practised this operation on the phantom repeatedly, and had found it remarkably easy. He had no experience of the operation on the living subject; but he thought that it had many advantages over traction on the body of the child, for there was no danger of ricking the neck or injuriously stretching the spinal cord.—The PRESIDENT said that it had always appeared to him one of the great disadvantages of the use of the phantom, that operations upon it seemed uncommonly easy, and he had always hesitated to draw conclusions from these operations to those on living women.—Dr. MATTHEWS DUNCAN said that he had particularly pointed out in his paper that the method of Smellie—that of traction with the fingers in the fossæ canine and simultaneous pressure upwards on the occiput—was an efficient and valuable method of delivery in head-last cases.—Dr. PLAYFAIR said that of late years, since becoming familiar with the writings of Goodell on the subject, he had been much impressed with the great advantage of the expression of the head from above in these cases. It seemed to him that it was of primary importance not to depend on one method alone; and the great advantage of expression was, that it could be performed in union with traction.—Dr. CLEVELAND said that it was pleasing to learn that one might justifiably use such a large amount of force as mentioned by Dr. Duncan without doing any material damage. There still, however, remained one want, and that was, a means of determining what muscular force one was putting forth. How, he would ask, was the operator to know that he was using a force not exceeding fifty pounds?—Dr. ROPER said that the conditions present in different cases of head-last delivery varied very much. There was a great difference between the cases in which the head was delayed above the brim and those in which it was only delayed in the cavity of the pelvis. He believed that where podalic version had been effected as an alternative to craniotomy, the life of the child was often lost from the head being delayed at the brim of the pelvis. If the head were fixed above the brim, there was not much scope for manipulation, as it was hardly possible to reach the jaw and the occiput, and we had therefore to rely on traction by the spine in the axis of the brim. It was the later movement of the head through the pelvis which required its rotation on its transverse axis. This distinction had hardly been pointed out in Dr. Duncan's paper.—Dr. BRAXTON HICKS felt that there was considerable difficulty in discussing Dr. Duncan's paper, for the author had not attempted to treat the whole question of the delivery of the aftercoming head. Had he done so, he would probably have advocated a combination of traction on the chin and neck and pushing up the occiput, together with pressure from above, a plan which he had adopted and taught many years. But the point dealt with by Dr. Duncan was quite different from this general question, and consisted in the determination of how much force might be safely used in a particular direction.—Dr. WYNN WILLIAMS thought it well to point out that a living muscle, as regarded its resistance to tension, was under very different conditions from a dead muscle. He did not believe that a living child could safely bear the same force that could be applied with impunity to a

dead child. The active resistance of a living muscle made it much more liable to injury than a dead muscle; and a drunken man, in falling from his horse, almost invariably escaped injury, the reason being that his muscles were paralysed. He believed that much injury was often done by undue traction being made to deliver the aftercoming head.—Dr. CLEMENT GODSON said that he had been much struck during Dr. Duncan's experiments with the small amount of force necessary to deliver the aftercoming head of an unusually large child on a phantom pelvis, with a conjugate diameter of three inches; and the question occurred to him, whether the soft parts did not interfere with delivery very much more materially than was generally imagined. He could not agree with Dr. Duncan in regarding with disfavour the application of forceps in head-last deliveries. He had himself, in one case, failed to deliver by Smellie's method; but, on applying the forceps, he had succeeded in at once extracting the head without any difficulty whatever.—After remarks from Mr. POOLE of Sidcup and Mr. MASON, the PRESIDENT pointed out that it was much easier to apply the forceps to the aftercoming head when the patient was delivered in what he might call the continental position, where she lay on her back. Here it was possible to secure ample space for the use of the forceps by drawing the body of the child well forward towards the abdomen of the mother.—Dr. MURRAY agreed with the President as to position making some difference; but he had, nevertheless, applied the forceps in two cases with complete success, though the patient remained in the ordinary position; and he considered that the use of the forceps was indicated sooner rather than later in the delivery of the aftercoming head when difficulty arose.—Dr. JOHN WILLIAMS had several times applied the forceps to the aftercoming head with the greatest facility. In the last case of this kind which he had seen, he had found it impossible to deliver by any other means.—Mr. COCKELL urged the importance of sweeping the body of the child round towards the abdomen before applying the forceps.

A Case of Protracted Labour in which the Use of the Forceps was typically indicated.—This paper was communicated by Dr. GEORGE ROPER. The case referred to in it occurred in October last, in a woman aged 40, who had had thirteen previous labours at full term, all of them severe. On being called to the case by a midwife, Dr. Roper found that delivery had taken place naturally except for the use of ergot, which had been given seventeen hours after the rupture of the membranes, the os being fully dilated. The drug was speedily followed by very severe and frequent pains, and delivery ensued in two and a half hours. The child, a male, weighing 9½ lbs., was still-born, and its appearance indicated that it had very recently died in its birth. The head was of very large size, and the ossification of the cranial bones was so complete that the fontanelles and sutures were nearly obliterated. For the purpose of contrasting this head with one of normal size, casts had been prepared, a comparison of which showed that the measurements of the former exceeded those of the latter in all the usual diameters by half an inch to three-quarters of an inch. Another interesting point in the shape of this head was, that the vault of the cranium was twisted on the base, so that the measurement from the left mastoid process of the temporal bone to the postero-superior angle of the right parietal was much greater than a corresponding line drawn between the same points on the opposite sides of the head. This lateral obliquity was probably to be explained by the severe pressure the left side of the vertex had to sustain against the ramus of the left ischium and pubes in the rotation of the head; the corresponding area of the right side of the vertex being exposed to no obstacle, but having the expanse of the pubic arch before it became elongated. In his comment on this case, Dr. Roper observed that he felt strongly that whenever it was determined to use forceps, the operator should be able plainly to state the indication pointing to the necessity of its use. In the present case, there were, apart from the death of the child, many indications of necessity: (1) Accidental discharge of liquor amnii at the very beginning of labour; (2) A woman aged 40, whose many previous hard labours had enfeebled the uterine force; (3) Great fitness, especially of the abdominal walls, and a weakened state of the abdominal muscles; (4) A large and hardly ossified head to be felt during labour; (5) Three hours of slow progression in the second stage of labour in a woman who had had twelve living children. Dr. Roper thought it could be scarcely doubted that, if forceps had been used an hour before the ergot had been given, the mother would have been delivered with much less suffering and of a living child.—After some remarks from Dr. HEYWOOD SMITH, Dr. WILTSHIRE called the attention of the Fellows to the cast of the normal child, as well illustrating what he might call the natural asymmetry of the fetal head. The cast before them was very well adapted for this purpose, as, the child being delivered by the feet, the head had not undergone much compression during delivery. The two halves of the head might be equal in bulk,

though he doubted whether this were so; but, in sixty per cent. of the cases, which he had examined, the right half of the head was in a plane a little in advance of the left half. This asymmetry affected not only the cranial bones proper, but also the arch of the palate. His own observations had convinced him that it was independent of any compression to which the head might have been exposed during delivery, for it was seen in children delivered by Cæsarean section. He thought the fact was important, as it might have some influence on the mode of presentation of the head during delivery.

The meeting then adjourned.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 2ND, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Enteritis Fatal on Eleventh Day.—Dr. J. W. MOORE showed the intestines of a man aged 21, single, whose illness dated from a surfeit on February 16th and 17th, followed by injudicious dosing with senna and castor-oil without medical advice. Severe pain in the lower part of the abdomen, and shivering, with nausea, vomiting, and diarrhoea, were the earlier symptoms. He came into hospital on the fifth day, when his evening temperature was 103 deg., and there were a few *tâches bleuâtres* on the chest. The abdomen was tense, full, and tender on pressure. Violent pain, with bilious vomiting, ushered in obstruction of the bowels, and he sank into a state of profound collapse. After death, only localised peritonitis was found. The colon and last three feet or so of the ileum were quite collapsed and intensely hyperæmic. Above the commencement of the collapsed condition of the intestine, the ileum was ballooned to an extreme degree, and large quantities of fæces were present in the ileum, jejunum, duodenum, and even the stomach. No strangulation or invagination of the gut was discovered. The condition seemed to be one of paralysis from inflammation. Peyer's patches were everywhere perfectly healthy. A perforation had occurred in the distended portion of the upper ileum, through a frayed portion of the mucous membrane, too late, however, to induce a general peritonitis.

Report.—Dr. R. J. HARVEY brought up a report on a specimen of "black quarter" in a calf, described by Dr. Lyons at the meeting of December 15th, 1877.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, FEBRUARY 6TH, 1878.

THOMAS FITZPATRICK, M.D., in the Chair.

The Late Drs. Stokes and Churchill.—Dr. H. KENNEDY moved, and Dr. MAC SWINEY seconded, the following resolution, which was unanimously adopted. "That at this, the first meeting of the Medical Society of the College of Physicians held since the lamented deaths of Dr. Stokes (a Vice-President of the Society) and of Dr. Churchill, the Society desire to express their sense of the irreparable loss occasioned by the removal of two such distinguished members of the profession—one the leader of Irish medicine, and the other amongst the foremost cultivators of obstetric science; and that the Honorary Secretary be requested to convey a message of condolence to the relatives of the deceased."

Case of Obstructed Circulation.—Dr. J. P. DOYLE brought forward the case of a woman aged 32, who was attacked five weeks after her confinement (of twins) by a feeling of oppression about the heart, and palpitation. Two days later, she appeared to be dying of asphyxia. Dr. Doyle described her state at this time as follows. She was sitting up in bed, gasping for breath, and spoke in a sighing, interrupted manner. The intellect was clear, the complexion livid, and the expression one of anxiety and fear; the surface of the body and extremities felt cold and clammy, and the forehead was covered with large drops of perspiration. Temperature in axilla, 97 deg.; the bowels, which were naturally regular, were costive; tongue clean; she had a slight, dry cough, with little expectoration. Pulse, scarcely perceptible, 140. The circumference of the thorax was thirty-one inches; on inspection, it presented a narrowed appearance transversely, which was due to an increased curvature of the ribs behind, and a slight prominence of the upper fourth of sternum. Resonance was slightly diminished on percussion anteriorly over both lungs. What appeared like a dry crackling was heard on auscultation anteriorly over both lungs, but was most intense over the right; otherwise, the air entered freely. The percussion-note posteriorly was normal, and the vesicular murmur clear and weak. The area of cardiac dulness was increased towards the right side, and

made the organ seem as if placed vertically. The cardiac beat was not visible, and the impulse was indistinctly felt towards the mesial line. The first cardiac sound was very weak, and the second was not audible. The jugular veins were distended, but did not appear to pulsate. The patient recovered after two similar paroxysms at periodic intervals of about ten days. Dr. Doyle, amongst other suggestions as to the probable cause of these peculiar and apparently periodic attacks, asked whether spasm of the arterioles of the pulmonary artery might not account for the symptoms. A thrombus of the right side of the heart or an embolus of the pulmonary artery would also be a plausible explanation of the paroxysms.—The CHAIRMAN thought that a recent paper by Dr. Forbergill on Simulated Diseases of the Heart (*Edinburgh Medical Journal*) bore on Dr. Doyle's case.—Dr. MAC SWINEY looked upon the affection as cardiac asthma.—Dr. HENRY KENNEDY would describe the patient as a nervous female of asthmatic tendency, with temporary dilatation of the right heart.—Dr. FINNY said he thought the whole *rationale* of the case pointed to a thrombus of the right auricle, followed by embolism of branches of the pulmonary artery. The puerperal state from which the patient was emerging, her weak and anæmic condition, and the occurrence of a "bad turn" on hearing some exciting intelligence—all supported this embolic theory.—Dr. DOYLE, in reply, said he must concede to Dr. Finny the merit of having given a very clear explanation of the phenomena observed.

The Society then adjourned.

CORRESPONDENCE.

CONSULTANTS' PROFESSIONAL ETIQUETTE.

SIR,—As an illustration of the causes of the misunderstanding that has arisen between consultants and general practitioners, I will relate two cases that have lately occurred in my practice, and, at the same time, make a few remarks on the method by which such misunderstandings could be avoided.

A gentleman who has been attended by me for some time, and who has cancer of the rectum, went without my knowledge to consult a celebrated physician, at the same time telling him that he was under my care, and that I had informed him he had a tumour of a serious nature in the rectum. The physician prescribed a simple mixture of salts, etc., without making any rectal examination (although my patient was passing blood *per rectum*, etc.), and did not in any way communicate with me, so that I only found it out by accident on my next visit.

Again, a lady that I have attended for years, and who is still under my care, went at the solicitation of her friends to consult an eminent oculist for an affection for which I was then treating her. This gentleman, although my patient told him she was under my care, did not communicate with me, but simply wrote a prescription for a different tonic from what she was then taking, and I only heard of it by my patient handing me the prescription.

I do not at any time object to a consultation, but I do complain greatly that consulting men in London should see patients, who are under the care of their regular medical attendant, and who tell them such is the case at the time of their visit, without in any way communicating with the medical man on the subject. Instead of doing so, they write a prescription, often a simple change of tonic or other medicine, and thereby give rise to a feeling of dissatisfaction with the former treatment, not unfrequently resulting in the loss of a good patient. Happily, this is not always the plan adopted; and I would recommend, as in accordance with true medical etiquette, that in all such cases the patient should be told, that no opinion would be given without first communicating with his medical man. This, of course, is always supposing the patient is to return to the care of the former attendant. I shall be glad to hear your opinion of this matter, and whether there are other members who have the same complaint to make.—Yours faithfully,

M. B. LOND. AND F. R. C. S.

THE ANTISEPTIC TREATMENT.

SIR,—The antiseptic treatment is so generally adopted and is spreading so widely, that we think it almost time to ask, through the medium of your most influential JOURNAL, if we may not possibly be encouraging a great delusion. Whilst we are neutralising the septic action of the atmosphere on the wound, are we not losing sight that the patient is breathing this atmosphere, which the antiseptic treatment proclaims to be poisonous? Surely this "antiseptic treatment" is a retrograde movement, taking us back to the ages of specifics and to the dread of fresh air. Can carbolic acid possibly be a substitute for

oxygen, Nature's disinfectant and purifier? Would it not be more rational to apply an efficient antiseptic treatment to the hospitals and wards in which the septic atmosphere is generated, so that the general health of the patient may be supported and the wound healed under the influence of pure fresh air and light simple dressings? Apologising for occupying your space, I am, sir, yours faithfully,

CHARLES SHRIMPTON, M.D.

Whitehall, S.W., April 15th, 1878.

TEACHING OF PHYSIOLOGY IN DUBLIN.

SIR,—I am quite unable to perceive that Professor Mapother has supplied any fact by his letter of the 8th instant which was not before you in mine of the 30th ult. Surely he cannot mean to imply that no course of operative surgery has been accepted since 1874. If this be his meaning, he is certainly greatly mistaken.

I shall not trouble you with any criticisms on his letter; it speaks for itself. He has shown what his idea of practical teaching is; and, as his influence on the Council of the College is very great, the difficulties I have to contend with will be all the more readily understood. I may, perhaps, be allowed to assure him that the introduction of a course of laboratory instruction will not do away with the illustration of lectures by specimens and experiments, any more in physiology than in chemistry.

As to Professor Mapother's last paragraph, I have only to say I do not wish to occupy your space or to trouble your readers with personalities. My object was to call attention to what I consider a great injustice to Irish students, and to such of their teachers as are anxious to keep pace with the ideas which everywhere else prevail.

In conclusion, I beg to thank you for the very material aid your remarks in the JOURNAL of the 6th instant have given my cause, by showing that what I am seeking is neither monstrous nor new, but only what is generally regarded as essential.—I am, sir, faithfully yours,

REUBEN J. HARVEY.

7, Upper Merrion Street, Dublin, April 15th, 1878.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual general meeting of this Association will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, on Tuesday, May 7th, at 3 P.M., when several matters of interest to the members of the Poor-law Medical Service will be discussed. After the meeting, the members will dine together; tickets, 7s. 6d. each, exclusive of wine. As this association has conferred great benefits by its public work on the members of the Poor-law Medical Service, the Council trusts—we hope with good prospect of success—that a large number of the members will attend. Gentlemen who intend to dine are requested to send their names as early as possible to J. Wickham Barnes, Esq., Honorary Secretary, 3, Bolt Court, Fleet Street.

THE BROMYARD BOARD OF GUARDIANS AND THE MEDICAL OFFICERSHIP OF THE CRADLEY DISTRICT.

IN the JOURNAL of February 16th, we alluded to an appointment which was made in the Bromyard Union in violation of the orders and regulations of the Local Government Board, and a hope was expressed at the time that the department would withhold its sanction to it. Not only was this done, but the facts of the case were laid before the Local Government Board by Dr. Lush, M.P. for Salisbury, in a letter which he addressed to Mr. Slater-Booth on the subject. The action thus taken, it will be seen by the letter subjoined, has been attended with the best results.

"Local Government Board, Whitehall, S.W., April 5th, 1878.

"Sir,—I am directed by the Local Government Board to acknowledge the receipt of your letters of the 16th and 18th ultimo, respecting the proposed appointment of Mr. G. E. F. Etheridge as medical officer for the Cradley District of the Bromyard Union.

"In reply, I am directed to state that the board are unable to sanction the appointment of Mr. Etheridge as medical officer for the above-mentioned district, inasmuch as he already holds the offices of medical officer for the second district and the workhouse of the Bromyard Union, and also of medical officer for the Knightswick District of the

Martley Union. The board considers that the appointment as district medical officer of a medical practitioner whose residence is situated at a distance from the district when there are other duly qualified medical men willing to accept the office, and resident nearer to the district, is contrary to the principle of the general regulations relating to the office of medical officer.—I am, Sir, your obedient servant,

"HUGH OWEN, Junior Assistant Secretary.

"To H. N. Knott, Esq., Clerk to the Guardians of the Bromyard Union."

PUBLIC HEALTH ADMINISTRATION.

A VERY good illustration of the average mode of administering sanitary laws by small local bodies is afforded by the recent proceedings of the Denbigh Town Council. The medical officer of health had resigned, and the mayor observed that he was "a very good man; a very good man indeed; his only fault was, that he reported too much and went into details". To mend this defect, it was arranged to appoint a successor whose salary should be cut down to £25 a year, on the understanding that he would not report too much, and that his chief duty would be to furnish extracts from the birth and death returns. It was explained that it was absolutely necessary to appoint somebody, and, on the whole, the plan adopted was considered to be the least likely to lead to troublesome questions. So long as the administration of public health is maintained on its present outlines, of which the inefficiency was from the very first pointed out to Mr. Stansfeld in preparing the original Public Health Bill by the most practical authorities on public health throughout the country, so long shall we continue to have an immense amount of money spent in trifling salaries and on little works, while comparatively small advance will be made in the prevention of disease and the saving of life.

OBITUARY.

WALTER BARTON STOTT, M.R.C.S. Eng.

MR. WALTER BARTON STOTT died on April 8th, at the age of 78. He practised for many years in Manchester, and retired into private life in 1862. In his earlier days, he was Demonstrator of Anatomy at the school in Mount Street, conducted by the late Mr. Jordan, and afterwards in the Pine Street School. He had also the honour of being one of the founders in 1831 of the Children's Hospital in Manchester, in conjunction with the late Dr. Alexander.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members on April 25th, 1878.

Bird, William Valentine, M.D. Aberdeen, L.R.C.P., Sydenham Bogg, Thomas Wemyss, M.B. London, St. Leonard's Boulton, Percy, M.D. Edinburgh, 6, Seymour Street Gill, Stanley Augustine, Royal Lunatic Asylum, Liverpool Sandby, Robert, M.D. Edinburgh, Birmingham Savage, George Henry, M.D. London, L.R.C.P., Bethlem Hospital Thorburn, John, M.D. Edinburgh, Manchester

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners, on April 25th; and, when eligible, will be admitted to the pass examination.

Messrs. William E. Winkell and Alexander Davidson, students of the London Hospital; William Sellers and Edward S. Jackson, of the Edinburgh School; Thomas P. Pemberton and Arthur F. Kingsland, of the Birmingham School; William Knott, of the Manchester School; John W. Ling of St. Bartholomew's Hospital; Ignatius J. Rubie, of the Dublin School; Francis J. Grindon, of the Charing Cross Hospital; and William M. Jennings, of the Newcastle School.

Twelve candidates were rejected.

The following gentlemen passed on April 26th.

Messrs. Edward A. Harbord, Alfred Lee, and William E. Alldridge, of the Birmingham School; Robert B. Knowles and James Thomson, of the Edinburgh School; Oswald G. D. Bradshaw, of the Bristol School; Robert Jones, of the Dublin School; James N. Richardson, of the Leeds School; William Loynd, of the Manchester School; Frederick W. Martin, of the Liverpool and Charing Cross Hospitals; Edward G. Peck, of the Cambridge School; and John F. Mackenzie, of the Newcastle School.

Twelve candidates were rejected.

The following gentlemen passed on April 29th.

Messrs. Daniel E. Anderson, Sydney H. Henty, Edgar F. G. Morris, and James Norie, of University College; John C. R. Itusband and David Harris, of the Leeds School; John J. Bewell and Leopold Burroughs, of Guy's Hospital; Charles Sanders and Howard H. Tooth, of St. Bartholomew's Hospital;

William H. Sharples, of the Manchester School; Hugh G. Hill, of St. Mary's Hospital; David J. Thomas, of the Glasgow School; Alexander H. Barbour, of the Edinburgh School; Arthur G. Wood, of King's College; Frank S. Watson, of the Charing Cross Hospital; Arthur W. Loveridge, of the Middlesex Hospital; and Alfred F. Street, of the Cambridge School.

Six candidates were rejected.

The following gentlemen passed on April 30th.

Messrs. Johannes H. M. Brok, George B. Silke, and Edward F. Martin, of the Edinburgh School; Hugh P. Rowlands and Robert A. Milligan, of Guy's Hospital; Tom H. T. Frampton and Richard D. H. Gwllim, of St. Mary's Hospital; Ernest M. Little, of St. George's Hospital; Alfred S. Kenny, of King's College; Jonathan N. Cook, of St. Bartholomew's Hospital; Arthur Vores, of St. Thomas's Hospital; and Frank M. Pope, B.A. Cantab., of the Cambridge School.

Twelve candidates were rejected.

The following gentlemen passed on May 1st.

Messrs. William Clark, Thomas W. J. Allen, and William F. P. Bassett, of University College; Edward Rice, Herbert J. Barratt, and Oswald A. Prowne, of St. Bartholomew's Hospital; Alfred Benson, William A. Smith, and George C. R. Bull, of St. Mary's Hospital; Harry P. Berry and Joseph J. Udale, of Guy's Hospital; Francis M. Puddicombe and Francis C. J. Sanders, of St. George's Hospital; William Flagg, of the Edinburgh School; and James H. A. Rhodes, of the Liverpool School.

Nine candidates were rejected.

MEDICAL VACANCIES.

The following vacancies are announced:—

BELGRAVE HOSPITAL FOR CHILDREN—House-Surgeon. Applications to be made on or before the 13th instant.

BROMYARD UNION—Medical Officer and Public Vaccinator for the Parish of Crauley. Salary, £50 per annum, and fees. Applications to be made on or before the 4th instant.

GLOUCESTER GENERAL INFIRMARY—Surgeon and Assistant-Surgeon. Applications to be made on or before the 30th instant.

GREAT NORTHERN HOSPITAL—Ophthalmic Surgeon. Applications to be made on or before the 6th instant.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Assistant-Surgeon. Applications to be made on or before the 16th instant.

LEITH HOSPITAL—House-Surgeon and Assistant-Surgeon. Salaries, £70 and £60 respectively, with board. Applications to be made on or before the 15th instant.

LIMERICK UNION—Visiting Medical Officer for the Workhouse. Salary, £75 a year. Candidates must be over 23 years of age, and must attend personally at the day of election; viz., the 9th instant.

METROPOLITAN FREE HOSPITAL, Commercial Street, E.—Two House-Surgeons.

MITFORD and LAUNDITCH UNION—Medical Officer and Public Vaccinator for the Irarsham District. Salary, £55 per annum, and fees. Applications to be made on or before the 10th instant.

ROYAL PILNICO DISPENSARY—Resident Medical Officer and Dispenser. Applications to be made on or before 4th instant.

SHEFFIELD PUBLIC HOSPITAL and DISPENSARY—Junior Resident Medical Officer. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 6th instant.

STOCKPORT INFIRMARY—Assistant House-Surgeon. Salary, £60 per annum, with board and apartments. Applications to be made on or before the 25th instant.

STROUD GENERAL HOSPITAL—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, and washing, and £30 per annum in lieu of stimulants. Applications to be made on or before the 15th instant.

UNIVERSITY COLLEGE, London—Professor of Materia Medica. Applications to be made on or before May 15th.—Surgical Registrar. Applications to be made on or before the 6th instant.

VICTORIA HOSPITAL FOR CHILDREN, Chelsea—House-Surgeon. Salary, £50 per annum, with board and lodging. Applications to be made on or before the 18th instant.

WILTS COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £110 per annum, with board, lodging, attendance, and washing. Applications to be made on or before the 15th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

TIBBARD, Nestor J. C., M.B., appointed Medical Tutor and Subdean of King's College, *vice* Freeman R. Cross, M.R.C.S. Eng., resigned.

WINTERBOTTOM, Augustus, F.R.C.S. Eng., appointed Lecturer on Dental Surgery and Dental Surgeon to St. George's Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

WALDO-WATERS.—On April 25th, at the Parish Church, Clifton, by the Rev. J. P. Waldo, Vicar of St. Stephen's, South Kensington, cousin of the bride-room, assisted by the Right Rev. Bishop Anderson, Vicar, *Henry Waldo, M.D., of Clifton, to Cecilia Emily Elizabeth, only daughter of the late Richard Waters, Esq., Solicitor, of Tredegar, Monmouthshire.

BEQUESTS, ETC.—Mr. James Madden has bequeathed £50 to the Hospital for Incurables, Donnybrook; and £100 to St. Michael's Hospital, Kingstown.—Mr. Forster Green has given £50 to the Society for Providing Nurses for the Sick Poor of Belfast.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. The Annual Oration by Dr. Alfred Carpenter of Croydon: "Alcoholic Drinks, as Diet, as Medicine, and as Poisons".

TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. Dickinson: Ulceration of the Bowel in connection with Granular Kidney. Dr. Ord: 1. Renal Calculus of mixed Carbonate and Phosphate; 2. Two specimens showing the Spontaneous Disintegration of Calculi. Mr. Nunn: Sections of Tumour from Pectoral Region of Man, aged 51. Dr. Braidwood: The Microscopical Characters found in Tissues affected by Measles. Dr. Thin: 1. Epithelioma of the Female Lip; 2. Cancerous Ulcer of the Skin, forty-three years' duration. Mr. Netleship: Carcinoma of Orbit recurring after fourteen years. Dr. Peacock: French Millstone-maker's Lung. Dr. Irvine: Specimens of Cerebral Aneurysms. Dr. Cayley: Embolism of the Left Inferior Parietal Convulsions. Dr. Tilbury Fox: 1. Specimens shewing the Minute Anatomy of Dysidrosis; 2. Favus. Dr. F. Taylor: Cavity in Spinal Cord.

WEDNESDAY.—Epidemiological Society, 8.30 P.M. Dr. Thorne, "On the Origin of Infection".

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Leggatt, "Case of Yellow Fever: with Notes of the *Post Mortem* Examination by Dr. Greenfield"; Mr. Spencer Watson, "Two Cases of Lupus Exedens"; Dr. Buzzard, "Case of Double Optic Neuritis, with obstruction of the Right Brachial Artery"; Mr. Cripps, "Case of Gastroscopy for Intestinal Obstruction".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

WE have received a further communication from Dr. Abrath of Sunderland, and also another letter on the subject; but we cannot publish any further communications on this matter.

DIALYSED IRON.

SIR.—We gave Dr. Cavafy credit for greater chemical knowledge than he seems to possess. We beg to say, in reply to his letter, that it is not "possible that we think the iron is converted into a peptone"; but it is perfectly obvious that the acid of the gastric juice which converts the albuminoid foods into peptones must far more easily combine with the hydrate of oxide of iron. That it should not so combine with it, is a chemical impossibility. Let Dr. Cavafy try Bravais's dialysed iron for himself. We will send him a bottle for the purpose, if he will publish the results. We are, sir, your obedient servants,

ROBT. GLENN & SONS, Agents for Raoul Bravais, and Co.

Idol Lane, Great Tower Street, London, May 2nd, 1878.

P.S.—We should add, that Mr. Bravais distinctly recommends the dialysed iron should not be taken with ordinary water, but in distilled water, if taken in water at all.

WE agree with the opinions expressed in the letter of Mr. H. Brown of Northallerton.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

DO MEDICAL MEN PROMOTE INTemperance?

SIR,—The admirable spirit of Dr. Maclean's letter on the above in your JOURNAL of the 15th instant deserves the attention of the medical profession and the gratitude of every one interested in the great cause of temperance. As a very humble worker in this movement, I do sincerely pray that the question he has raised may lead to much common sense scientific Christian inquiry and action among medical men, leading them to expose the miserable fallacies by which our drinking habits have been so long bolstered up, and to discountenance "alcoholic prescription" except when "vitally necessary". And as to the vital necessity of using alcohol at all, the profession—so far as I am able to judge from their published opinions—represent a house divided against itself. But if it be allowed that it is vitally necessary to prescribe this dangerous article in certain cases, it must equally be allowed that in the past, at all events, such treatment has been far more common than necessary, and that the evil results are such as we resolutely declare them to be.

Now, sir, presuming that medical men allow the following facts, how can they hesitate on the course they should pursue in the "present distress"? There is not a shadow of doubt as to the fearful ravages which alcohol is making amongst us as a nation—drowning our morality, withering our physiology, blasting our happiness, damning our Christianity. Ten thousand times ten thousand proofs abound that alcohol is but a wasteful luxury or a dangerous drug. All, or nearly all, diseases and sickness can be successfully treated, and is so by an earnest section of the profession, without resorting to such a dangerous drug. Surely, sir, in the face of the first two undeniable facts—if we grant, for argument's sake, that the third is questionable—it behoves every medical man who is jealous for the honour of his profession, jealous for the bodily and spiritual welfare of his patients, and willing to do his duty in helping to remove the drink-curse which now afflicts our dear country, to at all events consider the possible evil results of any and every alcoholic stimulant which he may purpose to advise. If we are to accept the views of Dr. Alfred Carpenter on this most important question, as expressed by him in the *Church of England Temperance Chronicle* of this week, "medical men prescribe alcohol to a very great extent to humour their patients, and because from a pecuniary point of view they cannot afford to advise differently". If this be so, all I can reply is, so much the worse for the profession's honour and their patients' stomachs; so much the more must we, who do our best endeavours to promote the cause of temperance, unceasingly educate the public on this question, even though by such poor argument as was used "at a Western County Church of England Temperance Society Meeting", to which Dr. Maclean specially refers.

If medical men will but conscientiously decide in every case, "Is alcohol vitally necessary here?" and prescribe accordingly, they will soon disarm us of arguments which, no doubt, sometimes are used with more zeal than discretion.—I am, etc.,
Good Friday, 1878.

TOM HOLE, C.E.T.S., Ilfracombe.

THE following communications have been handed to the General Manager:—Dr. St. George, Lisburn; Messrs. Macdure and Macdonald, London; Messrs. Corbyn, Stacey, and Co., London; Dr. Lawrence Hamilton, London.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions on Anatomy and Physiology submitted to the candidates for the diploma of membership of the College of Surgeons on April 23rd, when they were required to answer at least four (including one of the first two) out of the six questions. 1. Mention the forces concerned in the venous circulation, and describe their action. 2. Give the minute anatomy of the nasal mucous membrane. 3. Describe the attachment of muscles to the tibia, and mention the nerve-supply of each. 4. Describe the anastomoses of the scapular arteries, and the dissection required to expose them. 5. Give the relations and distribution of the portio dura nerve outside the stylo-mastoid foramen. 6. The pharynx being opened from behind, describe the parts brought into view without further dissection.

MEDICAL WITNESSES.

SIR,—Having recently known of a case where a coroner received the evidence from a man who had no qualification, and who was not an assistant to any registered practitioner, and who had attended the case and was paid his fee, I wish to know if that coroner was acting legally in paying this quack, for he was nothing else, the fee? If not acting legally, would it be of service were I to lay the facts of the case before the Home Secretary?—I am, yours truly,
CORONER.

. A coroner is bound by the Medical Witnesses' Act to summon as a witness and to take evidence only from a legally qualified medical practitioner, or one who is duly registered as such. In the case described by our correspondent the coroner acted illegally, not only in summoning an unregistered person, but in paying him the fee. The proper course for our correspondent to take is to lay the case before the magistrates who sit in quarter sessions. The fee which the coroner has thus illegally paid will be disallowed. This is the only mode in which he can be punished for his irregular conduct.

EAR-DISEASE AND LIFE-ASSURANCE.

SIR,—Having acceded to the request of the Bureau of the Section of Otology—President, Dr. Van Hock of Niemegeuen—of the International Congress of the Medical Sciences, to be held in September 1879, at Amsterdam, to act as reporter on the subject of "ear-disease with relation to life-assurance", I write to ask if you will be good enough to inform me if there be anything written on this subject other than the communications that have already appeared in the columns of the JOURNAL, and of which I am cognisant? Further will you allow me, through your columns, to ask those of my professional brethren who are advisers to assurance companies to inform me how they advise in respect to individuals who come before them as candidates for admission to the benefits of their respective offices, and who have a history (past or present) of an ear-disease, manifesting itself either by more or less of deafness alone, or by any ear-discharge, or by both together, or by the presence of old cicatrices over the mastoid; also, how they advise in respect to individuals who are totally deaf from inherited syphilis, and who may or may not be blind from the same cause. Replies to these queries sent to me direct will be regarded as a great favour; or, if you and your correspondents prefer it, I shall be glad to get them through the medium of your columns.—I am, yours very truly,
JAS. PATTERSON CASSELLS.

2, Newton Terrace, Sauchiehall Street, Glasgow, April 22nd, 1878.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than Thursday, Twelve o'clock.

THE BRITISH MEDICAL JOURNAL.

SIR,—I wish to draw the attention of the members of our Association to a resolution unanimously passed at a recent meeting of the South Wales Branch at Carmarthen. It related to the publication of the JOURNAL. What I wish for, and every medical man to whom I have spoken upon the matter, is to have the leaves of the JOURNAL cut before it comes out of the printer's hands. It is the small worries in life that make it so uncomfortable, and this is one of them. Though it might appear too trivial almost to notice, yet its constant recurrence every week—the cutting of the pages—has so many times ruffled one's temper in the morning, that I have determined to do my best to rid myself of this trouble. I am told that possibly it will entail a small extra expense; if this be so, I shall be very pleased to pay for the boon. As the JOURNAL is the property of the members, surely we ought to have it published as the majority wish; hence I trust that other branches will take up this matter, and urge the Council to meet our views.—I am, sir, yours truly,
Morrison, April 1878.

E. RICE MORGAN.

. The subject of Mr. Morgan's letter has been brought before the JOURNAL Committee, who have already had it under consideration, and who have endeavoured to make arrangements for the purpose in the new premises. The question is one of much difficulty and involving business details, which have been on several occasions carefully considered. One main difficulty arises out of the large issue of the JOURNAL, which amounts now to 8,250 copies a week, which have to be printed during Thursday night and rapidly issued on Friday morning.

DR. J. R. COLE writes to *New Remedies*:—"Having accidentally discovered that tannin will deodorise iodoform, I take pleasure in making known this fact to you, and through you to the profession. I use it in equal parts, as an application to chancroids, and to old offensive ulcers."

CHRONIC ALCOHOLISM.

SIR,—Would any of your readers be good enough to state what they find most suitable in the tremors of chronic alcoholism, and also name any substitute for the constant craving for drink which exists? By doing so, they would oblige
April 16th, 1878.

A CONSTANT READER.

. As this is a very important question in practice and one of frequent occurrence, and as it is known that Dr. Lauder Brunton has given a great deal of attention to it, we have asked that physician to oblige us with his experience on the subject. He informs us that, according to his experience, "A Constant Reader" will find a combination of iron and nux vomica—say fifteen minims of the tincture of the perchloride and ten of tincture of nux vomica—one of the most efficacious remedies for the tremors of chronic alcoholism. If the stomach be deranged, as it very frequently is, the indigestion should be treated previously to the administration of iron, by giving ten grains of subnitrate or carbonate of bismuth with ten of magnesia, suspended with gum tragacanth. If there be any tendency to sleeplessness, or if the tremors should not rapidly disappear under the use of the iron and nux vomica alone, thirty or forty grains of bromide of potassium should be given at night. The chalybeate mixture already mentioned, either alone or with the addition of five or ten minims of tincture of capsicum, tends to alleviate the craving for drink. Another mixture recommended for this purpose consists of sulphate of iron, magnesia, and oil of cloves; a third consists of carbonate of ammonia in infusion of gentian, to be taken whenever the craving is felt. Should the craving come on at intervals of several weeks, with complete intermissions between, the case should be treated like one of epilepsy, by the administration of bromide of potassium.

THE fees named in Dr. J. Beattie's letter appear to be fair and proper charges.

PROFESSIONAL PUFFS.

WE are very sorry to see the notice of "most successful" operation of the removal of foreign bodies in the walls of the chest in the *Drogheda Workhouse*, published in the *Freshman's Journal*. We feel little doubt that such a notice must be as annoying to Dr. Adrien as it is distasteful to the profession. Editors of public journals should understand that such notices are distinctly injurious to the medical man whose name they couple with laudations of his skill, and medical men cannot be too careful to prevent injudicious friends from publishing worthless puffs of the kind. It is always obvious that a newspaper reporter cannot be a proper judge of surgical operations, and that any attempt to get such operations reported in the daily papers is an unfair and mischievous form of advertisement, which will always be discontinued by the profession, with which it would greatly injure the professional reputation of any medical man to be supposed to have any connection.

SIR,—May I ask if the enclosed (leading notice in the *Chambers's Temperance Chronicle*) is in accordance with professional obligations?—Yours,
CHIRURGEON.

P.S.—If the medical man referred to know nothing of the notice, he ought to have an opportunity of disclaiming it.

"Many of our readers scarcely know the admirable work going on at the London Temperance Hospital, and fewer still the service which is being rendered by its skilful medical officers to the cause of temperance through the non-alcoholic treatment practised thereat. For instance, a man between fifty and sixty years of age only a month ago, by the operation of lithotomy, was relieved of a formidable calculus, measuring one inch in diameter, and which for years had rendered his life miserable. The operation was successfully performed by Dr. James Edmunds, and the patient is now so well that only the other day he walked two miles with ease. Other cases have been successfully treated. When operator and subject are thus both total abstainers, and the treatment always non-alcoholic, the success achieved deserves a conspicuous note in our columns."

DR. ROYSTON.—See BRITISH MEDICAL JOURNAL, September 23rd, 1871, page 568; and December 25th, 1875, page 805.

A CONSCIENTIOUS pharmacist, says the *Pharmaceutical Centralblatt*, receiving a prescription from a homoeopathic physician in Vienna, for belladonna a tenth dilution, dispensed distilled water; but the medical man sent back with a request to dilute it yet more, as it was still too powerful.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

GLANDERS IN THE HUMAN SUBJECT.

A DEATH from this disease took place at St. John's Hospital for Skin-Diseases on Good Friday. The man had complained for quite a month previously of sickness and pains in the stomach, but these symptoms were possibly quite unconnected with the fatal disease. On March 25th and 26th, the patient was employed to drive a cart; immediately after which he absented himself from his work. On April 11th, he was seen by his employer, when he complained of being very unwell, and seemed to be labouring under a severe cold. On the Saturday following (13th), he entered at St. John's Hospital, but became rapidly worse; and when seen by Mr. Milton on the 16th, was evidently suffering from glanders in an advanced stage. The face was of an erysipelatous redness; a large portion of the right side of the nose was covered with a pultaceous slough; the breathing was loud and brassy, and the appearance of the patient was like that of a man stupefied by some narcotic. The patient could scarcely stand, and complained of violent and constant pain in his head, saying he had not slept more than a quarter of an hour at a time for a fortnight. He was immediately ordered to bed, and taken into the hospital on Thursday, the 17th. He was supplied to an unlimited extent from the hospital with beef-tea, wine, and iced brandy, but vomiting and cramp came on the same evening; and though these seemed to improve after his admission, he died twenty hours afterwards, being quite sensible almost to the last minute. Towards the close, farcy-buds began to appear.

It has, so far, proved impossible to identify the animal from which the unfortunate man contracted the disease. The pony which he drove is in good health.

MR. J. B. EADE (Newcastle).—Paris Hospitals are open without fee to students; but those who wish to hold office as dressers or receive certificates must take an inscription at the Faculty, which costs a very small sum. Plenty of good pleasant lodgings will be found in the students' quarter, which is, indeed, now one of the most pleasant parts of Paris.

MIDWIFERY ENGAGEMENTS.

SIR,—In reply to Dr. Burges's letter, the matter appears to me to be very simple. If he wish an "engagement" to attend any case of midwifery, he should let the patient understand that his fee will be a certain sum, whether sent for or not; such fee to cover attendance for so many days, or to include so many after-visits; and that if the case be other than an ordinary one, the fee will be more (naming the sum). When a person calls to engage you to attend her in her confinement, I think myself the wisest plan is (amongst the guinea-fee class, at all events) simply to take a note of the time of expected confinement, as a matter of convenience to yourself, to let her understand that you will attend if in the way. If we wish to make the "engagement" binding on the patient, the latter has an equal right to make it binding upon us, and that might turn out very awkwardly for us at times.—Yours, etc.,
Cardiff, April 1878.

ALFRED SHEEN, M.D.

RHAMNUS FRANGULA.

SIR,—*A propos* of Dr. Poulain's note on the *Rhamnus Frangula*, of which a *bon-bon* form, recently introduced by Mr. Baildon of Edinburgh, is likely to supplant, both in cheapness and efficacy, Grillon's Tamar Indian, allow me to add to its interest historically, if not etymologically. In Dr. William Turner's *Herbal* (1561, profusely illustrated, black letter), I find a short account of three kinds of *rhamnus*, from which the following is an interesting extract.

"Of these three kinds of *rhamnus*, when I was in Italy I sawe but one kinde, that is the thirde kinde which hath the round leaves, where as I sawe it, it was called *Christes thorn*, as though Christ had bene crowned with *rhamnus*. I never sawe it in Englande, and therefore I knowe no English name for it. But it may be called either *Christes thorn* or *buklar's thorne* (hence *Buckthorn*?) of the fashion of the fruyt or round ramnes, of the broadnes of the leaves in comparison of the other two kinde, it groweth in the mounte Appennine a litle from Bononye . . . The leaves if they be laid to, are good for wild fires (*erysipelas*?) and greate hote inflammations, some holde that the bowes of it set at mennes doores, or windowes, do drive away sorcerye, and inchantements that wyches and sorcerers do use against men."

What is "*ramnes*," and how linked with *ramus*, *ῥάμνος*, and *rhamnus*? The author describes the plant as a hedgelush "with twiggies and roddees of 5 cubits high and full of prickles".—Yours, etc.,
Bolton, April 16th, 1878.

C. ROTHWELL.

CONJOINT BOARDS.

SIR,—The letter of Dr. Gairdner on medical reform, in your issue of April 20th, merits attention. It affords proof of that which you have already pointed out—viz., the unwillingness of the Scotch corporations to yield to the long cherished desire for the establishment of conjoint boards. In favour of the continuance of the present system of examination in Scotland, Dr. Gairdner, speaking of the Royal College of Surgeons of Edinburgh, says "its diploma has from first to last been granted only after an education much more complete than that required by any single corporation in England". While this can scarcely be admitted, even of its diploma for membership, I would ask whether it is not a fact that the fellowship of that College is granted to men without any examination at all, and simply on the recommendation of two or more eminent surgeons? If this be so, how can Dr. Gairdner put forth so bold an assertion as that contained in his letter? In a country town well known to myself, and where only eight medical men practise, two of the number hold the Fellowship of the Edinburgh College of Surgeons, and that, too, without having ever been subjected to an examination, writing a thesis, or even putting in an appearance at the College. This, sir, shows how misleading to the public are the qualifications given by the Scottish examining boards.

Much might be written about the title of Doctor obtainable in Scotland and Ireland after an examination in no respect more searching than that made at the London College of Physicians or the Apothecaries' Society, but which places its recipient on a scale of advantage in public estimation higher than that of either the L.R.C.P. or L.S.A. I must, however, refrain.

I only allude to let each member of the British Medical Association use whatever influence he possesses with the legislature to promote the compulsory establishment of joint boards for the three kingdoms.—I am, sir, yours faithfully,
April 20th, 1878.

M.R.C.S. Eng., L.S.A.

RESIDENCES FOR INVALIDS.

In further reply to "Hygeia", we would remark that it is impossible within our space to enter into questions of drainage and water-supply in detail. The condition, especially of the former, varies in different portions and different houses of the same

general locality. In the immediate vicinity of London, salubrious spots are to be found, perhaps had, at Wimbledon, parts of Upper Norwood, at Highgate, and at Hampstead; also, a little further off, on the higher points near Surbiton. At a greater distance, we consider Sunninghill and Ascot to have one of the best climates near London, or in England, and think them superior to Windsor or Slough, the latter of which, and part of the former, lie rather low. They are not, perhaps, so cheerful or convenient for persons of moderate means as Windsor or Slough. Tunbridge Wells is a very healthy and cheerful town, very superior to its neighbour, Tunbridge, which lies low. In central England, Malvern is most highly to be recommended, and is far superior to any place of the kind we know.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

SIR,—I am directed to inform you that, at the annual general meeting of the Society, held on April 24th, a vote of thanks was carried unanimously to the Editors of the Medical Journals, "for their kindness in forwarding in every way possible the objects of the Society".—I am, sir, your obedient servant,
April 26th, 1878.

J. B. BLACKETT, Secretary.

MEDICAL DEGREES.

SIR,—I think Dr. Jacobs's letter respecting the title of "Doctor" in your issue of the 27th instant is wide of the mark. The real grievance of the English medical men is, that they have not the same facilities offered them for obtaining a degree in their native land as their Scotch and Irish brethren have, and this is certainly very hard; hence the majority of men educated in England prefer a licence from one of our recognised corporations to a degree from an university across the Border or Channel. And again, another great grievance we experience is that, being possessed of English licences, we are debarred from using the title of "Dr." (by etiquette), while our neighbour may so style himself, having obtained a Scotch or Irish L.R.C.P. This is most unjust to the profession, and also to the public generally. I maintain that the Duke of Richmond's Bill should either enact that all practitioners should be styled "Dr.", not "M.D.", or that none should be so styled except they hold the degree of M.D.

Before leaving this important subject, I would again point out the difficulties that lie in the way of a student who would graduate at an English University as compared with those of Scotland and Ireland, feeling sure that some radical reform will shortly be found necessary.—I am, sir, yours truly,
April 26th, 1878.

ENGLISH LICENTIATE.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifeshire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

COMMUNICATIONS, LETTERS, etc., have been received from:—

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Effect of Chloral on Atropine.

No.	Weight.	Dose of Chloral.	Dose of Atropia.	Result.
104	1 pound 9 ounces	8 grains	12 grains	Death in ten minutes
105	2 " 7 "	12 "	18 "	Recovery
106	1 " 9 "	10 "	12 "	Death in two hours
107	1 " 9 "	10 "	12 "	" five hours
108	1 " 11 "	6 "	12 "	" one hour and a half
109	1 " 10 1/2 "	3 "	12 "	" one hour

From this it would appear that chloral only somewhat delayed the fatal advent in atropine-poisoning, as seen in the last three experiments. No. 105 after a week got other eighteen grains of atropia without any chloral, and again recovered.

It was next thought desirable to test the effect of strychnia upon aconite-poisoning.

Effects of Fatal Doses of Strychnine upon Fatal Doses of Aconitine.

No.	Weight.	Dose of Aconitine.	Interval.	Dose of Strychnia.	Result.
110	3 pounds	1-300th of a grain	Twenty minutes	1-100th of a grain	Death
111	"	1-120th "	"	Unknown	"

In the first of these two experiments, after a fatal dose of aconitine, with an interval of twenty minutes, the minimum fatal dose of strychnia (according to Dr. Bennett) was injected. The aconitine symptoms were much relieved; but the rabbit died in a strychnia-fit. To the second an unknown amount of strychnia was administered, as a quantity escaped through a leak in the syringe. No influence, or very little, was exercised over the course of aconitine-poisoning.

It has not been possible to carry out a complete series of experiments on the antagonism of strychnia and aconitine in the rabbit; but the subject appears worth pursuing, as the following experiments would indicate.

No.	Weight.	Dose of Aconitine.	Dose of Strychnia.	Result.
112	2 pounds 11 ounces	1-300th of a grain	1-150th of a grain	Death in 15 minutes
113	2 " 9 "	1-300th "	1-50th "	Recovery
114	5 " 2 "	1-200th "	1-50th "	"
115	2 " 0 "	1-400th "	1-50th "	Death in 30 minutes

The deaths were both due to strychnia. No. 113 had a convulsion twenty minutes after the injection of the strychnia, but recovered without any signs of aconite-poisoning. No. 114 had no severe symptom of any kind. No rabbit would survive 1-200th of a grain of aconitine given alone.

These experiments, so far as they go, are at least suggestive. They were abruptly brought to a close by the passing of the Vivisection Act.

SUMMARY.

1. The minimum lethal dose of Morson's aconitine for a guinea-pig of 1 1/2 lbs. weight is 1-1200th of a grain; for a rabbit of 1 1/2 lbs. weight, 1-400th of a grain; for a 3 lb. rabbit, 1-300th of a grain; the difference being due, probably, rather to age than to size. The younger rabbit took a comparatively larger dose.
2. The minimum lethal dose of digitaline (Smith's) is nearly one grain to the pound weight in the rabbit.
3. The simultaneous administration of digitaline and aconitine affords no protection.
4. If digitalis be given in sufficient dose and a sufficient time (from five to nine hours) before a lethal dose of aconitine is administered, a distinct protection is afforded.
5. When the digitaline is given at a less interval than five hours, the toxic power of aconitine is intensified.
6. Small doses of atropine, given before lethal doses of aconitine, exercise a decided protective influence.
7. Small doses of aconitine do not appear to exercise any influence over lethal doses of atropine.
8. Atropine in four-grain doses effectually antagonises lethal doses of aconitine, up to sixteen minutes after the administration of the latter.
9. Atropine exercises no like influence over lethal doses of chloral.
10. Strychnia exercises a potent influence over lethal doses of aconitine; but the experiments are too few to warrant very decided conclusions.

VIII.—REPORT ON THE PHYSIOLOGICAL ACTION OF THE CHINOLINE AND PYRIDINE SERIES OF COMPOUNDS.

By JOHN G. MCKENDRICK, M.D., F.R.S.E.,

Professor of the Institutes of Medicine in the University of Glasgow; etc.

It was first shown by Gerhardt* that when either quinine, cinchonine, or strychnine is distilled with caustic potash, each of these bases yields two homologous series of bases, named the pyridine and chinoline series. It has also been shown by Anderson† and Greville Williams‡ that bases isomeric with these are obtained by the destructive distillation of coal or from Dippel's oil. Greville Williams has also pointed out that chinoline obtained from coal-tar differs in some respects from that got from cinchonine.

It became a matter of physiological interest to ascertain (1) the action on the animal body of the various members of the series; (2) whether there was any difference in this respect between the members of the series obtained from cinchonine and those got from tar; (3) whether, and if so how, both as regards extent and character, the physiological action of these bases differed from that of the original alkaloidal bodies; (4) whether the action of the methyl and ethyl compounds of the substances was different from that of the substances themselves; (5) whether any facts could be ascertained generally which would throw light on the interesting problem of the relation between the chemical constitution of active substances and their physiological action.

I.—HISTORY OF THE RESEARCH.

This investigation has been carried on at intervals during the past four years. In the first instance, I had the able co-operation of Professor James Dewar, now of Cambridge; and the results of our work were communicated to the Royal Society in 1875.§ By Professor Dewar's removal to Cambridge, the investigation was arrested for a time. Soon after my own removal to Glasgow, I obtained the valuable aid of Dr. W. Ramsay, Tutorial Assistant of Chemistry in the University of Glasgow, whose writings on the chemistry of picoline and its derivatives are well known. In such a research as the present, the co-operation of the chemist with the physiologist is indispensable; and I consider myself as having been singularly fortunate in having associated with me such chemists as Professor Dewar and Dr. Ramsay, both of whom have paid great attention to the chemistry of the compounds under consideration.

II.—CHEMICAL RELATIONS OF THE CHINOLINE AND PYRIDINE SERIES OF BASES.

a. Homologues of Chinoline.—Without entering into details regarding the theoretical chemical constitution of these substances, it is sufficient to state here that when cinchonine or quinine is distilled with potassium hydrate, various bases may be obtained, at different boiling-points. Greville Williams showed, however, that no amount of fractional distillation will furnish chemically pure members of this series. Thus, with the exception of chinoline itself, the fluids we used in this research were really mixtures of bases obtained at various boiling-points. The laborious method of isolating by fractional crystallisation was not employed. These bases are:

Name.	Empirical Formula.	Boiling Point.
Chinoline	C_9H_7N	...
Lepidine	$C_{10}H_9N$	...
Dispoline	$C_{11}H_{11}N$	200 to 280 deg. Cent.
Tetrahiroline	$C_{12}H_{13}N$	280 to 300 deg. Cent.
Pentahiroline	$C_{13}H_{15}N$	Above 300 Cent. These can only be separated by fractional crystallisation of their platinum salts.
Isoline...	$C_{14}H_{17}N$	
Eltidine	$C_{15}H_{19}N$	
Validine	$C_{16}H_{21}N$	

It will be observed that we have here a homologous series of compounds passing from the lower to the higher by successive increments of CH_2 . A similar series of bodies may be obtained from heavy coal-tar oil. All of these bases unite with acids forming salts.

b. Homologues of Pyridine.—Pyridine is a substance discovered by Anderson|| in an investigation of bone-oil. Williams¶ found it in the distillation of bituminous shale, and among the alkaloids produced by the destructive distillation of cinchonine. These bases are separable by fractional distillation. They are:

Name.	Empirical Formula.	Boiling Point.
Pyridine	C_5H_5N	115 deg. Cent.
Picoline	C_6H_7N	134 deg. "
Lutidine	C_7H_9N	154 deg. "

* Gerhardt, *Annalen der Chemie und Pharmacie*, vol. xlii, p. 310; vol. xliv, p. 279.

† Anderson, *Edinburgh Philosophical Transactions*, vol. xvi, p. 4; also vol. xx [2], p. 247; *Philosophical Magazine* [4], vol. vii, p. 257; *Annalen der Chemie und Pharm.*, vol. lxxx, p. 55; *Jahresber.*, 1851, p. 478.

‡ C. Greville Williams, *Edinburgh Philosophical Transactions*, vol. xxi [2], p. 315 [3], p. 377; *Jahresber. der Chemie*, 1855, p. 548; 1856, p. 532; *Philosophical Magazine*, J. [4], vol. viii, p. 24; *Edinburgh Philosophical Transactions* vol. xxi [2], p. 315; *Chemical Gazette*, November 1855.

§ *Proceedings of the Royal Society*, No. 159; 1875.

|| Anderson, *Edinburgh Philosophical Transactions*, vol. xvi, p. 24; vol. xx [2], p. 247; *Philosophical Magazine* [4], vol. ii, p. 257; *Ann. Chem. Pharm.*, vol. lxxx, p. 55; *Jahresber.*, 1851, p. 478.

¶ Williams, *Philosophical Magazine* [4], vol. viii, p. 24; *Edinburgh Philosophical Transactions*, vol. xxi [2], p. 315; *Chem. Gazette*, November 1st, 1855.

Name.	Empirical Formula.	Boiling Point.
Collidine	$C_8 H_{11} N$	170 deg. Cent.
Parvoline	$C_9 H_{13} N$	188 deg. "
Coridine	$C_{10} H_{15} N$	211 deg. "
Rubidine	$C_{11} H_{17} N$	230 deg. "
Viridine	$C_{12} H_{19} N$	251 deg. "

c. *Addition-Derivatives of Chinoline*.*—Greville Williams† first succeeded in obtaining compounds, which he termed the hydrodates of methyl-chinoline, ethyl-chinoline, and amyl-chinoline. They are prepared by heating in a sealed tube chinoline with iodide of methyl, iodide of ethyl, or iodide of amyl, and they are represented by the following formulæ:

Chinoline, $C_9 H_7 N$.

Methyl-chinoline	$C_{10} H_{10} N$, or $C_9 H_7 N \cdot CH_3$
Ethyl-chinoline	$C_{11} H_{12} N$, or $C_9 H_7 N \cdot C_2 H_5$
Amyl-chinoline	$C_{14} H_{18} N$, or $C_9 H_7 N \cdot C_5 H_{11}$

It will be observed that the molecular weight of these addition-compounds is greater than that of chinoline itself. The hydriodides and sulphates were the salts always employed in this research. The substitution-derivatives of the other members of the chinoline series have not been investigated; but it is important to observe that their properties are tolerably well known to chemists.

d. *Addition-Derivatives of Pyridine Series*.—Similar addition-compounds belong to the pyridine series. Of these, the methyl-iodide of pyridine was the only one examined in this inquiry. The addition-derivatives of picoline, one of the best known members of the series since the researches of Anderson, are as follows:

Picoline, $C_8 H_7 N$.

Methyl-picoline	$C_9 H_{10} N$, or $C_8 H_7 N \cdot CH_3$
Ethyl-picoline	$C_{10} H_{12} N$, or $C_8 H_7 N \cdot C_2 H_5$
Amyl-picoline	$C_{11} H_{18} N$, or $C_8 H_7 N \cdot C_5 H_{11}$
Allyl-bicoline	$C_9 H_{12} N$, or $C_8 H_7 N \cdot C_3 H_5$

The hydriodide and sulphate were the salts employed.

e. *Polymeric Bases of Pyridine Series*.—By the action of sodium on pyridine, Anderson† succeeded in obtaining dipyridine, a base polymeric with pyridine and represented by the formula $C_{10} H_{10} N_2$, that is, twice the number of atoms in pyridine, $C_5 H_5 N$. In a similar manner, di- and even tri-picoline (?) may be obtained, having the formula $C_{12} H_{14} N_2$ and $C_{15} H_{21} N_3$. By heating these compounds with iodide of methyl or ethyl in sealed tubes, dipyridine methyl- or ethyl-iodide and dipicoline methyl- or ethyl-iodide may be produced, thus remarkably increasing the molecular weight. Thus:

Pyridine	$C_5 H_5 N$	Picoline	$C_8 H_7 N$
Dipyridine	$C_{10} H_{10} N_2$	Dipicoline... ..	$C_{12} H_{14} N_2$
Dipyridine ethyl-iodide ... ..	...	...	$C_{12} H_{15} N_2 I$, or $C_{10} H_{10} N_2 \cdot C_2 H_5 I$
Dipicoline ethyl-iodide ... ..	...	...	$C_{14} H_{19} N_2 I$, or $C_{12} H_{14} N_2 \cdot C_2 H_5 I$

f. *Dicarboxypyridenic Acid*.—In a research on the pyridine series of bases, Dewar‡ discovered an acid to which he gave the above name. It is represented by $C_7 H_8 N_5 NO_4$. Dr. Ramsay prepared a quantity for the purposes of this research, and the following salts were examined:

Dicarboxypyridenate of ammonia	$(NH_4)_2 C_7 H_8 N_5 NO_4$
Dicarboxypyridenate of soda	$Na_2 C_7 H_8 N_5 NO_4$
Dicarboxypyridenic methyl-ether	$(CH_3)_2 C_7 H_8 N_5 NO_4$

Dewar§ has recently discovered that the members of the chinoline series yield on oxidation a similar acid, to which he has given the name of leucolinic acid. The physiological properties of this substance have not yet been examined.

The formulæ of these compounds, as compared with various alkaloids, will be seen at a glance in the following table:

Name.	Empirical Formula.	Alkaloid.	Empirical Formula.
Pyridine	$C_5 H_5 N$	Curarine	$C_{10} H_{15} N$
Picoline	$C_8 H_7 N$	Conine	$C_8 H_{15} N$
Lutidine	$C_7 H_9 N$	Caffeine and theine	$C_8 H_{10} N_4 O_2$
Collidine	$C_8 H_{11} N$	Nicotine	$C_{10} H_{14} N_2$
Parvoline, etc.	$C_9 H_{13} N$	Santonine	$C_{15} H_{15} O_3$
Polymeric Pyridine Bases.		Physostigmine	$C_{15} H_{21} N_3 O_2$
Dipyridine	$C_{10} H_{10} N_2$	Morphine	$C_{17} H_{19} NO_3$
Dipicoline	$C_{12} H_{14} N_2$	Atropine	$C_{17} H_{23} NO_3$
Tripicoline	$C_{18} H_{21} N_3$	Codeine	$C_{18} H_{21} NO_3$
Methyl picoline	$C_9 H_{10} N$	Thebaine	$C_{19} H_{21} NO_3$
Ethyl picoline	$C_8 H_{12} N$	Bebeerine	$C_{19} H_{21} NO_3$
Amyl picoline	$C_{11} H_{18} N$	Quinine	$C_{20} H_{24} N_2 O_2$
Allyl picoline	$C_9 H_{12} N$	Cinchonine	$C_{20} H_{24} N_2 O_2$
Dipyridine methyl	$C_{11} H_{13} N_2$	Narceine	$C_{23} H_{29} NO_9$
Dipyridine ethyl	$C_{12} H_{15} N_2$	Brucine	$C_{23} H_{26} N_2 O_4$
Dipicoline ethyl	$C_{14} H_{19} N_2$		

* It has been thought advisable to alter the name "substitution-derivatives" to "addition-derivatives", for it is evident that the hydrogen of the base is not replaced by methyl, ethyl, etc.—as, for instance, $C_5 H_4 (CH_3) N$: and such compounds are really analogous to true salts, such as the hydrochloride, hydriodide, etc. Compare $C_5 H_5 N \cdot HI$, with $C_5 H_5 N \cdot CH_3 I$ and with $C_5 H_5 N \cdot C_2 H_5 I$.

† Greville Williams, *Edinburgh Philosophical Transactions*, vol. xxi [3], p. 577.

§ Dewar, *Transactions of the Royal Society of Edinburgh*, vol. xxvi.

‡ Anderson, *Chemical Society's Journal* [2], vol. vii, p. 406.

|| Dewar, *Proceedings of the Royal Society*, No. 179: 1877, p. 67.

Name.		Empirical Formula.	Alkaloid.	Empirical Formula.
Acids related to Pyridine.	Dicarbopyridenic acid ...	$C_9 H_9 NO_4$	Strychnine ...	$C_{21} H_{22} N_2 O_4$
	Dicarbopyridenic methyl ether ...	$C_7 H_5 NO_4$		
Chinoline Series.	Chinoline ...	$C_9 H_7 N$	Aconitine ...	$C_{27} H_{39} NO_{10}$
	Lepidine ...	$C_{10} H_9 N$		
	Dispoline ...	$C_{11} H_{11} N$		
	Tetrahiroline ...	$C_{12} H_{13} N$	Digitaline
	Pentahiroline ...	$C_{13} H_{15} N$		
	Isoline ...	$C_{14} H_{17} N$	Veratrine ...	$C_{22} H_{22} N_2 O_5$
	Ettidine ..	$C_{15} H_{19} N$		
Addition Derivatives of Chinoline Series.	Validine ...	$C_{16} H_{21} N$	Ergotin ...	$C_{30} H_{32} N_2 O_3$
	Methyl-chinoline ...	$C_{10} H_{10} N$		
	Ethyl-chinoline ...	$C_{11} H_{12} N$		
	Amyl-chinoline ...	$C_{14} H_{18} N$		

III.—METHOD OF THE RESEARCH.

The substance first examined was chinoline obtained from cinchonine. It was employed both as sulphate and hydrochloride, dissolved in water, and introduced by subcutaneous injection into the animal. The strength of the solution employed in this and in all other instances was one part of the base to twenty parts of water. Its physiological action was tested on frogs, mice, rabbits, guinea-pigs, cats, dogs, and man; but, as the effects were found to be similar in all of these instances, the majority of the observations were made on rabbits. After having noted the effects of chinoline, we next studied, by the same method, the action of hydrochlorides of the bases distilling off at higher temperatures, including such bases as lepidine, dispoline, tetrahiroline, etc. We then examined the pyridine series, beginning with pyridine itself, and passing upwards to bases obtained at still higher boiling-points, such as picoline, lutidine, etc. The investigation was directed to the action of condensed bases, such as dipyridine, dipicoline, etc.; and the effects of these substances were compared with those produced by the members of the chinoline series and among themselves. We then proceeded to examine the action of the addition-derivatives, and of dicarbopyridenic acid. So far as we could observe, there was no difference as regards physiological action between bases obtained from cinchonine and others got from tar.

IV.—PHYSIOLOGICAL EFFECTS OF HYDROCHLORIDE OF CHINOLINE ($C_9 H_7 N \cdot H Cl$).

The administration, by subcutaneous injection, of one grain and a quarter for every pound of weight into a healthy rabbit produced the following effects. In four or five minutes, the animal appeared to become drowsy, was unwilling to move; but, when pushed, locomotion was not affected. Both the pulsations of the heart and the respiratory movements were slightly increased in frequency at this stage. The drowsiness increased, and in a few minutes more the animal sank on its abdomen and remained motionless, with the eyes widely opened. It was now gently turned over on its back or side, and it remained in that unnatural position. Still later, there was complete anæsthesia. At no period was there any hyperæsthesia. Reflex functions were also in abeyance so far that they could not be excited by pinching or pricking, but irritation by a faradic current caused feeble movements. The animal appeared to be unconscious of loud sounds. The pupil was normal as regards size, and it contracted readily when exposed to a strong light. The reflex movements of the eyelid were not lost until the animal was in a state of deep stupor from an overdose. The respirations were now much fewer in number, and of less depth than normal. The heart still acted vigorously, but the pulsations were decreased in number by about one-sixth. After remaining motionless in that condition for a period of three or perhaps four hours, the rabbit slowly recovered, raised its head from the table, began to move about, and frequently ate food placed before it. It recovered completely from the dose above indicated, without any bad symptom supervening. A dose of two grains or two grains and a half per pound weight was usually lethal. If, at the end of three hours, the animal showed no indications towards recovery, it apparently sank in a state of profound insensibility, the heart-pulsations became feebler, and the respirations more and more shallow, until they were barely perceptible. Death ensued without convulsions. The temperature of the body fell six to eight degrees below the normal. An examination of the body, made immediately after death, showed the following appearances: (1) The vessels on the surface of the brain were somewhat congested; the substance of the brain itself did not exhibit any increase of vascularity; (2) the lungs were congested, more especially along the borders; (3) the heart was in a state of diastole and full of dark-coloured blood; (4) the veins in the mesentery and the larger vessels on the intestine were much congested; (5) the liver showed numerous minute ring-like congestions, indicating congestion of the portal system; (6) the kidneys and other abdominal and pelvic viscera were normal in appearance; and (7) the urine in the bladder contained no albumen or sugar.

From these symptoms and *post mortem* appearances, and from special methods of experiment, we draw the following conclusions regarding the action of hydrochloride of chinoline.

1. Action on the Nervous System.—The action is chiefly, if not altogether, on the nerve-centres, and not on the nerves or on their peripheral terminations. When the sciatic nerve is irritated by very feeble faradic currents, it manifests no diminution of sensibility, and the muscles supplied by the nerve contract with apparently their normal energy. The nerves of a frog killed by hydrochloride of chinoline show all the properties of nerves obtained from a non-poisoned animal. The sympathetic system of nerves is not usually affected to any appreciable extent, as evidenced by the normal condition of the pupil, the absence of dilatation of the vessels in the ear (consequent on paralysis of the vaso-motor system), and by the fact that, in an animal deeply under the influence of chinoline, the phenomena following section and irritation of the sympathetic in the neck of a rabbit take place to the same extent and in the same order as in a non-poisoned animal. In several instances we have observed dilatation of the vessels of the ear and slight contraction of the pupil; but these, from their rare occurrence, appear to be exceptional. No change was observed in the action of the pneumogastric nerve, so far as could be ascertained by the effect on the heart produced by faradic irritation of that nerve. We have observed no symptoms leading us to suspect irritation or paralysis of the centres in the cerebellum, or in the ganglia at the base of the brain; but in lethal doses the respiratory centres in the medulla oblongata become gradually affected, as shown by the diminution of the respiratory movements both in force and in frequency. The motor columns of the spinal cord do not lose their power of conduction from

the encephalon to various parts of the body, because, on irritating with a weak faradic current the end of the cord in a rabbit decapitated while deeply under the influence of the substance, powerful convulsive movements ensued. The reflex activity of the cord is much weakened, inasmuch as it cannot be excited by pinching or pricking; but it is not entirely lost, because it may be excited by faradic stimulation: and it has been observed in several experiments that strychnine, subcutaneously injected into a rabbit prostrate with hydrochlorate of chinoline, is followed by its usual physiological effects. It appears, therefore, that the substance acts chiefly on the sensory and motor centres in the cerebral hemispheres, weakening or removing all consciousness of external impressions and also all voluntary acts.

2. *Action on the Respiratory and Circulatory Systems.*—In the first instance, the action of the heart and the respiratory movements are increased, but afterwards they are much diminished, and death appears to be the result of these processes becoming weaker and weaker, until they cease altogether. The increased action observed at first is probably due to the excitement of the animal consequent on the injection of fluid beneath the skin. So soon as the substance acts through the blood on the nerve-centres, the action of both systems is weakened. We regard this weakening as due to an action on an encephalic centre, for the two following reasons: first, because irritation of the sympathetic and pneumogastric nerves in the neck of a rabbit completely under the influence of hydrochloride of chinoline produces acceleration and retardation of the heart's action respectively, as occurs in a healthy animal; and secondly, when the heart of a frog was treated according to Coats's method, with serum containing three per cent. of chinoline, no effect was observed. These experiments seem to indicate clearly that the substance acts on the encephalic centres, and through them on the heart and respiratory organs. The action of the heart finally ceases, probably by its textures being supplied with only venous blood.

3. *Action in lowering the Temperature of the Body.*—It was found, in three instances in which minute differences of temperature were observed at intervals of one minute, during a period of one hour before and one hour after the subcutaneous injection of hydrochloride of chinoline, that the substance produced a gradual and uniform fall of temperature to the extent of from six to eight degrees below the normal. In all of these instances the animal recovered from the effects, and, during recovery, the temperature slowly rose to its normal limit. This action we regard as of considerable importance. It is probably to be explained by interference with nutritional changes between the blood and the tissues, and also by the diminution, both in frequency and depth, of the respiratory movements.

4. *Action on the Dog.*—In 1875, three experiments were made on dogs. The effects were precisely similar to those already described, with the exception that nausea and vomiting occurred soon after the introduction of the substance beneath the skin, and that there was considerable cerebral excitement before the occurrence of stupor.

5. *Action in the Monkey.*—Two experiments were made on monkeys, one in 1875 and the other in 1876. The effects were the same as in the dog. One animal (a small macaque), used in 1875, died, after a dose of eight grains, in profound coma lasting nearly seven hours, although artificial respiration was kept up during a considerable portion of the time. The other, used in 1876, was a stronger animal, and recovered from a comatose condition lasting ten hours, after a dose of ten grains.

6. *Action in Man.*—The reporter on two occasions swallowed twelve grains of the substance, but the nausea was such as to forbid any further prosecution of the experiment. The only other symptom noticed was slight drowsiness.

7. *Remarks.*—If we compare the effects of chinoline on the rabbit with those on the dog, monkey, and on man, the chief fact to be noticed is the occurrence of nausea and of vomiting in the latter. This shuts out the hope at one time entertained that the substance might be employed to produce artificial stupor lasting for several hours continuously, unless, perhaps, the nauseating effect might be counteracted by combination with other substances. For physiological purposes, however, in experiments on frogs, birds, rats, and rabbits, it is very serviceable, inasmuch as it is possible to maintain this state of stupor and anæsthesia for several hours without the employment of artificial respiration. It was also observed that chinoline caused cerebral excitement in the first instance in the cat, dog, and monkey, whereas in the rabbit there is no excitement at any period.

V.—ACTION OF HYDROCHLORIDES OF THE HIGHER BASES OF THE CHINOLINE SERIES.

1. *Bases obtained by Distillation between 200° and 280° C. Lepidine, etc., $C_{10}H_9N$.*—These bases produced the same general action as chinoline, with the exceptions (1) that the dose required to produce a state of complete stupor was somewhat smaller than in the case of chinoline; and (2) that, after a state of stupor had been produced, the animal was less likely to recover, while it was observed that frequently before death there were jactitations of one or other of the limbs, and convulsive twitchings about the mouth.

2. *Bases obtained by Distillation between 280° and 300° C. Dispoline, etc., $C_{11}H_{11}N$.*—It was now observed that the symptoms following subcutaneous injection were considerably different from those of chinoline. One grain for each pound weight of the rabbit produced, in about five minutes, apparent uneasiness, side to side movements of the head, with a tendency occasionally to move backwards. This condition continued for three or four minutes, when the animal lay flat on its abdomen with its legs outspread. It was not in a state of complete unconsciousness. There was no anæsthesia. In several instances, there were convulsive twitchings of the limbs, grinding of the teeth, and a slight tendency to opisthotonos. The lethal dose was smaller than in the case of chinoline. The effects were a longer time in appearing, and they had more of a spinal than of a cerebral character.

3. *Bases obtained by Distillation above 300° C. Tetrahiroline, etc., $C_{12}H_{13}N$.*—These were found to be still more active. A dose of three-quarters of a grain per pound weight produced, in eight or ten minutes after it had been subcutaneously injected, violent convulsions, and was almost invariably fatal. During the first five minutes after the introduction of the poison, no marked symptoms were noticed. At the end of this time, the animal became uneasy, ran forwards in an excited manner, and then fell over on its side. The convulsions which ensued were similar to those produced by the action of large doses of quinine or cinchonine. They did not resemble the tetanic spasms produced by strychnia, as they were not excited by peripheral irritations; but they had an epileptiform character, consisting of irregular jactitations of the limbs, crunching of the teeth, movements of the eyeballs, pawing movements of the fore limbs, etc. The animal seemed to be semiconscious throughout. It was still susceptible to pain.

4. *General Results as to Physiological Action of Chinoline Series.*—A consideration of the effects just described indicates

that, as we ascend from the lower to the higher members of the chinoline series of bases, the physiological action becomes modified as follows.

1. The action on the sensory centres of the encephalon becomes less marked, until, in the highest group, there is no unconsciousness, but only slight stupor.
2. The actions of the motor centres of the encephalon and spinal cord are not affected in the lowest group, but become gradually more and more involved as we proceed upwards, until, in the highest group, we have substances producing powerful convulsions.
3. The lethal dose is smaller for the higher than for the lower members of the series.

VI.—ACTION OF HYDROCHLORIDES OF THE BASES IN THE PYRIDINE SERIES.

The physiological action of the bases of the pyridine series was next examined in the following order.

1. *Pyridine*, C_5H_5N .—The hydrochloride of this base produced no effects, even in doses of six grains per pound weight, other than slight excitement and acceleration of the pulse and of the respiratory movements. The animal, judging from its gait and demeanour, appeared to be in a state analogous to intoxication. It recovered without any bad effects.
2. *Picoline*, C_6H_7N .—The substance was employed both in the form of the base dissolved in water and as a hydrochloride. The salt was found to be more active physiologically than the base, but the kind of action was the same. The general effect was to produce, with a dose of three grains per pound weight, in the first place, general excitement and a full bounding pulse. This state was followed by a drowsy condition, which did not pass, with even a dose of six grains per pound weight, into complete stupor. The rabbit could always be readily aroused. While in the drowsy condition, the pulse fell in frequency and volume, and the respirations became feebler. The results we have obtained differ somewhat from those described by Vohl and Eulenberg* in a paper on the Physiological Action of Tobacco when used as a Narcotic, with especial reference to the Constituents of Tobacco-Smoke, of which picoline is one. The only explanation we can offer is that these gentlemen must have experimented with impure specimens of picoline.
3. *Lutidine*, C_7H_9N .—The effects were similar to those produced by picoline, only more marked. A dose of three grains per pound weight produced deep stupor, from which the animal could not be aroused. It remained in this condition for a period of from two to three hours. The pulsations of the heart were much reduced in volume, but only slightly in frequency; but it was clearly observable that the respirations were much less deep than in the natural condition, and they were reduced in frequency by about one-third. In a case of death from a lethal dose of four grains per pound, there was venous congestion in all parts of the body, but the heart was still feebly pulsating. It was observed that the blood had a peculiar dark chocolate-brown appearance. Examined with the spectroscope, it showed the two bands of oxyhæmoglobin.
4. *Collidine*, $C_8H_{11}N$.—Collidine was still more active in its effects. With a dose of a grain and a half per pound weight, the animal rapidly sank into a state of profound stupor, from which it could not be aroused. Anaesthesia was complete. The pulsations of the heart and the respirations became more and more feeble, until death ensued in about twenty minutes after the dose, apparently in consequence of failure of respiration. There were no twitchings or convulsions. The subcutaneous injection into a rabbit of one-eightieth of a grain of strychnine was followed by the usual physiological effects of that substance.
5. *The Higher Pyridine Bases obtained by Distillation above 200° C., such as Parvoline*, $C_9H_{13}N$, etc.—These were found to be still more active; but the effects were of the same nature as those just described. The lethal dose was found to be about three-quarters of a grain per pound weight. In two or three minutes, the animal sank on its abdomen; when pushed, could move with difficulty; respirations were rapid and irregular. It then lay on its side, and in four or five minutes died, apparently in an asphyxiated condition. There were no convulsive spasms or twitchings. This substance was lethal in much smaller doses than the lower bases of the chinoline series.

6. *General Results as to Physiological Action of the Pyridine Series.*—The pyridine series of compounds thus showed a gradual increase in activity of physiological action. The lowest of the series produced merely excitement from irritation of the encephalic nervous centres, while the highest produced paralysis of these nervous centres. There was no irritation of the spinal cord causing increased reflex activity. Death ensued from gradual failure of the respiratory movements, leading to asphyxia. The action of the higher pyridines was thus somewhat analogous to the lowest of the chinoline series, with this exception, that the pyridine compounds tended to cause death by asphyxia. It is to be noted also that the higher bases of the pyridine series were lethal in somewhat less than one-half of the dose required to destroy life by the lower members of the chinoline series.

VII.—ACTION OF HYDROCHLORATES OF THE CONDENSED OR POLYMERIC BASES OF THE PYRIDINE SERIES.

Considering the close analogy in chemical composition between the polymeric bases of pyridine and certain natural bases, such as nicotine, it became of importance to examine the physiological action of these bases, which were prepared, according to Anderson's method, by the action of sodium on pyridine, picoline, etc. The following were the effects observed after the subcutaneous injection of one grain of the hydriodide of dipicoline per pound weight into a rabbit. The animal remained quiet for a period varying from four to eight minutes, when it suddenly appeared uneasy, ran forwards as on tiptoe, with the back arched, and, falling on its side, became violently convulsed. The convulsions continued, almost without intermission, for three or four minutes, when death ensued. So far as could be observed, consciousness was not lost until immediately before death. The character of the convulsions resembled that of those produced by cinchonine or quinine, except that the tendency to backward movements, with the fore-legs extended, was not so marked; they also resembled those produced by salts of the higher members of the chinoline series, but they were more severe than in the latter. The hydrochlorides of two condensed bases of this kind were employed in the first instance—the first made from pyridine, and the other from picoline. The formulæ for these are: hydrochloride of dipyridine, $C_{10}H_{14}N_2 \cdot 2HCl$; and hydrochloride of dipicoline, $C_{12}H_{18}N_2 \cdot 2HCl$. The latter was found to be the more active of the two, but the actions were identical in character. The hydriodides were also used, and were found to be more active than the hydrochlorides.

* Vohl and Eulenberg, *Ar. für die Pharm.* [2], vol. cxlvii, pp. 130-166.

VIII.—ACTION OF THE ADDITION-DERIVATIVES OF CHINOLINE.

These were—

Methyl-chinoline ...	...	...	...	...	...	C_8H_7N , CH_3 or $C_{10}H_{10}N$
Ethyl-chinoline ...	...	...	...	...	...	C_8H_7N , C_2H_5 or $C_{11}H_{12}N$
Amyl chinoline ...	...	...	...	...	...	C_8H_7N , C_5H_{11} or $C_{14}H_{18}N$

The iodides and sulphates of these substitution-bases were employed, and it was found that the iodides were slightly more active than the sulphates. The general action of methyl-chinoline resembled that of chinoline, but there was a distinct tendency to spasm, in this respect somewhat resembling the action of the higher members of the chinoline series. This was still more noticeable with ethyl-chinoline, and reached its maximum with amyl-chinoline, where, of course, the molecular weight was still greater. The characteristic action of chinoline was, however, always manifest. There was thus a contrast with the action of the higher bases of chinoline series, which do not produce complete unconsciousness. The substitution-derivatives of chinoline do produce unconsciousness, but along with it there are twitchings, muscular tremors, and even opisthotonos, indicating irritation of motor centres. Thus, although in the chinoline series, lepidine, dispoline, and isoline have the same empirical formula as methyl-, ethyl-, and amyl-chinoline, they have a different kind of physiological action.

IX.—ACTION OF THE ADDITION-DERIVATIVES OF PYRIDINE.

Pyridine itself produces only slight excitement, and, except in very large doses, it is not lethal. Methyl-pyridine, C_5H_5N , CH_3 , or C_6H_5N , was found to have effects somewhat resembling those of picoline, but less marked. Three grains of pyridine-methyl-iodide given to a rabbit of two pounds weight caused nervous and vascular excitement succeeded by drowsiness. Comparative experiments were also made with the hydro-chloride of dipyridine, $C_{10}H_{10}N_2 \cdot 2HCl$, with the methyl-chloride of dipyridine $C_{10}H_{10}N_2 \cdot 2CH_3Cl$, and the latter was found to be the much more active of the two. Thus, a dose of one grain per pound weight of the hydro-chloride of dipyridine caused prostration, rapid breathing, partial paralysis of the fore-limbs, hyperæsthesia, and slight twitchings; whereas the same dose of the methyl-chloride of dipyridine was followed by severe convulsions three minutes after the dose was administered, and the animal died in five minutes. Ethyl-dipyridine was not examined.

X.—ACTION OF THE ADDITION-DERIVATIVES OF PICOLINE.

The iodides of methyl-, ethyl-, amyl-, and allyl-picoline were prepared by Dr. Ramsay, and their physiological action was examined, with the following general results. 1. In all the action was much the same as that of a large dose of picoline, with the exception that there were tremors and a tendency to convulsions, and there was less stupor; in fact, it bore a resemblance to the action of dipicoline. Thus, the modification of physiological action was somewhat similar to what was observed with the analogous substitution-compounds of the chinoline series. 2. In ascending from the lower to the higher compounds, it was noticed that a smaller and smaller dose was required to produce marked symptoms. For example, a dose of one grain per pound weight of the methyl-iodide of picoline produced tremors, slight twitchings, and prostration, but the animal recovered; whereas the same dose of the allyl-iodide of picoline, after producing symptoms of a similar kind, but more severe, invariably killed the animal. The corresponding bromine compounds were also examined, but their action differed in no respect from that of the iodine-compounds just described.

On three occasions, the following comparative experiment was made, the results of which may be clearly shown in a tabular form. Five rabbits were taken, of as nearly as possible two pounds weight:

Name of Substance.	Formula.	Dose in Grains.	Result.
A. Hydriodide of picoline	C_6H_7N . III	6	Excitement; stupor; prostration; recovery.
B. Hydriodide of dipicoline	$C_{12}H_{14}N$. 2HI	2	Excitement; difficulty of respirations; twitchings; convulsions; death.
C. Methyl-iodide of picoline	C_6H_7N . CH_3I	$2\frac{1}{2}$	Excitement; stupor; twitchings; recovery.
D. Ethyl-iodide of picoline	C_6H_7N . C_2H_5I	$1\frac{1}{2}$	Excitement; twitchings; convulsions; death.
E. Allyl-iodide of picoline	C_6H_7N . C_3H_5I	1	Excitement; twitchings; rapid occurrence of difficulty of breathing; Convulsions; death.

Death in all of these instances, except in A and C, was apparently the result of asphyxia from interference with respiratory centres, but the asphyxiated condition was most marked in the cases of ethyl- and allyl-picoline. Methyl-picoline resembled picoline in its action, except that twitchings and muscular tremors made their appearance. Doses of iodine and bromine, as iodide and bromide of potassium, and containing a quantity of iodine and bromine proportionate to that given along with the methyl-, ethyl-, and allyl-picoline, were subcutaneously injected without any noticeable effect. The potency of the addition-derivatives was, therefore, evidently due to the compound itself.

One cannot help being surprised at the activity of such a substance as picoline when introduced into the blood. Dr. Ramsay (*ut supra*) says: "I give an account of some attempts made to decompose picoline, all of which, with one exception, led to negative results. Picoline is not decomposed by potash in any form. Its vapour may be passed over fused caustic potash, or it may be boiled for a month with alcoholic potash, or it may be heated for some days to 350° with alcoholic potash, without undergoing the slightest decomposition. . . . It is not decomposed by a cherry-red heat, even in presence of lead peroxide or of lime. It may be distilled through a red-hot gun-barrel ten or twelve times without any deposition of carbon, and the picoline which distils over has not even a yellow colour. It is not attacked at the temperature of boiling sulphuric acid, nor by a mixture of strong nitric acid and sulphuric acid." He then shows that when picoline nitrate is heated to about 200° , a violent decomposition ensues. And yet, when a small quantity of a salt of picoline, or a salt of its substitution-derivatives, is introduced into the blood of a living animal, it will manifest its presence by unequivocal symptoms in the course of a few minutes. We are still ignorant of the physiological *modus operandi* of these substances.

XI.—ACTION OF DICARBOPYRIDENIC ACID, $C_7H_5NO_4$.

The action of the salts formed by this acid in union with sodium, ammonium, and methyl was examined, and they were all found to have an intense physiological effect, unlike that of any of the other compounds which have formed the subject of the present inquiry. The least active was the sodium-salt, and the most active was the compound with methyl—the

ammonium-salt occupying an intermediate position. The methyl-ether has a peculiar "mousy" odour, reminding one of conine. The general phenomena were as follow. When half a grain of the dicarbopyridenate of ammonium, in fifteen drops of water, was introduced under the skin of a rabbit of two pounds weight, the animal at once became violently agitated. It ran backwards and forwards on the table screaming loudly. Tremors of the whole body followed; the head drooped on the table; the fore-paws were at first weak, and then performed jerking movements, which rapidly terminated in strong tonic spasms of the anterior limbs alone; these spasms passed off, and the animal was quiet for a few moments and in a natural condition; during this period of quiet, the blood-vessels of the ears and the pupil rapidly dilated and contracted; the respirations were quick and shallow; another violent convulsion of a general character came on, and death occurred within four minutes of the administration of the dose. So far as could be observed, the animal was not unconscious. The character of the convulsions it is very difficult to describe. They somewhat resembled those of strychnine; but, as I have said, they were at first local, affecting only the fore-limbs. It was evident that reflex excitability was increased, as in several instances touching the animal caused a convulsive seizure. The action of the salt was thus unlike that of any of the chinoline and pyridine compounds, in none of which has any increase of reflex excitability been observed. We propose still further investigating the action of dicarbopyridenic acid, and also the action of leucolinic acid, the analogous acid of the chinoline series. It is sufficient, in the meantime, to note the sudden, rapid, violent, and fatal action of this substance on rabbits.

XII.—GENERAL CONCLUSIONS.

1. There is a marked gradation in the extent of physiological action of the members of the pyridine series of bases, but it remains of the same kind. The lethal dose, however, becomes reduced as we rise from the lower to the higher.
 2. The higher members of the pyridine series resemble, in physiological action, the lower members of the chinoline series, except (1) that the former are more liable to cause death by asphyxia, and (2) that the lethal dose of the pyridines is less than one-half that of the chinolines.
 3. In proceeding from the lower to the higher members of the chinoline series, the physiological action changes in character, inasmuch as the lower members appear to act chiefly on the sensory centres of the encephalon and the reflex centres of the spinal cord, destroying the power of voluntary or reflex movement; while the higher act less on these centres, and chiefly on the motor centres, first as irritants, causing violent convulsions, and afterwards producing complete paralysis. At the same time, while the reflex activity of the centres in the spinal cord appears to be so far inactive as not to be excited by pinching or pricking, it may be readily roused to action by strychnine. These conclusions apply specially to rabbits; in animals of higher cerebral development, such as dogs, monkeys, and man, nausea and vomiting are produced in addition.
 4. On comparing the action of such bases as C_9H_7N (chinoline) with $C_9H_{13}N$ (parvoline), or $C_8H_{11}N$ (collidine) with $C_8H_{15}N$ (conia from hemlock), or $C_{10}H_{10}N_2$ (dipyridine) with $C_{10}H_{14}N_2$ (nicotine from tobacco), it is to be observed that, apart from differences in chemical structure, the physiological activity of the substance is greater in those bases containing the larger amount of hydrogen.
 5. Those artificial bases which approximately approach the percentage composition of natural bases are much weaker physiologically, so far as can be estimated by amount of dose, than the natural bases; but the kind of action is the same in both cases.
 6. When the bases of the pyridine series are doubled by condensation, producing polymeric compounds such as dipyridine, dipicoline, etc., they not only become more active physiologically, but the action differs in kind from that of the simple bases, and resembles the action of natural bases or alkaloids having an approximately similar chemical composition.
 7. All the substances examined in this research are remarkable for not possessing any specific paralytic action on the heart likely to cause syncope; but they destroy life, in lethal doses, either by exhaustive convulsions or by gradual paralysis of the centres of respiration, thus causing asphyxia.
 8. There is no immediate action on the sympathetic system of nerves, although there is probably a secondary action, because after large doses the vaso-motor centre, in common with other centres, becomes involved.
 9. There is no appreciable difference between the physiological action of the bases obtained from cinchona and those derived from tar.
 10. The union of methyl, ethyl, amyl, and allyl with chinoline did not entirely change its characteristic mode of action, but their presence caused, along with stupor, a tendency to spasm and convulsion. Also, in the case of the pyridine and picoline addition-compounds, increase in molecular complexity and weight, while it does not entirely change the mode of action of the simpler compound, is always attended by a tendency to spasm and convulsion, probably arising from irritation of cerebral motor centres.
 11. The nature of the acid with which these compounds were combined did not appear materially to affect the physiological action, which apparently depended on the nature of the base. As a rule, bromides and iodides were more potent than chlorides or sulphates. No difference of effect could be observed between the iodine and bromine compounds of the addition-derivatives.
 12. Dicarbopyridenic acid ($C_7H_5NO_4$), the only substance containing oxygen we have examined, is remarkable for rapidity and potency of physiological action; it also acts rapidly on the vaso-motor centres. In containing oxygen, it has a nearer resemblance in percentage composition to several alkaloids than any of the chinoline or pyridine compounds.
 13. Substances having the same percentage chemical composition, but a different chemical structure, may have different physiological effects. Contrast lepidine with methyl-chinoline, dispoline with ethyl-chinoline, isoline with amyl-chinoline, and quinine with cinchonine.
 14. Substances which have an action on the cerebral portion of the nervous system will act on animals differently, according to the degree of their cerebral development. Thus, chinoline causes in the dog, cat, and monkey, excitement and nausea and vomiting antecedent to stupor and anaesthesia; while in the rabbit none of these phenomena occur.
- It is understood that several of these conclusions are merely tentative, and may require to be modified on further investigation.

CLINICAL LECTURE ON MYXŒDEMA.

BY WILLIAM ORD, M.D., F.R.C.P.,
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GENTLEMEN,—By the kindness of two of my colleagues, Dr. Harley and Dr. Greenfield, I am able to show you two excellent specimens of the condition which I have ventured to call myxœdema. The two cases were severally recognised in the out-patient department by my colleagues, and were sent to Alice Ward for observation.

Your attention may first be directed to the general appearance. Both patients are adult women; both have swollen features and hands; in both the skin over the whole body is swollen and singularly dry and harsh to the touch, having very much the condition produced by washing in strong alkaline solutions. On the face the skin is semi-transparent, the eyelids and lips showing this particularly well. But neither on the face nor on the limbs does the skin pit on pressure. The hanging folds of the eyelids do not even yield to a firm pinch. In both women you will notice an even and persistent blush on the cheek, terminating by a sharp border at the lower border of the orbit, and standing in singular contrast with the bloodless eyelids which surround the eyes with two white circular areas. The hands in both are much swollen. But, on comparing the cases, you will see that, in one, having a yellowish tint of skin, and who is much weaker than the other, the hands are much more swollen, the fingers shapeless, and the skin like dry leather. This patient, I may observe, shows the appearances described by Sir William Gull, in his account of a "cretinoid condition supervening in women in adult life"; and you will agree that the term "spade-like", used by Sir William Gull, is well applied to the hands before you.

Both patients have a placid expression, to which the thick expressionless lips much contribute. In fact, face and hands are both wanting in the expression which comes of active answering of sensations to impressions from without. When the patients speak, you will be struck by the slowness of their articulation and the monotony of the voice. Both speak nasally, with frequent interruption by the act of swallowing, and with little explosive sounds produced in the posterior nares, in these respects resembling persons suffering from tonsillitis. And, if you look into the mouth and throat, you will see that the soft palate, tongue, and cheeks are all swollen and œdematous. Besides speaking slowly, the patients will tell you that they can act only slowly; that all action requires a considerable initial effort, and is carried on slowly; so that they take twice as long, or even more, than formerly in completing the ordinary actions of life; for example, in dressing. They both walk in a tottering way, with a tremulous balancing at each step, as though the flexor and extensor muscles could not act in perfect harmony, and as if pendulum-like vibrations were set going by the efforts at adjustment. Both are subject to sudden falls when walking, caused, as an analysis of the accidents shows, by such a want of harmony going to an extreme, the flexors ceasing to act before the extensors have begun, and letting the body fall between the two. Although the co-ordination here is bad in respect of time-adjustment, there is no paralysis; and, although there is want of tone, there is no wasting of the muscles. In fact, both patients are well nourished. And, although the mental actions are slow, they are well performed. The patients can write well, have fairly good memories, and are painfully aware of their slowness. Sensation is everywhere perfect, but response always slow. In both, the urine is of average quantity, varying between two and three pints daily; is of average specific gravity, and contains no albumen or sugar. In both, the viscera generally give healthy indications, with the exception that the arteries are somewhat tense and hard, and that the second sound of the heart is in both accentuated over the aortic valves. The temperature in both is below the average by about a degree of Fahrenheit's scale. Both are married and have borne children. The condition which you are investigating was not observed in either till after the age of 20. Here is a photograph of one at the age of 16, showing a very different appearance. No portrait of the other exists. Both have been suffering from the swelling for between three and four years.

These two cases agree in all respects with the cases upon which I have founded the new term "myxœdema" and with the cases described by Sir William Gull as "cretinoid". The term "myxœdema" is used as an expression of the physical condition which I believe to be the true cause of the symptoms, and denotes the basis of the appearances to which the term "cretinoid" is perfectly fitted.

At first glance, the patients have the look of persons suffering from acute Bright's disease. For a long time, such cases were classed in my mind as rather singular cases of dropsy without albuminuria; and the occurrence of general anasarca without albuminuria is noted in treatises on diseases of the kidneys. But there are many circumstances which help to show that the cases before you, and others like them, are not primarily dependent upon renal disease, being, on the other hand, dependent upon states of the skin.

1. In these and other cases, there has existed, besides the doughy not-pitting œdema, a marked dryness and harshness of the skin. The chest of these patients is as rough as emery-paper, and as dry. There is no secretion of fat or moisture. There is perfect sensation, but slow recognition of impulses.

2. The movements of the limbs are slow, and there is a tottering, due to want of perfect harmony in the co-ordination of muscular actions as regards any moment of time.

3. The speech is slow in beginning, the articulation slow to painfulness, and the voice "leathery" in its intonation.

4. The thoughts are slow; the movements of the will slow; the momentum of thought considerable; the mental processes are ultimately well performed.

All these are symptoms such as would result from conditions interfering with the ready reception of peripheral impressions. Now, in one case, I had last year the opportunity of making full examination of the tissues after death, in addition to a partial examination during life. And the most important point noticed was a general tumefaction of the connective tissue in all parts of the body; the fibrillæ being particularly well defined, owing to the infiltration between them of a gelatinous substance; their number being greatly increased, and the nuclei of the tissue more abundant than usual. This infiltration appeared to me to be an overgrowth of the natural mucin-yielding cementing structure, and the resulting textures reminded me strongly of certain embryonic textures, in particular of that of the umbilical cord. As a test of this, I submitted parts myself, and afterwards asked Dr. Charles to submit skin on a large scale, to chemical examination. The result was that, while, in ordinary skin and connective tissue, and in the skin of anasarca patients, there was a barely weighable proportion of mucin, the skin of the myxœdematous case yielded several hundred times as much—this very weighable quantity here exhibited.

In the skin, this sort of material was found forming a pad round and in the touch-corpuscles. Now, suppose every nerve-end of the periphery thus padded, and bear in mind, at the same time, the effect produced by lightly padding the external auditory meatus with cotton-wool. You lose volume, at all events, in respect of impressions, and lose also acuteness, and acquire slowness in the reception of them. Consider what this means when the periphery is largely or entirely involved: how, first, the relation of the body to impressions from without must be changed. Remember what an effect upon the central nervous system a widely extended surface-lesion of the most superficial kind may produce: the fatal effect of a scald:—similarly of surface-impressions, the bracing influence of dry keen atmosphere; the depressing influence of a damp close one; the various effects of baths. In close observation of the sick, you will always see that a persistent failure of the action of the skin is attended with nerve-symptoms having the character of depression. These are often supposed to be due to retention of poisons which ought to be eliminated by the skin. There is better reason, however, to attribute them to the alteration of peripheral nerves, of which the want of action is a result. I have seen more than one case in which torpor and a slow perception were associated with a permanent dryness and harshness of skin, where, on the use of a hot-air bath or other means of inducing perspiration, the symptoms passed away at once, to return at once on the passing off of the perspiration. The want of action in these cases may be due either to compression of glands or to failure of the reflex actions upon which secretion depends. The microscope shows the glands to be greatly attenuated and encroached upon; but disease may well account for this. We may compare the effects of varnishing the skin in animals. Valentin and Edenhuizen have shown that the coating of the skin of rabbits with impermeable varnish is followed by rapid loss of temperature, by remarkable slowness of respiration and by speedy death, the fatal effect following when no more than one-sixth of the entire surface is thus treated. And, though Senator has treated men similarly without producing the same effects, the analogy holds good for our purpose.

If a temporary failure of normal peripheral stimulation be sufficient to produce torpor, the long-continued influence of even a slight failure may be expected to be followed by an increasing torpor of the centres, just as a paralysed limb wastes for want of exercise. And so one would expect the slowness in voluntary movements and the slowness in thought to follow the first sense of mere heaviness or sluggishness. In more advanced cases than these before you, the increase of lethargy becomes most distressing. The day is spent in overtaking the duties which ought to have been over in the first hour of it. The muscular errors become so marked that frequent falls occur. One lady under my observation broke both ligamenta patellæ in succession, owing to the wide separation of the action of flexors and extensors, the latter contracting, during a fall produced by this want of punctuality, just in time to cause the fracture. The same patient habitually walked in a singular tottering way, quivering from head to foot as each step was taken. Her head hung on her chest, in consequence of the incapacity of the will to maintain muscular action, and the thick blubber lips, swollen eyelids, and dribbling saliva completed a very cretin-like picture indeed.

In relation to muscular movements, any padding of muscular nerves would be likely to cause slowness of transmission of impressions of contractions, and so make the first step in the failure of co-ordination.

The two cases which I have followed to a fatal termination, the one after eight years, the other after five years of observation, both ended by way of renal disease. In one, a *post mortem* examination was made, as already noted. The kidneys here shared the condition of the skin. There was enormous interstitial growth of connective tissue of this soft gelatinous kind by which the secretory tissue was compressed and the early stage of granular kidney in part imitated. The same invasion had occurred in other organs, notably in the liver and heart; but I could not satisfy myself of the existence of the same or any parallel condition in the central organs of the nervous system. Specimens of skin from various parts, of kidneys, liver, heart, brain, and cord, are here under the microscope.

Reviewing the cases which have been under my notice, I may state that all were women of adult age; some married, some not. Of the married, some had children even after the dropsical condition had been well developed; there was not any known taint of syphilis in any, nor any general history of excess in food or stimulants. All shared the state of skin and the characteristic face, the absence of albuminuria, the slowness of perception, thought, and action, particularly of speech. In all the affection was general and progressive. There are a few maladies from which it may be necessary to distinguish this:

1. *From Bright's Disease.*—The variety of states included under this head is very great, and it is true that the fatal termination in the two cases followed to an end was by uræmia. But, unless the definition of Bright's disease is very much extended, it is hard to include under it cases in which, with a mucin-yielding gelatinous dropsy, a complete absence of albuminuria is observed during many years; to say nothing of the nervous symptoms so definite in their character.

2. *From Sclerema and Allied Conditions.*—In these, the skin is hard instead of soft; the affection is a local one; there is a tendency to healing at one point and extension to another: three points which completely separate the two affections.

3. *Cretinism.*—In relation to this, I now cite a point to which I have not previously directed your attention. Examining the throat and neck of both cases, you will find little or no trace of a thyroid body and a decided resilient fulness on both sides of the neck above the clavicles. These are conditions that have been noted in two cases of idiocy by Mr. Curling, and in a series of cases of cretinoid idiocy by Dr. Fagge. In Mr. Curling's cases, there was complete absence of the thyroid, and the supraclavicular masses were composed of fat—of adipose tissue.

In the fatal case examined by me, the thyroid was reduced to about a fourth of its natural size, and, being flattened against the larynx, was hardly felt during life. Its normal structure was almost entirely wanting, being replaced by myxœdematous infiltration. The absence of a thyroid gland in cases of cretinoid idiocy is certainly curious, goitre being very abundant in regions where cretinism is endemic. But, in these regions, the concurrence of goitre with cretinism is not the rule, only about one-third of the crétins having goitre. In fact, Dr. Fagge argues that goitre is a protection against cretinism, and supports his argument by citing these cretinoid cases in which the thyroid is deficient.

In comparing these cases with cases of cretinism, it must be observed that many crétins are œdematous, often from birth; and that cretinism is a condition which gradually develops after birth. In many cases, it is difficult to decide whether a child born under suspicious circumstances is going to be a crétin, and children born apparently healthy

do not become crétins after four or five years of age. Now, as the appearance of a decided crétin is absolutely characteristic, it follows that the change is a gradual and acquired one. Supposing a child to be born with a myxœdema, cutting it off from the first day of life from the external influences by which the education of its senses and sentient nerves should be effected, it is also cut off from the stimulations by which the central nervous system is kept in exercise and made to nourish itself. In proportion as the padding of nerves is effective, the child is reduced to the condition of a tunicate animal; reverts, in fact, to the condition of its far distant ancestor, and remains a bag of viscera with ill-developed brain, with misshapen limbs and unformed skull;—in the complete outcome of cretinism an organic being certainly, but not a human being.

The *post mortem* examinations of crétins demonstrate the existence of great imperfection in the development of the brain, and correlated imperfection in the development of the skull, particularly of the base of the skull; the growth and shaping of the bones being dependent on, and proportional to, the growth and shaping of the contained organs. The skin of crétins is hard, thick, and leathery; their movements are slow, their gait tottering, and their limbs small and feeble. These are all things which would agree with an hypothesis that cretinism began as a simple general myxœdema; and I hope some day or other to investigate this subject further in the regions where cretinism is endemic.

The sketch now put before you will be enough, in conjunction with the cases upon which the remarks are founded, to prove to you, first, that there exists a substantive affection in which a gelatinous dropsy without albuminuria is associated with a cession of the normal cutaneous secretion and with certain well marked nerve-symptoms of a bradæsthetic kind; second, that the various symptoms may be explained by the existence of the gelatinous dropsy; third, that this gelatinous dropsy consists in an excessive formation of the elements of connective tissue, particularly of the mucin-yielding or cementing element; the state here acquired resembling an embryonic state to which it may be a reversion or degeneration. This idea of reversion or degeneration is indeed, I am inclined to think, the ultimate explanation of the whole process.

If you have followed me carefully in the short analytical exposition of the relation between central nervous system and periphery, you will have had your attention drawn to the fact that the centre is very dependent on the periphery, particularly as respects its nutrition, which is determined by the due exercise of its function of reception and response. We are accustomed to see the centre in the position of control. We must also be accustomed to see the periphery in control, conditioning by regularly ordered stimulation the very existence of central power. To this influence of the periphery you will learn, as your experience grows, to give an increasing attention; and, if no other lesson be learned to-day, this one at least is of great practical value.

OBSTETRIC MEMORANDA.

CASE OF COMPLETE INVERSION OF THE UTERUS SUCCESSFULLY REDUCED.

THE case, to which I was called, occurred in the practice of a friend. Mrs. T. was confined of her ninth child on March 11th, 1878. The labour was not a rapid one, but normal in every respect to the completion of the second stage. No unusual traction was made on the cord, I am assured, when suddenly the placenta, which was adherent to the uterus, was expelled, together with the inverted uterus, beyond the vagina. The adherent placenta was at once separated, and the uterus returned into the vagina. Seeing the gravity of the case, and wishing to share the responsibility with another, my friend sent to ask my assistance. I found the inverted uterus lying in the vagina, with its spongy-like surface, from which there was considerable oozing of blood. On a first attempt at reduction, the uterus proved unyielding. I then grasped the tumour at its superior extremity, gently compressing it, when it relaxed a little. A steady upward pressure on the fundus with the back of the hand and knuckles in a few moments effected reduction, the organ suddenly leaving the hand, as Churchill describes it, "like a bottle of India-rubber when turned inside out". On placing the hand on the abdomen, the restored uterus could now be felt in its natural position above the pubes, and well contracted. The comparative facility by which reduction took place was no doubt owing to the immediate diagnosis and prompt treatment of the case, not more than half an hour elapsing between the inversion and the replacement. The patient had no untoward symptoms, and made a good recovery.

G. M. BRUMWELL, M.D., Mossley.

REMARKS

ON

THE TREATMENT OF WOUNDS.

By GEORGE W. CALLENDER, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

IN a recent number of the *Nineteenth Century*, Professor Tyndall has stated that the system of wound-treatment which I employ and that of Mr. Lister are practically the same.

From time to time, I have stated the results obtained with the cases under my own observation; and as these results continue their satisfactory character, it is unnecessary to refer to them further. It may, however, be of interest if it be mentioned that, tabulating the cases treated in the two wards which are under my care (one for male, and the other for female patients), there have been under treatment during the last eight years 2,070 cases, with 68 deaths; showing a mortality of about 34 per 1,000, or of 3.4 per 100.

Amongst these cases are included the chief operations which have been, of necessity, performed. I say, of necessity, because I trust that each year we are learning how better to avoid the need for having recourse to many an operation by closer attention to details of treatment, more especially in the case of severe lacerated and other wounds. Not that the total number of operations is thus materially affected, for, with improved methods for the treatment of wounds, operations are now indicated which, until recently, were rarely if ever practised.

The death-list is largely made up of patients dying from burns, from diabetes, albuminuria, phthisis, caries of the spine, spina bifida, hernia, and such various troubles as, unfortunately, are still prominent in such a list.

Granting, with Professor Tyndall, that the method we adopt is akin practically to that used elsewhere, I wish more particularly to point out, as I have before stated more than once, that it is essentially one of extreme simplicity, one which can be effectually carried out by any surgeon under any circumstances without any difficulty.

In illustration, the case of a patient aged 16 may be referred to. For the treatment of a severe case of genu valgum, I opened the knee-joint, and with a saw separated the internal condyle of the femur from the shaft of the bone. The condyle being displaced upwards, the limb was easily brought into the straight position, and in that position was secured by a long splint (Dr. Ogston's operation). The wound, which admitted at one and the same time the long knife used for penetrating and dividing the soft parts and a stout saw, had a depth of about three inches and, where the skin was divided, a length of about one inch. No carbolic or other spray was used at the time of the operation or at any time subsequently. The wound was covered with a doubly folded piece of lint soaked in carbolised oil (1 in 12); over this was placed a larger piece of lint, likewise soaked in the oil; and over all a yet larger surface was covered with some ordinary gutta-percha tissue. The dressings were examined daily, the gutta-percha tissue being lifted and the outer layer of lint being changed, the gutta-percha being then replaced. The inner layer of lint was left undisturbed on the wound for three or four days, being each day refreshed with carbolised oil (poured upon it or painted over it with a camel-hair brush). Whenever this layer of lint was changed, the wound was freely exposed to the air. The patient got well without any constitutional disturbance, and the parts healed in the ordinary course. Treated in a similar manner, there are at this time under observation in one of my wards a severe compound fracture of the femur into the knee-joint, and two cases of compound fracture of the leg; in one of the latter, it was not necessary to disturb the inner layer of lint for nine days after its first application.

Of course, these are but casual illustrations, from many similar cases, to show how a very simple plan suffices to ensure that condition of cleanliness which is essential to the sure and rapid healing of severe wounds, or wounds practised upon parts which it was formerly considered hazardous to involve in operations. With this cleanliness must go "rest", and with this will be ensured "ease"; and when deep wounds, or wounds the surfaces of which are not easily and closely adapted, are concerned, thorough drainage is of prime importance.

I do not like to write of "antiseptic" treatment, because I regard the treatment of wounds as a matter of strict adherence to the established rules of surgery, and I consider it undesirable to prefix a term

which may seem to specialise the method of wound-management. But the results claimed for antiseptic surgery can be ensured by the plan which we have now used for many years, and of which I venture to write as being as simple as it is efficacious.

I believe, with the exercise of care and by close attention on the part of the surgeon, that different methods of treatment will yield good results. As to the plan employed in my wards in relation to the proposition that germs are causative in producing bad results in the case of operation and other wounds (but without committing myself to this view of their influence), let me add that, whilst other methods aim, amongst other things, at the entire exclusion of such germs from wounds, I shall rest content to allow their ingress, feeling quite sure that after such entry they are absolutely prevented from doing any harm by the treatment we adopt.

Being not infrequently asked for information respecting the general results of amputation operations at St. Bartholomew's Hospital, I take this opportunity for adding tables compiled from the statistical reports of the hospital, showing all the amputations performed during the undermentioned periods in continuation of the cases previously tabulated from 1853 to 1863, both years included (*Medico-Chirurgical Transactions*, 1864).

1864-1869: Both Years included.

	Results.		Totals.
	R.	D.	
<i>Primary.</i> —Shoulder-joint	1	—	1
Arm	10	1	11
Forearm	20	1	21
Thigh	3	1	4
Leg	9	12	21
<i>Secondary.</i> —Arm	6	2	8
Forearm	3	—	3
Thigh	9	10	19
Leg	5	5	10
<i>All others.</i> —Shoulder-joint	2	—	2
Arm	15	—	15
Forearm	10	—	10
Thigh	45	30	75
Leg	44	20	64
Total	182	82	264

1870-75: Both Years included.

	Results.		Totals.
	R.	D.	
<i>Primary.</i> —Shoulder-joint	—	1	1
Arm	11	2	13
Forearm	13	—	13
Thigh	3	3	6
Leg	5	1	6
<i>Secondary.</i> —Arm	4	1	5
Forearm	2	—	2
Thigh	5	—	5
Leg	8	1	9
<i>All others.</i> —Shoulder-joint	2	1	3
Arm	2	2	4
Forearm	13	1	14
Hip-joint	2	2	4
Thigh	79	14	93
Leg	66	5	71
Total	215	34	249

SCARLATINOID ERUPTION IN THE AGUE OF YOUNG CHILDREN.

I AM much obliged to Dr. Handfield Jones for pointing out that he had already noted the occurrence of cutaneous hyperæmia and red eruption in the malarial affections of young children, and regret that I had not been cognisant of this when I published my paper on this subject a fortnight ago. It is satisfactory to find that my experience corroborates his previous observations. The chief difference is, that in the first of my cases the rash appears to have been brighter and more like that of scarlatina, and the malarial fever a genuine tertian ague, instead of the less regular intermittent described by Dr. Handfield Jones. I can further confirm his statement, that cases of malarial disease arise in London. I have seen several instances in children who have never been away from the city.

W. B. CHADLE, M.D., F.R.C.P.

OBSERVATIONS

ON THE

SUCCESSFUL REMOVAL OF A SOLID UTERINE FIBROMA WEIGHING SEVENTY POUNDS.

By T. SPENCER WELLS, F.R.C.S.,
Consulting Surgeon to the Samaritan Hospital.

ON February 4th, 1878, in consultation with Mr. Symonds of Oxford, I saw a single lady, thirty-six years of age. Her abdomen was enormously enlarged by a solid tumour, which extended upwards behind the lower ribs on both sides, pressing them outwards, and passed downwards into the pelvis, filling up the hollow of the sacrum, and causing prolapse of the posterior wall of the vagina. This sketch, al-



though made of another patient, gives an excellent idea of the appearance of the lady, except that it hardly shows how much the tumour encroached on the thorax, and there was considerable cedema of the feet and legs, which was said to disappear for a time after the cessation of each monthly period.

The cervix uteri could not be reached, and it was impossible to ascertain where the uterus was situated. The catamenia were regular in time and normal in quantity. Mr. Symonds had advised removal of the tumour in 1876, when it was much smaller; but the patient and her friends steadily objected. The first symptom of illness was in 1868, when backache became troublesome; and, early in 1869, Mr. Barker of Wisbech found a small hard swelling in the left side of the abdomen. This gradually enlarged; and Mr. Barker informs me that in June 1871, "in consultation with Dr. Protheroe Smith, the question of removing the tumour was canvassed, and it was then decided by us that, taking into account the low vital power of the patient and the fact that several forms of struma had shown themselves in several members of the family, it was decided that operative measures were not justifiable". After this consultation, increase went on, at first slowly, but much more rapidly during the year 1877.

As the tumour was quite solid, not fluctuating anywhere, and as the uterus could not be found, I expressed my opinion to Mr. Symonds that an accurate diagnosis was impossible; that I thought the tumour more likely to be uterine than ovarian; but that it might be some such rare form of abdominal fibroma as I had once removed in Germany, and which had been described by Virchow as *fibroma molluscum*, not necessarily connected with either uterus or ovaries. I also said that only an exploratory incision could determine if the tumour could be removed or not; and, that if the attempt were made, it should rather be at the wish of the patient than by the advice of the surgeon. At first, she decided against operation; but suffering became daily greater, and it was arranged that I should make an exploratory incision on March 7th, four days after the cessation of the catamenia. Accordingly, on that day, chloro-methyl being administered by Dr. Day, and Dr. Bantock, Mr. Thornton, and Dr. W. Webb assisting me, Mr. Symonds and Mr. Hill also being present, I made an incision in the median line between the umbilicus and pubes and cut into the substance of a solid fibroid tumour, which was closely adherent to the abdominal wall. After separating some adhesions, I passed my hand into the peritoneal cavity, and found the tumour to be free from adhesions on the left side, also behind and above, but to be closely bound down on the right side. In front, the bladder was so high that the incision could not be carried within about four to five inches of the pubes, so it was extended upwards about five or six inches above the umbilicus, as soon as I had convinced myself that it would be possible to remove the tumour. A

large piece of adhering omentum was detached from the upper part and behind. Towards the left side, a broad mesenteric attachment was divided by the knife, large blood-vessels being temporarily secured by torsion-forceps. I was then able to shell the tumour out from a sort of vascular capsule formed by the two layers of the right broad ligament, and separate it, but only by the knife, from the posterior surface of a uterus of normal size, after forcibly pulling the tumour up out of the pelvis and separating it from the rectum, to which it adhered closely. The right ovary (although normal) was cut away, because the Fallopian tube had been divided and the broad ligament was much torn. The left ovary and Fallopian tube were not disturbed. Several silk ligatures were applied to the right of the uterus, and also to open vessels on its posterior surface when the tumour had been cut away. Two large pieces of omentum were cut off, after securing them by ligature. I then found that the two opposite sides of the remnant of the capsule of broad ligament (out of which I had enucleated the tumour) could be brought together behind the uterus, so as to complete the union of the divided peritoneum from the lower angle of the opening in the abdominal wall, the elevated bladder and the fundus uteri, all down the back of the uterus to the rectum. I did this by an uninterrupted suture of fine silk, making about twenty points of suture, and finishing close to the vagina and rectum. In this way, the peritoneal sac was completely shut off from the torn cellular tissue of the pelvis. A good deal of sponging was necessary to remove clots of blood from the peritoneal cavity; but very little blood was lost considering the great size of the tumour and the extent of its attachments. The opening in the abdominal wall was closed by twenty-five silk sutures. The patient was placed in bed exactly an hour from the minute when she began to inhale methylene. She was faint and very chilly, a spray of a solution of thymol (1 in 1,000 of water) having played upon the abdomen all through the operation; and, although sponges moistened by warm thymol solution protected the intestines and abdominal cavity to some extent, the chilling effect of the spray was manifest.

On examining the tumour, it was found that about two pounds of blood had drained from the vessels divided in its capsule and at its line of separation from the uterus. Its circumference in three different directions was 52 inches at the smallest, 57 inches at the largest, and 53 inches in a third. A small piece was cut out for microscopic examination, and the tumour was then weighed in the Museum of the Middlesex Hospital, and found to be 68 lbs. 6 oz. The tumour was "chiefly composed of cells with relatively large nuclei, many containing several nucleoli, of the type difficult to distinguish as distinctly muscular; but in some parts of the tumour unstriped muscle-cells were manifest" (J. K. Thornton).

I have very little to add as to the progress after operation, except that the temperature seldom rose above 99 deg., only reaching 101.2 deg. (the highest noted) once. Only four opiates were given. There was never any distension of the abdomen. Six days after operation, the bandage and dressing were removed for the first time. The four or five layers of thymol gauze next the skin were damp with serum; the outer layers were quite dry. The wound was united from top to bottom. All the twenty-five sutures were removed, and the line of union was almost imperceptible. The dressing was only changed twice after this; and, except a few drops of pus from one of the central stitch holes, union was perfect by first intention.

For a few days in the second and third week after operation, the patient occasionally vomited, and was weak and low-spirited, and there was a considerable swelling in the pelvis, as if from a hæmatocele in the front of the rectum, to such an extent that the uterus could not be felt. There were frequent, very offensive, watery motions, but never any purulent discharge. When the swelling in the pelvis began to subside, and after washing out the rectum with thymol solution, rapid amendment set in and went on. Two days before she left London by rail for Oxford, on April 8th, just a month after operation, I carefully examined the pelvis by vagina and rectum, and really could not find any trace of an operation having been performed. The uterus was in its normal position, was movable, and of ordinary size and weight. Mr. Symonds wrote that he was surprised to see her looking so well after the journey; and I received a letter, dated April 16th, saying that she was gaining her strength, could walk downstairs, and that her appetite was good. She wrote herself on May 4th, saying, "I am able to walk a little, and get out in the air as much as possible."

THE Local Government Board have intimated that they will forthwith issue a Provisional Order that so much of the Townships of Bollin-Fee, Fulshaw, and Pownall-Fee, Cheshire, as are not included in any Urban Sanitary District, shall be constituted a Local Government District.

PATHOLOGICAL ILLUSTRATIONS OF THE LOCALISATION OF THE MOTOR FUNCTIONS OF THE BRAIN.*

By RINGROSE ATKINS, M.A., M.D.,

Resident Medical Superintendent District Lunatic Asylum, Waterford; late Assistant Medical Officer District Lunatic Asylum, Cork; etc.

[Concluded from page 641 of last number.]

CASE V. *Adhesion of the Pia Mater to and Softening of the Middle Third of the Left Ascending Parietal Convolution, Portion of the Ascending Frontal, and Edges of the Gyrus Supramarginalis and Gyrus Angularis; Paralysis of the Right Hand and Arm.*—W. J., male, aged 38, was admitted into the Cork District Lunatic Asylum on December 3rd, 1876, suffering from general paralytic dementia. The patient, a Welshman, was a discharged soldier, and his illness, of eight months' duration, was attributed to a fright he received while serving as pointsman on the railway near Mallow, County Cork. It is needless for my present purpose that I should enter into the minute details of his history or condition; suffice it to say that he had the uncertain gait, the trembling muscles, the hesitating speech, the jerky movements of the tongue, and the unequal pupils (the left being the larger), physically characteristic of this fatal malady. Mentally, he was dull, stupid, and demented, with occasional vivid hallucinations of sight; but never developed any of the delirious conceptions or ideas of grandeur which mark this disease from the mental point of view. During his residence in the asylum, every function slowly but surely deteriorated; he became more and more helpless bodily, but without any distinct paralysis, and demented mentally; the power of speech and of protruding the tongue diminished, and the muscular tremblings and twitchings increased, while he lost all control over the bladder and rectum.

On April 29th, 1877, the following report was made. "Since March 15th, when the last note was recorded, the unfortunate man has been steadily growing worse, and is now a pitiable object to look at. Though kept out of bed in an arm-chair, he has become quite incapable of walking unsupported; he can, however, move the arms and legs freely. For the past two or three days, he appears to be unable to protrude the tongue, and has not spoken; when pressed to do so, he makes feeble efforts with the facial muscles, which twitch convulsively. The general muscular tremor has increased, the irregularity of the pupils still exists, but to a less degree than before; he is greatly emaciated, the muscular groups being apparently generally and equally wasted. He now takes his food readily when fed. Urine and faeces are passed involuntarily. This morning, he was found to have become during the night quite unconscious. The attendant reports that he had no noticeable fit of any kind. He lies on his back with his eyelids closed, his eyes fixed, the conjunctivæ being quite insensible to the touch of the finger. The pupils are equal in size, contracted and fixed. The arms are flexed across the chest, and, when raised, require some force to straighten them, the muscular groups being very rigid; the lower limbs are to a less extent in a similar condition. Tactile sensation appears dulled, no outward manifestation being made when the skin is sharply pricked with a pointed probe. Reflex excitability is increased, the feet moving convulsively when the soles are tickled. Respiration is unaffected."

April 30th.—The comatose condition had passed away; he was to-day brighter; had opened his eyes, and looked around him, appearing to partially recognise those about him, and was able to swallow liquid food. The pupils were larger, and the inequality was again observable, the left being of greater diameter than the right. The features were much sunken; there was a tendency to diarrhoea.

May 1st.—He was in much the same condition as yesterday; diarrhoea was less; there was decided loss of power in the right hand and arm. Bed-sores were commencing over the lower portion of the sacrum.

May 2nd.—He was somewhat more sunken than yesterday. The right hand and arm were to-day completely paralysed; when raised, the muscles were in a state of tonic rigidity; but, when let go, the hand and limb dropped powerless, and could not be moved by any voluntary effort. The back of the hand was swollen and puffy; the epidermis between the forefinger and thumb was raised into a large irregular-shaped bleb containing yellowish-brown serum, surrounded by an erythematous zone. The fingers were flexed and rigid, the nails pressing on the palm of the hand; they were straightened with difficulty, and, when released, returned at once to their former position.

On the posterior aspect of the second phalanges of the fore-middle and third fingers were elongated ovoid bullæ of fluid, which had appeared since yesterday. The power of movement of the left hand and arm was but little affected; the grasp was still, comparatively speaking, strong; when he got anything into the hand, he clutched it so firmly that it was difficult to disengage it. The muscles of this limb were atrophied to a considerable extent, especially the interossei, the back of the hand forming a strong contrast to its swollen fellow. The man did not emit the slightest sound or noise of any kind. When the mouth was forcibly opened, the tongue could be seen moving about in the buccal cavity, the organ being atrophied, red, and glazed. Cutaneous sensibility seemed to be almost extinguished over the entire surface of the body. Reflex excitability was diminished, especially in the right leg. Farado-muscular contractility was weakened in the lower limbs, but persistent in the upper limbs, especially in the left arm and facial muscles. He lay on his back, with the legs drawn up and the pelvis rotated towards the left side. Across the junction of the sacrum and buttocks was a large eschar surrounded by an erythematous zone; and there was a commencing bed-sore midway on the left iliac crest.

May 4th.—For the past two days, the patient had been sinking, and he died this morning at 5.30 A.M.

May 5th.—*Necropsy*, thirty hours after death. Rigor mortis was strongly marked. The body generally was much emaciated. Over the lower portion of the sacrum, and extending across the left half of the buttocks, was a black eschar of a quadrilateral shape, about five inches in length, surrounded by the remains of an erythematous zone. The surface of the abdomen was flattened and of a blue colour. The bullæ above mentioned still existed on the fingers and hand. The scalp was thin, and considerable force had to be exercised to strip it from the bone. The cranial outline was asymmetrical, the right hemisphere being more prominent than the left, the fronto-parietal regions of the latter being flattened and sloping. The consistence of the bone under the saw was normal. The inner surface of the calvarium was of a slaty-blue colour. On the left frontal eminence was what appeared to be the remains of an old fracture, to which the scalp was firmly adherent. There was no corresponding mark on the inner surface. The outer surface of the dura mater over the vertex of the hemispheres appeared normal. Laterally over the left hemisphere, it was covered with a thin layer of clear gelatinous material readily scraped off with the scalpel. On cutting through the dura mater, between two and three ounces of non-sanguineous turbid sero-purulent fluid escaped; on raising the membrane, it was found adherent beneath at each side of the longitudinal cleft, and also connected over the hemispheres with the arachnoid by filiform bands; its inner surface covering the fronto-parietal convolutions of the left hemisphere was lined with a soft layer of yellow gelatinous material easily removable. The corresponding surface of the arachnoid was similarly coated, the coating extending anteriorly over the membrane covering the three tiers of frontal convolutions, and reaching posteriorly across the ascending frontal and parietal convolutions, as far as the edges of the sulci bounding the postero-parietal and portion of the inferior parietal lobules. The gelatinous deposit existed also over the upper tiers of the temporo-sphenoidal lobe, the occipital and annectent gyri being almost entirely free. The pia mater was, in the regions specified, thickened and opaque, especially that bridging the various sulci, where were scattered here and there numerous small spots of a greenish-yellow exudation. The Pacchionian bodies along the median cleft, where the dura mater had been attached, were shaggy, rough, and eroded. The membrane covering the convolutions of the right hemisphere was free from any of the gelatinous material; where it bridged the sulci, however, it was thickened and opaque, but to a less extent than at the left side. The fronto-parietal region of the left hemisphere was flattened, the individual convolutions appearing to be attenuated and angular. In removing the brain from the skull, about four ounces of sanguineous fluid escaped from its base and the upper portion of the spinal canal; the osseous configuration was normal; from the anterior and middle fossæ of the left side, a thin layer of gelatinous material could be scraped. The arteries at the base of the brain were delicate-looking and nowhere atheromatous; the basal ganglia were normal, the crura cerebri being somewhat diminished in consistence to the touch. The entire brain, previous to draining, weighed 1555.209 grammes: the cerebellum, pons, and medulla 138.8 grammes. The hemispheres were carefully divided into equal halves; the left weighed 641.5 grammes, the right 684.2 grammes, giving a difference of 42.2 grammes in favour of the right hemisphere. The ventricles and central ganglia were normal in appearance. The left hemisphere was placed in nitric acid solution (one to five of water). After macerating for thirteen days, the pia mater was removed, the membrane separating readily, leaving the portions where it was adherent to the cortex distinctly localised and eroded with ex-

* Read in the Section of Psychology at the Annual Meeting of the British Medical Association in Manchester, August 1877.

cavated and irregular margins. The portions thus affected were a small portion of the middle of the ascending frontal, the middle third of the ascending parietal convolution, extending farther below than above, the anterior edge of the gyrus supramarginalis, and a little piece of the gyrus angularis where it joined with the gyrus supramarginalis adjoining the ascending parietal. Not only was the membrane adherent to the cortex in these situations, but the latter was softened and pulpy, especially the portion of the ascending parietal, the tissue being broken down for a depth considerably greater than its own thickness and extending into the white matter subjacent. The pia mater was also adherent to the posterior portion of the superior frontal convolution on its inner aspect, and to small spots on the middle and posterior third of the inferior frontal, together with a few little patches on the posterior folds of the gyrus angularis. These adhesions were confined to the summits and sides of the gyri, the membrane stripping readily from the bottoms of the sulci; the latter were wide, especially that between the ascending parietal and gyrus supramarginalis.

The patches of softening and the adhesions are mapped on this diagram (fig. 5), the hemisphere of the brain preserved in the nitric acid

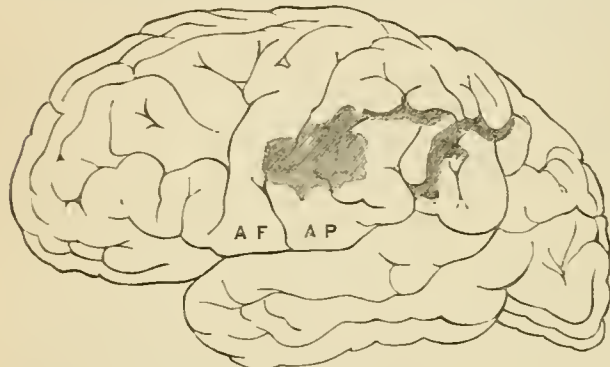


Fig. 5.—Adhesion of Pia Mater to, and Softening of the Middle Third of, the Left Ascending Parietal Convolution, Portion of Ascending Frontal, and Edges of the Gyrus Supramarginalis and Gyrus Angularis.

solution being also before you; the changes, owing to the shrunken condition of the tissue from the action of the acid, are not so well marked now as when seen in the fresh state: the organ, however, has been preserved from the action of the air, and has not, therefore, firmly hardened or changed colour.

Microscopical examination showed the surface of the pia mater to be covered with densely crowded free nuclei. The walls of the vessels were somewhat thickened and similarly overlaid with nuclei; in some instances, so closely packed that it was difficult to make out the boundaries of the coats of the vessels; where the latter were seen, the muscular coat was tolerably distinct, regular in outline, and unaffected. Scattered over the surface of the membrane and on the vessels were aggregations of clear circular disc-like bodies slightly or not at all tinted by carmine, forming clusters, rosettes, or irregular groups, varying in size from a minute dot to a disc as large again as a blood-corpuscle. These appear to me to be free fat or oil globules, the result of degenerative processes which have taken place. Teased preparations of the fresh brain-tissue stained with aniline blue black showed the larger pyramidal nerve-cells, in the great majority of instances, to be destitute of their basal processes, the angles being eroded or rounded, and the protoplasm loaded with granules, the nuclei being invariably present. Aggregations of globules quite similar to those observed in the pia mater were present here also, and, in several specimens from the apices of the ascending parietal and ascending frontal convolutions (right hemisphere), the so-called "giant-cells" at once arrested attention by their superior size and close resemblance to the multipolar bodies of the anterior cornua of the spinal cord. Prepared sections showed the vessels to be somewhat thickened and excessively nucleated, and surrounded by dilated perivascular spaces (?). The larger ganglion-cells were in different stages of pigmentary degeneration, and the neuroglia was coarse and molecular.

The importance in general paralysis of the localised adhesions of the pia mater, in the fronto-parietal regions, as a pathognomonic mark of the disease, has been lately discussed by Dr. Crichton Browne in the sixth volume of the *West Riding Asylum Reports*; and, more recently, the relations between the cortical lesions resulting therefrom and the various motor symptoms occurring in the course of this fatal malady, have been treated of at some length by Dr. Achille Foville in the

Annales Médico-Psychologiques. As the result of his observations, the latter concludes that, in general paralysis, the cortical lesions of the fronto-parietal convolutions are the direct cause of the motor troubles, and that on the localisation and intensity of these lesions depend the localisation and intensity of the various ataxic, spasmodic, and paralytic accidents which may occur. In the present instance, we have a paralysis confined to the right hand and arm, with spastic contraction of the muscles coming on towards the close of a case of the disease in question, the necropsy revealing localised cortical lesions resulting from adhesions of the pia mater occupying portions of the ascending frontal and ascending parietal convolutions, and of the inferior parietal lobule. Granting, then, that these localised cortical lesions and the partial paralysis stood to each other in the relation of cause and effect, which the absence of other lesions leaves no reason to doubt, we have here an interesting verification pathologically of the results obtained experimentally in this region. Ferrier, as is now well known from the phenomena produced both by electrical irritation and circumscribed destruction of the cerebral cortex in monkeys, localised the centres for the movements of the arm and hand in the ascending frontal and the ascending parietal convolutions, the regions which were here chiefly affected; and, although the localisation of the diseased patches is more circumscribed than that which produced similarly extensive symptoms experimentally in the monkey's brain, yet, from the nature of the pathological process causing the cortical lesions, it is more than probable that the irritation from the specially diseased foci spread to neighbouring centres in the same convolutions, thus leading to their involvement and the loss of voluntary motor power in the muscular groups they govern. The spastic contraction of the muscles, as an indication of irritation of the nerve-centres, would, I think, appear to favour this view.

The presence of the visual hallucinations with the disease in the angular gyrus, together with the fact that the prominent cerebral lesions were at the same side as the dilated pupil, and about the regions which have been found experimentally to govern its motility, are interesting points in this case. The rapid formation of the bulge on the paralysed hand and the acute bed-sore are also noteworthy. It is to be remarked that the latter was primarily sacral, and the side of the buttock to which it subsequently extended was the opposite to that of the paralysed limb: a fact contrary to the statement of M. Charcot, that, when an acute bed-sore forms in cases of cerebral hemiplegia, it is invariably at the same side as the paralysed limbs. I may add here that the spinal cord presented no gross lesions; the histological alterations I shall detail elsewhere, as well as those in the medulla oblongata.

CASE VI. *Softening of the Lower Two-thirds of the Left Ascending Parietal Convolution; "Foyer" of similar Softening in the Central White Matter of the Hemisphere; Right Hemiplegia.*—For the history of this case, and for the opportunity of being present at the *post mortem* examination and subsequently investigating the condition of the organs, I am indebted to my friend Dr. Cremen, Physician to the Union Hospital, Cork.

M. R., female, aged 68, was admitted under Dr. Cremen's care on March 4th, 1877. The patient, a fish-vendor, had always been a hard-working woman of tolerably temperate habits, and, up to three years since, had been in the enjoyment of general good health. About that time past, she began to feel oppressed after exertion, and experienced a sensation of giddiness, noises in the head, and failure of memory. These symptoms gradually increased, and finally she had to seek admission to hospital, when she presented the following appearance and symptoms. The skin was sallow; pulse hard and full, not intermittent; urine slightly albuminous, specific gravity 1017; contained a large quantity of phosphates; memory impaired; gait unsteady; she complained of occasional transient diplopia and constant pain in the forehead. On examining the heart, a rasping *bruit* was heard at the base, accompanying the second sound, and extending along the course of the aorta. With the exception of a few mucous rales, no indications of any morbid condition of the lungs was detected. The diagnosis arrived at was general atheroma, with probable softening of the brain. When about a fortnight in hospital, whilst walking along the ward, she suddenly fell down, and, when taken up by one of the assistants, was found to have lost power over the right side. She was not unconscious, but had partly lost the power of speech. When seen on the next day, her condition was as follows. There were complete paralysis of the right side (limbs, face, and tongue), dilatation of the left pupil, and a well marked flush on the left side of the face, which persisted until her death. When spoken to, she seemed to understand everything that was said, reached out her left hand when requested to do so, and protruded her tongue, which deviated laterally. The power of speech, however, was much affected. She seemed to improve for a couple of days, but then gradually sank into a stupor, from which she could be

roused with difficulty. Gradually, a typhoid condition came on, in which she remained for some days, and then sank.

Necropsy.—On removing the scalp and sawing through the calvarium, the diploë in the frontal region was found to be completely absent, the space between the tables of the skull being hollowed out into several thin-walled cavities extending upwards and downwards, and quite empty. The dura mater was healthy; on its removal, a small quantity of fluid distended the pia mater posteriorly. On removal, the configuration of the brain was normal; five ounces of blood and sanious serum escaped during its removal, draining chiefly from the base of the skull and spinal canal. The arteries at the base of the organ were slightly enlarged; their coats of a whitish colour, but not materially thickened. The middle division (the anterior parietal of Duret) of the arteria fossæ Sylvii of the left hemisphere, at its breaking up into two branches, was blocked, a transverse section under the microscope showing it to be filled with granular detritus; the arteries at the right side were normal. The various cranial nerves appeared healthy; the third nerves were, however, very easily detached. The pons, medulla, and cerebellum appeared normal. On examining the hemispheres, the left ascending parietal convolution, for two inches and three-quarters of its length, extending from one inch below the longitudinal fissure into the fissure of Sylvius beneath, was completely softened and broken down into a whitish pulp throughout its entire thickness, the pia mater being adherent to the surface and incapable of being stripped without bringing with it portions of the brain-substance (fig. 6). Beyond a general wasting

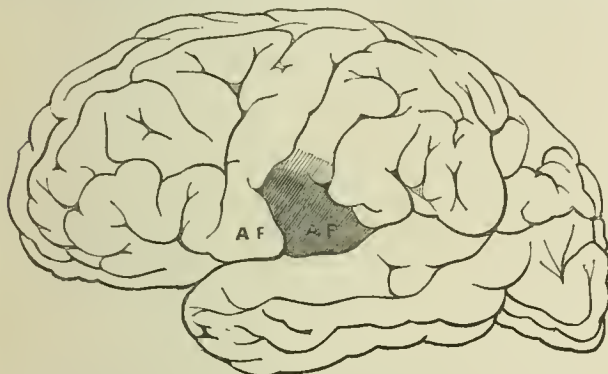


Fig. 6.—Softening of Lower Two-Thirds of the Left Ascending Parietal Convolution; "Foyer" of Softening in the Central White Matter of the Hemisphere.

and separation of the convolutions by wide and shallow sulci, no further cortical lesions, either on this or on the right hemisphere, existed. On cutting into the brain, a "foyer" of softening, circular in outline, and with a diameter of two inches, occupied the centrum ovale of Vieussens of the left hemisphere, commencing two inches and a quarter behind the apex of the left frontal lobe and terminating three inches and one-eighth anterior to the apex of the occipital lobe. This region of softening extended from above the level of the corpus callosum, right through the white matter of the hemisphere, and was continuous with the softened ascending parietal convolution. The intraventricular portions of the opto-striate bodies and the basal ganglia appeared normal. Microscopical examination showed the softened tissue of the cortex to contain numerous granular bodies and broken down nerve-fibres. Many of the ganglionic corpuscles had, however, still retained their normal appearance. A prepared section through the third left frontal convolution revealed a pigmented and granular condition of the nerve-cells and a widely dilated state of the perivascular canals, many of which contained globular debris of nervous disintegration; the majority of the vessels under observation were contracted and shrivelled; their coats were not morbidly thickened. Spots of milary sclerosis were present in great numbers both here and in a section through the left crus cerebri. The heart was enlarged, the walls of the left ventricle being much hypertrophied and covered with a layer of fat. The mitral valves were not apparently diseased; the aortic were puckered and thickened at the edges, and on one curtain was a minute vegetation. The aorta was dilated, and its lining membrane studded with atheromatous patches and cicatrices; the coronary arteries were enlarged and atheromatous; both kidneys were granular on the surface. Microscopic examination revealed hypertrophic thickening of the walls of the arterioles, with a circularly arranged layer of connective tissue externally. The epithelial lining of the tubules was generally present, filling the latter, of a yellowish colour, clouded and granular. Many of the Malpighian bodies appeared to be shrunken and broken. The

condition of the brain in this case was without doubt due to embolic softening of the region included within the area of distribution of the middle division of the arteria fossæ Sylvii (anterior parietal of Duret), aided probably by the general changes in the walls of the vessels. The cortical lesion was strictly located in the left ascending parietal convolution; but, as I have said, the softening was not confined to the cortex, the white matter of the centrum ovale beneath the fronto-parietal convolutions being also involved; and to this must, in all probability, be attributed the extent of the paralysis, though Charcot, indeed, has shown that destruction of a single convolution in the motor zone is sufficient to account for a loss of power in the hand, arm, and leg. Here the localised *ramollissement*, by interrupting the continuity of the conducting fibres passing from the cortical centres to the ganglia beneath, over a wider area than the cortical lesion itself extended, virtually destroyed the activity of motor centres not themselves affected, causing a cessation of function, and, as a result, paralysis of the region which they motorially governed. Softening may exist in certain portions of the white matter of the centrum ovale, without producing paralysis, if such be situated beneath or outside the course of the conducting fibres passing from the cortical motor centres to the ventricular ganglia. Such in all probability was the condition in the case recorded by Dr. Keble in the *Lancet* for May 5th, 1877, where a tubercular cavity extending for a distance of three inches and a half through the anterior and middle lobes of the hemisphere existed without any motor derangement being present, this softening being probably beneath the level of the conducting fibres to which I have alluded.

These six cases, gentlemen, which I have now related, in all of which localised lesions of the convolutions, either in the non-motor or motor regions, existed, and which were accompanied by negative or positive symptoms, according to the seat of the disease in the non-motor or motor zones, tend, in a greater or less degree, to support pathologically the fundamental doctrines of cerebral localisation, and as a slight contribution to this *questio vexata* of modern medical science, are, I trust, worthy of being placed on record.

MENSTRUAL FLUID RETAINED IN THE LEFT FALLOPIAN TUBE, SIMULATING OVARIAN TUMOUR; ABDOMINAL SECTION DURING ACUTE PERITONITIS.

By LAWSON TAIT, F.R.C.S.,
Surgeon to the Birmingham Hospital for Women, etc.

Miss M., aged 38, was sent to me in the beginning of 1877 by my friend Mr. Alfred Freer of Stourbridge. In November 1876, she had an ill-defined illness, during which she had obscure pelvic pains accompanied by fever. Previously to this illness, she had been in good health and had menstruated regularly. After it, she had severe pain during the whole period of menstruation, and she gradually increased in size until Mr. Freer discovered a pelvic tumour in February last. I found the tumour to be pear-shaped, quite movable, attached to the uterus at the left cornu, evidently unilocular, and about the size of an infant's head. I diagnosed it as a cyst of the parovarium, and advised that it should be tapped after it had increased in size sufficiently to warrant interference. She returned to me in May, with the tumour increased so as to be felt above the umbilicus. I advised her to come again in a month. She came, however, before the expiry of that period, on account of a sudden accession of serious symptoms; and when I saw her on June 20th, there could be no doubt she was suffering from peritonitis. Her pulse was 130; the temperature was 38.4 deg. C. (101.12 deg. Fahr.), and rose to 39.6 deg. C. (103.28 deg. Fahr.) in the evening; and there was excessive pain all over the abdomen, with considerable flatulent distension. I administered opium freely, and applied counterirritation over the epigastrium.

On the morning of the 21st, she was easier, but the temperature and pulse had not fallen. I therefore had her placed under the influence of ether by Dr. A. H. Carter, and proceeded to open the abdomen, assisted by Mr. Priestley Smith. The tissues of the abdominal walls were extremely vascular, and it was necessary to use a large number of ligatures to arrest the bleeding. The peritoneum was found to be intimately adherent to the tumour; and, as soon as the latter had been laid bare for a short distance, it became evident that it was not an ovarian tumour, but presented the red muscular appearance of the uterus. Passing the forefinger of my left hand down as deeply as I could in front of the tumour, with that of my right hand in the vagina, I made out distinctly enough that my original conception of the relations of the tumour to the uterus were perfectly correct.

Under the suspicion that it might be a tubal pregnancy, I did not separate the tumour further, as I had not opened the peritoneal cavity, but cautiously opened the cyst in the middle line by means of a knife. As soon as I had reached its inner coat, I passed my small trocar in and evacuated about six quarts of thick dark brown fluid, having the peculiar smell of menstrual fluid. After the cyst was emptied, I passed my finger through the hole made by the trocar; and to my amazement, I found that the cyst had contracted; and as I kept my finger in the cavity, I distinctly felt it contracting round and grasping my finger. Passing the finger of the other hand into the vagina, I made out that what I had opened was, beyond doubt, the left Fallopian tube, and that I must have opened it close to its fimbriated extremity. I could find no canal leading into the uterus, and did not deem it advisable to make one. I washed out the cavity freely with weak carbolic lotion, by reversing the syphon action of my trocar. The wound was closed by four deep sutures, one of which was so arranged as to fasten in a loop of wire drainage-tube; but before this was done, I acted on a hint from Mr. Priestley Smith and snipped off a piece of the cyst-wall for microscopic examination. This fragment proved to be composed of an abundance of unstriated muscular fibre, conclusively supporting the view that this singular tumour was a distended Fallopian tube. After the operation, I treated her exactly like a case of ovariectomy. Her temperature fell slowly. The wound suppurated freely, and shreds of what was undoubtedly mucous membrane came away with the discharge in large quantity. The drainage-tube was removed on the twenty-first day, and its track continued to discharge till the beginning of August. It then healed, and she is now (October 18th, 1877) in perfect health, save that she has occasional pain in the wound. She has never menstruated since the operation.

From the fortunate issue of this case much is left to speculation, but of the nature of the tumour there is no doubt. As to its origin, it seems to me that it may be accounted for by the supposition that the illness from which all her symptoms dated was a localised salpingitis, which resulted in the closure of the two ends of the tube. The peritonitis, which she undoubtedly had when I operated on her, I suggest was due to a threatening rupture of the tube, and possibly a slight escape of its contents. If this be so, it is evident that it was only the accident of my determination to act promptly which saved the patient's life.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

SAMARITAN FREE HOSPITAL.

CONSULTATIONS.

APRIL 26TH.—*Uterine Fibroid impacted in Pelvis.*—Dr. PERCY BOULTON introduced for consultation a young woman who had come from a provincial town for advice concerning an abdominal tumour. On vaginal examination, he found the cervix uteri displaced under the pubes and a firm elastic solid tumour blocking up the pelvis behind it. He reduced the growth and introduced into the vagina a Hodge's pessary to prevent it from falling back again. A sound could be passed three inches into the uterine cavity, and the enlargement then could be felt behind that instrument. The left ovary was enlarged and rather tender. Dr. Boulton desired the opinion of his colleagues on the case and the necessary treatment required, before sending her back to the country. He himself had no doubt that a fibroid tumour existed at the posterior aspect and right side of the uterus. He intended the patient to wear the pessary, and to take ergot, as her periods were profuse and frequent.—Mr. SPENCER WELLS observed that the cervix lay in the normal position, the tumour having evidently been completely reduced by Dr. Boulton. The morbid growth felt like an uterine fibroid, but it might be an enlarged ovary adherent to the uterus.—Dr. BANTOCK believed that the tumour was an extramural fibroid.—Mr. KNOWSLEY THORNTON observed that the tumour had fallen back into the pelvis, the pessary having been removed by his colleagues to facilitate examination. He had no doubt that the disease was fibroid. The remainder of the staff present were of the same opinion; and all agreed to the course of treatment suggested by Dr. Boulton, who again reduced the tumour and replaced the pessary.

Large Uterine Tumours.—Dr. DAY called the attention of the staff to the case of a married woman, aged 28. In her right iliac fossa, a firm solid tumour could be detected on palpation. It was freely

movable; and on vaginal examination, the cervix uteri was found to move with it. In the left iliac fossa, another firm but smaller solid tumour could be felt; it moved quite independently of the cervix. Both growths were in all probability fibroid. The patient had menstruated regularly until the last period, which continued eleven days and was excessive. Dr. Day intended to confine the treatment to the administration of tonics.—Mr. SPENCER WELLS had no doubt that the tumour on the right side was a large sessile fibroid growth, whilst that on the left was of similar pathological character, but connected with the body of the uterus by a long, thin, flexible pedicle.—The rest of the staff were of similar opinion.

Ovarian Tumour: Uterine Adhesions; Supposed Peritoneal Infection.

—Mr. KNOWSLEY THORNTON requested his colleagues to examine a patient aged 33. In September 1873, she had consulted Mr. Spencer Wells, who detected a hard tense swelling in the left iliac fossa, which felt like a pelvic abscess; but on tapping her, two pints of clear fluid escaped. In February 1874, three pints were removed by the aspirator; in the following November, a pint and a half was withdrawn; on this occasion, the tumour was punctured *per vaginam* by means of a trocar. The fluid was in every case ovarian, both in chemical and microscopical characters; it was clear and of a bright yellow colour at first; but at the last tapping, it looked like turbid beer, the cloudiness being due to immense numbers of inflammatory granular aggregations; ovarian granules were also very abundant. In March 1877, she was again tapped, and twenty-one pints of mixed ovarian and ascitic fluid were removed. Mr. Wells then thought that the connection of the tumour with the uterus was so close that the patient ought to wait till the growth was so large as to compel an operation. In February of the present year, Mr. Thornton tapped the patient at her own house and removed nineteen pints of mixed fluid containing an immense quantity of cell-groups, which he had always found to be diagnostic of peritoneal infection from ovarian growths. He believed that the uterus was so imbedded in the tumour and fixed in the pelvis, and this condition was so clear by combined pelvic and abdominal examination, that not even an exploratory incision was advisable. Then added to this grave complication was the evidence of peritoneal infection, which of course also contraindicated any operation but tapping.—Dr. GREENHALGH questioned the extreme danger of making an incision; but on examining the patient, he thought, considering how firmly the uterus was fixed, that ovariectomy should not be attempted.—Mr. SPENCER WELLS considered that the evidence of peritoneal infection rendered any surgical interference unadvisable; otherwise an exploratory incision might be undertaken to find if there were any possibility of removing the tumour.—Dr. WYNN WILLIAMS had opened the peritoneum for the exploration of tumours, which had been found to be malignant, without fatal results. But as in this case the growth could evidently not be removed, incision was useless.—Dr. BANTOCK remarked that the evidence, in this case, of communication existing already for some time between the cyst and the peritoneal cavity was in itself a most unfavourable complication.—Dr. CHAMPNEYS was also opposed to interference; after frequent tapping the solid parts of the tumour had much increased and become adherent to the uterus; besides, the thickening he could detect in the left vault of the vagina and the fixity of the uterus denoted old inflammatory complications.—Mr. DORAN also thought the case quite unfit for ovariectomy; the physical symptoms were so evident as to render an exploratory incision as needless as it would be dangerous.

Pelvic Tumour of Uncertain Nature.—Dr. BANTOCK called attention to a woman, aged 31, who had enjoyed good health till four months ago, when she gave birth to her sixth child. Three days after her confinement, she had a rigor, followed by two more in the course of a few days. She felt no pain till she got out of bed, a month after delivery. Seven weeks ago, diarrhoea came on; the motions were very dark in colour. At present, she feels weak, but is not in pain, and the bowels are not relaxed. The uterus is very high in the pelvis, the cervix is soft, the os patulous. A firm elastic swelling can be detected, immediately connected with the uterus, and extending across to the left iliac fossa; it is quite movable. There is also a slight projection towards the right iliac fossa. Dr. Bantock believed the tumour to be a pelvic hæmatocele. The dark colour of the motions, he thought, aided in his diagnosis. He intended to enforce rest and administer chloride of ammonium.—Dr. GREENHALGH considered that the tumour was made up of the hardened products of pelvic cellulitis.—Dr. WYNN WILLIAMS had seen pelvic cellulitis accompanied with little or no pain, as in this case; but he thought that it would be very difficult to prove by palpation whether the tumour was due to that disease or was a hæmatocele surrounded by indurated tissues.—Dr. CHAMPNEYS was of opinion that the primary affection in this case was pelvic peritonitis, the peritoneum being more involved than the

cellular tissue, for the thickening was high up and followed the reflexions of the pelvic peritoneum; moreover, the uterus was much more mobile than in cases of pelvic cellulitis.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 26TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

An Anomalous Mottled Rash, accompanied by Pruritus, Factitious Urticaria, and Pigmentation.—Dr. A. SANGSTER read a paper on this case. C. F., aged 2, a healthy well-nourished boy, came under notice last August, suffering with an obscure skin-affection. The trunk and limbs were covered, in some places more thickly than others, with a buff-brown and buff-red coarsely mottled rash; the buff-red mottling was most marked on the thighs and legs. Here, the disease presented much the appearance of a measles rash; the parts least affected were the backs of the arms and forearms, the loins, and buttocks; the palms and soles were free; the flexures were specially affected. On passing the hand over the surface, some of the diseased patches were felt to be slightly raised, but this was scarcely noticeable. Nowhere, by pinching up the skin, could any increase of substance be made out. On stretching the skin over the redder patches, the red colour disappeared, leaving a pale buff discoloration. There was much pruritus, especially at the flexures. Scratching led to the production of urticaria wheals. The mother stated confidently that the latter never appeared but as a result of irritation by scratching or rubbing. There were no other lesions of the skin, no papules, blood crusts, or desquamation. The points of interest in the patient's history were, that a grandmother and uncle had psoriasis, that the patient was severely jaundiced in infancy, as was also a younger child, since dead; and that, according to the mother's statement, the patient's skin had always risen in "bumps" upon the slightest irritation. Even handling the child during the process of dressing would cause "the bumps to rise". The eruption had commenced as a red mottled rash on the abdomen when the patient was two months old, and was thought to be measles; however, it persisted, and had gradually spread, first over the trunk, and then to the extremities. As the patches became old, they turned brown. The disease had defied treatment, internal and external. In appearance, this eruption was similar to some others brought before the Clinical Society by Dr. T. Fox, Dr. Barlow, and Mr. Morrant Baker, and judged by Dr. T. Fox to be allied to xanthelasma; while Mr. Hutchinson considered them to be of the nature of urticaria. The essential feature of the disease above described, appeared to be a vaso-motor change in the skin, occurring spontaneously, and also as a result of the most trifling irritation, the above vaso-motor change having a tendency to become permanent, and ultimately leading to pigmentation.

Dr. TILBURY FOX thought the case belonged to the same category as those which Mr. Morrant Baker and he (Dr. Fox) had shown to the Society in 1874, though there was, however, much less, and indeed very slight, elevation of the patches or blotches in Dr. Sangster's instance. In his (Dr. Fox's) *Atlas*, he had figured a patch of the disease, which was flattened and made up simply of apparently dull buff-coloured stains only; and in one of the cases he had recorded, after an interval of five years, the patches had almost subsided, and now only deep-coloured stains remained, so that, under certain circumstances, the patches of the disease were not much elevated. If the Fellows would look at two top figures in plate 60 of Willan's coloured delineations (which he handed round), they would recognise the disease now under discussion; and Willan, in all probability, under what he termed Vitiligo, intended to represent this same disease. He spoke of elevations in the early stage subsiding, and leaving the skin chequered in a curious way; and figured the early red irritable and the late dull mottled pigmented aspects of the disease. Dr. Fox did not think the disease could be called urticaria. It was no doubt liable under irritation to become hyperemic and irritable; but a disease made up of patches, which patches actually remained without much change for years, could scarcely be called urticaria. If the disease were an urticaria, we must completely revolutionise and change our notions of urticaria, as made up of evanescent hyperemic spots connected with vascular spasm. Further, one knew that microscopic examination had shown that the tissue of the skin, in the disease under consideration, was infiltrated with a new cell-growth, like lupus in character. Then, again, the disease might be congenital. The main practical clinical point about the disease to remember was, that it was liable to be mistaken and treated for syphilis, a considerable error which might be fraught with evil con-

sequences.—Mr. HUTCHINSON expressed his pleasure in having seen Mr. Sangster's patient, and heard his clear description. He also congratulated the Society on the fact that it had been the means of bringing under discussion so many examples of such a rare disease. In former sessions, three well-marked cases had been submitted for inspection: one by Dr. Tilbury Fox, one by Mr. Morrant Baker, one by Dr. Barlow, and each case had illustrated a different stage of the disease. The first two were the most severe, the third much less so, and now Mr. Sangster's patient showed it in a comparatively mild and early stage. Taken together, the cases, to any one who admitted that they all represented the same malady, were most instructive, and not far from conclusive as to its real nature. In Mr. Baker's case, the child was covered with brown wheals and ridges, which were in a quiescent state, and from month to month, or even from year to year, underwent but little change; but in Mr. Sangster's case the state of things was different. Here there were the brown stains and some approach to ridges, but scarcely any thickening, and the conditions, although they had lasted long, were constantly undergoing local change; and, above all, there were in addition the very easy production of urticarian wheals. No one who had seen this child's skin, and noticed how the slightest touch sufficed to bring out a wheal, looking exactly like a nettle-sting or a flea-bite, could possibly doubt that, for one thing at least, the child had urticaria. He congratulated the author of the paper on the name employed, "urticaria pigmentosa"; for he had no doubt that it came very close to the truth; and, further, that it was applicable not only to this, but to the other cases. It had been objected that we knew nothing of urticaria as a malady lasting for years; but he believed that, in reality, some of the forms known as urticaria perstans were of quite indefinite duration. Besides, it was not quite literally true that, in these cases, the urticarian stage lasted for many years; it was rather its results in the way of thickening and pigmentation which were so persistent. His theory of the malady was that it was urticaria occurring at an unusually early age, and in connection with some peculiar condition of pruriginous skin; that it was evoked by local causes, and in the first periods kept up by them; and that in the end the skin became permanently thickened and discoloured by the long persistent inflammation. He would further add, as a conjecture, that the original irritation would in all probability be found to be bites of bugs or fleas, or both. He held that it was almost impossible to allow so wide a range of variation for the consequences of bites. As a rule, young infants were not very much irritated by them, but sometimes they were dreadfully affected, and sometimes the consequences were by no means transitory. In Dr. Barlow's case, which he had been permitted an opportunity of examining in the hospital, he believed that he had identified the results of bites.—Dr. SANGSTER said that, in reference to Dr. Fox's observations, the eruption had never been more raised than it was at present. In cases of pruritus, one might generally suppose the pigmentation of the skin was due to the congestion of the skin produced by scratching. In this case, the pigmentation could not be due to that cause, since it began when the child was only two months old. He thought, however, the pigmentation was due to local causes, possibly to the flannel-binder. The child had been in New York, and the mosquito-bites there received did not give rise to any other than the usual effects in the skin. Vaccination also had produced no pruriginous eruption. The child had been jaundiced when very young, and the frequent connection of disease of the liver with innervation of the skin and skin-disease was suggestive.—The PRESIDENT had not long since seen a gentleman with permanent discoloration of the skin about the face and neck, due to the bites of mosquitoes.—Dr. TILBURY FOX had also witnessed the same thing.

Cacotrophia Folliculorum (Follicular Malnutrition).—Dr. TILBURY FOX, in a paper with this title, sought to bring before the profession a disease of the hair-follicles characterised by special features, and clinically distinct from those generally recognised. He had exhibited a drawing of it, with a brief description, at the annual meeting of the British Medical Association at Manchester in 1877; and Mr. Erasmus Wilson had, in his latest course of lectures in January of this year, used the same drawing to illustrate some more detailed and independent remarks. Dr. Fox sketched lightly the pathology of the several popular diseases situated at the hair-follicles, and characterised by retention of exuvie with secondary congestion, by simple follicular torpor, or by primary congestion with its consequences, viz., pityriasis pilaris, lichen pilaris and scrofulosus, planus, ruber, and simplex, and he argued that the drawing shown illustrated a condition distinct from any of these. At first sight, it appeared to be nothing more than ordinary but severe lichen pilaris; and in this category, no doubt, it was ordinarily placed, but it differed in its severity, the deeper and more complete affection of the follicles, its congenital nature, its more general distribution, and its obstinacy to treatment. Dr. Fox then

considered lichen pilaris more closely as being the disease in external features most like cacoecotrophia. Willan described lichen pilaris as a "modification of lichen simplex, the papules appearing only at the roots of the hairs of the skin", in fact, as an inflammatory state of the follicles. But most modern writers meant either a follicular torpor due to plugging by epithelial exuviae or altered sebum, or a simple inflammation with exudation into the follicle, especially confined to its upper part, and the consequent formation in both cases of papules pierced by hairs, which remained practically unchanged. It was brought about by many local and general causes, such as uncleanness, local irritants, and blood and constitutional states. Lichen pilaris was not often seen in the very young; it was an acquired disorder, was more or less localised to particular parts, especially the thigh and outer side of the arm and forearm; and, lastly, it was not notably obstinate. The eruption of cacoecotrophia folliculorum was made up of solid red papules, of the size of a pin's head, which were seen to be situated at almost every hair-follicle, and these papules stood out from a rather reddened base. Though the disease had a special predilection for parts, such as the outer aspect of the arm, the back of the shoulders, the thighs, the trunk, and the sides of the face and forehead, which was sometimes the seat of seborrhoea sicca, still, the eruption was of very general and extensive distribution. The hairs had mostly disappeared, those that remained being stunted and twisted, and the interfollicular portion of the skin was reddened, the whole thing often bearing a striking resemblance to xeroderma. In this affection, the deepest portions of the hair-follicle, including the papilla, were affected, and the formation of the hair interfered with. It was not an inflammatory condition, but one essentially of defective or indolent nutrition with plugging of the follicles and some passive congestion. Individuals were affected from the earliest age, or it might be truly congenital, and was not acquired later on in life. A very important point was that the disease occurred in subjects, mostly young women, of a lymphatic, strumous, or phthisical tendency, and was brought into prominence and especially attracted notice about the period of increased physiological activity, viz., puberty. The paper was illustrated with the detailed notes of four well marked cases.

Mr. HUTCHINSON scarcely knew why these cases should be separated from cases of xeroderma or ichthyosis, which was a congenital cacoecotrophy of the whole skin; whereas the disease in the present case was simply a cacoecotrophy of the follicles only.—Dr. WILTSHIRE thought that the disease was rather common amongst insane children of Mongolian type, with clubbed fingers and blue eyes.—Dr. TILBURY FOX, in reply, said he was quite aware that there was a plugged state of the follicles in connection with ichthyosis, but that was not the condition he had described in the paper he had read; and it was not very likely that both he and Mr. Erasmus Wilson should have made a blunder upon so simple a point as that. He doubted if Mr. Hutchinson (at least his remark seemed to show as much) was exactly conversant with the disease under discussion. He (Dr. Fox) did not know of any published account of the condition.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 25TH, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

THE recommendation of the Council, that the hour of meeting be changed from 8 P.M. to 8.30 P.M., was carried unanimously.

The Late Mr. T. C. Jackson.—Dr. LANGMORE referred to the death of the late President, Mr. T. Carr Jackson, and proposed that a vote of condolence be written to his family. This was seconded by Dr. ROYSTON, and carried unanimously.

Report on Tuberculous Kidney.—The report of Mr. MORRIS and Dr. GRIFFITHS on Dr. Griffiths's case of tuberculous kidney was read. The kidney was greatly enlarged, and consisted of masses of new growth with spaces in them extending throughout the structure of the kidney until the true secreting structure could scarcely be found. The cones in the pelvis were greatly destroyed. The ureter was also the seat of disease, which involved all its coats and diminished its lumen.—The PRESIDENT said the report left it still somewhat doubtful as to the real nature of the growth, as to whether it was truly tuberculous or not.

Abnormalities of Fetal Development.—Mr. AUGUSTUS PEPPER read a paper on the above subject, which he said possessed a practical value not sufficiently appreciated. He said that the development of the tissues of the organism from the three layers of the embryo often led to arrest of development, at other times to supplemental growths. The nervous system, with its membranes and the bones belonging thereto, were often so affected; not rarely the casework remaining in a non-

osseous state. He then gave an account of a case of spina bifida, which at two months began to grow worse; there was also hydrocephalus, with a loss of natural ebb and flow in the cerebro-spinal fluid; pressure on the head not affecting the tumour. In spina bifida, there was some loss of nerve-supply to the lower extremities; or one limb might be less than the other limb. A photograph of a cured spina bifida, with some modification of the ribs, was exhibited. One case which had come under his notice lately had but a small portion of the cranial vault, together with some closed cysts, probably formed from the arachnoid. The formation of these cysts was then described very ably. The first and second cranial nerves, he said, were probably formed from a different embryonic blast than the brain; and fusion took place later on. In another case (foetus exhibited), there were but rudiments of the spinal cord, and the head was entirely wanting; while the nerves of the limbs and the ganglia were perfectly normal. There were also talipes calcaneus, a contraction of a finger, and an extroverted bladder.—The PRESIDENT inquired if there were any mechanical explanation of those arrests of nutrition.—Mr. EDMUND OWEN said these defects were common in first-born children.—Dr. SEDGWICK inquired as to the condition of the thoracic viscera.—Dr. MAHOMED said that the remains of the vessels of the foetal cord were often a source of danger in after-life entangling the bowel.—Mr. CRIPPS LAWRENCE spoke of a child which was born while the mother had scarlatina; it soon died, and was found to have acute endocarditis.—Mr. OWEN related a case of a foetus he saw which had a tail, that was curled up on one buttock and distinctly moved. It was successfully removed by ligature, and was now in the museum of Guy's Hospital. The child lived to sixteen years of age.—Mr. PEPPER replied; and the meeting adjourned.

EPIDEMIOLOGICAL SOCIETY.

APRIL 11TH, 1878.

Surgeon-General JOHN MURRAY, M.D., President, in the Chair.

Plague and Typhus Fever in India.—A paper on this subject was read by the PRESIDENT (Dr. MURRAY), who said that plague or bubonic typhus was first noticed in India during the present century. It appeared in Kitywar on the West Coast in 1816, and caused great mortality till 1821. It crossed a range of hills, and appeared at Rajpootana at Pali in 1836, and spread to the surrounding towns till 1838. The typhus fever, with prominent symptoms of yellow fever, appeared to extend northward in 1837-8 to the Doab and Rohilcund. In 1836, the plague was reported to be causing great mortality in Gurhwal and Kumaun in the Himalaya mountains. On investigation, it was found that this disease had first appeared in 1823 in Gurhwal, at a temple in Kidarnath, where the people said that it was an infiction from the gods for a neglect by the high priest of the ceremonies prescribed in the Shasters; it killed the high priest and all the Brahmins of the temple, and spread with the pilgrims to the surrounding country. It continued to spread to the surrounding country with occasional aggravations from that date down to 1877. In 1852, a typhus fever, with symptoms of yellow fever, and, in addition, buboes in the groin, axilla, and neck, made its appearance in the hilly country of Eusofzai, about forty miles north of Peshawur, and proved very fatal during that and the following year. A detailed account of the symptoms, as given by Dr. Forbes of Palu, Dr. Farquhar at Eusofzai, and Dr. Plank at Kumaun, showed all the symptoms of plague as described in Egypt and Europe, and all the varieties of and modifications usually found in those countries. A typhus fever, with all the symptoms of yellow fever and occasional suppuration of the glands of the neck, appeared in Saugor in the year 1859; and in 1860 a virulent attack of the same disease broke out in the central prison at Agra, and proved fatal in 313 cases; during the same year, a similar disease in the central prisons of Meerut, Lucknow, and Allahabad proved fatal in 492 cases. In 1863, it appeared at Lahore, and subsequently in other prisons in the Punjab. The disease still appears in the Punjab; the total mortality up to 1875 having been 5,346. The general symptoms in the most intense cases of all these diseases were alike; extreme prostration of body and mind, with torpor, followed by death in twelve or twenty-four hours, leaving no local symptoms of bubo or jaundice, only a black liquid state of the blood. Buboes were early and prominent symptoms at P'alu. They did not appear till the fourth up to the seventeenth day in Kumaun; whilst nearly all the cases proved fatal before the third day. In Eusofzai, they did not appear till the eighth or eighteenth day. In the Doab, as in the subsequent jail attack, the glands in the groin were very rarely affected; those in the neck were more frequently affected, but this was not a prominent feature in the disease. In all these diseases, the approach of the hot season checked the attack in the same

manner as plague is arrested in Egypt and Turkey. This was shown in several interesting tables. These diseases were regarded by all the medical officers as contagious and capable of being transmitted from a patient to a healthy person, and all concurred in the dissemination being essentially promoted by crowding, bad ventilation, and defective sanitary arrangements. None of the medical officers engaged in investigating the outbreaks of plague in Kitywar, Palu, Kumaun, and Eusofzai were attacked by the disease, nor were any of the civil surgeons in charge of the sixty-eight jails in the North-West Provinces and Punjab since 1860 attacked, with one exception, and he recovered. The native doctors and hospital attendants, more especially the sweepers, suffered severely in many instances. The opinion of the inhabitants of Kumaun of the contagious nature of the disease was shown by the practice of deserting the villages where the *bola* or *bubo* appeared, and prohibiting the inhabitants of an infected village from entering their houses. This principle guided the regulations of the Government of India for the removal of troops from cantonments and of prisoners from jail on attacks of cholera or typhus fever. The result in saving life had been very satisfactory; as, had the mortality from European troops from cholera continued during the last thirteen years at the same rate it was the previous years, it would have amounted to 5,340, instead of 1,994 which actually occurred. The disease now proving fatal among the Russian troops in Armenia and Bulgaria under the various names of spotted typhus, black typhus, plague typhus, was probably induced by the same poison as plague, which produced the variety of local symptoms which were modified by season and temperature in India, and for practical purposes would indicate the same course of prophylactic treatment.

BRITISH MEDICAL ASSOCIATION.
SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT
MEETING.

MARCH 14TH, 1878.

R. M. MILLER, M.D., in the Chair.

Diarrhoea from Milk Supply.—The SECRETARY read a paper by Dr. PHILPOT on an outbreak of diarrhoea in Upper Norwood. One hundred and fifty-six cases occurred within twenty-four hours. It was traced to a particular milk-supply, but further cause could not be traced.—Drs. Miller, Lanchester, Galton, Coles, and Ogilvie made remarks.

Electrolysis of Scrofulous Lymphatic Glands.—Mr. GOLDING-BIRD read a paper on the treatment of scrofulous lymphatic glands by the electrolytic caustic. He referred to the general disuse of caustics. He divided cases of scrofulous glands into three classes: 1. The glands free, though enlarged; 2. The glands matted together or to the skin, or presenting hardened nodules, or encapsuled (lymphoma); 3. The condition of active inflammation. The first class was met by general treatment. In the second, it was better to use the knife. In the third, the best operation was by caustic; and the least painful of any mode of applying it was the one now described. A small arrow of sheet zinc, one inch and a half long by half an inch wide, sharp at one end, had a copper wire ten inches long attached to the other. The other end of the wire was soldered to a plate of thin sheet silver or copper three or four inches square. The latter was firmly strapped upon a piece of lint, wet with salt and water, on to the skin somewhere near the spot to be destroyed. Over it was placed some oiled silk or waterproof strapping. The zinc point was then thrust through the fungating mass to be destroyed; a small shield of gutta-percha or cork regulated the length of the zinc point. Some cotton-wool and a bandage were placed over all. The gland was gradually disintegrated by the formation of chloride of zinc at the expense of the metal inserted, and came away in four to six days. When all the gland had come away, the wound rapidly closed with very little scar. The lint must be wetted with salt and water night and morning. Mr. Spencer Wells was employing this treatment for the removal of uterine cancer. He referred to two cases, in which, though the results were very satisfactory, much pain was complained of. In the latter, the total weight of slough was four hundred and thirty-three grains. He narrated the history of one case in which he applied the zinc in the form of a flat disc to necrosed bone with good result.—Dr. HATLEY referred to the importance of the size of the scar.—Dr. HOLMAN remembered the late Dr. Golding Bird applying zinc galvanism to cause healing of ulcers.—Dr. MILLER advocated the use of small puncture in suppurating glands.—Mr. GOLDING-BIRD said that he would not use the caustic when the gland was in a fluid state. His plan was a following out of the lines of his father. He considered that the scar was larger when the knife was used.

Non-Alcoholic Treatment of Post Partum Hemorrhage.—Dr. POOLE read a paper on this subject. After referring to the general aspect of

the treatment of disease without alcohol, he quoted opinions of text-books, and contrasted those of Dr. Blundell, "faintness from small bleeding is conducive to its stoppage", and Dr. Denman, "cordials should not be given to those faint from hæmorrhage till there is danger from its long continuance", with Dr. Leishman's statement, that "tendency to syncope must be counteracted by free stimulation with brandy". He referred to ten or twelve cases of large scrotal tumour, upon which he had operated in India, which recovered from excessive hæmorrhage without stimulants. He gave a history of two cases, both in total abstainers. The first patient, aged 40, had a miscarriage at the fourth month. He gave Liebig's extract and a full dose of ergot, and removed the placenta. The fainting condition lasted for hours. In the second case, a multipara with breech-presentation, the forceps was applied, and a large head was followed by a rush of blood. Perchloride of iron was injected without clearing out the clots; the bleeding continued; then the clots were cleared out, and perchloride was reinjected. Liebig's extract was given. If the heart flagged, he would stimulate with a cup of soup. Alcohol was not food.—Dr. GALTON considered that the bleeding, in cases of surgical hæmorrhage, was not comparable with that from the uterus, where the arrest was due more to the muscular contraction than to clotting in the vessels. He should expect more good from alcohol in stimulating muscular contraction, than harm in preventing clots from forming. With reference to the scrotal elephantiasis, operation by Sir Joseph Fayer's method would have prevented the hæmorrhage, as he (Dr. Galton) had proved in seventeen cases, in the largest of which (weighing fifty pounds) little more than two ounces of blood were lost.—Dr. PARSONS SMITH said that the stimulant was not used to arrest hæmorrhage.—Dr. COLES thought we were often too meddlesome in midwifery. He questioned the absorption of alcohol in syncope, and agreed with Dr. Poole that nature's own remedy was fainting.—Dr. BRAXTON HICKS said that all must have thought whether stimulants were useful in *post partum* hæmorrhage. There were two points as to its arrest: 1. The contraction of the uterus; 2. Coagulation of the blood. The first depended upon whether alcohol increased the vital powers of the nerve. He doubted the increased action of the heart under alcohol; in large quantities, it certainly lessened it. In large doses, it checked uterine contraction; in small, it probably did good. People who did not faint with hæmorrhage came to grief.—Dr. LANCHESTER considered the question from two points of view: 1. When hæmorrhage was going on; 2. When it ceased. In the first, we should be trying to arrest the hæmorrhage instead of giving stimulant. In the second, he thought stimulant helped to keep up action of the heart after injecting perchloride of iron.—Mr. SIDNEY TURNER thought we should stop hæmorrhage before considering alcohol. In the first case mentioned by Dr. Poole, the hæmorrhage ceased after removal of the placenta. He had seen the worst syncope in a case of no hæmorrhage, but large thin uterus.—Dr. BRAXTON HICKS said that secale was the best remedy for this.—Dr. JEAFFRESON was of opinion that the extreme bloodlessness of approaching death was attended by contraction of unstriated muscular fibre. In pig-killing, as a final phenomenon, the animal passed urine.—Dr. HOLMAN considered the question as one of "experience, luck, and pluck". Having lost cases of hæmorrhage, he had not the pluck to stand by and see a patient faint to death. He had observed under stimulant a pulse of 150 come down. Often, not letting a patient die would depend upon moderate stimulation.—Dr. BRAXTON HICKS asked whether any one had tried subcutaneous injection of sulphuric ether.—Dr. MILLER thought there were two points to be considered: 1. The whole profession had abandoned the excessive use of stimulants; 2. Alcohol was the only remedy often at hand, and the objection against its non-absorption would apply also to beef-tea.—Dr. POOLE was still unconvinced. He considered that alcohol did not act upon the uterus.

Abdominal Tumour.—Mr. SIDNEY TURNER read a case of abdominal tumour. The patient, a woman aged 45, on October 15th, was seized with shivering. The temperature was 101 deg. to 104 deg. Fahr. for the first week. The pulse varied from 100 to 118. There was pain, of spasmodic character, with tenderness on pressure over the left lumbar and hypogastric regions. An oval tumour, visibly prominent, of roundish outline, occupied the great part of the left side from the ribs to midway between the crest of the ilium and Poupart's ligament; it was dull on percussion. Impacted calculus in the ureter was suggested. The swelling gradually subsided after the appearance of pus in the urine; and on December 5th the patient had completely recovered. No calculus was passed or found in the bladder. The treatment consisted of iron and quinine and good diet.—Dr. JEAFFRESON described a smaller case on the right side. Hydronephrosis was diagnosed. It was tapped, and clear acid fluid with urea crystals was obtained. In three or four months, the tumour reappeared, and disappeared again suddenly with turbid urine.—Dr. BRAXTON HICKS mentioned a similar case,

with *post mortem* examination, which showed a blocked ureter with distension of the pelvis of the kidney; this, bursting, had formed an artificial ureter from the pelvis of the kidney. He stated that an ovarian tumour was sometimes carried up by a pregnant womb and left adherent, so that resonance below did not necessarily imply that a swelling was non-ovarian.—Dr. MILLER had seen a similar case recurrent from time to time.

Poisoning by Opium.—Mr. SIDNEY TURNER read a case of opium-poisoning in a patient aged 60. The dose taken was four ounces and six drachms of the tincture; and, it being supposed to have been taken long before, no stomach-pump was used. Coffee was freely given, and warm clothing put on, with exercise for thirty-six hours; the patient was then allowed to sleep for ten hours. The pupils were contracted for three days, during which the patient took bromide of potassium with belladonna to relieve headache. He urged the necessity of keeping up the temperature of the body in these cases.

BRITISH MEDICAL ASSOCIATION. YORKSHIRE BRANCH. MARCH 27TH, 1878.

Tumour of the Brain.—Dr. SHANN read a case of tumour on the brain in a boy aged 13. The tumour was found lying on the optic commissure, having caused flattening of both optic nerves and of the pituitary body. One-half of the sella Turcica was destroyed, and the other reduced to a shell of bone. The interest of the case was the very slight character of the symptoms and their intermittent character, the local injury being of so permanent a nature. The only indication of disease of permanent and progressive character was the loss of vision, which, from being somewhat impaired, passed gradually into permanent blindness. The only other symptoms were occasional headache and sickness, temporary in duration, spread over eighteen months. He had a fit on two occasions, which passed off without leaving permanent effects. Seven days before death, drowsiness came on, and temporary paralysis of the right arm, which entirely passed away.

A Pill Swallowed into the Left Bronchus.—Dr. CLIFFORD ALLBUTT related a case in which a pill had been swallowed into the left bronchus. Expansion and respiration ceased in the upper part of the left lung, and violent spasm of the breathing was set up. This was kept under by the continuous use of chloroform for five hours, at the end of which time half the pill was spat up, and the remainder followed in morsels. By the use of the gag, the laryngoscope was easily used during the narcosis. The vocal cords stood very widely open, and almost motionless. Mr. Teale's assistance was obtained during the treatment. The pill swallowed was a coated compound conium pill. The patient was asthmatic.

Pernicious Anæmia.—Dr. CLIFFORD ALLBUTT related six cases of so-called pernicious anæmia. He said that the disease had not been forgotten in England since Addison's time, as cases of the kind had been under his care twenty years ago as clinical clerk to Drs. Bence Jones and Fuller in St. George's Hospital, and in Addenbrooke's Hospital under Dr. Paget, and were fully recognised by those physicians. The ophthalmic symptoms were described, and the curious relapses attended with vomiting were pointed out. The author thought that phosphorus was the only drug which seemed to be of use, and this only in a minority of cases. He did not think Dr. Fenwick's ingenious suggestion adequate, that this state was due to atrophy of the coats of the stomach.

Treatment of Hydatid Cysts.—Dr. EDDISON (Leeds) made some remarks on the treatment of hydatid cysts, and referred to the detailed reports of three selected cases from his own practice in the Leeds Infirmary, illustrating different forms of the disease. His opinions as to treatment, which, he believed, agreed generally with those of most persons having much experience of the disease in question, were as follows. Cysts should be emptied as soon as they are discovered. The fluid should be withdrawn by an aspirator, using a very moderate degree of exhaustion, and a very fine needle should be used. There is no need to attempt to cause adhesions to the external coverings, the abdominal wall or the costal pleura for example. If care be used, the suction of the aspirator does not cause pain; but pain may often be produced by allowing the point of the needle to move about unnecessarily. The cyst should be as nearly emptied as possible; for the less fluid that the punctured cyst contains, the less chance is there of the outflow of such fluid through the puncture. Nothing whatever should be injected into the cysts. As soon as pus is evidently present, an opening should at once be made, and the suppurating cyst be treated as an ordinary abscess, bearing in mind that the cyst-wall and secondary cysts should, if possible, be removed. In one of the cases referred to, a cyst of more than nine years' standing and of large size was expelled

en masse, the walls being perfectly clear and transparent, although suppuration had been going on for some weeks.

Foreign Body in the Eye.—Mr. SNELL related a case of foreign body (piece of steel) embedded in the fundus oculi close to the optic disc, with retention of perfect sight. The patient was exhibited, and examined by several members. The date of injury was five months ago. Mr. Snell also related a case of foreign body in an eye for twenty-nine years.

Diphtheria.—Dr. THOMAS related a case of diphtheria, which terminated in sudden death. The patient was progressing favourably, when, about the twelfth day, severe vomiting came on, followed in a few hours by collapse and death. Dr. Thomas did not consider that the patient had died from thrombosis, cardiac, pulmonary, or aortic, as he did not exhibit any of the ordinary symptoms present when such is the case; he did not think that sufficient evidence had been brought forward to prove that all these cases were caused by cardiac degeneration. Nothing had hitherto been found in the nervous centres sufficient to account for death. Taking into consideration, therefore, that the pneumogastric is a motor nerve of the stomach, and the inhibitory of the heart, and that stimulation of it will retard and at last stop the action of the heart, and at the same time increase the muscular action of the stomach if it contain anything, he was inclined to think that the pneumogastric nerves were irritated in some way, perhaps by the action of vitiated blood upon the medulla, or, as had been suggested, by reflex action through the nerves supplying the parts affected by diphtheria.

Tumour of Forearm.—Mr. H. J. KNIGHT related a case of tumour of the right forearm, presenting all the clinical features of a myeloid sarcoma, but really the result of inflammatory exudation and thickening following periostitis of the radius. The subject of it, a youth aged 17, made a rapid recovery after the formation of an abscess and the extraction of a minute shell of exfoliated bone.

Inversion of Uterus.—Dr. JAMES BRAITHWAITE (Leeds) related two cases of inversion of the uterus, in the first of which continuous elastic pressure, very firmly applied for four days, produced sufficient reinversion to allow completion of the cure by the hand. All previous attempts at reduction had failed.

Relaxation of Pubic Symphysis.—Dr. J. BRAITHWAITE related a case of relaxation of the symphysis pubis following delivery. Movement of the pubic bones upon one another could be felt by the hand, on pressing upward either thigh as the patient was recumbent in bed.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

MARCH 15TH, 1878.

R. SCOTT ORR, M.D., in the Chair.

Treatment of Acute Rheumatism.—Dr. CHARTERIS gave an outline of the treatment of acute rheumatism, tracing it from the time of Sydenham and Bouillaud down to the present, when most physicians are testing the value of the recommendations of Dr. MacLagan of Dundee. Dr. Charteris stated that, from November 1876 to January 1878, he had treated twenty-three cases of acute rheumatism in the Royal Infirmary, either with salicin or salicylic acid, in doses of ten to twenty grains every two hours, and he generally found the pain relieved in twenty-four hours. Dr. Charteris also showed an apparatus for testing the amount of urea excreted.—Dr. MCCALL ANDERSON urged the importance of attending to the cause and general treatment of the disease. He could not regard salicin as a specific, although he thought it the best medicine we at present possessed. He found hypodermic injections of morphia useful in relieving the pain.—Dr. GAIRDNER had made extensive trials of salicin, and he had found that no good result could be obtained unless large doses of twenty grains at least were given, and that there were some cases which would not yield to it. He thought we yet required a more accurate classification of cases of acute rheumatism founded on pathological facts.—Drs. THOMSON, REID, MORTON, RENFREW, and TENNENT were of opinion that careful general treatment was of the utmost importance. They had not seen the relief to pain which some observers reported.—Dr. SCOTT ORR had tried the new drug, and in some cases it seemed to suit well, but he was still inclined to trust to acetate of potash.

AT a special general meeting of the Birmingham Natural History and Microscopical Society, held on April 30th, Dr. Cobbold, F.R.S., was unanimously elected an Honorary Vice-President of the Society. The appointment was made under Law VIII, in consideration of his distinguished researches in natural science, and for his liberality to the Society. Dr. Darwin is the only naturalist who has received a similar honour.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 11TH, 1878.

SEWER-COMMUNICATIONS AND FILTH-DISEASES.

DR. JAMES B. RUSSELL, the Medical Officer of Health for Glasgow, in a paper recently read before the Philosophical Society of Glasgow, has made a valuable contribution to our knowledge of the effect of sewer-gas upon the production of enteric fever and diphtheria, two of the most clearly defined filth-diseases. It appears that, since 1873, every fatal case of any zymotic disease or of lung-disease in Glasgow has been entered on a card, upon which has also been recorded, after inquiry, "minute details about the size of the house, the position of the water-closet if there be one, and also of the ashbox or sink". During the three-and-a-half years ending December last, 420 fatal cases of diphtheria and 833 of enteric fever have been dealt with in Glasgow on this detailed card system, and form the basis of Dr. Russell's investigation undertaken with a view to calculate the effect of sewer-communication in the production of these diseases. For this purpose, the houses in which these deaths from enteric fever and diphtheria were recorded were divided into four classes: (1) those having a water-closet inside, with or without a sink; (2) those having a sink inside, but no water-closet; (3) those having no connection whatever between their internal atmosphere and the sewers—that is, having neither water-closet nor sink; (4) and those concerning which, from the addresses not being found or other causes, the information was not obtained. The investigation, for reasons which it is here unnecessary to dwell upon, was confined, so far as it deals with the influence of sewer-gas, to houses of one and of two apartments. The total number of houses of each size in the city was obtained from the City Assessor's annual assessment-roll; and the proportions of the houses of each of the four classes above mentioned was determined from a return called for by Dr. Fergus in 1872, showing the numbers and the class of the houses having water-closets, drains, etc., in communication with the sewers. In order to ascertain the numbers of persons living in these houses of different sizes, Dr. Russell assumed that the average number of inmates of the houses in each class prevailing at the census in 1871 is still maintained. It may be stated that, in one way or other, the internal atmosphere of fully 33 per cent. of the one-apartment and of 69 per cent. of the two-apartment houses was in communication with the sewers.

Dr. Russell set himself to answer the following questions. Does it make any difference to the inhabitants of a one or two apartment house, whether there is or is not a communication between the house-air and the sewers? Are the residents of these houses, or are they not, more liable to be fertilised with the germs of these two special filth-diseases? The number of houses of one apartment having an internal water-closet was too small to afford a trustworthy basis for calculation; but, among those persons living in houses of one apartment having no communication with the sewers, the death-rate per million was equal to 120 from diphtheria, and to 249 from enteric fever; whereas, among the residents of one-apartment houses containing a sink-communication with the sewer, the rate from diphtheria was equal to 253, and from enteric fever to 677, per million. So, in the houses of two apartments having "no direct means of access for the specific germs", the rate from diphtheria was 127, and from enteric fever 386, per million; in those

having a sink, the rates became 275 and 465; while in those having an inside water-closet in addition to the sink, the death-rate from diphtheria rose to 418, and from enteric fever to 665, per million. Thus it seems to be proved that in Glasgow, during these three years and a half, the lowest death-rates from diphtheria and enteric fever occurred in those houses of one and of two apartments having no communication with the sewers; while the highest rates were found in those houses of two apartments which were provided both with water-closets and sinks. The mortality from each of these diseases was, however, found to be still higher in houses of three apartments; but, as the proportion of this class of houses provided with sewer-communications is unknown to Dr. Russell, he was unable to deal with their statistics so completely as he did with those of one and two apartments. As, however, the proportion of internal sewer-communications rose from 33 per cent. in the houses of one apartment to 69 per cent. in houses of two apartments, it is only reasonable to assume that three and four apartment houses are still more fully provided with internal sewer-communications. Hence, probably, the still higher death-rate from these diseases, the specific germs of which conclusively appear to be distributed by sewer-gas. Dr. Russell expresses his conviction, which is fully warranted by his carefully compiled statistics, that it is the absence of the sewer-connection by sink and water-closet with the internal atmosphere of a large proportion of the one and two apartment houses which causes the death-rates from diphtheria and enteric fever to be lower in these than in larger houses. He further says: "If every house of each size were connected alike with the drains and sewers, then I am sure the diseases specially associated with such misplaced connections would conform to the general law of other diseases, and be at their maximum in the smallest houses."

Dr. Russell concludes his valuable paper by stating that, if we would reduce the mortality from diphtheria and enteric fever to the "lowest possible minimum", not only must all internal communications with the sewers be as far as possible abolished, but our sewers and house-drains must be ventilated on the separate system, and the use of cistern-water for dietetic purposes must be entirely discontinued. There is no reason to doubt that what Dr. Russell has proved with regard to the mortality from diphtheria and enteric fever in Glasgow is more or less true with regard to their mortality in other sewered towns. It is, however, to be feared that but few medical officers of health have provided themselves with the materials for so valuable an investigation as that which has been so carefully elaborated by the indefatigable Medical Officer of Health for Glasgow.

A STRANGE CORONER'S INQUEST.

ON several occasions lately, we have commented on Coroners' inquests as they are conducted in England. The peculiar conduct of many of these officials, who have won their position by the votes of free and independent electors, has formed a frequent subject of criticism. We do not remember, however, to have met with any case in which the defects of the present system of conducting these inquiries have been more strikingly displayed, than in an inquest lately held at Ruthin on the body of a child alleged to have died from starvation and neglect. We have waded through seven columns of a report published in a local paper, with a view of placing before our readers an abstract of the case; but the proceedings were conducted in so irregular a manner, that we find it exceedingly difficult to carry out this design.

The first inquest was held on the 13th, and the second, by adjournment, on the 20th of April. On the first occasion, the coroner, a member of the medical profession, threatened to commit, for contempt of court, a solicitor and a sanitary inspector; and on the second he threatened to commit one of the jury who had taken an active part in the proceedings. No order was kept in the court; the coroner and jury placed themselves in the position of witnesses, and in complete antagonism to each other; and from the beginning to the end, the

proceedings involved a continual wrangle between the coroner, jury, and other persons concerned in the case.

The facts go into a small compass. A child aged under two years, the illegitimate off-spring of an imbecile pauper woman, died under circumstances which demanded inquiry. The body was emaciated, free from fat, and presented the usual appearances indicative of starvation. There were ulceration and sloughing of the left foot; the clothing was insufficient; and the body was infested with vermin. There was, it is said, no natural disease to account for death or for the emaciation. The child was too young to provide nourishment for itself; and the question, therefore, was simply whether the mother, who was a pauper, or the guardians of the poor, were responsible for its death.

There was evidence that the mother had an insufficient supply of milk, and was without the means of procuring food. The responsibility for its death, therefore, appeared *prima facie* to rest with the guardians. Had the case been before a stipendiary magistrate, or one having an ordinary acquaintance with the rules of evidence, the examination of one or two witnesses would have sufficed to show where the responsibility lay. Had the guardians a knowledge of the child's condition; and was it at the time of its death under their custody? The state of the body showed the absolute necessity for proper food and shelter. On these material points, the evidence was most confused and unsatisfactory. After a summing up by the coroner in favour of the mother, the following verdict was returned by the foreman: "Died from starvation and want of proper care; and we find no blame attached to the mother." We give what followed in the words of the report, but abbreviated.

"Several Jurors: We said nothing whatever about the woman.—Mr. Joyce: Our unanimous verdict was, that 'the child died from starvation and neglect'. We say nothing as to who is to blame; we leave that to somebody else.—On the formal 'inquisition' being produced to be signed, some of the jurors demanded it read. The coroner read it, and it stated something about the death being through the inclemency of the weather. Mr. Morris, Mr. Jones, and Mr. Joyce (three of the jury), uttered exclamations of surprise, and declared that they had said nothing about 'the inclemency of the weather'.—Coroner: Don't I tell you this is only the inquisition, and it must be put in legal form.—The Jurors: Well, we won't sign that; we said nothing about the weather.—The document was again read, and said the child died from 'want of the common necessities of life'.—Mr. Joyce and others: Good gracious, Mr. Coroner, that is not our verdict at all.—Coroner: Don't I tell you that the inquisition must be put in proper form. Continuing to read from the document, he said, 'And the jurors say that the deceased came by his death by no violent ways or means whatever'.—Several Jurors: Why, there is not a word of our verdict there; it's altogether a different thing.—The coroner again tried to argue with the jury that that was the proper form for the verdict; but they persisted that they would not sign anything but the verdict. The coroner then handed to the foreman the piece of paper on which the jury's words, 'Died from starvation and neglect', were written; and directed him to sign that.—Mr. Jones: That won't do. We had better retire again and make a verdict for ourselves.—Mr. Morris: I don't understand, Mr. Coroner, why you don't put our verdict into that document, and not what you have got written there.—Eventually, after arguing with them for a long time, the coroner struck out some of the sentences they objected to, and put in that the death was through neglect. The foreman and four or five jurors signed the document. On it being passed to Mr. Morris, he read it through most minutely, and was joined by the coroner, who said it must be put in proper form.—Mr. Morris (pushing the document from him): I won't sign it. I won't agree to that as one of the twelve. Our verdict is there, on that piece of paper; and, if you embody that in a formal document, I am ready to sign it. [*Hear, hear.*]—Also, some further cross-firing, the verdict was made to read that 'the said Edward Davies, on the 7th April, died from starvation and neglect'. This document was signed by the foreman, and, on it arriving at Messrs. Morris, Joyce, Jones, etc., they carefully looked it over before signing it. This inquiry, which is admittedly one of the most remarkable that has, perhaps, ever occurred in the district, was thus brought to a close."

The amicable relations of the coroner and the jury are well brought out in this quotation. It is satisfactory to perceive one glimmering of common sense in this discussion; namely, that an inquest should be

really for the purpose of determining the cause of death, leaving the question of who is the criminal to another tribunal. The perusal of the proceedings shows that the coroner and jury had the most eccentric and imperfect ideas of their duty in an inquiry of this kind. The coroner, in his altercations with the jury and witnesses, and with his repeated threats of imprisonment to those who differed from him, appears to have lost all sense of self-respect. The jury, under such guidance, were not likely to take a calm and judicial view of the facts; and hence the difficulty of fixing upon any verdict in the case in which all would agree.

The report of this inquest shows that some legislative enactment is absolutely required to improve the method of inquiry into the causes of death. It is a disgrace to our system of jurisprudence that such occurrences as these should be possible under the sanction of law.

PRESENTATION-DAY at the University of London is fixed for Wednesday, May 15th, at 2 P.M.

DR. VOLKMANN has been appointed Rector of the University of Halle for the year 1878-79.

THE fiftieth anniversary of the doctorate of the celebrated zoologist, Dr. von Siebold, was celebrated in Munich on April 22nd.

It is intended to hold a public celebration of the completion of the fortieth year of professorship of Dr. Schwann, at Liège, in the end of June.

JULIA FRAM BROWN, a woman who had carried on business in Brighton as a herbalist, has just been committed for trial on a charge of feloniously administering drugs to women.

THREE deaths from yellow fever are reported as having occurred on board a Norwegian brig just anchored in the Dover Roads during a voyage from Rio de Janeiro.

THE pay of an assistant-surgeon in the American army is sixteen hundred dollars (£320) a year on entering the service, with an increase for every completed five years; also travelling expenses, quarters free, and forage.

DURING the American war, we had occasion to refer to the details of charges brought against the Surgeon-General of the Northern Army, Dr. W. A. Hammond. Upon reviewing the charges made and the evidence adduced, we came to the conclusion that this was a political attack, and that the charges were unproven and in no way affected the character of Dr. Hammond. Nevertheless, Dr. Hammond was removed from office. We are glad to see that, by a tardy and incomplete act of reparation, the name of Dr. W. A. Hammond has, by special act of Congress, been placed upon the list of retired surgeons-general.

THE names of various Fellows have already been mentioned as probable candidates for the Council of the Royal College of Surgeons. We understand that Sir Henry Thompson has decided to offer himself for the next election. His friends have urged him to take this step, inasmuch as his position on the list is at the present moment senior to that of the other candidates, and the time for his candidature has, therefore, obviously fully come. Sir Henry Thompson has precedence, we believe, of any candidate whose name has yet been mentioned. He became a Member in 1850, and a Fellow in 1853, and is, therefore, on the score of seniority, distinctly called upon to come forward now. Sir Henry Thompson's eminence in the profession and varied ability are so well known as to need no observation, and there seems little doubt that his friends are well advised in nominating him on this occasion. Mr. Callender, whose name has been mentioned as a probable candidate, will, we are informed, not come forward this year.

DR. BROWN-SÉQUARD has been nominated Professor of Physiology in the College of France, in succession to Claude Bernard. Being, however, a British subject (born in Mauritius), he must be naturalised in France before his appointment can be confirmed.

THE vacancy caused by the resignation by Dr. E. Mackey, of the office of Physician to the Queen's Hospital, Birmingham, has been filled by the appointment of Dr. B. Hunt.

THE annual general meeting of the Poor-law Medical Officers' Association was held last week, at the Freemasons' Tavern; Dr. Joseph Rogers in the chair. We will give an account of the proceedings in next week's JOURNAL.

WE have it on the authority of the *Army and Navy Gazette* that, since the beginning of the present year, fifty-two of the leading surgeons of the Russian army have fallen victims to the typhus epidemic. The number is equally distributed between the European and Asiatic seats of war.

DR. WILLIAMSON of Ventnor has received a letter from Admiral Fanshawe conveying to him the thanks of the Lords Commissioners of the Admiralty for the care and attention which he bestowed upon the survivors from the *Eurydice*.

MR. SPENCER WELLS will commence his course of six lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours, in the theatre of the Royal College of Surgeons, on Monday, June 10th; and on the 24th, Mr. B. T. Lowne will commence his course on the Physiology of Nerve-Stimulation. With the latter course, the lectures of the College will terminate for the present session.

THE Council of the Metropolitan Counties Branch have summoned a special general meeting of the members of the Branch, at 11, Chandos Street, Cavendish Square, on Wednesday next, May 15th, at four o'clock, to consider various questions of medical reform in connection with the Bills for the Amendment of the Medical Act now before Parliament.

THE multiplication *usque ad nauseam* of special hospitals makes it all the more important that those which have attracted a large number of cases should, as far as may be, compensate for some of the social harm which they do by indiscriminate pauperisation of the working classes and lax administration of gratuitous advice to the well-to-do, and for some of the scientific harm which they do by drawing away a great number of instructive cases from the centres of medical education. The Brompton Hospital for Consumption and the Children's Hospital in Great Ormond Street have for some years rendered good service to medicine, by the excellent courses of clinical teaching and clinical lectures which have been organised there. The Throat Hospital in Golden Square has now followed the example; and special courses are announced by Dr. Semple, Dr. Whistler, and Dr. Prosser James; while Dr. Semon has organised courses of clinical instruction in the use of the laryngoscope, in which he is an adept.

A SIMILAR course is being adopted at the St. John's Hospital for Skin-Diseases; but, as if at once to illustrate the abuses often connected with special institutions of the kind, these clinical lectures have been made at the outset the occasion of offensive puffs in the daily papers, preliminary to and concurrent with their delivery. We willingly attribute the appearance of these vulgar and most objectionable puffs to the officiousness of some lay officer of the institution; but certainly the surgeons owe it to their own reputation and to the loyalty to their profession, to see that a stop is at once peremptorily put to them.

So admirable (says the *Army and Navy Gazette*) in every respect has the new magazine equipment—the invention of Surgeon-Major Oliver—been found, that, though there was a disposition at the War Office

to discourage it on account of the expense which its adoption would entail, it may now be considered certain that, ere many years are over, it will have entirely superseded the present valise, which, though an immense advance on the old knapsack, has one serious defect in the great difficulty which is experienced in fitting, in consequence of the complicated nature of the straps. Dr. Oliver's invention is as near perfection as can be, and from the first has been most favourably received by the military authorities at the Horse Guards, who have only succeeded in getting it issued to a couple of regiments after the most persistent advocacy of its merits.

MEDICAL TEACHING IN CAMBRIDGE.

THE Regius Professor of Medicine at Oxford must, one would think, experience very singular mental emotions on reading the report of the Regius Professor of Medicine at Cambridge at a meeting of the Senate of that University on May 7th to discuss a report of the Studies Syndicate (see page 693). Dr. Paget is as active in inducing Cambridge to fulfil its obligations to medicine as Dr. Acland is energetic in inducing Oxford to forego hers. Dr. Acland found great resources available for medicine, and has helped to divert them. Dr. Paget is successfully inducing Cambridge to apply fresh funds and fresh power to the urgent academic duty of fostering studies in all the subjects in which it examines. The contrast is too dramatically striking not to arrest attention.

THE ROYAL ACADEMY.

THE exhibition this year again contains contributions by members of the medical profession. Mr. J. L. Probert's etching, "The Shipwreck" (1222), has a great deal of dash and spirit. Dr. Evershed sends a portrait of a horse (1314). Sir Henry Thompson's "Chapel at St. Mark's, Venice" (180), is clearly and carefully painted. In sculpture, Mr. J. H. Thomas has a bust of Dr. Carpenter, in which the tense expression of the mouth and the corrugation of the thoughtful brow are well brought out. Mr. Woolner exhibits a bust of Mr. Simon, which expresses mixed determination and concentrated thought. The same artist has a bust of Professor Huxley, which is a faithful likeness. Mr. H. P. Macarthy shows an excellent likeness in terracotta of Dr. R. Barnes. The Medal of the British Medical Association is shown by Mr. Wyon.

BRITISH DEGREES AND COLONIAL PRETENSIONS.

JUST now, when we are very properly arranging to give privileges of practice in Great Britain to colonial graduates, may be the proper time to secure the like privileges for our own graduates, who in some colonies suffer from the application of a strictly protectionist system by indigenous examining boards. The *Canadian Medical Journal* points out:

"If, however, we ask for our graduates the privileges enjoyed in England by home-graduates, we must at least be prepared to concede something in return. It seems that there is amongst our Ontario Medical Council a feeling of jealousy that makes them resent a man's going over to Great Britain and obtaining his qualifications there rather than here. It is looked on as a slight to the College, and as an attempt to set it at defiance, and is punished by a refusal to register his British qualifications without further examination here, on the ostensible ground that these qualifications are conferred by irresponsible close corporations, instead of, as here, by a body chosen by the profession and responsible to it for the proper performance of its duties."

The assumption of superiority which covers the special pretension of the Ontario Medical Council is not a little amusing; nor is it altogether uninteresting to note how the exaggerated talk which is sometimes heard about "irresponsible close corporations" is taken *au grand sérieux* by our colonial offspring, who delight to flout their grandmother with her supposed shortcomings, on however slender evidence. The fact is, that there is no such thing in the three kingdoms as an "irresponsible close corporation" of medicine, so far as we are aware; not one which is not responsible to its own Fellows, to the General Medical Council, and to Government. But, in any case, the joke of a Canadian board turning up its nose at English diplomas, and refusing

to admit them to registration, is too funny to be serious, and too nearly serious to be treated as altogether humorous. We are surprised that this "want of reciprocity" was not mentioned lately at the Medical Council, when the subject of colonial degrees was being discussed.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN. THE annual general meeting of the Society was held on Wednesday, April 24th, at 5 P.M., by the kind permission of the Royal Medical and Chirurgical Society, in their rooms, 53, Berners Street. The chair was taken by Mr. J. Gregory Forbes, Vice-President. A letter was read from the President, Sir George Burrows, expressing his regret that absence from town would prevent him from presiding at the meeting. From the statement of the affairs of the Society read by the Secretary, it appeared that during 1877 a sum of £2,949 had been voted to the widows and orphans—£63 : 10 in excess of the grants of 1876. The expenses of the year were £187 : 0 : 11—£27 : 15 less than those of the previous year. The receipts, with the exception of legacies and entrance-fees, all showed an increase. The interest on funded property had been £2,576 : 1 : 1; subscriptions, £519 : 15; entrance-fees, ten guineas; donations, £111 : 4. Only one legacy had been received during the year; viz., £250 from the executors of James Graham, Esq. The funded property had been increased by the purchase of £593 : 19 Metropolitan Consolidated Stock. The Society had lost twenty-two members by death during 1877, and four members had resigned. Among the deaths were mentioned those of Sir W. Fergusson, Vice-President; George Cooper, Esq., Vice-President; and Dr. Carr, a Director. Only nine new members were elected. At the end of the year, the Society consisted of three hundred and eighty-five members. During the year, fresh applications had been received from six widows and two orphans; four widows had died or become ineligible; and three orphans had ceased to receive grants. On December 31st, there were sixty widows and ten orphans receiving assistance from the Society, and four orphans on the Copeland Fund. The following gentlemen were elected directors, in the place of the six senior who retired by rotation; viz., Dr. Barnes; Dr. Taylor; A. Willett, Esq.; George Eastes, Esq.; Dr. Andrew; and J. Langton, Esq. A vote of thanks to the editors of the medical journals, for their kindness in forwarding in every possible way the objects of the Society, was carried unanimously. A vote of thanks to the Chairman closed the proceedings.

CHLOROFORM-DEATHS.

CASES of death following anæsthesia by chloroform administered for dental purposes are multiplying in America. The following is the verdict of the jury: "The jury find that Elizabeth Neely came to her death March 20th, 1878, at No. 224, North Tenth Street, by chloroform administered by H. G. Winslow, M.D.; and we find the said Dr. Winslow guilty of criminal ignorance in administering so powerful a remedy, not having made any examination of his patient." Winslow was really a graduate in medicine, and five out of the six jurymen were also regular graduates. We believe that protoxide of nitrogen has now pretty universally superseded ether and chloroform for dental purposes in this country; and we are surprised to note, from the fatal cases recorded at New York and Philadelphia, that chloroform appears still to be much used there by dentists, and with culpable recklessness.

VOLUNTEER SURGEONS.

A CORRESPONDENT writes to us:—I enclose circular, a copy of which you may not have seen. I think, as volunteer surgeons, it is our bounden duty to undertake these duties at the present crisis, provided during the discharge of them we hold the same rank, etc., which an army surgeon of the same date of commission would hold. You will observe it states *under* any medical officer. Now, we cannot be expected to work under men who might be many years our juniors not only in their profession, but also in the service, as volunteer surgeons *vs.* army surgeons. Besides, surely most volunteer surgeons have had sufficient experience in practice to be able to take charge of a few men

without an army surgeon to advise them. Of course, there could be no objection to serve under our seniors. If you called attention to this question in the JOURNAL, you would do the volunteer surgeons a service.

"Army Medical Department, War Office, 30th April, 1878.

"Sir,—As it appears to me desirable that there should be a closer connection between the Army Medical Department and the medical officers of the volunteer force, I have the honour (as President of the Volunteer Ambulance Committee) to request that you will inform me if you are willing to undertake local professional duty under the direct supervision of the Director-General, Army Medical Department, whenever your services may be required, either with troops and their families, or in military hospitals under army medical officers, or even in their absence. You will quite understand that it is not the intention that such duty should remove you from your regiment or interfere with your private practice. A similar letter has been sent to every medical officer of the volunteer force; and, on receipt of their replies, if favourable, I intend to submit to the Director-General, A.M.D., a proposal for the formation of a Volunteer Medical Department, to be referred to the Inspector-General, Auxiliary Forces, for the consideration of the Secretary of State for War.—I have the honour to be, sir, your obedient servant,

"WILLIAM MUNRO, Surgeon-General, A.M.D."

COMPARATIVE BIRTH-RATES.

A RETURN just published in the *Journal Officiel* displays the interesting fact that, while France in 1876, with a population of 36,000,000, had an increase of 132,000, England, with a much smaller population (24,000,000), had an increase of 205,000; the rate being in England 1 in 28 inhabitants, and in France 1 in 36. That the population in France does not increase as rapidly as in other countries is a well-known fact, and the figures we have quoted are the latest record of the fact. During the year 1876, the births in France numbered 966,682, exclusive of those still-born; and the deaths to 834,074. The still-born numbered 44,680, and the marriages 291,366.

A SOVEREIGN'S GRATITUDE.

A TELEGRAM published in a morning contemporary informs us that on Monday last Mr. Barrington Kennett, Commissioner of the Stafford House Committee, had an interview with the Sultan of Turkey. His Majesty thanked him very cordially, and desired that it might be made known how deeply grateful he felt to the British nation for all it had done for his suffering people and soldiers, and to all who had taken the lead in charitable efforts. His Majesty asked for a list of the Stafford House surgeons, and specially requested that they might each be thanked in his name.

RAGS AS DISSEMINATORS OF DISEASE.

As during the campaigns of 1849, 1850, and 1855, when cholera first appeared in the camp, and afterwards made a tour of Europe, the close proximity of the scene of strife to Austrian ground has caused the government of that country to devote some attention to the outbreaks of epidemics and their means of propagation. A case of spotted typhus has been reported at Kronstadt; while Trieste and Venice, always in active communication with the Levant, have developed some cases which give rise to grave suspicion. Among the measures taken by the Austrian Government to prevent the spread of disease is to obtain the adoption of uniform precautions in all the neighbouring states, in the shape of the strict enforcement of sanitary regulations, and the prohibition of the importation of rags and other things capable of spreading disease-germs. The authorities of Austria have for some time past wisely forbidden the importation of rags.

MEDICAL USES OF THE TELEPHONE.

WE have already recorded various experiments and suggestions with reference to the medical uses of the telephone. It has been in use in the house of a medical man during the last few weeks, to enable a member of the family suffering from an infectious exanthem to communicate with her family and friends; and this application we would recommend as very practical to the managers of fever-hospitals and

asylums. In the *Boston Medical and Surgical Journal*, we read that its utility in the class-demonstration of auscultative signs of disorder of the chest is being studied, with good promise of success. Professor Da Costa made a preliminary trial in March last, at the Pennsylvania Hospital, of a Bell's telephone constructed by Dr. W. B. Hopkins, a former resident. It was tested by cases of cardiac murmurs and different varieties of respiration; and, while the results obtained were not fully satisfactory, it was believed to be demonstrated that a slight modification in the construction of the instrument, enabling it to respond to more delicate impulses, would fit it for the purpose, and make it an almost indispensable adjunct to the clinical amphitheatre.

DR. RICHARDSON AND THE DENTAL PROFESSION.

THE annual distribution of prizes to the successful students of the National Dental Hospital and College took place at the Langham Hall, Great Portland Street, on May 2nd. After the presentation, Dr. B. W. Richardson, who presided, said he remembered that, at the time of the starting of the school, the profession of the dentist was not affiliated to the medical profession, which he regretted was now the case. He believed that, if the effort which was originally made to establish a College of Dentists had not been hampered by petty jealousies, they would now have had an institution that would have rivalled any of the medical colleges. He cared little for medical reform, for he had seen but a small amount of good come from the effort to obtain it, especially while there existed such a body as the Council of Medical Education. Never mind these examining bodies or quacks. If they could only make their profession certain, all else was certain. Did they want legal protection in anatomy or physiology against quacks? If they were masters of their profession, the difficulty that now arose in respect to any legislative measure for their protection would vanish, and the able man would take the foremost place.

PREVENTION OF SCURVY.

ON Tuesday last, at Plymouth, William Owens, master of the ship *Chyrolite*, was fined the lowest penalty of forty shillings, for providing an insufficient supply of limejuice during the voyage of his vessel from Cardiff to Aden, thence to Calloa. Scurvy broke out among the crew when the supply ceased, and some of the men had on their arrival to be sent into hospital.

THE PUBLIC HEALTH.

DURING last week, 6,483 births and 3,776 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 2.4 deaths annually in every 1,000 persons living. The annual death-rate was 29 per 1,000 in Edinburgh, 28 in Glasgow, and 32 in Dublin. The annual rates of mortality per 1,000 last week, in the twenty English towns, ranged in order from the lowest, were as follow: Leicester, 15; Brighton, 19; Hull, 19; Bradford, 19; Bristol, 20; Newcastle, 20; Nottingham, 21; Leeds, 22; Portsmouth, 22; Wolverhampton, 22; London, 23; Oldham, 23; Manchester, 23; Norwich, 23; Birmingham, 24; Sunderland, 24; Liverpool, 25; Sheffield, 26; Salford, 27; and Plymouth, 30. The annual death-rate from the seven principal zymotic diseases averaged 3.8 per 1,000 in the twenty towns, and ranged from 1.0 and 1.1 in Brighton and Hull to 6.3 in Oldham, 6.7 in Sheffield, and 7.8 in Plymouth. Measles and scarlet fever are fatally prevalent in Oldham, scarlet in Sheffield, and measles and whooping-cough in Plymouth. Small-pox caused 60 deaths in London and 1 in Bradford. In London, 2,702 births and 1,545 deaths were registered. Allowing for increase of population, the births exceeded by 193 and the deaths by 37, the average numbers in the corresponding weeks of the last ten years. The annual death-rate from all causes, which in the three previous weeks had been equal to 27.6, 25.9, and 24.2 per 1,000, further declined last week to 22.5. The 1,545 deaths included 60 from small-pox, 29 from measles, 27 from scarlet fever, 10 from diphtheria, 117 from whooping-cough, 29 from different forms of fever, and 23 from diarrhoea; thus to the seven principal diseases of the zymotic class

295 deaths were referred, against 346, 323, and 305 in the three preceding weeks. These 295 deaths were 58 above the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 4.3 per 1,000. The fatal cases of whooping cough, which had been 157, 123, and 136 in the three previous weeks, declined to 117 last week. The deaths referred to fever, which had been 32, 26, and 24 in the three preceding weeks, rose again to 29 last week, and were within 1 of the corrected average weekly number. Eighteen deaths of infants under one year of age were referred to diarrhoea (in addition to one fatal case of infantile choleraic diarrhoea in South Hackney) against 9 and 5 in the two previous weeks. The deaths from small-pox, which had been 80 and 63 in the two preceding weeks, further declined to 60 last week; 35 were recorded in the Metropolitan Asylum Hospitals, 6 in the Highgate Small-pox Hospital, and 19 in private dwelling houses. Of the 60 fatal cases of small-pox, 33 were certified as unvaccinated and 10 as vaccinated; in the remaining 17 cases (of which 12 occurred in private practice) the medical certificates did not give any information as to vaccination. The deaths referred to disease of the respiratory organs, which had been 497, 398, and 345 in the three preceding weeks, further declined to 284 last week, and corresponded with the corrected weekly average; 162 resulted from bronchitis, and 93 from pneumonia. Different forms of violence caused 60 deaths; 53 were the result of negligence or accident, including 22 from fractures and contusions, 2 from burns and scalds, 11 from drowning, and 10 of infants under one year of age from suffocation. In Greater London, 3,282 births and 1,805 deaths were registered, equal to annual rates of 38.5 and 21.2 per 1,000 of the population. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 35.8 hours, the sun being above the horizon during 103.4 hours. The recorded duration of sunshine was, therefore, equal to 35 per cent. of its possible duration.

MEDICAL SOCIETY OF LONDON.

ON Monday last, there was a large and influential gathering at the house of the Medical Society of London to hear the annual oration, which was delivered by Dr. Alfred Carpenter. The subject chosen was Alcoholic Drinks, as Diet, as Medicine, and as Poison. The President proposed a vote of thanks to the author, which was carried by acclamation. During the *conversazione* which followed, the band of the Royal Artillery, under the direction of Mr. Smyth, the bandmaster, played a choice selection of music, and there was also some excellent glee-singing. This innovation appeared to meet with the cordial approval of the company present. A few objects of interest were exhibited, among which was a parabolised illuminator by Dr. Edmunds. This instrument condenses upon a microscopic specimen a large pencil of unrefracted light, and the image is seen upon a black foreground.

HEALTH OF FOREIGN CITIES.

THE Registrar-General states that a summary of the weekly returns with which he is favoured by various local authorities abroad, shows that the average annual death-rate during the first quarter of this year in thirty Indian and Foreign cities, having an aggregate population of nearly thirteen millions of persons, was equal to 32.2 per 1,000. The average rate in the twenty-two European cities was 32.7 per 1,000, against 26.1 the average rate in London, Edinburgh, and Dublin. The lowest death-rates during the quarter were 18.2 in Brooklyn and Philadelphia, 19.4 in Boston, and 19.7 in Christiania; in the other towns they ranged upwards to 41.3 in Naples, 42.8 in Alexandria, 43.3 in Buda-Pesth, 47.3 in Trieste, 56.3 in St. Petersburg, and 71.8 in Madras. The death-rate in Madras showed a further decline from the excessively high rates in recent quarters; the fatal cases of small-pox and cholera showed a considerable decline from the numbers returned in the three preceding quarters. Cholera caused 473 deaths in Calcutta, 373 in Bombay, and but 40 in Madras. Small-pox, to which but 2 and 20 deaths were referred in the two previous quarters, caused 403 deaths in

Calcutta during the first three months of this year, of which 180 were returned in the two weeks ending March 30th. Small-pox also showed increased prevalence in Bombay, St. Petersburg, Vienna, Buda-Pesth, and Trieste. In St. Petersburg, no less than 2,273 deaths were referred to typhus, enteric, and simple continued fevers, equal to a rate of 13.6 per 1,000; in London the death-rate from these forms of fever did not exceed 0.40 per 1,000. Fever was also prevalent in Paris, Amsterdam, Buda-Pesth, Turin, and Philadelphia. Measles caused 472 deaths in Bombay, 325 in Paris, and 133 in New York. In Berlin, 175 deaths resulted from scarlet fever, against 331 in the preceding quarter; 121 deaths were referred to this disease in St. Petersburg, and 326 in New York. Diphtheria was again fatally prevalent in Paris, causing 398 deaths (exclusive of 340 referred to croup), against 311 and 347 in the two previous quarters; this disease caused 260 deaths in Berlin, 315 in Vienna, 330 in New York, and 168 in St. Petersburg.

SANITARY AUTHORITIES' LIABILITIES.

FROM reports published, we learn that the magistrates sitting in petty sessions at Hampton, were, on Monday, engaged some hours in hearing a case of interest to sanitary authorities and to the public. Application was made to the magistrates by the Vicar of St. James's, New Hampton, to obtain payment of a sum of over £19 from the Kingston Rural Sanitary Authorities. It appeared that scarlatina was prevalent in Hampton last autumn, and complainants then took all precautions, even to disinfecting their schools voluntarily. In January of this year, when there was but one case known among the cottagers, and that imported, the trustees were required by letter from the clerk to the authority to close the school for six weeks, and to disinfect the premises. The schools were closed immediately, and the requirements carried out, upon the completion of which the medical officer said the schools need no longer be closed. The trustees then applied to the sanitary authority for reimbursement of the charges incurred in disinfecting, and also for the amount of school fees lost. The original claim was about £30, but it was reduced so as to bring the matter within the jurisdiction of petty sessions. The claim was resisted generally upon the ground of non-liability; but the magistrates made an order for the payment of the amount of school fees lost and the costs of the hearing.

SCOTLAND.

AMONG the graduates capped at Glasgow University, last week, were five who obtained the degree of M.D., namely, W. S. Anderson, W. Findlay, J. L. Miller, J. Service, A. Hall; one M.B., W. Shaw; and one M.C., W. Arthur.

WE are requested to state that the petition to the Senatus of the Aberdeen University, published in the JOURNAL of May 4th, does not apply to the Medical Clinical examinations conducted by Dr. Smith-Shand and Dr. MacLagan of Dundee, which have given general satisfaction, but only to the Surgical Clinical examinations conducted by Dr. Pirrie and Dr. Ogilvie Will.

THE local authorities of the parishes of Dumbarton, Bonhill, and Cardross have been negotiating, through representatives, for some time back, with the view of converting the hospital at Dumbarton into a common hospital for infectious diseases under the Public Health Act, 1867. The representatives have agreed on a plan for joint occupancy; this has been forwarded to the Board of Supervision for approval.

MEASLES IN GLASGOW.

DR RUSSELL, Medical Officer of Glasgow, in his report submitted to the sanitary department of that city last week, states that there has been an outbreak of measles among the children of the Industrial School, Rottenrow, from which they had removed seventeen cases. The disease was attacking the town on all sides. So far it has prevailed

among the children of the wealthy and well-to-do, so that it has not yet to any great extent manifested its presence as a cause of death. Schools, the medical officer remarks, are the chief means of spreading measles; and he adds: This disease was infectious from the very outset, when sneezing, watery eyes, and other catarrhal symptoms may only indicate an ordinary cold. It was a great mistake to think measles beneath notice as an infectious disease. It may prove fatal to a child here and there in any rank of life, but to the bronchitic children of the lower, working, and middle classes it is always dangerous. The last epidemic in Glasgow was in 1871, and killed eight hundred and ninety persons. He also states that one case of small-pox was discovered—the first for six weeks. The girl was employed in a rag-store; but further than that, no hint of the probable origin of the infection had been obtained.

NEW SCHOOL OF PHARMACY IN EDINBURGH.

THERE was opened last week in Edinburgh, in Marshall Street, a School of Pharmacy and Chemistry, of which the object is to prepare students for the major and minor examinations of the Pharmaceutical Society. The lecturers are Mr. R. Urquhart in *Materia Medica*, Mr. T. W. Drinkwater in Chemistry, and Mr. D. McAlpine in Botany. Dr. Charles Bell commenced, in the hall of the new school, on Wednesday last, a qualifying course of lectures on Midwifery and the Diseases of Women and Children.

THE EDINBURGH SCHOOL OF MEDICINE.

THE summer session of the Edinburgh School of Medicine, both the University and Extra-academical classes, began on Wednesday, May 1st. In opening the University course on Medical Psychology, Dr. Grainger Stewart expressed his approval of the recommendation of the University Commissioners that there should be established a separate lectureship on insanity, and said that this would probably be the last time on which he would have to take charge of the course. He approved of the proposal of the Commissioners; 1. Because it was not possible that the Professor of the Practice of Physic could find time properly to conduct both classes; 2. Because it was not likely that in future the holder of his chair would be at the same time a great authority on mental diseases; 3. Because the subject was one of great importance, and fully deserved to have a special teacher set apart for it. Remarking upon the great power and responsibility which the State put into the hands of medical men, by permitting them in their judgment to deprive individuals of their personal liberty, he said it had always seemed to him peculiarly anomalous that the State did not at the same time require the medical man who was intrusted with such a power to know something of the nature and treatment of mental disease, as a condition necessary to obtaining his certificate.

ILLNESS OF PROFESSOR BALFOUR.

PROFESSOR BALFOUR was prevented by ill-health from commencing his course of botany, and the class is accordingly conducted for the present by his son Dr. I. Bayley Balfour. We are glad to hear that the Professor is rapidly recovering, and expects to be able to take charge of his class himself in a short time.

TRIAL OF M. CHANTRELLE.

THE trial in Edinburgh of M. Chantrelle, a teacher of French, for the murder of his wife, which is expected to prove one of unusual interest from a medico-legal point of view, commenced on Tuesday last. The accused is charged with having administered or caused to be taken by his wife, in an orange or parts thereof, or in lemonade, or in some other article of food and drink, a quantity of opium or other poison, in consequence of which she died on January 2nd. He is further charged with having exhibited malice and illwill towards her, and had many times struck and otherwise maltreated her. A *post mortem* examination was made by Professor MacLagan and Dr. Littlejohn, and a chemical analysis conducted by Professor Crum-Brown. The results obtained have not been hitherto made known. The prisoner is defended by able counsel.

IRELAND.

A CASE of small-pox has occurred at Birr Barracks: the first for many years in that locality.

THE annual meeting of the Royal Medical Benevolent Fund Society of Ireland will be held on the 3rd proximo, the first Monday in June, in the King and Queen's College of Physicians.

AT a meeting of the Dispensary Committee of the Glencullen District, Rathdrum Union, held on the 25th ult., Dr. W. Brittain Mackay was elected medical officer, in the vacancy caused by the resignation of Dr. Croly. There were three candidates for the post, the salary of which is £110 *per annum*.

DR. P. CUTLER has been appointed to succeed the late Dr. Baldwin as Medical Officer of the Kilmeadan Dispensary District, Waterford Union. The salary attached to the post is £100, independent of fees, and has recently been reduced by £20 yearly, the district being a small one.

AT a meeting of the Limerick Board of Guardians last week, a resolution was adopted to the effect that a Common Board for the United Kingdom, for the examination of medical students, was necessary, instead of, as at present, nineteen bodies authorised to confer diplomas, each having its own standard of examination; as, under the present system, efficiency in the Poor-law Service was not always obtainable.

HEALTH OF BELFAST.

DURING the March quarter, the annual death-rate was equal to 31 in every 1,000 inhabitants. The deaths comprise 11 from small-pox, 78 from fever, 42 from measles, 19 from scarlet fever, 11 from whooping-cough, 5 from diphtheria, and 39 from diarrhoea. The mortality from these seven zymotic diseases amount to 205, a number equal to an annual mortality of 4.5 per 1,000 of the population in 1871, or allowing for the probable increase since that period, to 4.0 per 1,000.

ZYMOTIC DISEASES IN CORK.

IN the first quarter of the present year, the deaths in Cork from zymotic affections include measles, which caused 49 deaths; fever, 18; whooping-cough, 10; diphtheria, 1; and diarrhoea, 24. The annual death-rate was high, being equal to 34 in every 1,000.

REFUSING TO VACCINATE.

A SHERIFF's officer, named Savage, was last week prosecuted, at the Kinsale Petty Sessions, for the eighth time, at the suit of the Poor-law Guardians, under a summons charging him with neglecting to have his child vaccinated according to the provisions of the Act. The defendant made some trivial excuse, and an order was made that the child should be vaccinated. We regret, in a case like this, that the magistrate did not inflict a fine, or even imprisonment, as an example to other offenders.

THE MEATH HOSPITAL.

THE ceremony of the distribution of prizes on the close of the winter session took place in the theatre of this well known seat of clinical instruction last week. A large number of students were present. The prizes were awarded as follows: First Medical Prize, Mr. Thomas Lecky; Second, Mr. Armitage Forbes; First Senior Surgical Prize, Mr. Thomas H. Lingard; Second, Mr. Lucas Middleton; Junior Surgical Prize, Mr. T. W. Pike and Mr. Charles Adams. The answering for the prizes was excellent, and the competition close. For the Senior Surgical Prize, the answering was so good that the first two candidates were bracketed, each being awarded a prize of equal value. In accordance with the usual custom, addresses were delivered by the Senior Physician and the Senior Surgeon to the Hospital—Dr. Foot and Mr. Porter—on presenting the successful competitors with their prizes.

THE SMALL-POX EPIDEMIC.

DURING the last week, there was a falling off in the number of admissions of cases of small-pox into the Dublin hospitals; but the type of the disease is reported to have increased in virulence; and this is evidenced by a considerably greater number of deaths.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual election of examiners in this College took place on Tuesday last. In addition to the outgoing officers, who offered themselves for re-election, Messrs. Wheeler and Robinson were also candidates. With the exception of Mr. H. G. Croly, the members of the former courts of examiners, and in addition Mr. Wheeler, were elected. The following is the official list:—Examiners to examine candidates for the letters testimonial and fellowship—Messrs. B. Wills Richardson, Edward A. Stoker, John Barker, Edward O'Grady, William H. O'Leary, William Thomson, Robert S. Swan, and William J. Wheeler. Examiners to examine candidates for the diploma in midwifery—Messrs. Henry Croly, John R. Kirkpatrick, and William J. Smyly. Examiners to examine students as to their proficiency in general education—Messrs. Frank J. Davys, Michael J. Malone, and Robert Morton. The annual election of President, Vice-President, and Council of the College will take place, according to charter, on June 3rd. Dr. Robert McDonnell, F.R.S., the present President, will be succeeded, in the ordinary course, by Dr. P. C. Smyly, now Vice-President. For the Vice-Presidency, then to be vacated, Dr. Mapother, Professor of Physiology in the College School, is, we believe, a candidate. There will probably be two, if not more, vacancies on the Council to be filled up on the same occasion. Dr. A. H. Jacob and Mr. Elliott have already, we hear, signified their intention of seeking election.

DEATH FROM CARBOLIC ACID.

WE regret being called upon to record the death of a nurse in one of the Dublin hospitals in consequence of her taking carbolic acid in mistake for wine. It appears, from the very meagre and unsatisfactory report of the coroner's inquest that has been permitted to appear, that the deceased drank the acid from a bottle containing, as she supposed, wine. A verdict of accidental death, by misadventure, was returned. In the absence of any reported evidence as to whether the bottle was labelled or not, and as to the state in which the unfortunate woman was when induced to help herself to what, presumably, she mistook for a patient's wine, we would only remark that the carelessness of hospital authorities in general is painfully evidenced by this case. We have over and over again seen the undiluted acid, and strong solutions of it, left in unlabelled bottles in the wards of hospitals in reckless proximity with similar bottles or vessels containing medicines or stimulants. Mr. Shaw has shown (*JOURNAL*, vol. ii, 1877, p. 638), that out of a total of seventy deaths by carbolic acid poisoning he has noted, twenty were caused by taking it in mistake for medicine. When we consider that eleven of these twenty deaths occurred in hospitals and other public institutions, the responsibility that rests upon the authorities of such institutions should make itself felt. In all the deaths reported to have occurred in hospitals from this cause, it would appear that the nurses had free access to the strong acid and had mistaken it for wine or medicine. There is no reason why carbolic acid in its undiluted form should ever leave the hospital pharmacy. For no ordinary purpose is it necessary to have a stronger solution than a five per cent. one in the wards; and in the majority of cases in which the acid is employed, a much weaker solution will suffice. In our comments on the case that occurred in the Homerton Small-pox Hospital, in which a nurse caused a patient's death by giving carbolic acid in mistake (*JOURNAL*, vol. ii, 1876, p. 799), we stated that the arrangements of any hospital in which such a mistake could occur merited the severest condemnation. As we then also remarked, unless more intelligent action be taken by those who possess authoritative supervision in such matters, we must anticipate—as this case has proved—a repetition of similar accidents.

MEDICAL REFORM: DIRECT REPRESENTATION OF THE PROFESSION IN THE GENERAL MEDICAL COUNCIL.

THE article under the above heading, in the JOURNAL of April 27th, concluded with the statement that the Association claims the representation of the profession in the General Medical Council—first, as a right; and, secondly, as a means of improving the composition and working of the Council by balancing the undue preponderance of the licensing corporations upon it. Reference was slightly made to the heavy demands on the funds of the Council—funds supplied entirely by the members of the profession, as distinct from the Universities and Corporations—by lengthy discussions, in which the interests of the Corporations were alone concerned; while the wealthy bodies who send their representatives to it, charged certainly with the duty of safeguarding their interests, contribute nothing. The care of these interests may be one explanation of the remarkable manner in which all the representatives of the Universities and Corporations in Scotland and of the Universities and Colleges in Ireland were arrayed against the conjoint scheme proposition in the late debate in the General Medical Council. Whether the fund which maintains the Council during its sittings be raised in the form of a tax or not, it is undeniable that it does not come from the Universities and Corporations, but that it is drawn from the profession. Some notion of "taxation", however, must evidently have been running through Dr. Quain's brain when he stated, at the interview of the Medical Reform Committee with the General Medical Council, that the Chairman of the Committee had "made use of a very remarkable phrase 'taxation'," when no such word had passed his lips.

The mention of the meeting between the General Medical Council and the Medical Reform Committee of the British Medical Association demands a few words. Some misapprehension having occurred as to the correspondence which led to the meeting, we are now in a position to place the facts before our readers.

The Medical Council having been called together, the Chairman of the Medical Reform Committee, acting on its behalf, wrote to Dr. Acland, the President of the Council, on March 30th, twelve days before the commencement of its session, and forwarded him the so-called Bill of the Association, together with the Reports of the Committee passed at the annual meetings at Norwich in 1874, at Sheffield in 1876, and at Manchester in 1877, with the object of bringing under the consideration of the Council the views as to medical reform advocated by the Association, so as to reconcile any existing discrepancy, which once accomplished, both the Medical Council and the Association might then unite in urging the Government to grant the prayer of the profession. On April 9th, the eve of the assembling of the Council, Dr. Waters again wrote to Dr. Acland, and expressed a hope that the opinion of the General Medical Council might be taken on the direct representation of the profession upon it. A reply was received from the Secretary of the Council, that the letter should be laid before it. The British Medical Association had placed the opinion of the Association in this matter before the General Medical Council in 1868. The late Dr. Sibson, as President of the Council of the Association, headed the deputation. Sir D. Corrigan and Dr. Andrew Wood pleaded strongly in favour of it; the late Dr. Parkes said a good case had been made out for considering whether the constitution of the Council might be improved by the introduction of a new class of members, and whether its counsels would not be thereby strengthened. He believed this would be the case, because the opinions of bodies elected by representatives were always regarded with more consideration.

Dr. Sharpey stated that the Council was pledged by its proceedings to an inquiry into its constitution, and the question of its alteration would be inevitably raised in any amended Bill. This prediction of Dr. Sharpey has been, and will again be, fulfilled. He is still of opinion that the power of the representatives of the Corporations should be diminished by the addition to the Council of members who are not office-bearers in any of the Corporations. From that day to the present, the General Medical Council, although invited even by the late Government to express an opinion on its constitution, has never suggested any modification of its composition. Far from following the example of the House of Commons, no decision as to its reform has ever been taken at its repeated meetings; and on this point the Medical Council seems to have been most unfortunately in antagonism to the profession. Two facts tend to prove this. First, in 1869, a large deputation, representing about ten thousand members of the pro-

fession, waited on the General Medical Council, and expressed their dissatisfaction with its composition. Secondly, in 1870, when the Medical Act (1858) Amendment Bill was brought down to the House of Commons, a large proportion of the profession opposed it on the ground that it did not grant representation in the General Medical Council to the profession.

It will, indeed, be strange if this prayer of the profession be disregarded in any medical Bill, was the observation of the Earl of Lichfield in the House of Lords in 1870. Who, then, are the real obstructives in regard to medical reform? Certainly not the Medical Reform Committee of the British Medical Association. As has been already stated, time upon time, the Association has advocated medical reform from the earliest period of its existence, and representation in the General Medical Council is one of its cardinal principles; the true, the persistent obstructives are those who resist this legitimate demand of the profession. Year after year since 1870, the Association has redemanded representation in the Council, and the Medical Reform Committee would be false to the trust reposed in it if it were to abandon the claim. The Committee deemed it, therefore, of vital importance that the opinion of the General Medical Council, which has undergone many changes during the last ten years, should be taken respecting it at the present crisis.

The Registrar of the General Medical Council acknowledged the receipt of Dr. Waters's letter of the 9th April thus:

"April 11th, 1878.

"Sir,—I am directed by the President of the General Medical Council to acknowledge the receipt of your letter of the 9th instant, and to say that the letter will be laid before the General Medical Council at its present meeting.—I am, sir, your obedient servant,

"W. J. C. MILLER, Registrar of the General Medical Council.

"Dr. Edward Waters."

On the 12th April, Dr. Waters wrote to the Registrar:

"Chester, April 12th, 1878.

"Sir,—I beg to acknowledge the receipt of your letter of the 11th instant. I am very happy to hear that the views of the Association will be submitted to the General Medical Council during its present meeting. I hope the Council will not negative the proposals without giving an opportunity to the Medical Reform Committee of defending them.

"The Committee will have a meeting in London on Wednesday next, and some of its members might possibly attend before twelve o'clock on that day.—I am, sir, your obedient servant,

"EDWARD WATERS.

"W. J. C. Miller, Esq., 315, Oxford Street, London, W."

On the 16th April, Dr. Waters received this reply:

"London, April 15th, 1878.

"Sir,—In answer to your letter of the 12th instant, I am directed to forward to you a copy of the resolution passed thereon this day by the General Medical Council. With a view to making the appointment for Wednesday at eleven o'clock, it is desired that you would be so good as to telegraph to me your answer as soon as possible.

"That, in reply to the letter of Dr. Waters of April 12th, the President be authorised to receive Dr. Waters and members of the Medical Reform Committee on Wednesday at eleven o'clock, in order to hear their views of the proposals referred to in the letter of Dr. Waters, and that such members of the General Medical Council as desire it shall be present at the interview.—I am, sir, your obedient servant,

"W. J. C. MILLER, Registrar.

"Dr. Waters, 14, Nicholas Street, Chester."

On the receipt of this letter, Dr. Waters sent the following telegram to the Registrar of the General Medical Council:

"Excuse succinctness of telegraphic reply. I cannot formally summon Committee to attend an informal meeting. I will, however, I hope not unaccompanied, keep the appointment made for eleven Wednesday."

Dr. Waters, at the same time, requested the Secretary of the Association to summon the members of the Medical Reform Committee to the proposed interview by telegram.

It is considered desirable, for the information of the members of the Association, thus to supplement the report of the meeting between the General Medical Council and the Medical Reform Committee, because Dr. Quain, in no measured terms, for which, however, he subsequently expressed regret, arraigned Dr. Waters as wanting in courtesy to the General Medical Council, in intimating that within a certain time on a certain day would be more convenient than another for the members of the Committee to attend. His Grace the Duke of Richmond and Gordon granted an interview of considerable length to members of the Medical Reform Committee on a particular day, to enable them to report the result on the following day to a specially convened meeting

of the Committee, and Dr. Waters was doubtless encouraged to feel that he might expect, as was the case, similar consideration from the General Medical Council to accommodate men residing in localities far distant from the place of meeting, whose sole object in attending was to bring the General Medical Council and the Association into accord when medical legislation was impending.

The question of courtesy being settled, a still more curious question arose: Was Dr. Waters, as he represented himself, *de jure et de facto* the Chairman of the Committee; had the Committee itself any real existence? Now, as the Committee comprises the President, the President of the Council and President-elect, five ex-Presidents of the Association, six physicians to large hospitals and lecturers in important medical schools, and inasmuch as several members of the Committee so constructed, stood before the General Medical Council with their chairman and convenor before them, the glaring absurdity of this contention may be dismissed without further comment. History, however, repeats itself. When the deputation waited on the General Medical Council in 1868, as now in 1878, an attempt was also made to show that the Committee did not represent the Association; this indicates at any rate a respect for the Association.

One point more in connection with this memorable meeting. The Committee was pressed to show what they had done for medical reform since 1870. They could only reply that they had done their best—it might have been said their very best. In the session of 1871, they drafted a Bill, of which Mr. Headlam gave notice, but the introduction of rival measures by other parties deterred Mr. Headlam from proceeding with it. He said that the profession must be united to carry any such measure, embracing not only private but public interests. Acting under the advice of Mr. Headlam, which the Committee could not disregard, two sessions were thus lost. In 1873, Mr. Headlam again introduced the Bill, which was read and printed. Copies of this Bill may be obtained by all who are interested in medical reform; the cost is virtually nothing. In 1874, there was a change of government, and legislation was out of the question. Mr. Headlam, the old and valued friend of the Association, lost his seat. At this time, however, a new condition of things presented itself. The English authorities were making, under the sanction of the General Medical Council, strenuous efforts to combine for examination. The late Dr. Sibson, a long proved and influential member—now deeply regretted—of the Medical Reform Committee, was staunchly in favour of the Committee suspending action pending these efforts so as not to embarrass them. Each year it was expected that the work would be completed. It was firmly believed by Dr. Sibson that if the conjoint scheme were voluntarily completed in England, it would then follow in Scotland and Ireland. No secret was made of this modified course of action by the Committee. It was distinctly laid before the Association at the annual meeting in Norwich in 1874, and approved year after year until, at Manchester, the Committee reported they were "happy in the knowledge that their forbearance had borne good fruit, for they had to congratulate the Association on the success which had at last crowned the efforts of the Universities and Licensing Corporations of England, in establishing a conjoint board of examination for their division of the kingdom".

Dr. Sibson, in the College of Physicians, was an active promoter of the English conjoint scheme, and he greatly influenced the Committee not to press for direct representation until the former point was settled. The forbearance of the Committee shows how earnest were their efforts not to oppose, but, on the contrary, to work with the Medical Council and with the English authorities in favour of the conjoint scheme. The Committee regarded the success as a recognition of one of the objects for which the Association had so long contended, and felt themselves thereby greatly strengthened.

In consultation with, and under the guidance of, eminent members of the House of Commons, they were actively engaged and about to act during the present session, when they were informed that the Government had a Bill prepared and ready to be brought in. During the whole period thus gone over, the Association has never given up either of the two points. It has postponed action with the object of strengthening its advocacy of the conjoint scheme, with regard to which it was certain to meet with an amount of opposition which, even one of the strongest Governments that has been known for many years has hesitated to encounter. The delay in this respect has proved an enormous advantage, and has greatly strengthened those who seek to extend the conjoint scheme to Ireland and to Scotland.

No sooner, however, was success supposed to have crowned the English authorities in their laudable efforts to combine, than a vote, little anticipated, in connection with the University of London, as regards the admission of women to its degrees, threw the whole scheme into a position of the gravest peril, and medical reform seemed

to be again relegated to an unknown period. The inability of the General Medical Council to cope with the difficulties besetting the question has been well shown during the twenty years of its existence; and, again, by its failure to agree to a basis of medical reform during its recent session, when no notice was taken of the long urged demand of the profession for direct representation, although it was placed before them by the Medical Reform Committee; and although Dr. Sharpey, so long ago as 1868, stated that the question of the alteration of the Council would be inevitably raised in any amended bill. The Council at its commencement began work on a fund raised from those already in the profession, which must have amounted to £32,000 if the number was sixteen thousand. Since then, now twenty years, the Council has also received from the profession, in five-guinea fees for registration, large sums annually. In 1874, the income of the General Medical Council was reported to amount to £6,004. The calculation of it at £5,000 a year however, would, during twenty years, give £100,000, which, added to the first £32,000, would make £132,000 paid to the Council by that profession, with respect to which it exercises judicial functions, but which is not directly represented on it. What has the Council given to the profession in return for this sum, or for whatever it may have received? Certainly not medical reform. A man may be Graduate of an University, Fellow of one or perhaps two Colleges of Physicians, Consulting Physician to a Hospital, may have been President of the British Medical Association, may have received flattering recognition from professional societies in other countries, but is none the less not deemed worthy to have a voice in the election of any one of the numerous members of the General Medical Council. It cannot be supposed that, with a knowledge of these facts, the profession will silently submit to the total eclipse of its voice. As regards the question of the conjoint scheme, the General Medical Council also failed; a division of fourteen on one side to ten on the other is not such as to carry great weight. And though the voice of the Association may have been ignored as regards direct representation, it was cited by Sir James Paget in favour of the conjoint scheme.

The objection of difficulty of election raised against direct representation is easily grappled with. The numbers of the constituency cannot be adduced against it. Dr. Humphry of Cambridge made it his pride that he was elected to the Council by all the graduates of his University. The number of that constituency ranges between five and six thousand, and yet the election has never been marked by difficulty or even excitement. If such has proved the case in that instance, no greater difficulty need be looked for as regards England with its 14,000 electors, certainly not with Ireland numbering 2,360, and Scotland with its 1,820 electors.

The Association has been reproached with not having the provisions for carrying out direct representation completed. The charge is baseless, and is a mere haphazard assertion, used either in ignorance or willfully to mislead and to deceive.

The following is a summary of the method proposed. The registrar of each of the Branch Councils is to be sworn before the proper authorities, "that he will conduct the election and do all things relating thereto without favour or affection, and will make true returns".

Notice of the intended election will be published in certain newspapers; and, for one month afterwards, the registrar shall receive the names of candidates, who must be registered medical practitioners, and must be duly nominated by twelve or more registered medical practitioners. As soon as may be after the expiration of the above specified month, but not less than fourteen days previous to the day appointed for the election, the registrar shall forward by post to each registered medical practitioner resident in his part of the United Kingdom, a voting paper, containing the name or names of all persons who may have been nominated as candidates, with directions that the voter shall affix his initials opposite the name or names of the candidate he may select, and shall sign each voting paper in the presence of a witness who shall attest the same, and shall then transmit it to the registrar from whom he received it. All the expenses shall be defrayed out of the funds at the disposal of the Branch Council for the division of the kingdom in which such election shall be held.

Fifth Schedule.—To the Medical Registrar for . . . We hereby nominate — as a fit and proper person (or fit and proper persons) to be a member (or members) of the General Medical Council, at the election to be held on the day of . . .

Signatures.	Titles.	Residences.

Sixth Schedule.—Voting-paper for Election of Representatives of Registered Medical Practitioners in England [or in Ireland or Scotland, as the case may be] on the General Medical Council.

Names of Candidates.	Titles.	Residences.

I, the undersigned, being a registered medical practitioner, residing at _____, do hereby vote for the candidate [or those candidates] opposite whose name [or names] I have placed my initials. (Signature) Witness _____ N.B. Should you vote for more than _____ names in the above list, this voting-paper will be invalid. This voting-paper must be returned to me on or before the _____ day of _____, Medical Registrar for _____.

The expense of the election may be easily calculated by the amount of postage of the proxy papers. The return postage would naturally fall on the voter. The expense of the papers would be trifling compared with the postage. In England, there are about 14,260 medical men, which gives £59 8s. 4d. as postage; in Ireland, 2,360, which gives £9 16s. 8d. as postage; in Scotland, 1,820, which gives £7 11s. 8d. as postage.

MEDICAL TEACHING IN THE UNIVERSITIES.*

We may take it, then, that, in all subjects up to the date of entry upon serious clinical work, the old universities can, out of funds and material at their disposal, endow chairs which would attract and retain the best teachers of the day, teachers who would work even at greater advantage than the occupants of any such chairs elsewhere. Even if students of medicine had to leave the universities at this stage, surely it were well to detain them thus far. Would it be, however, possible adequately to carry on their education beyond this point: adequately, and not in a perfunctory way, which might fail to benefit them, and might discredit the universities? It is said that the Addenbrooke and Radcliffe Hospitals, if not positively too small to contain material for teaching, are, at any rate, placed in districts where such material is less easily found. Dr. Foster qualifies this statement, and says he finds in the wards of Addenbrooke's cases numerous enough and important enough for educational purposes. We believe that at present this can be said better of Cambridge than of Oxford; for a recent visit made on our behalf to the Radcliffe wards revealed but "seven cases of surgical accidents and operations, one case of fever in the fever-ward, and most of the cases in chapel". This report has been corroborated for us by another able observer in Oxford. This seems unpromising; but we fail to see why the Radcliffe should be so different from Addenbrooke's, of which we ourselves happen to know more. In cases of severe accident, no doubt, the latter is often wanting; but, in recent years, we have always found in its wards ample material for examination purposes, and we carry our memories back twenty years or more to a time when Professor Paget taught us that inductive diagnosis of nervous diseases since developed by the school of Hughlings Jackson, and that minute investigation into blood-states which Addison initiated, and which were probably carried on in a hospital fed from a malarious country. At that date, Dr. Humphry was performing his earlier excisions of joints, and was attracting such cases to the wards, and also, by irrigation and other methods, he was pursuing those antiseptic indications lately ardently followed up by Mr. Lister. Our time within those walls was indeed too brief, but our memories are stored with vivid impressions which have been more permanent than those of a larger experience in other fields of labour. In the earlier days of study, the simple effect of a few cases well investigated and ably demonstrated is far more useful and abiding than an embarrassment of riches. A case of chronic bronchitis in the hands of a master is more valuable to a young student than half a dozen cases of pre-systolic murmur. As regards Addenbrooke's, then, we can promise ample material for third year's men, and we do not think it desirable that men should confine their studies to any one hospital. It must not be supposed that no alterations are needed in these hospitals. The Radcliffe is probably in worse care than Addenbrooke's, because it is more in the hands of local people and local subscribers.† If they are to be centres of medical teaching, they must be brought in part at least under university government, and even subsidised by the University.

The staff appointments must also be held by the members of the University, to the exclusion of local practitioners as such. Aural, ophthalmic, and dermal classes, and obstetric and children's wards, if established, would attract even more patients than could be well managed, and cases of chronic nervous disease are to be found abundantly in the district infirmaries. The County Asylum is already used as a school of mental diseases. The increasing reputation of the school, acting in part upon medical men and in part upon the public, would rapidly promote the assembly of important cases; and, as every district has its "specialty", Oxford and Cambridge, like Norwich, would prove, no doubt, to be "strong" in certain maladies. It is objected to all this that bodies attract inversely as the square of their distance, so that the nearness of the London hospitals would certainly empty the University wards of students. But, if this be simply true, every London student should be drawn from Westminster, Charing Cross, St. Mary's, and University College Hospitals to St. Bartholomew's, Guy's, and St. Thomas's. Dr. Foster points out that University College Hospital contains only one hundred and twenty beds—that is, no more than the Oxford and Cambridge Hospitals—and Dr. Payne reminds us of the eminent schools of medicine in such small towns as Heidelberg, Jena, and Göttingen. As it is, men are positively discouraged from ward study at Oxford, and not much sought for at Cambridge; but, in the new proposals of Cambridge, a prospect of the finest teaching in the world up to the end of the third year is opened out, with the added advantage to the student of living in the presence of other culture, of gaining those habits of the refined gentleman which, as Dr. Foster says, are so precious to the doctor and the doctor's patients (pp. 7-8), and, finally, of moulding himself in his first and second years in that scientific school which it has been Dr. Acland's aim to establish in Oxford, and in which he has so signally succeeded. The perfection of the sciences ancillary to medicine is the condition of all true progress in medicine itself, and to secure this indispensable condition in Oxford has been Dr. Acland's ambition and his title to the gratitude of ourselves and of our children. For this he has given more than one man's work, and has sacrificed much that is dearest to men, not time and money alone, though this is much, but even health and the rival claims of society and of home. We trust that, under his guidance, the medical school of Oxford may make some progress in its own special work. If we admit that the establishment of the science schools was a previous need, we may urge now that this finished work may be led to its practical outcome.

One disadvantage there is in the relations of the Oxford and Cambridge Schools of Medicine to those in London which has, perhaps, received even less attention than it may require: we refer to the difficulty which men passing from the former to the latter may find in securing resident appointments at the London hospitals. In our experience, this has been for many years a great misfortune to University men. It does not seem an insuperable difficulty, and we trust that an endeavour will be made to secure openings for Oxford and Cambridge students in this direction.

Another difficulty at both universities, but at Oxford more especially, is the inordinate length of time required for the course. Dr. Foster devotes much of his pamphlet to this most serious question, and makes some very important proposals to meet it. As things are, the student does not enter the university till he is nineteen years old, and does not take his tripos until the age of twenty-two. He has then to begin his medical studies, and cannot, therefore, well qualify until he reaches the age of twenty-six. This is not only a long and most expensive curriculum, but also, in Dr. Foster's opinion, it has this additional evil, that the student postpones his medical studies until, in the author's opinion, he has lost much of the flexibility of hand and brain, and fails, therefore, to attain "the medical instinct". The old usage of apprenticeship, bad and wasteful in its way, at any rate secured the early adaptation of the man to his work. It is impossible for us to quote in full the many interesting passages in which the author explains and enforces this opinion: briefly, he says (p. 6), "I assert that the most characteristic feature of a successful doctor is the possession of what, for want of a better word, I will call 'medical instinct'. I need not enter here into any psychological discussion as to the nature of this instinct, or into any justification of the use of such a term. I employ it simply to illustrate the habit of mind by which a doctor may form an absolutely correct opinion without being able to offer a satisfactory logical defence of his position, and often without having been distinctly conscious of all the individual steps which led him to the right result. If this is the case, it is clear that the special training of the doctor ought if possible to begin early in life, or at least ought not to be delayed until his nervous system has become rigid and preoccupied with unsuitable habits." In another passage Dr. Foster says, it is "the tardy assumption of professional

* Concluded from p. 657 of last number.

† In his answer to the Committee of the Association for the Organisation of Academic Study, Dr. Tuckwell said that the Radcliffe Hospital was filled with chronic cases, sent in by right of governors' orders. We happen to know, on the contrary, that Dr. Bradbury thinks the medical cases at Addenbrooke's "are as good as in any London hospital, and the surgical good enough".

studies wherein lies the secret of the comparative professional failure of Cambridge men at the present time. . . . They work by science and logic, and are often led by apparently right reasoning to unhappy conclusions in cases where the true physician feels, as we have said, his way to the truth" (p. 11). He proposes to meet this by bringing the student to Cambridge at an earlier age, say at sixteen; and he successfully, as it seems to us, combats the more obvious objections to this change, and this not only in respect to students of medicine. We confess that we are not deeply impressed by Dr. Foster's anxiety concerning "the medical instinct". In a large experience of practitioners, we have observed that wrongheaded men are as often found among those who were put early to work as among the rest, and that among the former is a far greater proportion whose "facility" is a certain *damnosa felicitas*, a facility of "making shots", which is almost inconsistent with genuine investigation. We have ourselves far more faith in the success of patient reason and tenacious memory with *savoir faire* than in this "instinct", which, however useful in the more empirical eyes of the art, is becoming now daily less valuable and even daily a false friend. Nor do we admit that physicians from the older universities are failures; regard being had to the paucity of their numbers, and to that indifference to money-getting and to popular favour which marks men born in easy circumstances.

But we will not linger here, as we do not disagree with the author's proposal to bring lads earlier to Cambridge. He thinks the present tutelary system sufficient for younger men (and if half that is whispered abroad concerning some of our leading public schools be true, no discipline could be worse than theirs); and he points out that university discipline, which is indeed somewhat stricter in Oxford, was designed in days when undergraduates came up much earlier in life.

We may add that the foundation of Cavendish College for younger students will encourage earlier entries, as will also the admission of "unattached" students, though we are far from advising any parent to send up his son as an "unattached". An unattached student, generally, fails to associate himself with the liberal and social life of the place, and so fails to gain the urbanity which Dr. Foster desires to see in all physicians, so that if his expenses be less, the less also are his advantages. It may be urged that this early admission of students would tend to discourage mature culture in the humanities, and we should be among the first to regret this. We have said that the old universities should aim especially at the training of consultants, and in these we should encourage a training far wider than that of their profession alone. But we question the gain of keeping lads at school three years after the age when the average schoolboy has, or ought to have, learned all that is needed for his "little go". We believe that boys of seventeen to twenty would make far better progress at the university than at a public school. Moreover, an earlier call to the university would stimulate the teaching of average boys in the lower forms which, in most public schools, is very defective. The best men will take classical or mathematical honours as they do now, and the majority will graduate in the science schools which, as Mr. Huxley says, are no longer a back door by which men may secure a degree. The cause of later entries at the universities is well known to be the competition for exhibitions and open scholarships, in which older students have a great advantage. Dr. Foster does not see how this tendency is to be counteracted. We can only suggest to the Colleges—to Caius in particular, and also to that noble foundation of which he is himself so distinguished an ornament—to offer scholarships for medical students with a lower limit of age. We know that the Professors of Medicine, of Anatomy, and of Pathology at Cambridge are at one with Dr. Foster in regretting the late entry of medical students. The M.B. "might be used to denote not men of unusual ability, but men qualified to practise, and who had enjoyed the advantages of an university career" (p. 29). . . . "while after two or more 'Wanderjahre', a general or special examination should preface the M.D.—an examination searching, and, above all things, practical. The title of M.D. should not be a natural sequence of the M.B., but one of real distinction (such as the F.R.C.S.), only to be gained by men who have devoted themselves with vigour to the study of the profession" (p. 30). "It is in the production of such men that the Medical School of Cambridge ought to look for its *ratio existendi*" (p. 29).

Here are we compelled to end our survey of this pamphlet, and of the vital question which it raises. There are many passages marked for extraction which we must pass over, and many interesting side issues which we must leave for the future; among them being the suggestion that the old universities are the proper seat for certain professorships in more abstract subjects connected with hygiene, pharmacology, toxicology, medical jurisprudence, and the like. The need of such posts for men who are willing to devote their whole time to the theoretical as distinguished from the practical study of disease; the

tendency of enthusiasm to flag when the teacher knows he is but laying foundations on which some one else will build; the want of filial feeling of pupils towards the medical schools at Cambridge and Oxford, and its reasons; the pregnant suggestion that parish medical officers might be associated with the clinical teaching, taking students to aid them in out-door relief, by which the poor would also be gainers; the overloading of medical teaching with pure science—Mr. Coutts Trotter's new scheme of examinations—all these, and many other most important matters, are argued or glanced at in this pamphlet. To it we have not ventured to apply the terms of ordinary laudation; we trust, rather, that in the long articles we have devoted to it we have done what is more useful to the public, more helpful to the universities, and more grateful to the distinguished author himself.

MEDICAL TEACHING IN CAMBRIDGE.

A MEETING of the Senate of the University of Cambridge was held on Tuesday last, May 7th, for the purpose of discussing a report of the Studies Syndicate. The Vice-Chancellor presided, and, in introducing the report, invited discussion in the first place on the recommendations as to medical studies.

Professor PAGET was of opinion that the question put to the Board of Medical Studies by the Studies Syndicate was not happily worded. It was in these words, "Whether it is desirable to attempt to found a complete medical school in Cambridge, so as to make it possible for a student to complete his whole medical course here", or whether it is "better for all concerned, while making the teaching at Cambridge as perfect as possible in the scientific subjects which are the basis of medicine, to leave students to carry on elsewhere the greater part of their clinical studies, and most of what relates directly to the practice of medicine". He objected to the alternative method of putting the question, as he thought it might create a bias among those who would have hereafter to decide as to the adoption of the report. Such a way of stating the case would be apt to mislead persons not familiar with the working of a medical school. He, also, even at the risk of being hypercritical, objected to the phrase "attempt to found". A member of the Senate, unacquainted with the working of medical schools, might think the object unattainable; but it was quite certain a complete medical school could be established at Cambridge, although the further question remained whether or not it was desirable. Dr. Paget discussed the expediency of affording complete instruction to medical students at Cambridge at considerable length, maintaining that the *crus probandi* rested on those who maintained that the University was wrong in desiring to provide the necessary instruction. He maintained that there was not an University in the whole world that did not provide instruction in subjects it compelled its students to acquire, but the medical students at Cambridge were compelled to go elsewhere to attain the knowledge which the University had laid down as essential before allowing them to take a medical degree. Such an anomaly ought not to exist.

Professor HUMPHRY said he should for some reasons be glad to see a complete medical school established at Cambridge, and if one were founded he would support it to the best of his power. He, however, had not signed the report of the Board of Medical Studies, on the broad ground that he did not consider it advantageous to the students that they should be able to complete their medical education at Cambridge. His own feeling was that the University could provide adequate instruction in the earlier study of the science of medicine—for instance, in chemistry, anatomy, and physiology, and that students would be well grounded at the University in those subjects; but he did not agree that any real good would ensue if steps were taken to enable a student to complete his medical education. He did not wish to undervalue the opportunities for clinical instruction afforded in Addenbrooke's Hospital, but he did not think they were sufficiently great or strong to render it desirable to induce students to complete their course at that hospital. He would compel students to study the other parts of their profession elsewhere. He felt sure the attempt to found a complete medical school would result in failure. He would not recommend any one to enter at Cambridge with a view of commencing and completing his medical studies there. He concluded by expressing his regret that he stood alone in his opposition among the members of the medical faculty at Cambridge to the report.

Professor LATHAM said that no one would ever advise a student to complete his education at one school of medicine; but he maintained that the University ought to provide a complete medical school, or else dispense with some of its teaching power. If they were only to educate up to a certain point, the duties of the Downing Professor would be obliterated. A complete school of medicine could be ob-

tained at a small outlay. Nor would the teaching necessarily be confined to medical students. The instruction in sanitary science might with advantage be attended by future vicars and rectors, who would be benefited by being acquainted with the means of dealing with preventable diseases. The lectures on medical jurisprudence might with advantage be attended by law students. He maintained that Addenbrooke's Hospital afforded as complete opportunities for clinical instruction as the larger hospitals, and it was not so crowded with students, which was a great advantage. He urged that there could be no doubt that the University would be doing right in completing its medical school, and the advantage of a junction of practical with theoretical teaching would soon be apparent in the increase of the number of medical students.

Dr. BRADBURY saw no difficulties in obtaining a complete medical school at Cambridge. He expatiated on the advantages for the purposes of study a small hospital had as compared with a larger institution. He objected, however, to the proposal that the Professor of Pathology should not be allowed to practise, as no London school imposed a similar restriction.

Mr. COUTTS TROTTER (Trinity) did not think it desirable that a medical education should be completed at Cambridge or any other medical school; but if at Cambridge they only promoted the study of subjects necessary for the first M.B. examination, they had more teaching power than they required. If pathology were to be studied, it must be by students of medicine who had commenced clinical work. He did not apprehend that there would be a great class, but he thought the presence of advanced students would encourage the junior students and be beneficial. He supported the report.

Professor PAGET, in reply, said he recollected when the number of medical students was very insignificant; at the present time, there were at least one hundred in the University. One reason for the increase was the increase of teaching power. As to the facilities for instruction, he urged that Cambridge possessed them in a far greater degree than Heidelberg or Göttingen. Foreigners were amazed that the old Universities did not foster their schools of medicine. The study was actually discouraged, and certain fellowships, formerly given for medicine, were diverted, under the name of reform, to other uses. He urged the completion of the medical school, not as a favour to the medical faculty, but as a matter of justice and common sense.

CORRESPONDENCE.

NAVAL MEDICAL SERVICE.

SIR,—The medical officers of the services will cordially agree with the remarks which appear in your impression of last Saturday. They recognise, in common with others, the obligation due to their country in a crisis like the present; but, on the other hand, if their services are indispensable, they feel that these services should be suitably recognised, and they are not so at present. A circular is placed in the hands of the junior members of the profession, with a view of inducing them to join, where, *inter alia*, it is stated that cabin accommodation on board Her Majesty's ships is allotted according to relative rank. This, on the part of the Admiralty, admits at least the fairness and justice of such an arrangement; but is it carried out? No; it is not. The Fleet-Surgeon, ranking with a Commander, is invariably relegated to a dark cabin between-decks; while the Chaplain, Paymaster, and Commander are accommodated on the deck above, where space, fresh air, and light can be enjoyed. We do not object to take choice of these cabins with other officers of corresponding rank; but we consider it a most unfair regulation, and one which must be strenuously resisted, that at no period of a medical officer's service afloat is he ever to enjoy an equal advantage with others in this respect. Let the Admiralty endeavour to act justly, and they will then not be reduced to appeal to the patriotic feelings of the profession, at a crisis like the present, to come forward and rescue them from their present position.—I am, sir, yours, etc., X.

CONSULTANTS' PROFESSIONAL ETIQUETTE.

SIR, Your correspondent "M.B.Lond. and F.R.C.S." complains of the conduct of consultants, who, when a patient comes independently, do not mention the name of his regular medical attendant, prescribe treatment without communication with the latter.

My own experience, which is not singular, indicates, I believe, the real source of this practice. I have been not unfrequently consulted by patients under the circumstances mentioned. I find that the patient very rarely mentions spontaneously the name of his regular attendant. I began by resolving always to adopt the line of conduct your correspondent desires. Whenever a patient had been recently under treatment, often when he had not, I obtained, sometimes only by pressure, the name of his attendant, and wrote to him my opinion and the particulars of the treatment suggested. Most of the cases I see are chronic, requiring treatment for a long time; and I, in my inexperience, imagined that if I adopted this course, the practitioner would appreciate my concern for his interest, and take care that, after a time, the patient should see me again regarding further changes in the treatment—as certainly would have been the case had I followed the course of separate treatment which the patients in most cases desire. In not one single instance did I ever see the case again. My behaviour, of course, left the practitioner master of the situation, and the result showed the use he made of his opportunity. All know how easy and how common it is to run down a consultant of the patient's own choice. So I have changed my plan. I never encourage patients, under the circumstances, to come to me again; but I take no trouble about the interest of the practitioners, who do not, where they might, acknowledge practically my concern for their interests.

This is the custom of which the practitioners complain. I cannot doubt that, with many others, it has arisen from an experience similar to my own. Certainly no one ever began with a greater desire to act with scrupulous concern for the professional interest of the regular attendant of the patient.

If I put together the complaints of your correspondents and my own experience, I am driven to the conclusion that what the practitioners desire is a "one-sided reciprocity"—a thing which neither they nor any other persons are likely, as a general system, to obtain. Let them treat the consultant as they wish to be treated themselves, and I believe they would have little cause for complaint.

I am, sir, yours, etc.,

A CONSULTANT.

SIR,—Having occasion very often to invoke the aid of consultants, may I be permitted to bear testimony to the promptness and kindness which I have invariably experienced at the hands of those consulting members of our profession in London, both in medicine and in surgery, whose skilful and experienced advice has been sought by me?

With one exception, in which case quackery and not science seems to be the *modus medendi*, even when the patient has gone to the consultant unknown to me, I have never found so much as an attempt to take the patient from me. I, therefore, have nothing in common with those of your correspondents who have been complaining of unfair treatment by consultants, and cannot help feeling that many of these complaints are unfounded, for the simple reason that patients often conceal the fact, when they consult medical men, that they are under the care of any other practitioner. In one or two cases, when called in, I have been informed that the patient had not been attended by any qualified medical man; and yet, to my intense disgust, I afterwards discovered I had unconsciously supplanted a medical brother, whose services had been dispensed with merely from whim, caprice, or impatience. If such a *contretemps* occur to a general practitioner, with a tolerably fair acquaintance with the residents in the locality in which he practises, how much more likely would it be for the consultant to be deceived, seeing he usually knows little or nothing about the most of the persons who go to him for advice!

Having been, as one busily engaged in general practice, the recipient of much courtesy and true professional amenity from many of the consulting members of our profession in this city, I feel bound, in the present discussion, to give feeble expression to my indebtedness and thanks.—I am, sir, your obedient servant,

London, May 4th, 1878.

NORMAN KERR, M.D.

ASSOCIATION INTELLIGENCE.

NORTH OF IRELAND BRANCH.

A MEETING of this Branch will be held on Friday, the 17th instant, at 12 o'clock, noon, in the Board Room, Belfast Royal Hospital.

The President will deliver an address.

Members to represent the Branch in the Council of the Association for the ensuing year will be elected.

The Bill for the Amendment of the Medical Act, now before Parliament, will be considered.

JOHN MOORE, M.D., *Honorary Secretary*.

Belfast, May 7th, 1878.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE annual meeting of this District will take place in the Library of the County Hospital, Canterbury, on May 16th, at 1.30 P.M.: P. B. HALLOWES, Esq., F.R.C.S., of Canterbury, in the Chair.

At 2.30 P.M., immediately after the meeting, it is proposed to pay a visit of inspection to the County Hospital at Chartham.

Dinner will be provided at the Fleur-de-Lis Hotel at Five o'clock.

WM. KNIGHT TREVES, F.R.C.S., *Honorary Secretary*.

Margate, May 6th, 1878.

METROPOLITAN COUNTIES BRANCH.

A SPECIAL General Meeting of this Branch will be held at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, May 15th, at 4 P.M.

1. To receive and (if thought proper) to adopt an amended code of By-laws for the Branch.

3. To consider the Bills for the Amendment of the Medical Act (1858) now before Parliament.

An Ordinary Meeting of the Branch will be held at the same place on Wednesday, May 22nd, at 8 P.M., when papers on Vaccination will be read by Dr. E. C. Seaton and Dr. J. Greene of Birmingham.

ALEXANDER HENRY, M.D. } *Honorary Secretaries*.
W. CHAPMAN GRIGG, M.D. }

57, Doughty Street, W.C., May 2nd, 1878.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE next meeting of the above District will be held at Lewes, on Friday, May 24th, at 3.30 P.M.: N. P. BLAKER, Esq., of Brighton, in the Chair.

Dinner will be provided at 5.30 P.M.

Notice of intended communications is requested by the Secretary on or before Wednesday, the 14th instant, in order that they may be inserted in the usual circular.

THOMAS TROLLOPE, M.D., *Honorary Secretary*.

9, Maze Hill, St. Leonard's-on-Sea, May 7th, 1878.

STAFFORDSHIRE BRANCH.

THE third ordinary meeting of the Session will be held at the Mines' Drainage Office, 22, Darlington Street, Wolverhampton, on Thursday, May 30th, at 3 o'clock P.M.

VINCENT JACKSON, } *Honorary Secretaries*.
J. G. U. WEST, }

Wolverhampton, May 5th, 1878.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fifth ordinary meeting of the session was held at the Vork House, Bath, on Thursday evening, April 25th; H. MARSHALL, M.D., President, in the chair. There were also present thirty members.

New Members.—Surgeon-General Bowen of Ridgway, and R. W. Thomas, Esq., of Keynsham, were duly elected members of the Association and of the Branch.

Papers.—1. Dr. E. M. SKERRITT read a paper on Cases illustrating the Treatment of Pleuritic Effusion, on which Dr. Brittan and Dr. Hensley made remarks, and Dr. Skerritt replied in favour of antiseptic treatment.

2. Dr. A. E. A. LAWRENCE read a paper on Certain Forms of Non-verperal Uterine Hemorrhage; and Dr. Swayne replied.

Letters.—The PRESIDENT read letters from the Harvey Tercentenary Committee and the Nottingham Medical Defence Association; and the Secretary (Mr. Fowler) undertook to receive subscriptions for each object.

Habitual Drunkards Committee.—Mr. Fowler was delegated to represent the Branch on the Habitual Drunkards Bill Committee.

VACCINATION.—Mr. H. J. Kendrick Vines has received a Government grant of £11:5 for successful vaccination in the Littlehampton District of the East Preston Union. This is the second grant which Mr. Vines has received.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

DARLINGTON RURAL SANITARY AUTHORITY.

THE first meeting of the Guardians constituting the Rural Sanitary Authority of the Darlington Union was held on April 27th. For the fifth time, Dr. Eastwood of Dinsdale Park was unanimously elected Chairman for the ensuing year; and his services to the Authority, especially as a professional man, were cordially acknowledged.

THE CHARGE OF PAUPERS SUFFERING FROM INFECTIOUS DISEASES.

SIR,—Observing in your JOURNAL of the 13th April that the Local Government Board have called upon the guardians of the poor in Dublin to find hospital accommodation for paupers suffering from small-pox, permit me to inquire whether it is incumbent on the sanitary authority or the guardians to take charge of such patients in England? The Public Health Act (1875) does not, I believe, extend to Dublin, and it is a question of great importance whether it rests with the sanitary authority or the guardians to take charge of the cases referred to above. The sanitary authority are expected to take charge of those above the pauper class, and to charge for maintenance, etc. (see Clause 132, Public Health Act, 1875), but such patients could not be placed among paupers. It would therefore be necessary to find other accommodation for the latter; and as they are strictly under the care of the guardians, provision should be made by the guardians, and power given to all district medical officers to send their patients to their hospital. It is not necessary that the hospital for paupers suffering from infectious disease should be in close proximity to a poorhouse, but in some central part of a town or rural district.—Your obedient servant,
M. O. H.

MILITARY AND NAVAL MEDICAL SERVICES.

MILITIA MEDICAL SERVICE.

SIR,—Having heard much of late concerning the maladministration of Army Medical Service, will you kindly permit me to give an example of the manner in which the Militia Medical Service is regulated? I joined my regiment as surgeon upwards of twenty-three years ago, during which time we were twice embodied, comprising nearly five years. I have always superintended or done the duties connected with my department. I was never absent from training, and of late years without an assistant, having seen three out, as well as two adjutants. Soon after the termination of the first embodiment, I was required to reside at head-quarters, which necessitated the giving up of a good house and farm in the country at some distance from head-quarters. Up to May 1873, I was required to accompany the adjutant through the country for the purpose of examining recruits, averaging about three days per week. After that time, I was ordered to be confined to a radius of fifteen miles from head-quarters. In March 1876, I was ordered to cease going out with the adjutant for examination of recruits; duties to be done by civilian medical practitioners. In January 1877, I was ordered to discontinue the examination of recruits at head-quarters, to be done in future by an army medical officer in garrison, and no depot centre yet formed in this district. The recruits of my regiment are now undergoing preliminary drill, the medical duties of which have invariably been conducted by the surgeon. This year, under a new regulation, an army medical officer is ordered to act, and this in addition to his onerous duties in a large garrison. I am now reduced to attendance on the staff of the regiment, with the liberal allowance of 2d. a head per week—medicine, appliances, and car-hire included, and also going out for twenty-eight days' training to a camp, at much inconvenience and a considerable distance from head-quarters. I cannot, therefore, discover what inducement there is for a surgeon to remain in this service when deprived of almost all duties and consequent emoluments, faith being broken, notwithstanding being appointed under Royal Warrant, being served for a lengthened period, the greater part taken up by regimental duties, including almost daily attendance at orderly-room, when not out on duty in the country, to the detriment of private practice, and denied compensation on retirement, as almost all public departments are in the habit of granting.—I am, etc.,
MILITIA SURGEON.

THE ARMY MEDICAL DEPARTMENT.

SIR,—It is anything but clear to me that the discontent in the Army Medical Department at present turns upon the question of unification and regimental system. I am inclined to think either system might be made popular. For my own part, I would rather have unification with exchanges allowed than the regimental system with them prohibited, and I would rather have the regimental system with exchanges allowed than unification with them prohibited. The prohibition of exchanges, only six months' sick leave, and then half-pay if not well enough to serve, the difficulty of getting ordinary leave, etc., have, I am inclined to think, much more to do with the present discontent than the mere separating of medical officers from regiments. If the authorities had stopped at the separation of medical officers from regiments, and not brought in all kinds of restrictions in connection with unification, I think the medical officers might have been a comparatively contented body of men, notwithstanding the harshness of the manner in which we were turned out of our regiments. They might also have compensated us in money. What on earth the prohibition of exchanges had to do with unification I cannot imagine; and yet no sooner was unification carried out than this vexatious restriction was instituted.

I hope you will publish this, as I am half afraid the question is being tried on false issues.—Yours, etc.,
SURGEON-MAJOR.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Tuesday, May 7th, 1878.

Food and Drugs Act.—Mr. A. MOORE asked the Chief Secretary for Ireland what steps, if any, have been taken by the Irish Government to put in force the provisions of the Food and Drugs Act, 1875, relating to the detection of adulterated liquor.—Mr. J. LOWTHER said that in 1875 and 1876 the Local Government Board in Ireland addressed a circular letter to each urban and rural sanitary authority, drawing their attention to the provisions of the Act to which the honourable member referred, and making suggestions as to its administration. In 1877, the Irish Government issued a circular informing the local authorities that police constables were authorised to assist them in carrying out the provisions of the Act. By the thirteenth section of the Act, one of the duties of the officer appointed under it related to the detection of adulterated liquor. In the case of any dispute arising, he had directed that another circular should be prepared and issued.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners, on May 2nd; and, when eligible, will be admitted to the pass-examination.

Messrs. Charles R. Tyrrell and Joseph H. H. Lawrence, students of the Middlesex Hospital; Charles A. Whitcombe and Richard A. Billial, of King's College; Richard G. Cooper and Owen Pritchard, of St. Bartholomew's Hospital; John R. Rolston, of Guy's Hospital; Herbert C. Hallows, of St. George's Hospital; Walter Pearce, of St. Mary's Hospital; and Henry R. Evans, of St. Thomas's Hospital.

Fourteen candidates were rejected.

The following gentlemen passed on May 3rd.

Messrs. James F. D. Willoughby, Edward Daly, and Henry H. Taylor, of St. George's Hospital; Herbert C. Male, Robert W. Mead, and Benjamin Wainwright, of the Edinburgh School; N. E. Johnson Gaylor and Arthur S. Stokes, of Guy's Hospital; Arthur B. Carpenter and Henry N. Holberton, of St. Thomas's Hospital; William Charnley, M.D. Cantab., of University College; Thomas L. Noding and Robert E. G. Cuffe, of St. Mary's Hospital; John L. B. Oakley, of St. Bartholomew's Hospital; and Walter Johnson, of King's College.

Ten candidates were rejected, making a total of seventy-five out of the one hundred and sixty-eight examined.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 25th, 1878.

Barnes, James John Frederick, 83, Caversham Road, N.W.
Coombs, Samuel Wellesley, Worcester
Morton, Augustus Charles, Aylsham, Norfolk
Shepherd, Thomas William, Ilminster

The following gentlemen also on the same day passed their primary professional examination.

Davies, Evan Naunton, Guy's Hospital
Greensill, James Haynes, Middlesex Hospital
Greensill, Joseph Moon, Middlesex Hospital
Ladell, William John Simpson, St. Bartholomew's Hospital
Leadbeater, Thomas Edward, London Hospital
Womersley, Joshua King, Guy's Hospital

At the Preliminary Examination in Arts, held at the Hall of the Society, on the 26th and 27th of April, 1878, 76 candidates presented themselves; of whom, 24 were rejected, and the following 52 passed, and received certificates of proficiency in general education—viz., in the First Class, in order of merit:

1. H. C. E. Cooper; 2. W. W. Floyer; 3. Rowland Hill, A. Mitten, and W. H. Moore; 6. H. E. Bateman and Anne McCull.

In the Second Class, in alphabetical order:

S. Aspinall, J. C. Bates, H. S. Baumgartner, J. B. Berry, B. Blackmore, R. E. Bowen, J. F. Bowring, L. H. Brown, H. M. Bullock, T. E. Butler, F. G. Carnell, F. M. Coppin, C. Conlan, C. E. Day, F. H. Douglas, J. H. Drury, C. H. East, A. J. Gardner, W. E. Gardiner, A. E. Garrett, W. H. Gimblett, A. J. Grant, H. S. Greenwood, G. F. Hartsch, W. Hern, H. T. Herring, G. Hessenauer, A. F. Marsack, F. B. Norris, H. S. Parkinson, A. Sales, P. M. Scatliff, J. S. W. E. Sharman, A. Shearman, A. F. Smith, E. T. Smith, F. W. S. Stone, R. W. Stratham, A. E. Taylor, H. H. Taylor, S. R. Thomas, A. G. Webster, G. D. Wenham, A. E. Woodforde, and G. A. H. Woodrde.

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 2nd, 1878.

Lucas, Charles, Dunwell, Cambridgeshire
Pope, Herbert Francis Montagu, West Malling, Kent
Williams, Hugh Harreis, Haverfordwest

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, April 9th, 10th, and 11th, 1878, the following candidates were successful.—For the Licence to practise Medicine: previous examination.

O'Meara, John Brett Johnston

Shove, Edith

Final examination.

Cameron, James Chalmers
Gruggen, William

O'Neill, Edward Daniel
Young, Alfred Naason

For the Licence to practise Midwifery.

Cameron, James Chalmers
Gruggen, William

Moullin, James Alfred Mansell
Weiss, Hubert Foveaux

MEDICAL VACANCIES.

The following vacancies are announced:—

BELGRAVE HOSPITAL FOR CHILDREN—House-Surgeon. Applications to be made on or before the 13th instant.

BIRMINGHAM, Parish of—District Medical Officer. Salary, £175 per annum, and fees. Applications to the Clerk to the Guardians on or before the 14th inst.

GLOUCESTER GENERAL INFIRMARY—Surgeon and Assistant-Surgeon. Applications to be made on or before the 30th instant.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Assistant-Surgeon. Applications to be made on or before the 16th instant.

KENT and CANTERBURY HOSPITAL—Physician. Applications to be made on or before June 28th.

LEITH HOSPITAL—House-Surgeon and Assistant-Surgeon. Salaries, £70 and £60 respectively, with board. Applications to be made on or before the 15th instant.

METROPOLITAN FREE HOSPITAL, Commercial Street, E.—Two House-Surgeons.

MITFORD and LAUNDITCH UNION—Medical Officer and Public Vaccinator for the Frarsham District. Salary, £55 per annum, and fees. Applications to be made on or before the 10th instant.

ROYAL HANTS COUNTY HOSPITAL, Winchester—House-Surgeon and Secretary. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 27th instant.

ROYAL HOSPITAL OF BETHLEHEM—Resident Physician and Medical Superintendent. Salary, £700 per annum, and furnished apartments. Applications to be made on or before the 16th instant.

ST. MARY'S HOSPITAL, Manchester—Medical Officer. Salary, £80 per annum, with board and residence. Applications to be made on or before the 17th inst.

SCARBOROUGH DISPENSARY and ACCIDENT HOSPITAL—House-Surgeon and Secretary. Salary, £120 per annum. Applications to be made on or before the 30th instant.

SOMERSET COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £100 per annum, with board, residence, and washing.

STOCKPORT INFIRMARY—Assistant House-Surgeon. Salary, £60 per annum with board and apartments. Applications to be made on or before the 20th instant.

STROUD GENERAL HOSPITAL—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, and washing, and £30 per annum in lieu of stimulants. Applications to be made on or before the 15th instant.

VICTORIA HOSPITAL FOR CHILDREN, Chelsea—House-Surgeon. Salary, £50 per annum, with board and lodging. Applications to be made on or before the 18th instant.

WILTS COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £110 per annum, with board, lodging, attendance, and washing. Applications to be made on or before the 15th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HAYWARD, T. E., M.R.C.S.Eng., appointed Resident Medical Officer to the East London Hospital for Children, *vice* F. H. Spooner, M.R.C.S.Eng., resigned.

IRWIN, John Arthur, M.A., M.D., and **SIMON**, Robert M., B.A., M.B., appointed Honorary Physicians to the Manchester Southern Hospital for Diseases of Women and Children, *vice* J. Roberts, M.D., and R. B. Smart, Esq., resigned.

DONATION.—The Merchant Taylors' Company have made a fourth grant of Thirty Guineas in aid of the funds of the National Hospital for Consumption and Diseases of the Chest at Ventnor.

The Bridgwater Guardians and Rural Sanitary Authority have entered into a contract for the erection of an Infirmary for infectious and contagious cases for £670.

ROYAL COLLEGE OF SURGEONS OF ENGLAND; ARTS EXAMINATIONS.—At the recent preliminary examination for the diplomas of Fellowship and Membership of the Royal College of Surgeons, 338 candidates presented themselves, viz., 96 for the first named distinction and 242 for the membership. Of the 96 candidates, 52 were successful; 22 failed to reach the required standard for the fellowship, but obtained sufficient marks for the membership; 14 had not completed all the required subjects, and 8 were rejected. Of the 242 candidates for the membership, 137 were approved, and 105 were rejected. Those who passed can at once commence their professional studies.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. P. Kidd, "On the Pathology of Hæmophilia"; Dr. Reginald Thompson, "On the Pathological Traces of Pulmonary Hæmorrhage"; Dr. Gowers, "The Brain in Congenital absence of One Hand"; Dr. Topham, "Abscess within Thorax, accompanied by Pulsation".

WEDNESDAY.—Association of Surgeons Practising Dental Surgery, 8.30 P.M. Mr. Gaine, "On some forms of Trismus arising from Dental Irritation".

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. Hughlings Jackson, "On a large Tumour of the Left Cerebral Hemisphere"; Mr. Lister, "On the Effects of Position upon Local Circulation".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

PROPOSED REGISTRATION OF FOREIGNERS WITHOUT DIPLOMAS.

SIR,—In reference to the subject of my letter in the *JOURNAL* of April 18th, I observe that on the fifth day of the session of the General Medical Council, when Clause 8 of the Bill came under consideration, Dr. Haldane very properly pointed out that in it no mention was made of either examination or diploma. Mr. Simon thereupon "explained that this clause was only designed to meet very exceptional individual and personal cases, of the merits of which the Council would be the judges". I think, sir, that some more satisfactory explanation should be given than this. What possible "exceptional individual and personal cases" can there be in which foreigners not possessing any diplomas can have any claim to be entered on the *Medical Register* of this country? It would really seem as if the Council were seeking for the power to register some unqualified foreign practitioner whose "individual and personal case" commends itself to them. It such be the case, it is a monstrous thing, and cannot be too strongly opposed. I hope the Medical Reform Committee of the Association will take it up. The matter may seem a trivial one, but it is really one of principle, and it cannot be just that power should be given to the Council to register a man because he is a foreigner, who could not claim registration if he were an Englishman. Any properly qualified foreigner is already amply provided for by Clauses 6 and 7; and therefore I think the profession should unanimously demand that Clause 8 be expunged. The Council should have no power to register any unqualified person, whether a Briton or a foreigner, as such power strikes at the very root of the principle of the Medical Acts.—I remain, yours, etc., W. DOUGLAS HEMMING.

36, Ladbroke Road, W., April 24th, 1878.

DR. HARRIS.—There will be three vacancies declared in the Council of the College of Surgeons in July next, caused by the retirement, in the prescribed order, of Messrs. H. Lee, B. W. Holt, and Erasmus Wilson, who are eligible for re-election. Mr. E. Lund of Manchester, Sir H. Thompson, and Mr. John Gay of London, are the only candidates whose names have reached us.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MUSCÆ VOLITANTES.

SIR,—The optical shadows produced by the peculiar bodies to which the name of "muscæ volitantes" has been applied have been long recognised and frequently described; but there is still considerable obscurity attached to the history, *habitus*, and pathological propensities of their material archetype, and a few original observations may probably be an acceptable contribution to your *JOURNAL*, and a timely addendum to the investigations of the anxious "Inquirer" in a late issue thereof. Muscæ volitantes are usually first observed between the twentieth and thirtieth year, and begin as a faint but circumscribed blotch floating over the axis of vision at a short and uniform distance, which gradually enlarges, deepens, and finally assumes a pale amber tint, with traces of organisation, and possess a tenure of existence which is truly remarkable. One and the same musca has been observed and studied by the same individual already for a period of twenty-one years, and has certainly undergone no perceptible change for many years. The true muscæ occur in subjects whose eyes and venous system generally are in a state of capillary turbulence, and who have, recently or remotely, had recurring attacks of catarrho-rheumatic ophthalmia, in a subdued or subacute phase, and with implication of the iris, and who have, moreover, subjected their eyes to a severe and protracted strain in heavy reading, or in fine artistic details; and they invade both eyes equally. As remarked by Mr. Greenwood, the eyes are watery from turbulence of the vascular rete in the lacrymal canals; the eyeballs are, or have been, tender to the touch; the interior of the eye is over-sensitive to light, and the pupil a little irregular, whilst the sight is strong, penetrating, perfect in adaptation to distance, and quite up to par in its retentiveness of these qualities. True muscæ never spontaneously disappear, and their clinical associates are rheumatism, chronic bronchitis, and emphysema, either with or without obstructive cardiac and renal disease. In shape they may be punctate, circular, linear, crescentic, or hemispherical, and their limiting edges may be abrupt, jagged, or dendritic. Some appear with a nucleus, like a complicated knot of ribbon, and have an elongated lashing tail. In the linear ones may be observed a distinct limiting line, within which on each side is a glassy peripheral portion inclosing a central axis of overlapping and apparently tinted nucleated cells. The crescentic and hemispherical ones are fixed; the others move with the eyes upwards, downwards, and to either side, and with a rapidity proportionate to that of the eye itself. When the eyes are directed upwards, the muscæ appear to rapidly rise, not simultaneously, but in sequence, and to less rapidly subside; and if the eyes be fixed horizontally or thereabout, the muscæ leave the field of vision free till the next movement causes them to sink in their medium, whilst their shadow rises again as before. When the axis of vision is vertically upwards or downwards, the muscæ float over and trouble its area, especially in strong light; and in foggy weather they are also very annoying, though it is encouraging to know that eyes full of muscæ may, from sheer habit, become so reconciled to the inevitable as to cease to notice them, and to be sensible to their existence only under conditions favourable to their illumination, or when the mind is "at attention". Muscæ are distinctly seen both in sunlight and gas-light when the eyelids are closed and motionless, and their movements are in no way impeded or influenced by those of the lids; they are obviously situated deeper in the eye, and probably, from the rapidity and ease of their gambols, they have a watery medium for *habitus*—that is, the aqueous humour of the anterior and posterior chambers of the eye. It is sheer speculation to speak of their histological nature; but I believe them to originate in minute exudations of lymph or blood, that they elaborate their nutrition by imbibition from their surrounding medium, that their existence is compatible with a life-long retention of the best qualities of sight, and that when their possessor is weary to intolerance, he may hope for a cure in a skilful evacuation of the aqueous humour.—I am, etc.,

E. HOLLAND, M.D., M.R.C.P., Assistant-Physician to the Hospital for Women.

May 1878.

SIR,—Like your correspondent Mr. F. R. Greenwood, I also am a sufferer from the troublesome and annoying affection known as "muscæ volitantes". I first noticed them after a severe attack of enteric fever a few years ago, when at the same time I became slightly myopic. The little transparent beads or opaque spots are constantly dancing in front of the eyes (especially the left one) during the day, much to my annoyance, though they do not seem to affect the vision much. They can sometimes even be seen with the eyelids shut, and become invisible by gaslight, or in very bright sunlight. I have been told by ophthalmic surgeons that there is no fear of any permanent injury to vision; but I am anxious to get rid of them, if possible, and should be glad of any suggestions for the cure of the affection. I may add, that Mr. Greenwood's explanation of their origin is mentioned by Dr. MacKenzie in the *Edinburgh Medical and Surgical Journal*, No. 164.—I am, yours truly, MEDICUS.

A PLEA FOR OUR HOSPITALS: OR FLOWERS IN THE SICK-ROOM.

SIR,—There exists in the minds of many a popular, though ill founded, prejudice against flowers in the sick-room, the idea being that they exhale poisonous odours and are detrimental to health; but this is not the case. Although flowers with a heavy sickly odour should never be admitted into a house at all, those of a brilliant and pleasing colour, either with or without agreeable odour, are much appreciated by the sick. In some of our large and best conducted hospitals, flowers are regularly arranged in the wards. They are sent by railway by some of the country families in the neighbourhood from the conservatories, packed in tin boxes; and we feel quite sure that the liberal donors would be more than repaid if they could witness the joyful and eager looks of the pallid faces clustering around the newly arrived box, and bestowing words and glances of heartfelt admiration upon its treasures as they are one by one drawn forth.

Those who know little or nothing of the daily weary routine of hospital life can scarcely form any idea of the instinctive longing for, and the intense pleasure felt at the sight of, plants or flowers by the sick and their attendants; and it has been found that the patients in the large hospitals of our crowded towns have derived much benefit, both mental and bodily, from the introduction of flowers into the sick-wards; and we feel sure that every medical man of experience will acknowledge that the presence of flowers in the sick-room, especially of a town patient suffering from chronic disease, is perhaps one of the most valuable adjuncts to his treatment that he can possess. Flowers of a brilliant red colour have exhilarating effect on the mind of the patient, and should always have a preference given to them when there is a choice.—I am, etc.,

E. M. RAVENHILL, Lady-Superintendent of Nursing.

Stratford-on-Avon, April 1878.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

DISINFECTANT.

SIR,—In your issue of the 27th instant, you make some observations regarding a so-called new, cheap, and useful disinfectant, said to be the discovery of Dr. Day of Geelong, and I should be glad if you will allow me to remark upon the statements referred to. For many years it has been well known that oil of turpentine and similar substances have the power of absorbing atmospheric oxygen, and that simultaneously an active principle is developed, resembling ozone in certain of its properties. The nature of this active principle was, however, a matter of much dispute among chemists for many years; and I believe it will be granted by those best acquainted with the literature of the subject, that I was the first to prove that this agent was neither ozone nor peroxide of hydrogen (*Journal of the Chemical Society*, June 1874). The substance really produced is an organic peroxide, of the probable formula $C_{10}H_{14}O_4$, which by contact with water is gradually resolved into camphoric acid and peroxide of hydrogen (*Journ. Chem. Soc.*, March 1875), thus: $C_{10}H_{14}O_4 + 2H_2O = H_2O_2 + C_{10}H_{10}O_4$. Simultaneously with this organic peroxide, other camphoraceous products are formed, and among them a kind of camphor resembling thymol both in its chemical and its antiseptic characters. The study here indicated I pursued for many years, the various new facts which were ascertained being published from time to time (*Chemical News*, Sept. 17th, 1875; Sept. 22nd, 1876; etc.). In the meanwhile, I was aware that Dr. Day had made many simple observations upon a similar subject; that is to say, he had noticed, in an amateur sort of way, what many others had noticed before—viz., that various oils, like turpentine, do absorb oxygen from the atmosphere, and at the same time give rise to an active principle; but the tests employed by Dr. Day were neither mathematical in their exactitude, nor did they admit of strictly scientific interpretation. Indeed, the tests used by him do not serve to diagnose ozone from peroxide of hydrogen; and I have already stated that neither one of these substances is produced directly in the atmospheric oxidation of essential oils and other hydrocarbons. It is unnecessary here to refer more particularly to the chemical law by which peroxide of hydrogen is ultimately produced in these processes. Your readers may learn more about this by consulting my various papers previously indicated, and also those in the *Pharmaceutical Journal*, December 2nd, 1876, and the *Journal of the Society of Arts*, February 16th, 1877, and March 8th, 1878.

From a number of considerations affecting the nature of the products formed in the atmospheric oxidation of bodies like turpentine, I was led to believe that the disinfecting and antiseptic properties exhibited by such oils under given conditions resided in these very products, and that initially the original substances have comparatively little value. This conjecture proved to be true, and from the scientific aspect of the question I was led to its commercial pursuit. The solution now well known as "sanitas" is a solution of the products formed in the atmospheric oxidation of turpentine, and other oils resembling it, and, indeed, consists of peroxide of hydrogen (to which the disinfectant characters are in part due) and camphoric acid and other camphoraceous principles (to which the antiseptic characters are due). This solution has many advantages, and among them it may be mentioned that it contains no oil, and is therefore non-inflammable. Now, even on the simplest grounds, there could not be employed on any appreciable scale a disinfectant solution made up of inflammable principles like those forming the basis of the preparation which has called forth these observations. Moreover, it will be at once seen that any disinfectant characters it may possess are due to the generation in its use of those very substances of which "sanitas" exclusively consists. Why, however, a dangerous substance like benzene is used to dilute the turpentine I cannot imagine; the more so because it does not absorb atmospheric oxygen, and does not produce peroxide of hydrogen.

In conclusion, allow me to say that I am surprised Dr. Day should fail to admit the credit of my years of labour in a study which must have given him as much pleasure as it has cost me work and time.—Yours truly,

CHAS. T. KINGZETT, F.C.S., Member of the Institute of Scientific Club, April 29th, 1878. Chemistry of Great Britain, etc.

A FELLOW (Oxford).—Mr. F. Le Gros Clark, F.R.S., late President of the Royal College of Surgeons of England, will preside at the Fellows' Festival. Mr. Lowne has succeeded Mr. Allingham as honorary secretary, and to whom you should apply for the stewardship.

CIRCULATORY DISEASES.

SIR,—Though some practitioners think climate and locality are influential in the treatment of certain lesions by rest and diet to induce fibrillation, my own observation convinces me that the breezy higher grounds of the west—namely north-west Pembrokeshire and south-west Cardiganshire—have a tendency to render the action of the heart far more quiet and regular from day to day and during sleep than any part of the interior of England; and this must have its effect in palliation or cure. There is a cool freshness in the district named in summer, and winter frost is seldom so keen or of such long duration as in England. The prevailing characteristic is mildness and freshness, without the relaxing quality of Devonshire air, and I have often wished some wealthy and benevolent individual would erect a really comfortable sanatorium in the neighbourhood for invalids of the class named, and others similar. I feel sure that many, even incurable cases of cardiac disturbance, would be alleviated, and lives which in the feverish atmosphere of English towns are wellnigh unendurable, might be rendered at least tolerable by a few daily lucid intervals of enjoyment. But of course the building must be made to suit the climate, and have proper aspects in its surroundings to meet the various seasons. One great advantage is, that there is generally very pure water to be had on the slate formation, so there need be no trouble with the dyspeptic and irritative complications which the eternal "whitewash" of secondary and tertiary we induces.—Yours faithfully,

J. C.

MEMBER.—It is necessary for our correspondent's son to be registered as a student. The necessary information will be obtained on application to the Registrar of the General Medical Council, 315, Oxford Street, London, W.

TREATMENT OF TINEA DECALVANS.

SIR,—Can any of your readers inform me of an efficacious remedy for tinea decalvans? I have found the complaint especially intractable, and shall be glad for more light in the shape of a better remedy. Those tried have been principally parasiticides and stimulants.—I am, etc.,

R. G.

The following communications have been handed to the General Manager:—Mr. A. Graham, Cheltenham; Mrs. M. Hall, Sheffield; Mr. W. W. Esam, Eastbourne; Mr. T. J. James Brown, Llanbister.

THE M.D. DEGREE.

SIR,—I have read with some pleasure and interest the letter from M.R.C.P., published in your JOURNAL of last week; his case, I should at once state, is one somewhat similar to my own. I studied at St. Bartholomew's, and after four years of hard work, I came away trebly qualified; but not having the time, and being very anxious to get my living as soon as possible, I was unable to obtain a degree in Medicine. I now find myself much in want of such a degree; a want I did not realise as a student, or think I should when I became a M.R.C.S., etc.

Now, sir, on looking around I do not find the portals of any university open to me (except the Continent) unless I again become a student for a year or two, or wait until I have attained a certain age, or spent a definite number of years in the practice of my profession. In my case, and doubtless it is the case with most medical men, it is simply impossible for me to spend any length of time now at an university; it would be most injurious to my future prospects. I have no desire nor have I such a keen appreciation of Continental degrees (which I believe I am correct in stating are not registrable in England), as to lead me to leave the country where I have studied and practised for years to seek a degree in medicine. I can, I must honestly confess, see no reason why one of the English universities should not grant a degree to men who have obtained certain qualifications, and who have been studying their profession, say, for some ten years. I cannot see it would be in any way derogatory to that University to hold examinations twice a year for such a class of medical men. Give them a searching, long, and, above all, practical examination; demand a reasonable, but not an exorbitant, fee; and those they find well read, quick in diagnosis, and prove themselves good practical men, and well acquainted with their profession, give them, I say, without hesitation, the M.D. degree. The university best suited in England to do this is, I think, the Durham; it has opened its doors to a certain extent, and has shown a willingness and desire to assist qualified men—in the same situation, I take it, as "M.R.C.P." and myself—to obtain the M.D. degree; but I do not think the University has acceded enough. I would most strongly urge it to take the matter again in hand; allow qualified men to present themselves earlier than they do now. I feel quite sure the degree would not lose a particle of its lustre or value, that the number of applicants would be greatly increased, and that an enormous boon would be conferred on aspiring practitioners generally.—I remain, yours faithfully,

MEDICUS.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. G. W. Callender, London; Mr. Wm. Eddowes, Shrewsbury; Mr. T. Spencer Wells, London; Dr. Alexander Robertson, Glasgow; Dr. J. Milner Fothergill, London; Dr. Ringrose Atkins, Watford; Mr. S. Lodge, Bradford; Dr. G. M. Brummell, Mossley; Mr. W. Sykes, Moxborough; Dr. W. A. Elliston, Ipswich; The Secretary of the Royal National Hospital for Consumption, Ventnor; Mr. J. B. Curgiven, London; Dr. Wm. Ord, London; Dr. Boyd Mushet, New Brighton; Mr. T. E. Hayward, London; Dr. Ogston, Aberdeen; Mr. J. B. Blackett, London; Mr. R. J. Garden, Aberdeen; Dr. E. Markham Skerritt, Clifton; Dr. Gourley, Hartlepool; Dr. W. M. Kelly, Taunton; Mrs. M. Hall, Sheffield; Mr. T. J. Eames Brown, Llanbister; Dr. G. D. McKeddie, Wainstead; Dr. D. Drummond, Newcastle-upon-Tyne; Mr. Lawson Tait, Birmingham; Dr. Edis, London; Undergraduate, London; Mr. J. C. Renton, Glasgow; Dr. C. Barham, Truro; Mr. J. G. Curtis, Cork; Mr. R. S. Fowler, Bath; Dr. John Haddon, Manchester; Dr. Joseph Coats, Glasgow; Dr. P. H. Pye-Smith, London; Dr. Gowers, London; Dr. A. S. Taylor, London; Mr. W. Holder, Hull; Dr. J. Urquhart, Aberdeen; Dr. W. Newman, Stamford; Dr. Francis Warner, London; Inspector-General Maclean, Netley; Dr. G. K. Poole, Upper Norwood; Mr. J. Lawrence Hamilton, London; Mr. Alder Smith, London; Mr. James Startin, London; Dr. G. A. Abrath, Sunderland; Dr. Reeves, Carlisle; Dr. E. S. Thompson, London; Dr. B. Annington, Cambridge; Mr. St. Vincent Mercier, London; Dr. J. Moore, Belfast; Dr. Eastwood, Darlington; Mr. S. Benton, London; Dr. St. George, Lisburn; Mr. Alfred Currie, Portsmouth; Dr. A. P. Stewart, London; The Rev. E. Wyatt Edgell, London; Mr. George Scudamore, London; Mr. A. Ford, London; Dr. Wm. Sanders, Edinburgh; The Secretary of the Medical Society of London; Dr. W. B. Cheadle, London; Mr. A. J. Pepper, London; Dr. Wallace, Turfiff; Doubtful; Our Edinburgh Correspondent; Mr. H. Sewill, London; Mr. S. Roy, Strassburg; Mr. J. H. Craigie, London; Mr. R. W. Leadbetter, Glasgow; H. H.; Dr. Meymott Tidy, London; Mr. W. K. Treves, Margate; Dr. Tilt, London; Dr. Robinson, Dublin; Dr. Fancourt Barnes, London; Our Dublin Correspondent; Dr. Waters, Chester; Dr. R. Lee, London; Dr. Richard Stanistreet, Malahide; Mr. Davy, London; Dr. Norman Kerr, London; Mr. Balmano Squire, London; Dr. J. Sawyer, Birmingham; Dr. E. Rickards, Birmingham; Mr. G. Van Abbott, London; Dr. Sutherland, London; Dr. W. B. Carpenter, London; Dr. Trollope, St. Leonard's-on-Sea; Mr. J. N. Radcliffe, London; The Medical Officers and Lecturers of the Dental Hospital Medical School, London; Dr. J. C. Bucknill, London; Member; Dr. Annington, Cambridge; R. G.; Dr. J. A. Irwin, Manchester; M.D.; Mr. H. J. K. Vines, Littlehampton; Mr. A. Graham, Cheltenham; Paterfamilias; Dr. Williamson, Ventnor; Mr. V. Jackson, Wolverhampton; Mr. J. H. Wathen, Fishguard; Mr. Fradelle, Regent Street; etc.

AN ADDRESS

ON

ALCOHOLIC DRINKS: AS DIET, AS MEDICINES, AND AS POISONS.

The Oration delivered to the Medical Society of London for the Year 1878.

By ALFRED CARPENTER, M.D., Croydon.

Lecturer on State Medicine at St. Thomas's Hospital.

I HAVE assumed that the establishment of an annual oration is not for the purpose of proclaiming some new discovery, or propounding some new theory, but rather for reviewing the evidence which has been obtained upon some given subject, and which has been, more or less, already submitted to the notice of the assembly to whom the oration is delivered.

From such a standpoint, I propose to deal with "alcoholic drinks". The subject is one of vast importance to the medical world, whether it be considered from a therapeutic or from a sanitary point of view, and on that account no excuse is needed for taking it as the theme of this year's oration.

A review of the effects of alcohol upon a healthy man, as well as of its therapeutic use, may be taken under different aspects, viz., as a diet, or as a medicine, or as a poison. They are intimately associated, and the reasoning which will apply to the consideration under the one head will, more or less, apply to the others.

The use of alcohol as a diet has been strongly condemned, and indeed prohibited, by influential leaders among us. Its usefulness as a medicine has been distinctly challenged, and it has been stigmatised as a poison under all circumstances by some whose professional opinion upon most matters usually commands respect. Others, again, of equal talent and experience, affirm that it is a food of great use, that disease cannot be so successfully treated without it as by its aid; and both sides assert that the chemist and physiologist are able to show us how it acts and how it is removed from the body.

I propose to review some of the evidence which has been produced by these different schools of thought in an unbiassed manner, and for this purpose to consider the action of alcohol from a chemical and physical as well as therapeutic standpoint.

I apply the term "alcoholic drinks" to all those liquors in common use as articles of diet in the composition of which alcohol finds a place. The universal employment of this particular class of liquids indicates a natural requirement of some kind. Their use may be condemned as unnecessary, or even hurtful, by sensible men as well as by enthusiasts, just as chimney-pot hats or stays may be condemned; but the condemnation does not prevent their use by the public at large, because the general opinion is that they are necessities; and this opinion is fostered among some of us because it entails no trouble to accept it as true. But that alcoholic drinks are not necessities of life is proved by the fact that millions of people do not use them, and, as far as practical observation goes, those people do not suffer from their non-use. If a number of people be deprived of sugar, of fat, salt, vegetables, or water, the effect is soon manifest; they are necessities of life, and, if they are absent from the diet-table, those omitting to use them as articles of food suffer sooner or later in their health from the exclusion; but those who never touch alcohol in any form never show any distinct signs of evil from its non-use. It is not, therefore, a necessary of life for ordinary people and for common purposes, and if used as an article of diet, it must be considered as a luxury and not as a necessity. It is possible that fluids containing alcohol may be useful in their way, in the same manner as turtle soup and Stilton cheese are useful to those who like them; it will be an advantage to the art and science of medicine if its professors always view them in that light, rather than as things that are absolutely required for the ordinary production of chyle.

Some things which were formerly thought to be luxuries are now considered to be necessities, such as tea and coffee; and it may be argued that alcohol is one of this class; we can do without them, but they are very useful as articles of diet, and, unless it can be shown that they are more injurious than useful, the argument is a good one. I have, therefore, to inquire in what way alcohol may be beneficial when used as a luxury.

I will first dispose of some arguments which are employed both for and against its common use. It is sometimes said that it is an evil thing, which should be put aside altogether; the advice being founded

on the fact that animals will not touch it, and it is said that their example should guide us to reject its use. But, are we prepared to be guided by animals in other matters? They never cook their food or make exchanges among themselves of one kind of food for another, or use artificial coverings. It would be quite as reasonable, on such foundations, to argue against cookery and barter, and to assert that milliners and tailors are unnecessary traders, because animals never cook their food or put on other than their natural coverings. We must look deeper into the case, and get more certain proof against the use of alcohol than this, before we can justly decide that it is hurtful under all circumstances and ought to be dismissed from common use.

The evidence derived from its rejection by animals not helping us, we may look to its effect upon the human economy. There has been a conflict in all ages of the world as to the good or evil effects of wine and strong drink. It has been styled God's gift which cheers the heart of man, as well as the "Devil's draught" which steals away his intellect; but so of sleep, "tired nature's sweet restorer", the author of Proverbs says: "Go to the ant, thou sluggard, consider her ways, and be wise." Sloth is the result of excessive sleep, but we must not banish sleep because "some sleep their fill and take their soft repose". A late writer and noted chemist wrote (in his *Lectures on Food*) that "the universal use of fermented liquors was the indication of their serving a profound physiological purpose and supplying a common want. The fact", he says, "of their use from time immemorial, and that no fluid containing sugar, whether the juice of vegetable matter or the juice of fruit, can be exposed to the air without spontaneous or immediate fermentation, are evidences of useful purpose." This argument is as unsound as that which objects to stimulants because animals do not drink them. We might just as well assume that, as milk cannot be kept exposed to the air without rapidly changing, therefore the changed milk is "evidence of useful purpose", and that articles of diet which, sooner or later, have become tainted, become so that they may "supply some common want".

The first question which we have to solve is, whether any force can be produced out of alcohol, *quid* alcohol, either as animal heat, muscular power, or nervous energy. Is it capable of being at all utilised in the animal economy? Dr. Henry Bennet says (*Nutrition in Health and Disease*, p. 64) that alcohol feeds organic combustion and creates heat, and even Dr. Richardson (*Temperance Lesson Book*, p. 182) says that, "in its first action, it causes the warmth of the body to rise". But there is then a divergence of opinion; on the one hand, eminent men agree with Dr. Bennet, and assert that alcohol is rapidly decomposed and heat disengaged. Dr. Parkes, from his practical observations, was satisfied that it did evolve heat, though it lowered the temperature for a short time after being taken; whilst others equally eminent affirm that there is no utilisation in the ordinary sense, and some say that the whole of the alcohol is passed through the body and is expelled without any of it being changed into force-producing matter. I cannot endorse this opinion, because it is contrary to almost universal therapeutical experience. Every medical man in extensive practice must have seen cases, which now and then have fallen to my lot to witness, in which life has been prolonged for many months without any other nourishment than that which was contained in the spirituous liquors or wines which the patient would alone consume; cases in which it was impossible for life to have been sustained upon the few grains of organic substances which were contained in the colouring matter or extractive of the liquor, or in the sugar which is sometimes given with the stimulant. It has been shown that dilute solutions containing alcohol of about the strength in which it is likely to be found in the body, viz., 1 in 1,000, if passed several times through six inches of a silicated carbon filter, metamorphosed the alcohol into complex products non-volatile at the boiling point of water; the alcohol being changed by this plan of proceeding into glycol, which is considered one of the saccharine group. If this be a possible contingency, it may be transformed into force in the human economy under certain unknown circumstances, and as such it may be useful without danger as a luxury. It may be argued by the austere ascetic that all luxuries are evil, and that they should not be used at all. I need not stay to consider this line of argument. To abolish all luxuries would be to bring enormous misfortunes upon the whole race of mankind, for which there could be no excuse; and I must assume that a luxury which is not immediately injurious may be fairly used by all who can afford it.

It is forcibly argued by some, whose opinion is worthy of deep attention, that alcohol is hurtful under all circumstances. They state that it is immediately injurious to those in health, and that there are other stimulants equally if not more useful, which could be employed in disease. They contend that its ordinary sale should be prohibited on that account, in the same way that arsenic or strychnine is prevented from being a common article of merchandise. Let us now look into

this view of the question, premising again that the individual experiences of those who have been accustomed to the use of stimulants are not in any way to be depended upon for an accurate estimate of their effects, and that their evidence is worthless for scientific purposes.

If alcohol be administered in potent doses to one unaccustomed to its use, there is no doubt of its injurious and even fatal results; but such would also be the effect of the administration of potent doses of phosphorus, sodium, or potassium, and yet they exist as necessary elements in many foods, and are absolutely required to enable the body to be built up properly. Because, therefore, a large dose of alcohol, phosphorus, or calcium is injurious, it does not follow necessarily that a small one is mischievous likewise. Indeed, if lime and common salt are withheld, the constitution is sure to suffer; we have rickets established in the one case, and in the other the body is tormented by parasitic life. We must not assume that, because a large dose is injurious, a small one is so also. Lime and salt are necessities of life, and yet they are injurious in large doses, and it is not an argument against their use in small ones. Alcohol, like lime and salt, may be beneficial if used at the proper time, and it ought not, therefore, to be absolutely prohibited as a common article of commerce unless it can be shown that some injurious sequence is sure to follow sooner or later upon its use in small ones.

We must look a little closer into its action upon animal life before we can solve this point. The first deduction to be made from its continued use is, that the body, after a short interval, becomes very tolerant of its effects, and apparently the more, in moderation, a man takes into his system, the more he can carry without apparent injury. Those accustomed to the daily use of alcohol can take a much larger quantity with impunity than the teetotaler can do. One man may take a bottle of wine and half a pint of brandy every day of his life, whilst another man only takes a bottle on a given day once a week, or three or four glasses of brandy and water on Saturday night. The one may be of the race of "fine old English gentlemen", who never transgresses the rules of propriety, and goes honoured sooner or later, generally sooner, to his grave with blessings on his head; whilst the other becomes a habitual drunkard, a transgressor of the law, and an outcast of society, although he does not consume one-sixth part of the liquor which is taken apparently with impunity by the other. This result shows that conditions vary very much in different constitutions, according to the regularity with which the dose is taken, and alcohol, or some of its constituent elements, collects much more rapidly in some habits of body than in others. It differs within certain limits from most reagents, and helps to protect those using it regularly from its own evil effects. In this it appears to be allied with tobacco, and also with certain miasmatic influences, which require some constitutions to be acclimatised before they can bear that which is manifestly injurious in its first effect, however they may be able to stand against its bad influence after a time.

It is stated by microscopical observers that alcohol acts immediately upon the blood-corpuscles, as well as on the fibrin which is contained in the liquor sanguinis. It is said that one part of alcohol mixed with five hundred of blood interferes with the power of the corpuscles to absorb oxygen; it abstracts water from the blood-discs and makes them adhere together in masses in the blood-vessels; it also causes the plastic or fibrinous part of the blood to coagulate, which then collects in the capillaries, and the current may be thereby stopped.

From frequent observations, I incline to believe that this is true, and that this result explains some of those unfortunate cases which now and then occur to the obstetric practitioner. The free administration of alcoholic stimulants to the weak and debilitated, especially when there has been hæmorrhage or long-continued suffering, and perhaps too great dependence on stimulants, has led to the sudden development of embolism. A clot of fibrin has been deposited rapidly in the heart or large blood-vessels, and the patient is dead in a very short time. I have also seen many cases of paralysis and epileptiform convulsion which had been caused by embolism, and which, in my opinion, had been promoted by alcoholic saturation. Such cases have done well, and have ultimately recovered, if alcohol have been superseded; but, if it have been persevered in, in most instances which I recollect, there was a continuation of the disease. An excessive quantity of alcohol does impede the purification of the blood, and the elimination of carbonic acid, by obstructing endosmosis and exosmosis in the lung-capillaries; the purple tint which pervades the skin of the regular toper is sufficient proof that this is true. Observation shows that the exhalation of carbonic acid is decreased in quantity after the imbibition of alcohol.

Whilst these are undisputed facts as regards large doses of alcohol, it has not been shown that a similar result follows from the smaller quantities which are found in the weaker drinks, such as natural wines and weak beers.

Alcohol is not cumulative under ordinary circumstances, or the man who takes his bottle of wine daily would suffer more and sooner than he who only takes a bottle one day in the week; but it is cumulative under some conditions at present unknown, and in which it is probable that the ordinary elimination or oxidation is interfered with, so that the toper, who could formerly take his bottle with ease, gets quite drunk by taking three glasses of his favourite liquor. One very eloquent writer, and former orator to this Society, says that "we may trust a great deal to instinct, and that tastes are, generally speaking, expressions of the wants of the system". I consider this a most dangerous argument to use; for no man taking stimulants can be himself aware of all the harm that they may be doing to his constitution, or know the time when they may become cumulative. All those who indulge in any kind of vicious practices would be glad to be able to rest upon such a dictum, and to affirm, and excuse themselves by affirming, that their vicious tastes "were but the expression of the wants of the system".

It appears to be supported by a sufficient weight of evidence that, when once the system has been exposed to the full influence of alcohol in such a way that a portion of the blood has been so acted upon that its discs have become corrugated and some of the fibrin coagulated by its action, a cumulative effect may begin, and with that cumulative effect there will be developed a taste for more which prevents the instinctive desires of the individual from being any guide as to the real wants of the system so long as any altered material exists in the blood. The lightest kind of wines generally contain ten per cent. of alcohol, so that they must be diluted with five times their amount of water to reduce them to a harmless condition. The reduction is seldom effected in this country, although the general consumption at the dinner-table of saline waters, which has lately come into fashion, is tending greatly in the direction indicated. Porter, stout, and ales all contain at least double the amount of alcohol beyond that which would make them safe for absorption at all times, unless freely mixed with other things. To take them, therefore, on an empty stomach tends more rapidly to bring about the point of saturation than when food is taken with the drink.

Alcohol transudes most rapidly through membrane, the rapidity of transudation varying very much according to the stage of dilution, and in its transudation it acts upon the membrane. It is quickly conveyed to all parts of the body, and we have no means of judging where it is likely to manifest its first effects, neither have we any means of knowing when the limit is reached beyond which it will not be safe to allow blood-disturbance to proceed. The alteration of shape of a few blood-corpuscles, the interference with their diffusive power, the interference with the transudation power of membrane, or the coagulation of a few grains of fibrin, are of comparatively little consequence, especially if the place be one of secondary importance; but when the number of altered corpuscles passes beyond a certain percentage of the whole volume of blood, evil must result. This percentage is much more rapidly reached in some habits of body than in others; it will depend very much upon the power of those organs to do their duty whose function it is to remove the altered fibrin and imperfect oxygen-carriers from the circuit. If they be defective, deterioration will be much more rapid. Thus, of two men, each taking the same quantity of liquor in the course of a month, one taking it only with food and the other on an empty stomach, the latter becomes rapidly saturated, the former escapes without serious damage.

If coagulated fibrin be not removed as soon as coagulation takes place, if it gravitate to some one organ and impede circulation there, we have the commencement of those organic changes which are constantly found in the bodies of the intemperate classes, by means of which their habits are unerringly revealed to the pathologist. The fibrin may be removed at first without setting up mischief; but the altered blood-corpuscles and interference with physical power of membrane increase the evils which arise from want of oxidising power, and fatty degeneration sooner or later follows.

Here is the great difficulty which meets the view of all those who have considered the action of alcohol in an unbiassed manner, and which has led so many among us to become total abstainers. They refuse to take alcohol as a luxury. The evil is so great and the resulting good so small, that they prefer to do without the good and so avoid the evil; and, as society is at present constituted, they are probably right. Still, the lighter wines, if entirely unfortified, and the weaker beers may be taken with impunity; they may even assist digestion, and be of advantage with or immediately after food. If taken with other food, when great exertions are being made, and when there is a call upon the stomach for fuel to supply waste of tissues, there is sufficient evidence to show that they enable the machine to obey that call with better effect than would be the case if stimulants were altogether withheld; but, if the effort be continued from day to day beyond the ordinary capacity of the machine, and that effort be sustained by more fuel

in the shape of stimulant, the human machine, like all others, must wear out sooner than it would otherwise do.

Whenever, therefore, the consumption of alcoholic drinks exceeds the quantity which gives rise to the probability that more than one part of alcohol to five hundred of water may exist in any part of the circulation, harm, in some form or other, must result. That harm need not necessarily be permanent, and its cause may be removed altogether from the system, or it may be partially removed, a particle of matter being left *in situ*, which acts as a foreign body when alcohol is again taken, aggregating to itself fresh coagulated matter or freshly agglutinated corpuscles, by which the symptoms of alcoholic excess are rapidly induced when those particles are situated in any of the primary nerve-centres.

We may fairly assume that there are occasions in which stimulants may be useful and even necessary; but as habitual drinks they must be hurtful, unless more diluted than we are accustomed to take them, and it appears to be our duty as medical advisers to forcibly state this fact to those consulting us, and to advise their non use in daily life.

Having come to this conclusion as regards their use as common articles of food, we may now inquire when they are likely to be beneficial as medicines. To enable us to answer this question satisfactorily, we must study their effects a little more closely than we have yet done.

A stimulant in moderate doses promotes the secretion of gastric juice; it brings a flush of blood to the capillaries which surround the gastric follicles, producing congestion immediately. This is relieved by a free flow of gastric fluid, and the rapidity of digestion is promoted. But the action is followed by a reaction, and the next day there is a deficiency of gastric juice, and, as a consequence, a want of appetite. The deficiency may be remedied by another dose of the irritant. The dyspeptic symptoms are relieved for the time being by a "pick-me-up", and so each daily exhibition leads to increased dyspeptic disturbance, until the follicles are so altered that the whip no longer acts, and the general health fails. If an excess of stimulant be taken at any one time, it acts immediately on the pepsin in the gastric juice, as well as the lining membrane on the vessels, and destroys the power of digesting and rearranging the materials which are contained in the food.

The rapidity of the current of blood being delayed in the capillaries of the stomach, their tension is interfered with, they dilate, and a larger quantity of blood is present than is right; as a sequence, local warmth is promoted, and, in vulgar parlance, "coppers are hot". But it has been fully proved by accurate observers, that the quantity of heat in the body is not materially added to by alcohol, but that, on the contrary, there is a reduction from the general amount in consequence of the loss which arises from increased radiation from the surface of the body. The temperature of the "dead drunk" man is lower than that which usually marks the natural heat of the body. This rule does not obtain at all times, as there are exceptional conditions which occasionally modify it. A dead drunk man often has some disease going on in his body which raises the temperature to above 98.5 deg.; but if there be no active disease, and if the temperature of the body of an insensible person be found below the natural standard without any evidence of collapse from any other cause, it may be safely assumed that he is drunk rather than that he is suffering from active cerebral lesion.

The picture which I have drawn of the gastric vessels may be found in any other organ of the body. There is dilatation with reduced power of contraction. This vaso-motor paralysis, so to speak, is more continuous as well as more complete in some organs than in others, and some forms of alcoholic drinks produce it much more certainly than others. This is the case if the alcohol be impregnated with some of its allies, especially amylic alcohol and fusel-oil; these latter are always more or less present in potato spirit, with which wines are commonly fortified. The influence of these alcohols is very decided upon the nervous centres; they immediately produce some of those exaggerated forms of drunkenness in which violent excitement and maniacal delirium are manifest. They make the fluid pleasanter to the taste; and some of their forms are frequently added for the purpose of producing a so-called "bouquet". Their effects are far more serious and immediate than those which follow from the simple use of ethylic alcohol. Time fails me to do more than simply allude to this important point. It may be that some conditions of the body, which arise from a continuous soaking with alcohol, may enable it to change ethylic alcohol into some of the heavier forms: fusel-oil may be manufactured, so to speak, in the human economy itself. The odour of the breath of a dead drunk man is often more than the odour of alcohol; but upon this point chemists have not yet afforded any safe information.

It is uncertain whether the congestion arises from an immediate action upon the tissue of the capillary, or whether the first effect of the alcohol may not be on the nerve, or whether an effect upon the nerve-

centre may not also accrue, as well as a local effect be produced before vaso-motor paralysis can arise. It may, like the blush of shame or the pallor of fear, arise from direct nerve influence, or it is possible that the blood, altered by the alcohol, may be unable to affect the nerve-centre so as to exert its controlling influence upon the particular set of capillaries more immediately concerned, or it may act in different ways according as the membrane is or is not altered by the alcohol. Be it as it may in its first origin, the effect is to interfere with the proper renovation and nutrition of the part and to commence a disease of the particular organ affected. Dyspepsia is the first outcome of the use of stimulants, and as a sequence to a common result, viz., inflammation of Glisson's capsule, we may have so-called cirrhosis or fatty degeneration of the liver, and similar changes may take place in the kidney; the heart and large blood-vessels suffer directly or indirectly; the muscles may be destroyed, or the nerve-tissue of the brain or spinal cord may be the parts which show the effect of the reagent first.

There is another class of disease not always so clearly identified with the administration of alcohol. I seldom meet with acute neuralgia in the total abstainer, whilst hysteria is in a great measure absent in those families whose ancestors have been perfectly temperate people. I have traced back several cases of strongly marked hysteria, and in all I have found a certain dependence upon alcohol, not only in the patient, but also in the patient's immediate ancestors. I have met with numerous cases of acute neuralgia in highly sensitive females; it is generally styled agony in those who are hysterically inclined; some declare that it is only relieved by alcohol, or chloral-hydrate, or some other narcotic. The medicine allays the pain if given in sufficient doses; but, as the effect of the dose goes off, the disease returns with still greater intensity until, at length, the stomach rejects the remedy, or some other circumstance comes into play which causes it to be laid aside. The pain has then to be borne with for a time, but after two or three days of comparative abstinence, the pain subsides and the patient is in comfort. There is then, from some accidental cause, a transient return of pain; the stimulant or the narcotic is again resorted to; it relieves for a short time, but that relief is purchased by a return of acute pain; there is soon afterwards another paroxysm, and the whole course is gone over again.

A close attention to numerous cases of this kind, both in high life and low life, has satisfied me that, so long as the alcohol is given sufficiently in excess to induce moderate vaso-motor paralysis, there is relief from the pain; but, as soon as that influence lessens, there is an aggregation of altered fibrin, microscopic in quantity, either in the capillaries which supply the sentient nerves or in the nerve-cell itself, which sets up an irritation, which is felt at the periphery of that particular nerve, and neuralgia results as a sequence of that irritation.

Many kinds of so-called rheumatism have a similar origin. The imbibed alcohol affects different parts of the cerebro-spinal nervous system, according as the result attaches itself, as altered matter to one or other class of nerve-cell, and neuralgia, or rheumatism, or rheumatic gout, as they are often called, or even gout itself, is the outcome of the action.

The cases of neuralgic disease, to which I more especially refer, occur in highly hysterical constitutions, and are not generally accompanied by any cutaneous capillary congestion, except when neuralgic pain is absent. There is sometimes great mental power in this class of cases, a brilliant intellect or great genius, which only shows itself when the cerebral capillaries are congested and the cutaneous system gorged with blood. These cases generally go from bad to worse, and end in suicide, or as general paralysis or dementia. The tissue of the brain and spinal cord being subject to changes which correspond, in a great measure, with those diseases of liver and kidney which are induced by alcohol, a low form of inflammation is set up first, and after that atrophy from impaired nutrition or fatty degeneration, ending in so-called white softening.

There is also a class of cases, not so generally attributed to alcohol as a cause, which I believe to have their origin in its habitual use, which are due to spinal irritation, and are sometimes called spinal neuralgia.

If time would allow, I could detail to the Society numerous cases in which so-called rheumatic pains have continued month after month and year after year, apparently relieved for a time by the use of stimulants; but the use being always followed a day or two afterwards by renewed pain and general distress, and yet the amount of stimulant taken has been in no way excessive. In such cases, I have omitted the use of stimulants altogether, and, after a few weeks of further suffering, the pains have subsided and there has been a fair recovery. Once or twice, I have suspected locomotor ataxy, which developed when the patient has persisted in the use of stimulants, but it has not done so when they have been given up. Such cases are generally associated with a lithic acid diathesis. However much we may try to cure them, we cannot succeed effectually unless we enforce total abstinence, even putting aside

pharmaceutical tinctures. The plan is often given up by the patient too soon; he finds that the pains are at first even more severe; he becomes disappointed and low spirited; then some acquaintance advises him that abstinence is doing him harm. He takes stimulant unknown to his doctor, he feels renovated by it, his pains are eased, and he falls back into his old habits before there is time to effect the removal from his body of the remains of former doses of his favourite drink. He is then quite convinced that the treatment is wrong, and he will not continue it, whilst, if he had persevered a few days or weeks longer, he would have found relief and been on the high road to obtain a perfect cure.

These cases are allied to those of the habitual drunkards and so-called dipsomaniacs, who are persons who have produced so much mischief in their nerve-centre that they are unable to take even a moderate amount of stimulant without a catarrhal state of the stomach supervening, which at once gives rise to an irresistible drink-craving from which they have no escape if they can obtain alcohol. In such cases, there is always an altered state of blood-vessel, or some interference with the nutrition of the cerebral organs, such as a varicose condition of the arterioles or small veins in the nerve-structure, the result of alcoholic excess, which is at once renewed by each application to the wine or spirit bottle. There may be in such cases a cirrhotic condition of some of the glands, or else a fatty degeneration which is incompatible with healthy vigour. These conditions may be removed in their early stages, as well as all other morbid results which are not self-productive, if proper measures are taken to promote their removal. The first and most important step is the immediate and total abstinence from all kinds of alcoholic drink.

The principle upon which we propose to cure the habitual drunkard is to restrain him from the use of his liquor, so that he may eventually recover his health and his power of self-control. There are several stages in this process. First, his digestive power has to be restored: a very difficult and a very slow process. Then the deposits which have already taken place in his glandular system, his blood-vessels and nervous centres, have to be removed, and altered membrane has to be restored. Simple food with healthy habits of body reduce the alcoholic saturation to a minimum, and enable the patient to get healthy digestive power.

The dyspeptic state must be cured before the alterations in glandular organs can be removed; they must do their duty properly before the nerve-tissue can be renovated; and, until the whole are restored, any return to alcoholic diet is followed by relapse. It is only by long continued self-denial that cure can be effected. That I have not overdrawn the picture as to the condition of the nervous system and the seat of disease in such cases, is shown very fully by Dr. Magnan in his work on *Alcoholism*, which has been translated by Dr. Greenfield. It abounds with instances which prove most clearly that the immediate action of alcohol is to dilate the capillaries of the nerve-centres, increasing them to three or four times their ordinary dimensions, and thus paving the way for that atrophic degeneration which is frequently associated with other changes in advanced states of alcoholism. The cases detailed by Dr. Magnan are very instructive; and, if taken in conjunction with others, in which, with similar symptoms, the microscope reveals changes which were formerly unsuspected, we cannot doubt at all as to cause and effect.

The hallucinations and delusions which accompany excess of alcohol even in young beginners are associated with capillary dilatation; and, as a sequence, there is a pressure on nerve-substance which cannot be repeatedly renewed without the risk of subsequent atrophy or degeneration of one part or another of the tissue immediately affected.

Is it to be wondered at that cure in such cases is only to be obtained by long continued treatment? Is it a fair objection to take to long continued treatment, that relapses are common? Can relapse be considered a reason for not attempting cure; and is it to be endured that, with a knowledge of the capability of cure, we should not have power given to us to attempt it, because the disease is said to be the result of a vicious habit?

An opinion was expressed to the Lords' Committee on Intemperance that dipsomania is a kind of epilepsy, and that its attacks correspond with the latter disease. I cannot think that there is any foundation for this idea, any more than that attacks of asthma or any other recurring disease may be epileptic. That dipsomaniacs often become epileptic is undoubtedly true; but many forms of disease tend to set up epileptiform attacks before a fatal termination arises. Epilepsy will arise in any kind of constitution; but drink-craving will only be induced in those who court its advent by taking excess of alcohol.

Another eminent physician, who agreed in the main with Dr. Brunton, expressed an opinion that habitual drunkenness may be cured

by punishment; and that, if its victims were brought under the influence of good education, and some reasonable punishment inflicted, they might be trained to good habits. I do not think so, unless alcohol is rigorously withheld. Some of the worst cases of dipsomania that I have met with have occurred in highly educated individuals; and it is found, by overwhelming experience in the magistrates' court, that punishment has no deterring effect in preventing drunkenness in those who have been two or three times convicted, and who have lost their self-respect and power of self-control. The inconsistency of such an argument is seen at once; for such cases may be epileptic, and yet they are to be dealt with as criminals and punished accordingly.

It is true that, if the alcohol be withheld, the so-called "epileptoid attack" will not come on; for, like the so-called "sunstroke", it is in a great measure caused by the imbibition of drink; but it is not consistent with our ideas of justice to punish a man because he has had either of the conditions mentioned, which are undoubtedly diseases. The frequency with which the plea of sunstroke is urged as a reason for mitigation of punishment by the drunkard in the dock of a police-court is not a little remarkable; and, although I have never myself allowed that plea to be used in arrest of punishment in those cases in which the free will of the individual was manifest beforehand, yet it did sometimes avail when the individual was not a free agent. The plea set up has satisfied me that there is an intimate connection between the embolism which causes the so-called sunstroke and the alcoholic soaking in which the victims indulged. Like to outbursts of passion and to other vicious practices, there is an inability to exercise free will at first; but

"Facilis descensus Averno,
Sed revocare gradum, superasque evadere ad auras,
Hoc opus, hic labor est."

The work and labour required to return to the right path are greater than most men, unaided by restraint, are able to use. The battery of nerve-force, in which free will and the higher orders of mental powers are produced, is damaged by the reagent, and is unable to set up those actions which are required for the production of self-control and self-respect. Thus that which was a vice in its early stages becomes a disease later on in life.

The man who refuses to exercise his own self-control when he has the power, after a time becomes a nuisance and a scandal to society at large. He is slowly committing suicide, and is ruining the happiness, and probably the worldly prosperity, of his immediate relations. He ought to be deprived of his liberty to do wrong to himself and others, until such time as his tissues are restored to that state in which his power of self-control may be regained.

So far, the effect of alcoholic drinks seems to be for evil and not for good; and some persons ask very pertinently why they should be retained at all in the *Pharmacopœia* as therapeutic agents, when other stimulants might be used with as much advantage in those cases in which they appear to be required. But so powerful a means to evil, like every similar thing, may be used beneficially, if used aright. There are conditions of the body in which it performs a duty more satisfactorily than any other stimulant. It seems to preserve the body from decay, performing a vicarious duty, being sacrificed itself, and so saving the patient's life. It interferes with the normal changes which are required for the continuance of health, and retains the products of tissue-change in the blood; but in certain forms of disease, when the blood is rendered impure by the retention of those matters which should be excreted, if the retention have not been caused by alcohol, and great heat be developed in consequence of the combustion or oxidation of such matters, alcohol seems to take the place of those of the tissues which are oxidising; it lessens temperature and saves the fabric from death. This effect is seen most frequently in some zymotic form of disease; there is a great tendency to sloughs and bed-sores, which tendency is materially diminished in those who have had alcohol administered, as compared with those who have not.

The therapeutic effects of alcohol, when exhibited in certain typical forms of fever, are most marked. The cases which require it are those in which there are a dry tongue and skin, no sickness, and no indication of cerebro-spinal lesion. If there be any indication of the latter with a moist tongue, stimulants universally do more harm than good, because the tendency is then to increase the congestion upon which the lesion depends. When a case is benefited by alcohol, there are soon produced a lessened temperature, a slower pulse, a moister tongue, and a quieter condition of system generally.

In these cases, the effect of alcohol has to be most carefully watched, and the moment there is evidence of cerebro-spinal lesion or of alcoholic excess, its use must be discontinued. I have seen patients in serious danger, which has been brought about by the wine and spirits

which have been too freely exhibited, rather than by the disease itself. There is something so utterly repugnant to all moral feeling for a medical prescription to be the instrument by means of which a man is sent *drunk* out of the world, that I need hardly insist in this assembly upon the necessity of watching for the probability of such a result. But, in those cases in which the remedy is beneficial, it may sometimes be freely pushed in a marvellous manner with most excellent results.

The cases in which the temporary administration of alcohol may be useful are those in whom the surface of the body has been chilled, and in whom the powers of life are weakened in such a manner that the heart is unable to do its work of propelling the blood to the capillaries with its usual ease. The action of alcohol in these cases acts something like taking off the pendulum of a clock; the spring is able to work so much faster, and to get over an extra amount of beats in the same space of time. Internal congestion, irregular circulation, so to speak, fullness in one place, with unfilled cutaneous capillaries, are cases in which alcohol may be exhibited with immediate advantage. The tension of the capillaries being overcome, there is a diminution of the impediment to the flow of blood, and, as a sequence, a possible diminution of the internal congestion. So, if the action of the heart itself be too weak to overcome the tension of vessels, we may induce a kind of vaso-motor paralysis to enable it to do its work more easily for the time being, and get over a passing difficulty in that way. How far it is prudent to push this vaso-motor paralysis for any length of time is another matter, as a continuance of it must lead to the first stages of tissue-change, which then becomes itself of primary importance.

There is a class of persons to whom alcohol may be useful even in comparative health. When the powers of life begin to decay, when the force of the heart is not enough to transmit the blood to the extremities of the body, and the aged person feels the influence of cold, the blood scarcely passes through the unfilled cutaneous capillaries; by dilating them and diminishing their tension the heart is relieved and the functions of the skin and other organs are more efficiently performed. A moderate dose of alcohol taken with food is always beneficial to an old person under such circumstances, and I cannot see any reason why it should not be administered. Again, there are conditions sometimes present in youth in which alcoholic drinks also are useful; no other kind of stimulant acts so equally and so satisfactorily; there are a few cases—and a very few only—in which they may be administered in middle-age; taken as a whole, a weak heart with unfilled cutaneous capillaries will be always found in those cases in which it is likely to be beneficial. The stethoscope most clearly reveals them, the impulse of the heart and the general rhythm of the pulse not at all corresponding.

So long as alcohol is taken only in such quantities that it becomes utilised at once in the equalisation of animal heat, no harm can result, but if there be more than sufficient to do this, and its specific action be produced on the blood itself, mischief sooner or later results. In this it differs from fat, with which it seems to be allied as a diet, which, if not used up, may be stored in its proper place out of the way, but the changed matter which arises from an excess of alcohol is always stored in the tissue of an organ. Thus its effects may find a home in the capillaries themselves, interfering with their elasticity, or it may be laid down in muscular tissue, and there is then a decrease of power and so-called rheumatic pains are produced. If nerve-tissue be the seat, there is interference with the power of thought, with volition, self-control, and other mental actions, the effect of which is to render the patient a weak-minded and unstable character. In a state of health, it does not prevent the waste of tissue, whilst it does prevent the discharge of effete products. There is a decrease of the formation of carbonic acid, and in this is probably found the reason why there is a decrease of temperature. It stands in the way of more beneficial actions unless it be at once used up. If there be no muscular exercise going on, or no extra mental labour called for, and no action at all required except that which keeps up temperature to a normal standard, it is hurtful; work which is kept going by continual doses of alcohol always ends in a break-down. If it be taken for the purpose of increasing muscular exertion, ultimately there is great loss of muscular power, as athletes well know. If mental exertions be kept going by alcohol, there is mental break-down, as the lunatic asylums testify; whilst it is quite impossible for organic life to be performed in a healthy manner if alcohol be habitually used to promote digestion. The evidence which was afforded by the Abyssinian and Ashantee campaigns and the Arctic expedition help to prove this, whilst the unanimous opinion of those who are competent to judge informs us that, in the Russo-Turkish war, the temperance of the Turkish soldiers enabled them to bear injuries with impunity, whilst similar injuries easily caused the Russians to succumb.

It has been argued by some experts that it is unwise to leave off

alcoholic drinks at once; that it is better to do it by degrees. I never could see any reason for this. The experience of all gall surgeons is in accord with my idea, that no evil, but real good, results from immediate and total abstinence. I am satisfied that when mischief is arising from its use, it is best to immediately desist from it. If mischief then result, it is because it had already commenced, and not from the abstinence; although when a man has been accustomed to his daily dose of alcohol for a long series of years, and his constitution has become acclimatised without evidence of tissue-change, he should not abandon its use. I could not advise an old man to give it up; such a change would certainly do harm, not good.

I cannot leave the subject of nerve-disturbances produced by alcohol, without referring to the connection which exists between intemperance and crime and lunacy. Statistics are not to be depended upon, because they are not drawn up with scientific accuracy, neither are they usually based upon similars. Yet there are some facts which are something more than coincidences. There is an undoubted increase in the consumption of alcohol per head of the population. The report of the Select Committee of the House of Lords on Intemperance tells us that the consumption per head in the United Kingdom of the following articles in 1876, as compared with 1861, had increased.

	1861.	1876.
British spirits	0.68 gals.	0.91 gals.
Foreign spirits	0.13 ..	0.35 ..
Wine	0.37 ..	0.57 ..
Malt	1.61 bus.	2.02 bus.

The increase year by year was progressive.

The same progressive increase was observed with regard to crime.

	1861.	1876.
Committals for drunkenness	83,196 ..	203,936
Committals for assaults	85,448 ..	122,913

There is also a rise in the number of lunatics which the increase of population does not account for. In 1861, there were 39,645 under the supervision of the Lunacy Commissioners; whilst in 1875 they had increased to 63,793; and out of thirty-nine medical attendants of lunatic asylums who were consulted by Canon Ellison, thirty-two replied that, in their opinion, there was a distinct connection between an increase of drinking and lunacy as either cause or effect.

The Chief Inspector of the Metropolitan Police shows us that 251,125 persons were charged at the various police-courts in the Metropolis with drunkenness in the ten years ending 1876. That more than a quarter of a million of persons had within ten years recklessly thrown away their liberty of action in the eyes of the public, by rendering themselves slaves to a vicious habit, is a fact which must make men thoughtful as to the future of our people.

The poisonous nature of alcohol in large and continuous doses has never been doubted, and no one can study its effects on the death-roll of this country, or read Dr. Magnan's work on Alcoholism, without being thoroughly satisfied on that point. Dr. William Farr, in his supplement to the thirty-fifth annual report to the Registrar-General, tells us that those who supply the community with drinks, food, and entertainment in inns and beerhouses are shown to suffer more from fatal disease than any known class. He says also that the majority of the publicans and the greater part of the wine merchants are comparatively temperate; yet, as the mortality of the whole trade is high, the mortality of the intemperate among them must be excessive. In the same report, the deaths amongst those engaged in the sale of stimulants is returned at 2,538 out of 74,367 persons so occupied, which gives a death-rate of 30.4, whilst 1,988 blacksmiths are registered out of a gross total of 108,939, a death-rate of only 18.2 per 1,000; that of men in all industrial occupations was 19.9. The report tells us not only that the poisonous effect is undoubted, but that the effect is progressing in an increasing ratio. Thus we find that in the year 1857, 323 deaths were reported in which the verdict of a coroner's jury was death through excessive drinking; in 1875, the number had increased to 516. It also tells us that, whilst in 1857 294 deaths were directly attributed to intemperance, 569 were so registered in 1875. The deaths from delirium tremens also reached the number of 485. Thus in one year, 1875, we actually have 1,566 deaths, in England alone, directly caused by alcoholic poisoning—not one-hundredth part of those which are hastened by alcohol. But supposing 1,566 deaths had occurred from hydrophobia or serpent bites, or had happened to passengers on the railways in the kingdom, commissions and edicts and proclamations from Privy Council would have been issued, and Acts of Parliament would have been rapidly passed to provide against the continuance of this wholesale slaughter. Not so, however, with the poison of alcohol; it works its way, in a great measure unheeded by the Legislature, except so far as it is made to be a means for increasing revenue by increasing the sale of the poison itself.

I have endeavoured to prove the truth of the proposition by statistical data obtained from the Registrar-General's publications, attested by the returns of the Census Commissioners; but, unfortunately, they do not refer to the same districts and are not based upon exactly the same foundations, so that the data do not correspond. There are, however, some striking points made out. Thus, taking the "England Tables", the mortality in the year 1871 among ministers of religion was 666; of these, 464 lived to be over forty-five years of age, or 69 per cent. Taking the number of deaths among gardeners—men much exposed to vicissitudes of climate—1,949 died; and of these, 1,335, or 68.2 per cent., lived more than forty-five years. Then, passing to the other end of the death-roll, I find, out of 725 brewers who died in the same year, 294, or 41 per cent., only reached the age of forty-five; and of 2,728 publicans and eating-house keepers who died, 49 per cent., or 1,330, were over forty-five. These facts show that the occupations which bring men into contact with the sale of alcoholic drinks materially shorten their lives.

When we come to deal with the character of disease which causes death, statistics do not help us. I have waded through an immense mass of figures without satisfactory result; for upon this point statistics prove nothing. A reference to the physiological effect of alcohol will easily explain why this is so. I have shown that its effects may fall upon any one of the excretory organs or upon any part of the nervous system. It follows that a very large number of persons may die from disease induced by a too frequent application to alcoholic drinks without the remotest suspicions in the minds of themselves or their friends that such is the case. Disease of brain, heart, lungs, kidneys, stomach, indeed of every organ of the body, may have its first origin in alcoholic excess, although the person so affected may be a temperate man and have never been drunk in his life. I have, therefore, been reluctantly compelled to put statistics aside. I have also looked carefully into the reports of the National Temperance Hospital, and have compared it with reports of similar institutions in which stimulants are freely used; but as the results, as based upon the reports, are fairly open to objection, I do not use them here. The difficulty of obtaining the life-history of a given case renders all hospital returns unsafe and unsatisfactory as bases upon which to found a basis for the treatment of disease. That temperance does promote length of life is a truism which even the intemperate are ready to grant, although we have not much statistical proof of its soundness. I may, however, support my statement by a return which has been kindly given me by a director of the Temperance Provident Life Office; being a statement of mortality from 1866 to 1877. The insured lives are divided into two sections: teetotal and general. The temperance section gives, as the result of twelve years' working, 1,619 claims expected, the actual number being 1,156; whilst in the general section, 2,846 claims were expected, 2,807 were made. The claims in the temperance section were 28.5 below the expectation, whilst in the general section they were 1.4 per cent. below only. This return is a clear proof of the commercial value of abstinence.

In concluding my subject, I have only to remark that alcohol in any of its forms may be a good medicine, but is a bad diet, and that its action as a poison is visible among all ranks of society. It is our duty as medical men to advise our patients accordingly.

WORCESTER.—The estimated population in 1877 was 34,626; the deaths 865; and the death-rate consequently 24.05 per 1,000, and the zymotic death-rate 4.2, which is much in excess of the average, in consequence of the great mortality from measles, scarlatina, and diphtheria. Dr. Strange states that he has inspected the whole of the district during the year, and especially the poorer houses; and finds a great improvement in their sanitary condition as compared with former years, as roofs have been made watertight, yards better paved and drained, and the interior of the houses is more cleanly. Articles of food were analysed, and found to be fairly good; the mortuary is finished; and the removal of nuisances has been fairly carried out.

CREWE.—Dr. Lord reports that a special inquiry was made during the year as to the sanitary condition of the workshops, lodging-houses, bakehouses, slaughter-houses, piggeries, etc.; and fifty-six notices to abate nuisances on these premises were consequently served. The water-supply is good, most of the sewers ventilated, and the streets kept clean; but he says that the ash-pits are a great nuisance. The birth-rate was 37.5 and the death-rate only 14.1 per 1,000 living, against 15 in 1876. Dr. Lord, however, is not satisfied, as there were nearly 50 per cent. of deaths under five years of age. The chief mortality from zymotic diseases was caused by scarlet fever, and the next by typhoid, viz., eleven; but no special cause is given for these deaths.

CLINICAL LECTURE

ON AMPUTATION AT THE HIP-JOINT:

CASE ILLUSTRATING A NEW METHOD OF COMPRESSING
THE COMMON ILIAC ARTERY.

By RICHARD DAVY, M.B., F.R.C.S.,
Surgeon to the Westminster Hospital.

GENTLEMEN,—I shall endeavour to-day to engage your attention on the gravest amputation in surgery, viz., that at a hip-joint. For the practical elucidation of this lecture, I will read the notes of the boy's case who is now in this theatre; next I will describe in detail the method of operating; and will lastly carry out the whole procedure on the dead body.

C. C., aged 9, school-boy, was admitted into Mark Ward on July 10th, 1876, suffering from morbus coxae (femoral and acetabular) on the right side. In 1874, he had two severe falls, one especially from a cliff near Yarmouth; pain in the right hip and lameness set in at once. Some months afterwards, swelling and puffiness were noticed over the right hip; the abscess, however, did not open over the articulation, but burrowed along the adductor group of muscles; and, in June 1875, a sinus formed at the junction of the middle and lower third of the thigh. Suppuration was watery and profuse; the limb became everted and drawn up towards the abdomen. He was admitted because alarm had arisen from his emaciation. From July 1876 until January 1877, he was kept in the recumbent posture; had a most generous diet and quinine; rest to the joint was maintained; and at times he was slung in the open air in a hammock. The boy was so surely losing ground that, on consultation, it was agreed to remove the right thigh at the hip-joint.

Method of Operating.—In all severe amputations, one of the first considerations of the surgeon is to anticipate shock and to prevent the loss of blood. I am inclined to permit any patient to have a glass of wine or brandy and water about one hour before the operation; the result partakes more of a sedative than stimulating character; apprehension is lessened; cardiac tone is gained; fitness for the ordeal is exhibited. The American surgeons, with their characteristic ingenuity, devised pressure on the abdominal aorta for hæmostatic ends during amputations high up towards the pelvis. Lister arranged a horse-shoe clamp and screw-pad for compressing the aorta above the umbilicus. I saw this mechanism (1860) used in Symes's brilliant operation on gluteal aneurism at the Royal Infirmary, Edinburgh; but in 1874, during the delivery of the Surgical Lectures at the College of Surgeons in London by Professor Holmes, I drew the lecturer's attention to the possibility of controlling the aorta, common iliacs, and internal iliacs by pressure through the rectal wall, and wrote the following note to the BRITISH MEDICAL JOURNAL.

"June 20th, 1874.—*Compression of the Internal Iliac Artery.*—Sir, —Mr. Holmes, in his lecture on Gluteal Aneurism at the Royal College of Surgeons, June 8th, mentioned the late Mr. Symes's case, treated by boldly laying open the sac, and restraining the hæmorrhage by Lister's aortic clamp. It may be well to draw surgical attention to the fact that the internal iliac artery may be effectually compressed for a time by pressure through the rectum on the true pelvic wall; a less serious procedure than compression of the aorta through the abdominal wall.—I am, etc.,
RICHARD DAVY."

On January 16th, 1877, this case presented a fair opportunity for testing the suggestion. The right leg and thigh were emptied partially of blood by Esmarch's bandage. Chloroform was administered, and about one fluid ounce of sweet oil was sent up his empty rectum. A straight lever of wood (run smooth and round out of a lathe) was introduced *per rectum*; the small end was applied over the right common iliac artery between the lumbar bodies and psoas magnus muscle; the projecting part of the lever ran nearly parallel to the left thigh.

My colleague Mr. Thomas Bond readily compressed the common iliac artery by elevating the projecting arm of the lever, the perineal tissues acting as a fulcrum. Accordingly, as Mr. Bond elevated or depressed the lever, so did the right femoral artery cease or continue to pulsate. The left femoral was undisturbed, beating with regularity throughout. A long square anterior flap was made by transfixion over the joint; the muscles and capsule were divided, and a short posterior cut severed the limb. The arteries were tied, sutures in-

serted, and the boy placed in bed. About a wineglassful of blood only was lost.

January 30th.—The stitches were removed.

February 3rd.—The ligatures were removed.

May 16th.—He was discharged convalescent. Three sinuses were together weeping half an ounce of pus *per diem*. The boy looked fresh and well.

February 15th, 1878.—The boy says now that he is quite well; two sinuses are discharging a little, and that little is becoming less every day. He gains weight and flesh.

My finger in the acetabulum readily entered his pelvis during the operation; a loose piece of bone was removed; and this pelvic mischief accounts, in my opinion, for the yet present sinuses.

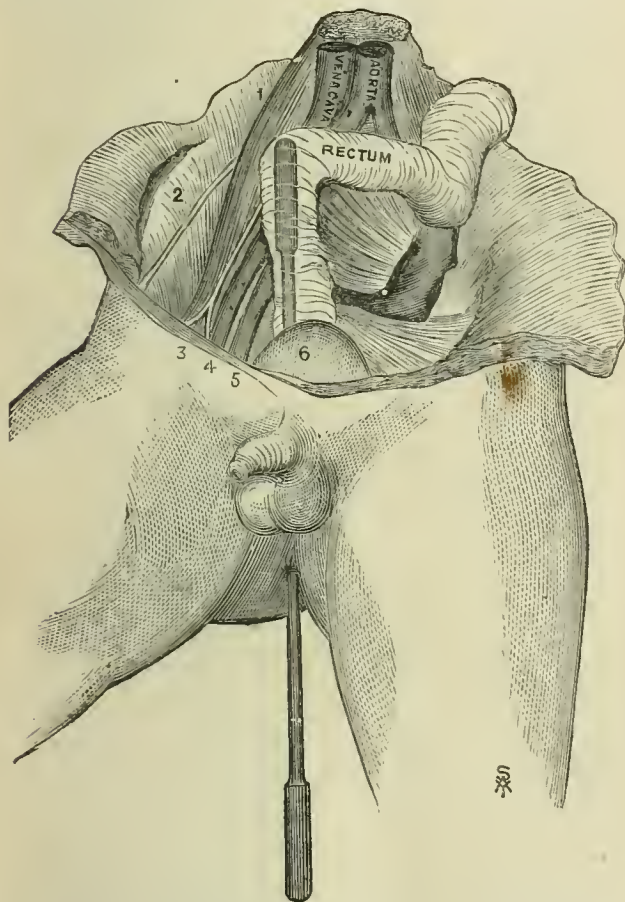


Fig. 1.—The rectum is supposed to be transparent. 1. Psoas magnus muscle; 2. Iliacus muscle and exterior cutaneous nerve; 3. Genito-crural nerve; 4. External iliac artery; 5. External iliac vein; 6. Bladder.

In this operation, I have demonstrated that surgeons possess a new method of controlling hæmorrhage; and as an amputation at the hip-joint must ever represent a grievous loss of tissue, any amelioration in its performance must be welcome to the surgeon and the patient. I venture to say that compression of the iliac artery *per rectum* is less serious than compression of the aorta through the abdominal wall; that the former is more *easy and reliable* than the latter, a straight smooth lever alone being required; that the circulatory system is far less disturbed, by reason of the circulation in the opposite limb remaining undisturbed; and no danger results to the rectum from the lever if guided by the hand of an expert surgeon.

[Mr. Richard Davy concluded by demonstrating the operative details on the dead body; and suggested that this new method of compressing the aorta and iliacs might apply to many operations in pelvic surgery.]

M. RICHTER has, he considers, demonstrated that the gastric juice is a combination of hydrochloric acid with tyrosine and leucine. M. Richter's researches bear especially upon the nature of the albuminoid substances in combination with the acid.

CLINICAL LECTURE

ON

ANTISEPTIC OSTEOTOMY FOR ANKYLOSIS AND DEFORMITY.

By RICHARD BARWELL, F.R.C.S.,
Surgeon to Charing Cross Hospital.

GENTLEMEN,—Some months ago, I spoke to you concerning the value and use of osteotomy in cases of ankylosis of the knee. I mentioned why, in most cases of true ankylosis at that joint, it would very nearly always be found a most efficient substitute for the more severe operation of excising a wedge of bone from the angle. One of the cases brought to your notice in that lecture, was one of true or bony, the other one of false or fibrous, ankylosis. I now show you a third. A. T., aged 14, also a case of false ankylosis, upon whom I performed osteotomy of the femur very close to the knee, and who has now, you see, a quite sufficiently straight limb, with which he walks very well indeed; the better, too, for possessing a slight amount of mobility at the point of ankylosis. Now, before we go on to another sort of deformity, to which I more especially wish to direct your attention, allow me to say a few words concerning this operation in falsely ankylosed knee-joints. There are very many cases of this sort, in which stretching the fibrous bond with a certain degree of force is the best possible treatment. You have seen me do this a great many times so as to procure a very useful and mobile limb. But there are other cases, like these two, R. B. and A. T., in which the surgeon finds one of two impediments. One is produced by extreme and invincible shortening of the posterior crucial ligament, which causes, if the surgeon wrongfully persevere, posterior luxation of the tibia, partial or total, while extension is produced; the other obstacle only arises when the joint has been more disorganised than in the above event, so that throughout what was its whole, or nearly its whole area, fibrous or fibro-cartilaginous bonds unite the bones. If these bonds be fairly long, the knee may simply be put straight by manual power; but if they be short, and if the shape of the joint-surfaces be much altered, considerable force will be necessary, and this force is in such cases extremely likely so to rend the union that a knee movable in all directions—a flail-joint as it is called—will result. This joint on the knee is very useless, or worse. Therefore when, the patient being narcotised, the surgeon meets with such difficulty, that either one or the other of these misfortunes appears imminent, it is wise to abstain from further effort, and to divide the femur as close as he can to its lower end, either then or on some future occasion. The result will be a rapid and safe convalescence, and an extremely good limb quite sufficiently straight and with a certain, perhaps a very useful, amount of mobility at the knee. Thus much I have felt it right to add to the subject of my former lecture. We will now turn to another class of deformity.

Rickets produces certain curves of the bones which, if they persist, are extremely ugly and detrimental. I say if they persist, because it is desirable to guard against the notion that I would advocate operative interference during early childhood, or while there is a fair chance of spontaneous recovery—for a certain number of young people do recover even from pretty severe distortion of the bones, if they can be placed in the best circumstances for such cure to take place. But a large number of such children, especially after a certain age, do not recover, but must remain permanently distorted, unless operative surgery intervene. The cases which I will show you immediately are not the first cases of rickety distortions remedied by surgery, though one of them offers the largest results hitherto attained or attempted. In 1861, Billroth operated on a bent tibia, and has since repeated the procedure (Langenbeck's *Archiv*, vol. i, p. 677); and, in 1874, Mr. Howard Marsh published in the *Medico-Chirurgical Transactions* three cases in which he had partially divided the tibia with the saw and had fractured the fibula, and one case in which he had removed from the tibia a wedge-shaped piece of bone, a very severe operation unlikely to be repeated.

A few words concerning the *rationale* of the method which I practice may be desirable. My mode of carrying it out you have witnessed. It will be seen at once that, if a bone abnormally bent be

divided, and then placed in a straight position, there must result at the place of division an angular interval between the ends of the bone; that is to say, the two flat surfaces caused by the division will not be in contact throughout, but will only touch each other at one side or corner, while the rest will lie apart more or less according to the amount of rectification which the limb required; and it must of course happen that the interval will correspond with the concave side of the faulty curve.

The problem to be solved is so to arrange matters that this in some cases tolerably wide gap between the bone-ends may be most readily and certainly filled up; and I need hardly say that this will occur if we can leave the periosteum over this gap either entire or very nearly so. The weapon which I use is the chisel. I have no hesitation in saying that this is the best instrument for several reasons; one is the absence of detritus, the other the less injury done to soft parts. Let us for a moment consider what the saw must do to the tissues in the immediate vicinity of a cylindrical bone, one, namely, whose section would be of a circular form. The instrument must have a certain play beyond the edges of that bone, and must, therefore, make in its neighbourhood a quadrilateral wound of a size larger than the tangential square, and this wound not cut clean as with a knife, but mangled throughout by the teeth of the saw. I use, then, the chisel (first employed by Billroth) and, through the same periosteal wound, cut in all directions, but not quite through the bone. I believe practice has given me the capability of judging, partly by distance, partly by sense of resistance, and partly by the sound elicited, when I have reached to very near any of the surfaces. There I stop, and I believe can always avoid going through and cutting the periosteum. The rest of the bone is broken, but even in this simple matter there is a certain method. Firstly, the power must be applied in a direction away from the place where the chisel entered; secondly, the jerk though sharp must be very short, the bone moved but very little away from its natural position. Then the rectification must be done slowly and with a slight amount of extension, not for fear of riding (I have never seen such displacement), but simply to obviate tearing the periosteum.

We will go on to the consideration of cases.

E. B., aged 9, a strong looking handsome child, who has been brought up in a healthy house in the country, was sent to me in October 1877, her mother begging that I would do something to put her legs straight. The condition was then, as you see, very ugly. (Fig. 1.) The bones were well consolidated; and, I think, there was no chance of their getting straight without operation. Accordingly—

October 25th—I divided the right fibula on a very oblique line backwards and upwards, so that the ends might ride and obviate, on straightening the leg, separation of the tibia. I then almost divided the tibia from its inner and posterior edge at a right angle with the shaft; the parts left were easily snapped; the leg was slowly straightened, and put up in plaster of Paris: all this was done antiseptically. The plaster supplied, however, was not very reliable. I therefore postponed operating on the other leg.

November 1st.—I performed the same operation on the left side, and treated the limb in the same manner. No fever or pain followed; the wounds were both healed on November 25th, that on the right leg probably a week sooner, but, after dressing it on the 30th, the dressings had not been disturbed. From this date, nothing further is to be said until December 11th, when the child was allowed to get up.*

* On the 14th, the patient was shown at the Clinical Society of London. Certain of the members remarked that she did not walk very well—a defect resulting from the very recent getting up from bed.

but, in a few days, the union was found hardly strong enough to support the weight, and there was a little yielding of the tibia outward.

She was ordered to bed again until January 22nd.

February 1st.—She left the hospital with the limb as now shown, and walking quite well. (Fig. 2.)

I will but detain you with one other case, one in which no fewer than six bones were divided.

E. E., aged 17, an inmate of the Cripples' Home, where she first came under my notice, begging that something might be done to help her. I therefore took her into Hospital on March 27th, 1877. She was fairly healthy, but the strongly bowed legs were a great trouble. She could not walk, since at each step her body had to be thrown over so much that she either fell or was obliged to seize on some support. Crutches, owing to this oscillation, impeded her, and were worse than useless. The plate, as here given (fig. 3), speaks for itself; but it is well to give some measure-

ment as more accurate than mere appearance. When she stood with the inner malleoli in contact, the knees were just over six-and-three-quarter inches apart.

April 12th.—I divided the fibulae (obliquely), and then the tibiae about an inch below the head of the one and the tubercle of the other, and then put the legs straight in plaster of Paris. Both limbs were similarly treated.

May 3rd.—Neither pain nor fever resulted from the above operation; there was fair union. I should have operated a week ago on the femora, but that the catamenia, which were excessive, intervened. To-day, I divided both femora above the junction of the middle and upper thirds from the outer side, and put the limbs in plaster of Paris. She was placed on a couch, properly arranged to obviate any necessity for movement.

July 10th.—The plaster was removed; but the union of the left was less strong than the right, and it was placed on a MacIntyre's splint.

July 11th.—The patient got up, and was placed on crutches.

July 30th.—She could walk very well, balancing rather than supporting herself with crutches. Another patient called her rather suddenly: she was startled, turned quickly, fell, and broke her right thigh obliquely about an inch and a half above the artificial fracture.

The second fracture did not do so well as the one I had purposely made: it was very difficult to prevent the bone from riding, and to keep it straight. The progress was slow, and the result a slight bend forwards of this part, and a shortening, which the original section had not produced.

On December 28th, 1877, she left the Hospital, able to walk well, and with the limbs very fairly straight.



Fig. 2.



Fig. 1.



Fig. 3.

A little examination of the plate (fig. 4) shows that the right femur is more bent than the left—the result of the accidental fracture; and, had this not occurred, there is no doubt that the knees would have been almost, if not quite, in contact. Even as it is, the result is such as to render it doubtful whether she is now a fit inmate of an institution for cripples.

These cases show clearly that osteotomy with the chisel is an operation unattended with danger, with fever, or indeed with more than very trifling pain; by its means we can rectify deformities and lameness, hitherto considered beyond the reach of art; and, as in the case of ankylosis, may substitute a very mild operation for one greatly more severe. In none of the many cases on which I have performed this operation has the fracture suppurred or inflamed, but the bones have united with remarkable rapidity, even when a large wedge-shaped gap must have existed.

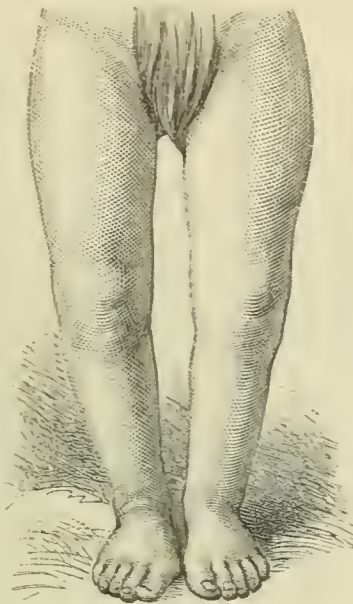


Fig. 4.

[To be continued.]

CASE OF PARTIAL CONVULSIONS (JACKSONIAN EPILEPSY); WITH OBSERVATION ON PERCUSSION OF THE SKULL IN DIAGNOSIS.*

By ALEXANDER ROBERTSON, M.D.,

Physician to the Town's Hospital and City Parochial Asylum, Glasgow.

I SHALL first record this case, and afterwards direct attention to its points of special interest.

J. N., aged 38, engineer, while in Madras, in 1868, had sunstroke. Previously, and also after its occurrence, he was of drunken habits. In 1869, he had syphilis—a chancre on the penis, followed by indolent bubo in the groin, and a severe and protracted attack of pains in the joints and bones, which were worse at night. There is not, however, any history or existing indication of nodes, nor are there any glandular enlargements, and he has a healthy aspect. About seven years since, he began to suffer from seizures of an epileptiform character, recurring every six weeks or two months, but latterly at rather shorter intervals. These have occurred in different forms; but the following has, upon the whole, been the most frequent. Spasmodic action, usually without premonitory symptoms, begins in the right hand as a whole, though, in a number of instances, it has begun in the little finger; then the hand becomes clenched and bent at the wrist, the forearm is flexed on the arm, and the head is drawn towards the right shoulder. The arm, in this contracted state, is then jerked across the breast for about a minute, after which the attack ceases. Consciousness is not impaired during the whole time. On a number of occasions, the convulsive seizure has been limited to the right lower extremity; beginning in the right foot, extending thence upwards to the thigh, and ending in forward and backward movements of the leg, which lasted for some minutes. At other times, however, and more frequently of late, the attacks, beginning in the arm and progressing as described, have extended to the side of the body and right leg, and have advanced to unconsciousness. When this happens, the last event he is aware of is the forearm turning outwards from the chest and becoming supinated. So far as can be ascertained, the convulsive action seldom affects the left side. The succeeding unconsciousness may last a quarter of an hour or even longer. All the fits are accompanied by severe pain in the convulsed members. They are also followed by more or less of paralysis in the same parts, which, however, does not generally last above three or four hours, and I

may pass away in a much shorter time should the preceding convulsions be slight.

On September the 24th, he had a severe fit. The convulsions were stated by an intelligent patient beside him to have lasted about three minutes, and the unconsciousness about ten minutes. I saw him just after he had become fully conscious, and proceeded to test the motor power and the sensibility in the extremities which had been convulsed. The following notes were then made. At twenty minutes after the fit began, when I placed my fingers in his right hand and asked him to squeeze them, no appreciable pressure was felt on his attempt, while the pressure with the left hand was moderately firm; at thirty minutes (tested by dynamometer), pressure by the right hand two pounds, left hand thirty-five pounds; at fifty-five minutes, right hand twenty-six pounds, left thirty-seven pounds; at two hours, right hand fifty-four pounds, left fifty-one pounds. The patient is right-handed. At twenty minutes, he could scarcely raise the right leg from the bed; but after that, power was restored to it nearly *pari passu* with the arm. At twenty minutes, he scarcely felt sharp pinching in either the right upper or lower extremity; at thirty minutes (tested by æsthesiometer), both on the back and front of the right hand and wrist the two points of the instrument were felt as one at nine inches, whereas on the palm of the left hand the points were felt as two at one inch and a quarter, and at three inches on the back of the same hand; at an hour, on the front of the middle finger of the right hand both points were felt at an inch, and, on corresponding finger of the left hand, at three-quarters of an inch—sensation being all but fully restored in the affected hand.

Some months ago, I happened to be in the ward, when he had a seizure with very different features from those hitherto described. He began to cry out in a mournful strain, "Oh dear! oh dear!" and, on my going up to him, he asked me, with a wild frightened aspect, what was going to be done to him. In about half an hour, he regained his mental composure. There were no convulsive movements. He states that previously he had suffered from three other such turns.

He is of average intelligence; and, in illustration, it may be mentioned that he has the charge of the galvanic batteries in the hospital. He states, however, that his memory is rather impaired. He does not suffer from headache, but, on tapping somewhat firmly with the point of the finger all over his head, he feels pain of moderate severity on the left side, above the centre of the left ear, over a nearly circular area two inches in diameter. The lowest part in the circumference of this space is two inches above the highest point of the ear. He was not aware of any pain or uneasiness in this region till his attention was directed to it by the percussion. There is no indication of any other impairment of nerve-function, except a little deafness of both ears, probably due to his occupation, and a just appreciable greater width of the right pupil than the left one. The retinae are normal in appearance.

The treatment has consisted chiefly in the administration of the iodide and bromide of potassium. He is at present getting the iodide in thirty-grain doses, twice daily. Besides, since the discovery of the local pain, which is only lately, the first of what is intended to be a succession of blisters has been applied over the affected region.

REMARKS.—1. The lesion is probably situated on the surface of the brain, involving the inner membranes, in the area corresponding with the dull pain, and thus implicates the motor region for the extremities, as indicated by Hitzig's and Ferrier's experiments.

2. Percussion of the skull was of material aid in the diagnosis. By this mode of examination, namely, smart tapping by the finger, the force applied may apparently be transmitted to the membranes and surface of the brain, to such a degree as to induce pain in these parts, if they are in a morbid condition. Obviously this test will more likely be of service when the disease is circumscribed than when it is generally diffused. It is worthy of note that, as no pain is felt till the part is percussed, probably the lesion does not implicate the skull, or the skull and dura mater; for when these parts are involved, and particularly when syphilis is the cause, the pain at the affected points is usually distinct enough, especially at night, and indeed is often very severe.

3. The starting-point of the morbid action inducing the fits would seem to have been sometimes in the centre for the arm, at other times in the centre for the leg, and occasionally in that for purely mental function.* This suggests the propriety of not too hastily arriving at a conclusion respecting the limits of a lesion, by reason of the convulsive movements occurring in the same order in two or three successive fits.

4. The paralysis which followed the convulsions, though at first very complete in degree, was of brief duration; and is explained in accordance with the view now being generally accepted, that this form of palsy is due, not to organic change, but rather to temporary exhaustion

* In a paper published in the *Edinburgh Medical Journal* for December 1876, I directed attention to this occasional varying mode of commencement of the fits in the same patient.

* Read before the Glasgow Pathological and Clinical Society.

of the nerve centres, and perhaps also, I would add, of the nerves involved. It apparently corresponds with the transitory paralysis induced by physiologists in the lower animals, by passing a strong galvanic current through the spinal cord or motor nerves; or, in a minor degree, with the fatigue that follows unwonted and excessive voluntary muscular exercise.

5. It seems probable, from the fact that the severe pain which accompanied the convulsions was followed by ephemeral anaesthesia in the affected members, that the centre for sensation, and possibly also the corresponding sensory nerves, were in a state similar to those for motion. This association is analogous to what is observed in hemiplegia due to organic lesion, and, just as in it, the sensory defect was even of shorter duration than the loss of motor power.

6. It is worthy of being recalled that analogues of convulsions with excessive pain, followed by temporary palsy and anaesthesia, exist in the sphere of special sensation, as in a case recorded by me in the BRITISH MEDICAL JOURNAL (April 18th, 1874), in which, at the beginning of an epileptic seizure, a ball of red fire was seen by the patient, who for some hours afterwards was unable properly to recognise that colour. And I think we also see an analogous condition in the sphere of mind in the degree of dementia which ordinarily follows an attack of acute mania before restoration of full mental power.

ON THE TREATMENT OF PUERPERAL HYPERTYREXIA BY COLD.

By ALFRED WILTSHIRE, M.D., F.R.C.P.Lond.;

Joint Lecturer on Midwifery and the Diseases of Women and Children at St. Mary's Hospital; Vice-President of the Obstetrical Society of London.

DR. PLAYFAIR'S case of puerperal septicæmia, with hyperpyrexia, treated by the continuous application of cold (recorded in the JOURNAL for November 17th), opens up for discussion the practice of treating such cases by the rapid abstraction of heat, a remedy which has proved of inestimable value in other grave maladies accompanied by hyperpyrexia. As I am able to contribute particulars of two cases similarly treated by a method which appears to possess some advantages, I avail myself of the opportunity now afforded by Dr. Playfair's communication to lay them before the readers of the JOURNAL.

The cases were briefly narrated at a meeting of the South-Eastern Branch on December 9th, 1875 (see the JOURNAL for December 25th, 1875); but no particulars have until now been published.

In the autumn of 1873, I succeeded my friend and colleague Dr. Edis in the charge of the in-patients of the British Lying-in Hospital, an institution to which I was then physician. In giving the patients into my charge, Dr. Edis remarked that there was something wrong about the place; for none of the mothers had a temperature under 100 deg. Fahr., upon which I observed that I should feel compelled to close the hospital, if things continued in an unsatisfactory state. I regret to say that closure immediately became necessary, on account of the serious symptoms which arose in two newly admitted patients.

A day or two after I took charge, two healthy young women, primiparae, were delivered in the hospital. Both were married, were aged respectively 23 and 26, and had fairly good labours, there being nothing abnormal in either case. I had the temperature watched, as has now for many years been my custom, and very speedily it attained high figures. There was no local condition in either case to account for this abnormal elevation of temperature, and it appeared to be only too clearly due to the unhealthy surroundings of the patients. Finding that quinine in large and repeated doses, intra-uterine irrigations, purges, and so on, were ineffectual for the reduction of the excessively high temperature, which in each case exceeded 106 deg.; and feeling persuaded that such hyperpyrexia was incompatible with life, if long-continued, I had the patients packed round with vessels containing ice; hot water-tins, soda-water and other bottles, being filled with broken ice.

This dry cold method was selected because it obviated the necessity of removing the prostrate patients from their beds: a point which has always seemed to me to be of much importance in the treatment of hyperpyrexia by cold, since the patients for whom it is necessary are usually extremely exhausted. The temperature in each case was promptly reduced, but it rose again, after a variable fashion, when the cold was removed, and occasionally, I am bound to say, apparently in spite of it. Still, in the main, when it was carefully and assiduously applied, the effect of this method of reducing temperature was distinct, and the relief experienced by the patients was at times great and palpable. The only inconvenience arising from its use was the inability of the patients to sleep during its application. Chilling of

the skin appeared to be attended by increased vascular supply to the nervous centres, and consequent wakefulness. This might doubtless have been obviated if we had then had at command the efficient means we now have for cooling the head; viz., the ice-cap. As it was, sound sleep speedily followed the removal of the cold; the cerebral vessels being obviously relieved by the flushing of those of the skin. For many days, a weary fight was kept up with fluctuating success, the temperature occasionally remaining normal for several hours. Ultimately, one of the patients recovered, and the other, to my great regret, sank. Unfortunately, no necropsy was obtainable.

I believe that, could we have removed the patient whose case ended fatally from the building, she also would have recovered; for, again and again, her temperature fell to normal or near it, and she appeared to be on the verge of convalescence; she seemed, however, to get fresh doses of poison and relapsed accordingly. What tends to confirm this view is the fact that the other patient, who oscillated in like manner, only recovered on being removed, though at some risk, to her home at Croydon. In neither case was there any purulent collection or other abnormal condition, except that, in the one that ended fatally, there was at one time slight tenderness of the uterus. Both were what might be called ichorrhæmic cases; they were poisoned by their environments, the poison exerting in them powerfully phlogogenous effects. This is by far the most fatal form of "puerperal fever"; in my experience, it is much more rapidly and certainly fatal than where "puerperal fever" is accompanied by suppuration.

Some weeks afterwards, on attending a meeting of the South-Eastern Branch at Croydon as the guest of Dr. Alfred Carpenter, I found the surviving patient in the Croydon Hospital, whither she had been taken shortly after her removal to her home. Her appearance interested me greatly; for, from a plump blonde with plenty of fair hair, as she was when I first saw her, she had changed to a thin dusky-skinned woman with scarcely any hair. Her appearance showed plainly the severity of the struggle she had gone through: her epidermic structures generally had withered, as usually happens after *post partum* inflammations.

In both the cases just related, the skin was occasionally sponged with cold water. There was one noteworthy difference between them, inasmuch as only one of the patients perspired, and that was she who recovered. The other's skin was obdurately dry, and it is obvious that her power of radiating heat was correspondingly diminished. Efforts were made to induce sweating, but unsuccessfully. Her friends said they had never known her to perspire.

The advantage of applying cold to hyperpyretic patients without moving them is obvious. It is especially useful, for example, in acute articular rheumatism, and in cases of typhoid fever where perforation of the bowel from ulceration is dreaded, since movement from the bed to a bath, or *vice versa*, might precipitate bursting. This plan has already been attempted with partial success by wet packing and so on; but the packing around with vessels containing ice in addition to the wet sheet or sponging appears to be a ready and powerful means of abstracting heat without unduly disturbing the patient.

Besides its value in puerperal cases, as illustrated by Dr. Playfair's case and by the foregoing, I have also found it of great value after ovariectomy. During the past year, I used it in conjunction with another and similar method, also very valuable—the ice-cap—in, among others, two cases of ovariectomy at the West London Hospital. Both patients recovered, and I believe they owe their recovery in no small degree to the prompt abstraction and subsequent control of heat by the continuous application of cold.

My own observations enable me to concur fully in the opinion that the control of abnormally high temperatures by the application of cold is not only largely feasible, but that it is a therapeutic agent of immense value in a great number of cases. I mean that, by the rapid reduction of hyperpyrexia, not only do we remove excessive and dangerous heat, but also that probably we, at the same time, hinder its production: a result of enormous importance. I am, therefore, quite at one with those who consider that we ought not to wait for *foudroyant* manifestations of hyperpyrexia, but that alarm should be taken early, and efforts made, if possible, to suppress its genesis. There are doubtless still unused methods of doing this, and it will well repay those who are called upon to employ cold to devise means suitable to different cases. For example, where the patient can bear removal from the bed to a bath of cool water without risk, nothing can be better; but numbers of patients could only be so moved at great hazard, and then such measures as water-beds and cushions filled with cold water, vessels containing ice, ice-caps, sponging with cold water, wet packing, exposure to cold air, and so on, might be adopted. Wet packing may, in a modified way, be advantageously combined with ice-packing; and, as both are applicable without undue disturbance of the patient, they are

valuable auxiliaries in cases of marked prostration. Moistening the skin and allowing free evaporation not only favours the radiation of heat, but is also extremely grateful to febrile patients. I have adopted the combined plan with decided advantage.

I have more than once stated, at the Obstetrical Society and elsewhere, that quinine appears to exert much less influence over hyperpyrexia of ichorrhæmic origin than over that associated with, if indeed it be not dependent upon, suppuration; and I would venture to suggest the probability that the ichorrhæmic cases which show the highest temperatures and are the most rapidly fatal may be more favourably influenced, if not entirely controlled, by the assiduous application of cold than by the administration of quinine, valuable as that drug doubtless is in other cases. The brilliant results which have attended the administration of salicylic acid and its salts in acute rheumatism, usually a non-suppurative disease, lead one to hope for similar results in puerperal septicæmia unaccompanied by suppuration. I cannot forbear remarking that our present therapeutical resources encourage the belief that we are better able to cope with "puerperal fever" in its various forms than heretofore, more especially when their employment is not unduly delayed.

It only remains for me to say that the further admission of patients into the hospital was immediately suspended on the appearance of unfavourable symptoms in the two patients whose cases I have just related; and that, on inspection, quite enough was found to account for the unhealthy state of the building. Thorough measures were resorted to with marked success, and the recommendation that the hospital should be closed periodically for thorough cleansing and disinfection was adopted by the authorities. This plan has been attended by marked success; and I learn from the matron (Mrs. Freeman) that, at the present time, the condition of the patients is most satisfactory, although other metropolitan lying-in hospitals are not so free from mischief as could be wished. The acting matron (Mrs. Thompson) deserves a warm acknowledgment of the intelligent skill with which she attended to the two patients whose cases are related above.

TWO CASES OF HYPERPYREXIA TREATED BY THE COLD BATH.

By A. T. H. WATERS, M.D., F.R.C.P.,

Physician to the Liverpool Royal Infirmary.

THE following cases may perhaps be considered worth publishing. Their publication has been delayed by the unsuccessful endeavour to recover the lost notes of a third case—one of typhoid fever—treated on similar principles.

CASE I.—I was summoned on May 15th, 1876, to see a patient who was under the care of Dr. Johnstone of Upholland, and it is with his consent that I publish the case. The patient was a married lady twenty-six years of age, of strumous aspect, suffering from an attack (the first) of acute rheumatism, with pericarditis. Her attack had commenced on May 8th, and she was first seen by Dr. Johnstone on the 10th, when the temperature was 104 deg. During the four following days, the temperature, when taken, ranged between 104 deg. and 105 deg. I saw the patient at 5 P.M. on May 15th, about the eighth day. The case was one of severe rheumatic fever, and the physical signs of pericarditis were well marked. The patient was restless, but free from delirium. The pulse was 120, and the temperature 104.2 deg. The urine was very acid. The treatment which had been adopted by Dr. Johnstone was the administration of bicarbonate of potash, with bark and opium, and four ounces of brandy daily. I recommended that the treatment should be continued; the dose of potash, however, to be increased, and that of opium diminished. I further advised that, should the temperature rise to 106 deg., the patient should be put into a bath at 95 deg., to be cooled down to 75 deg. or 70 deg. On the following day, at 1 P.M., Dr. Johnstone found the temperature 106.2 deg., accompanied with "furious delirium". Dr. Johnstone says: "I had her put into a bath (tepid), which was quickly cooled down to perfectly cold. (I cannot give you the temperature, but the water was cold from the pump.)" The patient was in the bath half an hour. The delirium sensibly decreased during this time. She slept a little the night after the bath, and, on the following day, she slept profoundly for two or three hours, and after this there was no delirium. At 10.30 P.M. of the 16th—viz., between eight and nine hours after the bath—the temperature was 102.6 deg. On the 17th, at 9 A.M., it was 103 deg.; at 3.30 P.M., 102.8 deg.; and at 10 P.M. 102.8 deg. Dr. Johnstone says: "Beyond this, I have no further record. I can only say that her progress towards recovery was

uninterrupted. She left home about the end of June for the seaside, feeling perfectly well, but with a slight systolic murmur."

CASE II.—E. W., a domestic servant, nineteen years of age, was admitted into the Liverpool Royal Infirmary, under my care, on November 21st, 1876, suffering from typhoid fever. She had been confined to her bed for about a week, but had not been under medical treatment. There had been slight looseness of the bowels, but no decided diarrhoea. She was ordered milk and beef-tea, and effervescent mixture, three times a day. On the morning of the 22nd, the day after admission, the temperature (then and afterwards taken in the axilla) was 101 deg., and in the evening 104.6 deg. On the 23rd, it was 101.8 deg. in the morning, and 104.6 deg. in the evening. Three ounces of brandy were ordered on this day. On the morning of the 24th, at 9.30, the temperature was 105.6 deg.; at 12.15, 106.4 deg.; and at 12.45, when I paid my visit to the hospital, it had risen to 106.8 deg. There was no delirium; but the patient was restless. Being unable to remain at the Infirmary, I gave directions that the temperature should be taken every quarter of an hour, and that, if it rose to 107 deg., the bath should be used. At 1.15, the temperature was found to be 107.2 deg., and the patient was put into a bath at 100 deg., which was gradually reduced to 75 deg. The patient was in the bath an hour and five minutes, and on removal her temperature was 99.6 deg. At 3 P.M., ten grains of quinine were given, and were vomited; at 3.35, five grains were given, and retained. The temperature began to rise soon after the bath, and at 5.15 it was 105.6 deg., and the bath was again used; the temperature of the water being 99 deg. at the beginning and 76 deg. at the end. The patient was in the bath an hour, her temperature on removal being 100.8 deg. At 6.30, five grains of quinine were given. The temperature again rose after the second bath, and at 8.15 it was 103.8 deg.; and the house-physician thought it best to use the bath again. The patient remained in it half an hour, the temperature of the water being 97 deg. at the beginning and 76 deg. at the end. On removal, the patient's temperature was 99.8 deg. She was put to bed, and I saw her immediately afterwards, and ordered five grains of quinine to be given every four hours. She slept during the night, and, at 9.30 A.M. on the 25th, the temperature was 99 deg. and the pulse 100. She had perspired freely, and had taken six doses of quinine, with a good deal of milk and beef-tea, and nine ounces of brandy, since the first bath. The quinine was now ordered to be taken every six hours. The highest recorded temperature of this day was at midnight; viz., 104.2 deg.; but it soon fell, and, at 9 A.M. of the 26th, it was 100.4 deg., and in the evening 102.4 deg. On the 27th, great pain was complained of in the left side; but no signs of pleurisy or any inflammation could be detected. The pain continued for some days, and was relieved by subcutaneous injections of morphia. The quinine was diminished, and the patient took nothing but milk and beef-tea, with a moderate quantity of brandy. There was no diarrhoea throughout, and only a few characteristic spots appeared. For a few days, the temperature remained very moderate, and there was no complication; but, on the evening of December 2nd, the temperature was found to be 104.8 deg., having risen from 99 deg. since the morning. The patient was carefully watched, and five-grain doses of quinine were given every six hours. The temperature soon began to fall, and, on the evening of the next day, it was 100 deg. With the exception of a rise of the temperature to 102.5 deg. on December 10th, and of 103.5 deg. on the 13th, the recovery was uninterrupted. She was discharged from the hospital on January 5th, 1877, the temperature having been normal for a fortnight.

NOTES ON A CASE OF MULTIPLE EXOSTOSES.*

By THOMAS JONES, M.B., F.R.C.S.,

Surgeon to the Children's Hospital, Manchester.

THE condition of several exostoses developed in the same individual is a sufficiently rare occurrence to induce me to place on record the following remarkable case.

Wm. S., aged 9, a native of Warrington, was admitted into the Children's Hospital on July 3rd, 1877. The immediate cause of the parents seeking advice was a large tumour springing from the posterior surface of the right leg about two inches below the knee. This mass, of irregular shape and firm consistence, was found to spring from both bones. The skin over the tumour was of normal colour and freely movable. A further examination of the boy resulted in the detection of a number of bony outgrowths, of various sizes and

* Read before the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

shapes, in different parts of the body. They were connected with the following bones: the right clavicle, one at each end; the upper extremities of both humeri; the carpal ends of the right and left radii; the lower ends of both ulnæ; the second phalanges of the ring and middle fingers of the right hand; the outer side of the second phalanx of the middle finger on the left hand; the dorsal surface of the middle phalanx of the left ring-finger; the lower border of the same phalanx; the lower ends of both femora; the posterior surface of the right femur; the upper ends of both tibiae; the outer surface of the left fibula; and the dorsal surface of the middle phalanx of the left second toe.

Besides these outgrowths, the upper end of the left fibula and the lower end of the right radius are very materially increased in thickness. I would also mention a deformity of the left ulna which the boy presents. The lower third of this bone appears to be quite in a rudimentary state, and to join the radius, thereby destroying the power of pronation and supination in the left forearm.

The progressive increase in the size of the osseous tumour situated on the right lower extremity rendered its removal advisable. The operation by a single straight incision in the long axis of the limb was performed on July 18th. The fibular attachment of the tumour was much broader and firmer than the tibial. On section, it was discovered that the greater part of the mass was made up of cancellated bone-tissue, and that it was enveloped by a thin layer of glistening cartilage.

The case I have briefly related, while agreeing in many respects with those already published, differs in many particulars. It coincides with the cases referred to in Paget's *Surgical Pathology*, and with Dr. Poore's (*Lancet*, Nov. 29th, 1873), in the tolerably symmetrical arrangement of the growths, and in those on the right side being larger than those on the left; but, unlike these, careful inquiry has failed to establish the presence of any osseous deformities in other members of the family.

I am unable to offer any theory as to the causation of these exostoses. I think, however, I may say with confidence that they were not the result of conditions which are generally looked upon as causes—such as rickets, syphilis, and struma. There is an entire absence of the usual indications of either struma or syphilis, and the conformation of the osseous system in general renders the probability of rickets ever having existed very unlikely.

The local hypertrophy of the right radius and left fibula appears to lend some countenance to the observation made by Sir James Paget, that these exostoses are to be regarded as closely related to osseous malformations by excessive development.

In conclusion, I would submit that the formation of a number of bony tumours in connection with the osseous system should be looked upon as evidence of a constitutional ossific dyscrasia.

SURGICAL MEMORANDA.

ON TREATMENT OF FRACTURE OF BOTH BONES OF THE LEG.

I BEG to offer a suggestion in the treatment of fracture of both bones of the leg. We have all noticed the difficulty of keeping the inner edge of the patella in a line with the great toe; that is to say, after the bones have been carefully set in the straight position with the inner edge of the patella in a straight line with the great toe, after the lapse of a few days the patella is more to the outer side than it should be, in consequence of the external rotation of the leg from the hip. My plan of treatment is to set the limb in the straight position, to swing it in one of Salter's cradles, and then to rotate the whole limb outwards. The advantages of this treatment are: 1. The greater comfort of the patient, as it is the natural position of the limb; 2. The prevention of that rotation at the seat of fracture which ends in the turning in of the foot after cure.

J. B. RICHARDSON, M.B. (late House-Surgeon Torbay Hospital), Lynsted, Torquay.

CATGUT LIGATURES AND DRAINS.

IT is not my purpose to open up a discussion with Mr. Lane upon the fitness of catgut ligatures; but I must crave permission to make a brief statement upon a question of fact. In calling my description of the state of the vessel ligatured, as revealed *post mortem*, "very singular", Mr. Lane seems to throw some doubt upon its accuracy. May I, therefore, be permitted to state that the artery was exactly as I described—"cut through, with the exception of a short interval about a

line in length"? On referring yesterday to the *post mortem* record of the case made by the pathologist to the infirmary, Dr. James Ross, I find, indeed, that it is spoken of as if completely cut through; but this was not the case, as I found on demonstrating the specimen to my class in practical surgery at Owens College. In the same record, indeed, I find that a loose and soft coagulum is mentioned as being present on the proximal side; but Dr. Ross told me yesterday he regarded this as a *post mortem* clot, and in this opinion I concur. That the ligature was properly tied, we had evidence in the absence of the radial pulse for two days; its reappearance at this date being, I think, due to a yielding of the ligature and a re-establishment of the through current of blood. The reason that no violent hæmorrhage took place before death was doubtless due to the fact that the external wound had nearly healed; and there was much firmly organised lymph around the vessel, forming, for the time at least, an efficient barricade.

S. MESSENGER BRADLEY, Manchester.

THERAPEUTIC MEMORANDA.

ERUPTION AFTER BROMIDE OF POTASSIUM.

REFERRING to Dr. W. Russell's interesting case of bromic eruption controlled by arsenic (*BRITISH MEDICAL JOURNAL*, March 16th), I would point out that Bartholow says: "Bromic acne may be, in part at least, prevented by the conjoined administration of arsenic" (three to five minims of liquor arsenicalis) (*Materia Medica*, p. 371), and I have verified this several times. It deserves still further inquiry, and the influence of arsenic itself over the nervous system is such as to make it, for its own sake, a most useful adjunct to treatment by the bromides in many cases, e.g., of cerebral or spinal congestion.

EDWARD MACKEY, M.D.

OBSTETRIC MEMORANDA.

INTRODUCTION OF THE HAND INTO THE UTERUS AND REMOVAL OF THE PLACENTA, SIX WEEKS AFTER DELIVERY.

IN none of the cases quoted by Dr. Matthews Duncan, in his recent paper on the subject (*BRITISH MEDICAL JOURNAL*, November 1877), was the introduction of the hand into the womb, practised at nearly so long an interval as six weeks after the expulsion of the child.

During my absence from home on December 11th, 1875, Mrs. L., aged 25, and mother of three children, began to abort at the middle of the fifth month, and during the night was delivered, without assistance, of a well-formed male child of that term. My friend Dr. St. Clair, who saw the patient for me, three hours after the child had been born, was unable to remove the placenta, owing to the obstinate refusal of the patient to submit to interference. On my arrival next day, twelve hours after the child had been expelled, I found the cervix unusually long and the os firmly contracted; but, from the size of the womb, I concluded it still enclosed the placenta or a large clot. There was then no doubt in Dr. St. Clair's mind that the placenta was still *in utero*; but there was, he said, a possibility that it had come away, as at least one vessel had been emptied without his inspection. All efforts, then, within the bounds of legitimate force, only proved the futility of further attempts to reach the interior of the womb. Nothing then was to be done, but to wait and watch for symptoms. So things went on from day to day and from week to week until, at last, I began to think that the placenta must have been removed unnoticed, or, disintegrated, had come away in the discharges, which all along had been considerable. The possibility of its being absorbed was also suggested. During this time of considerable doubt and no little anxiety, I sought and availed myself of the kind and valuable counsel of several friends. The patient gained in strength, and there was not an unfavourable symptom; but the abdomen increased in size, and the patient herself imagined that she was still pregnant with a second child. While I was with her, however, on January 22nd, 1876, a gush of blood poured from her without warning, saturating her clothes and the bed on which she was lying. With ergot, and by using my finger as a plug in the os, which was dilated to about the size of a sixpence, I endeavoured to control the flooding, and as quickly as possible got the patient under chloroform, introduced my hand into the vagina, and with great difficulty dilated the os until at length I got my whole hand into the womb. There I found a large placenta, only partially, for about one-third of its surface, detached from the uterine wall; the remainder I peeled off

and slowly withdrew the whole mass. The uterus contracted immediately and the hæmorrhage ceased. The patient, naturally of a delicate constitution, made a rapid recovery. The placenta, when removed, was perfectly fresh, well nourished, and measured four and a half inches in diameter.

LESLIE JONES, B.F., M.D., M.Ch., Blackpool.

RETENTION OF THE PLACENTA AFTER ABORTION.

IN the JOURNAL for May 4th, under the heading "Obstetrics", Dr. Hervieux reports a case of retention of placenta in the uterus for twenty-one days after an abortion at the sixth month. This reminds me of a case which happened in my practice some years ago, a short account of which may be interesting.

I was called to see a lady who was in the fourth month of her pregnancy, and who was suffering from severe hæmorrhage, which was so profuse that I was obliged to plug the vagina. She aborted at the fifth month; but the placenta resisted all justifiable means for its expulsion. She convalesced in the usual time; but, as the placenta was still retained, I obliged her to keep the recumbent position. She continued perfectly well; and, in thirty-eight days after she aborted, the placenta was expelled during the action of some purgative medicine which I found it necessary to give her. The placenta was small, healthy, and without a trace of fœtor.

RICHARD STANISTREET, M.D., L.R.C.S.I., Malahide.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS.

APRIL 25TH.—Large Abscess of Thigh, etc.—A man, aged 64, but looking much more aged, had been admitted into Harley ward eight weeks previously. He had been unable to pass his urine without difficulty, and had been under the care of a surgeon for some weeks, during which period he suffered from constant pain on the inner aspect of the left thigh. On admission, there was a large fluctuating swelling at the seat of pain, extending from about half way down the front aspect of the thigh downwards and inwards as far as the popliteal space. Fluid could be detected in the left knee-joint. The urine was turbid, of neutral reaction, and slightly albuminous. The difficulty in micturition appeared to have been due to atony of the bladder. The swelling was punctured, and a large quantity of creamy pus escaped, mixed with blood and old clots; the femur was found to be denuded of periosteum. The patient rapidly lost flesh, and the abscess-cavity continued to discharge, the temperature persisting at from two to three degrees above the normal point. This case was brought forward by Mr. Callender, who was ready to perform amputation if his colleagues thought it would increase the slender chances of recovery which the patient had. None, however, were in favour of the operation, which, it was considered, would only hasten death, already only too near at hand.

May 2ND.—Large Nævi of Forearm.—Mr. MARSH brought into the operating theatre for consultation a child two years of age that had been born with a large subcutaneous nævoid tumour above the back of the wrist, another on the back of the forearm below the olecranon, and another on the front of the arm immediately above the bend of the elbow; all these growths were on the right upper extremity. The lowest had distinctly nævoid characters from the first; the others had of late developed more definite nævoid features than they possessed when they were first examined, and the cutaneous vessels over them were enlarged. During the last few weeks, the lowest had, rather suddenly, become larger, firmer, very smooth and globular, and the integument over it was very red. Mr. Marsh believed this lower tumour to be a suppurating nævus, and proposed to explore it; but thought it within the range of possibility that the growth might be malignant.—Mr. CALLENDER felt tolerably certain the tumour was nævoid, and recommended an exploratory incision. The suppurating was beneficial, and would ultimately cure the nævus.—Mr. THOMAS SMITH and Mr. LANGTON were of the same opinion as to the nature of the disease; they recommended expectant treatment, as the inflam-

matory changes would most likely cure the nævus and render exploratory incisions unnecessary.

Swelling of the Forearm.—Mr. THOMAS SMITH brought forward a young man who had been troubled for a year with a general, firm, ill-defined swelling of the forearm. Mr. Smith, judging from the general characters of the disease, stated that either a large tumour of one of the bones of the forearm existed, or else there was diffused chronic periostitis and osteitis. The latter was the more probable. Mr. Smith proposed to keep the patient at rest for a few weeks, giving a trial to various drugs, and if no improvement resulted to make an exploratory incision which would let out pus, if any were pent up under the periosteum.—Mr. CALLENDER also believed there was inflammatory mischief in the bones from some injury, which had either torn the muscles from their periosteal attachments, or bruised the bone itself.—Mr. LANGTON could detect, on pressure, deep-seated fluctuation in the part.—All the surgeons agreed to Mr. Smith's proposed line of treatment.

Injury to Urethra: Stricture: Extravasation.—Mr. CALLENDER desired to consult the opinion of his colleagues on a case of great interest in Harley ward. A man, aged 32, had fallen, six years ago, astride over the bulwarks of a barge on board which he was working. He felt no ill effects till a few days later, when he passed blood with his urine. A stricture ensued and gave him great trouble. On Jan. 23RD of this year, he was admitted into the hospital with extravasation of urine. Free incisions were made into the groin and scrotum, and much inflammation followed. Many attempts had been made to pass a catheter, but the smallest were stopped close to the membranous part of the urethra by a stricture which appeared to be impassable; or, possibly, the instruments entered an old false passage running in the normal line of the urethra. The patient can at present pass a little urine by the meatus, but most of that fluid escapes during micturition through large sinuses in the scrotum. The urine had been constantly slightly albuminous during his stay in Harley ward; and his health had been in a bad condition for some years. Taking all the untoward circumstances of this severe case into consideration, Mr. Callender believed that it would be advisable to open the bladder above the pubes and let the urine escape for a time through a catheter inserted in the wound, so that the urethra might be kept well at rest. Then, when the local mischief had subsided, he would pass a catheter from the vesical orifice of the urethra and would introduce another by the meatus, and, with the instruments as guides, he would finally be enabled to lay open the stricture. This plan, originally suggested by Hunter, had been successfully adopted by Mr. Callender in a case recorded in the second volume of the *Saint Bartholomew's Hospital Reports* (On an Operation for the Relief of a Stricture of the Urethra).—Mr. LANGTON approved of the proposed treatment. In a similar case, he had opened the bladder above the pubes and retained a catheter there for some time. The patient is now in China in perfect health. He continues to pass urine by the suprapubic incision, which is closed by a plug during the intervals between micturition.—Mr. MARSH, also, was in favour of Mr. Callender's proposal, especially as his previous case had been so satisfactory; and, on the other hand, the state of this patient's health contraindicated urethrotomy or perineal section.

KING'S COLLEGE HOSPITAL.

CASES OF CHEST-DISEASE.

(Under the care of Dr. BURNEY YEO.)

Pleuripneumonia supervening upon diffused Bronchial Catarrh (? Catarrhal Pneumonia): Exploratory Puncture.—J. G., a man aged 31, was admitted to hospital, March 8th, suffering from an acute illness of four days' duration. The onset had been sudden, with shiverings, soon followed by urgent dyspnoea. He had always had a cough, which had been much worse during the last three months, and, apparently, depended upon diffuse bronchial catarrh. He was a member of a healthy family.

When examined on admission, his temperature was 104 deg. Fahr.; pulse 128; respirations 48 to the minute. There was dulness at the right base behind up to the angle of the scapula, and in front the dulness reached to the lower border of the fourth rib. The whole of the right chest was obviously distended, and its base measured half an inch more than the left; there was also an entire absence of tactile vocal fremitus corresponding exactly to the area of dulness described; the heart was not displaced, nor was the liver depressed. On auscultation, vocal resonance was absent over the lower part of the right lung; there was no tubular breathing, but faint crepitant rales were distinctly heard on deep inspiration; these appeared to be superficial in their origin. Over the upper part of the right lung there were abundant

most bronchitic *râles*, so also over the whole of the left lung. As the case went on, the temperature did not fall as it usually does in an ordinary pneumonia, but kept up into the third week of illness at the average of 102 deg. Fahr.

Throughout the illness, the patient was much prostrated; there has been no orthopnoea, but hectic flushing has often been observed. The area of dulness over the right lung gradually extended, so that diminished resonance was observed over the whole of the front of the right chest, as also behind. At one time, the tactile vocal fremitus returned in some degree, and there was some resonance on percussion, while the crepitant *râles* were heard larger and looser, as if the air-passages were again opening up; vocal resonance, however, was still absent, and still there were no tubular breath-sounds at the base. There was no albuminuria.

There was some hesitation in arriving at first at a positive diagnosis in this case; it resembled in many respects a case of croupous pneumonia with plugging of the air-tubes, occurring in a lung previously the seat of scattered catarrhal pneumonia. The absence of any indication of displacement of the heart or of the liver, the subcrepitant *râles* heard apparently superficially over the right chest, and the return at one time of the vocal fremitus, seemed to indicate the presence of pneumonia rather than of pleuritic effusion; and the maintenance of the pyrexia also favoured the view of the existence of pneumonia to some extent of a catarrhal form.

On April 5th, the dulness over the right front had become almost absolute; the edge of the liver was felt depressed two or three finger-breadths below the margin of the ribs. There was complete absence of tactile fremitus over the lower lobe, yet, on deep inspiration, faint subcrepitant *râles* could still be heard all over the area of dulness. It was determined to make an exploratory puncture with a hypodermic syringe; serous fluid was withdrawn, and then, with the aspirator, forty-six ounces of clear straw-coloured fluid were removed. Immediately after the introduction of the needle (low down in the axilla), and before many ounces of fluid had been withdrawn, the point of the needle was felt distinctly to grate against the surface of the lung, and it had to be withdrawn partially and inclined obliquely in order to continue the aspiration.

REMARKS.—This appeared to be a case in which an acute attack of pleuropneumonia supervened on chronic bronchitis, probably complicated with patches of catarrhal pneumonia. Though from the first there was absence of vocal fremitus, and tubular breath-sounds over the area of dulness, while there was some bulging of the chest-wall, yet the occurrence of superficial subcrepitant *râles* on deep inspiration, and the partial return of vocal fremitus, together with certain of the general symptoms, gave rise for a time to the suspicion that the whole of the lower lobe of the lung had become distended with both croupous as well as catarrhal exudations; that the air-tubes were more or less blocked, which prevented transmission of any vocal thrill to the chest-wall, and accounted for the absence of tubular breath-sound. It would seem, however, to have been a case where the lung, more or less condensed by exudation and somewhat incompressible, was surrounded at its base by a not very deep layer of pleuritic fluid, so that on deep inspirations the slight movement of air in the superficial air-cells could be heard on listening over this area of dulness. It afforded a good example of the value of the hypodermic syringe for making exploratory punctures in such doubtful cases.

A Case of Probable Pulmonary Stenosis: Unusual Seat of Cardiac Murmur.—A girl, aged 19, came under observation complaining of pain in her left chest and shortness of breath, with occasional faintness, but no cough. These symptoms commenced a year previously, when she was laid up for a few days with what was termed "inflammation of the chest". As a child, she never could run without getting out of breath; but there never appears to have been any cyanosis. All the members of the family appear to be healthy, and there is no history of rheumatism in the patient or in her family. The girl is well nourished, and all her organs, except the heart, appear healthy.

The following were the physical signs of the condition of the heart. At the second left intercostal space, near the sternal end, *i. e.*, over the region of the pulmonary artery, a distinct vibratile thrill was felt; at the same spot was heard, with maximum intensity, a loud, prolonged, harsh, almost rasping *bruit*. This was the only *bruit* detected; it was conducted equally well in all directions, being still audible, but diminished in intensity at the apex and in the axilla. Outside the apex-beat in the axilla, the normal first and second sounds could be distinctly heard, indicating that the murmur was not of mitral origin. In time, the murmur occupied nearly the whole of the cardiac revolution, including the entire diastolic period. The pulmonary second sound was abolished, and was replaced completely by the murmur.

At the second right cartilage, *i. e.*, over the aortic area, the murmur was still heard, but with less intensity; the aortic click was distinct, though feeble. The murmur was also heard over the large vessels at the root of the neck on the right side, which prevented the absolute exclusion of all possibility of disease of the aortic valves. The area of precordial dulness was normal, or slightly increased in its vertical dimension. There was no very decided evidence of hypertrophy of either the right or the left side of the heart; the force of the impulse was not increased, but the apex-beat was somewhat displaced to the left. The radial pulse was jerky, rather small in volume, regular, 66 to the minute. The pulse in the carotid was locomotor, and suggested that the period of dilatation was prolonged. There was no venous dilatation or other sign of tricuspid disease.

REMARKS.—Dr. Yeo pointed out that this was an exceedingly rare form of cardiac disease. It was certainly not a case of auricular impulse in the second left interspace due to mitral stenosis or regurgitation, for, on listening a little outside the apex-beat in the axilla, quite normal cardiac sounds, systolic and diastolic, could be distinguished apart from the loud almost continuous murmur heard in the distance. Indeed, on listening carefully over the apex, one might fancy one was listening over two hearts, for to the right of the apex the normal cardiac sounds were entirely replaced by the loud, harsh, and prolonged murmur; while to the left of the apex the natural cardiac sounds could be distinctly heard. Absence of pulmonary second sound in the second left interspace, and its replacement by the murmur, also pointed strongly to the pulmonary orifice as the seat of the disease. Had the patient been a male, the strong tactile thrill and impulse in this unusual situation would certainly have aroused the suspicion of aneurism. Dr. Yeo leaned to the belief that this was a case of malformation of the pulmonary valves, not unlike a case previously under his care, in which the segments of this valve were so united as to form a narrow funnel-shaped orifice to the artery.

Case of Cardiac Disease with high fluctuating Temperature.—A male, forty-four years of age, was admitted on February 16th, complaining that he had been becoming thin and weak for the last twelve months, and that for the last three months he had had a cough. Latterly, he had noticed considerable swelling of the abdomen, with pain in that region. He had rheumatic fever when sixteen years of age, and had suffered constantly from rheumatism. On examination, a loud systolic *bruit* was heard both at base and apex of heart; loudest at apex. The liver-dulness was greatly increased, and extended from the upper margin of the sixth rib down to the level of the umbilicus. The spleen was also greatly enlarged. The urine was scanty and high coloured, free from albumen. The lung-sounds were normal. The tongue was clean. The gums were red, with a tendency to bleed; and occasionally there was a little blood-stained expectoration. The terminal digital phalanges of both hands were slightly bulbous, and of a curious bright rose colour, contrasting much with the pallor of the adjacent skin. The distal phalanges of the toes presented a similar appearance in a slighter degree. Pulse 90. His appetite was fairly good. The point of chief interest in this case was the range of temperature observed throughout. On the 18th, two days after admission, the morning temperature was 97 deg.; evening temperature 100.2 deg. On the 19th, the morning temperature was 98.8 deg.; the evening temperature 104 deg. Then, for two days and a half, it varied between 98.4 and 100 deg., and on the evening of the 22nd again rose to 103 deg., and for the next seven days oscillated between 98.6 and 103.4 deg.; the highest temperatures appearing to occur with something like regularity on alternate evenings—*i. e.*, evening temperature, on 21st, 100.2 deg., and on 22nd, 103 deg.; on 23rd, 100.6 deg., on 24th, 102.2 deg.; on 25th, 100.2 deg., on 26th, 103.2; on 27th, 100 deg., on 28th, 102.4 deg. But on March 1st, the temperature rose again in the evening to 103.4 deg., and the next day he was ordered three grains of quinine every four hours. The temperature then fell steadily about six degrees, and for three days and a half remained below 99 deg.; but, on the evening of the 4th, it again rose to 103.4 deg.; the next day kept below 100 deg., and the following evening rose to 103.6 deg.; the next morning fell to 97.8 deg., and then rose gradually for four evenings till, on the 10th, it was again 103 deg.; the quinine was increased to six grains every four hours, and then for four days the temperature only rose once above 100 deg. But on the 15th the temperature suddenly rose from 98.4 deg. to 104.6 deg.; eight grains of quinine every four hours were now given, and in less than twelve hours the temperature fell eight degrees and a half, and remained subnormal for two days. Then it again rose, in spite of the large doses of quinine, to 101.4 deg., and ranged for three days between 100 deg. and 103.6 deg. Salicylate of soda was given instead of the quinine, ten grains every six hours; at first, the temperature fell from 102.6 deg. to 97 deg. in twelve hours; after this, it gradually rose till March 26th, when

the patient had quite an acute febrile paroxysm. It began about 11 A.M., with slight shivering and feeling of cold; temperature 102.6 deg.; pulse 150; heart's impulse very strong; dyspnoea and a sense of dragging opposite the first piece of sternum; no tenderness over spleen; face flushed and dusky; surface warm. The temperature continued to rise till, at one o'clock, it reached 105 deg., and remained so for two hours; at 3 P.M., it began to fall; at 5, it was 102.6 deg., and he was perspiring (he had begun to take quinine six grains, infusion of digitalis sixty minims, every four hours); at 9 P.M., the temperature was 101.2 deg.; it rose again at midnight to 103.6 deg.; this was followed by a temperature-depression to 101 deg., then it rose to 104.2 deg. The dyspnoea was gradually increasing in severity; moist rales were heard at both bases; there was slight hæmoptysis, and a small quantity of blood in a motion which he passed, and shortly afterwards he died, March 28th. On *post mortem* examination, it was found that both aortic and mitral valves were the seat of old deformative changes. The aortic valves were thickened, and contained small calcareous masses; they were slightly incompetent, allowing of very small regurgitant stream, and the spot on the surface of the ventricle, against which this regurgitant stream must have impinged about an inch below the sigmoid valves, was the seat of a patch of endocarditis, from which long rough vegetations projected; and as these jutted out into the efferent current of blood, no condition could have been more favourable for the continuous production of fine emboli. The chordæ tendineæ of the aortic curtain of the mitral valve were ruptured, the free extremities being covered with black clot. The margins of the mitral flaps presented on their auricular surface a fine granular or rather eroded appearance; and this, together with the rupture of the chordæ tendineæ, suggested recent ulcerative inflammation. The lungs were oedematous, and the seat of hypostatic congestions; there was a small amount of effusion in both pleural cavities. The liver weighed 104 oz., and reached nearly to the umbilicus; it contained no evidences of coarse embolic infarction. The spleen weighed 43 oz., was of firm consistence, and, with the exception of one or two minute black spots close to the surface, presented also no signs of embolism. Small hæmorrhagic patches were found on the mucous membrane of the small intestine. The brain was slightly oedematous. There were no other noteworthy changes.

It was expected during life that *post mortem* examination would probably disclose coarse embolic changes both in the spleen and the liver, and thus account for the high fluctuating temperature. This, however, was not the case; and if the high temperatures observed were to be attributed to embolic process, they must have been capillary, and led to no appreciably naked eye changes. It is also possible that the physical conditions may have been dependent, to some extent, upon slow ulcerative endocarditis. There was no reason to suppose that the patient was affected with malarious fever. It was remarkable that the tongue remained almost constantly clean and moist, and the appetite fairly good.

JERVIS STREET HOSPITAL, DUBLIN.

EXTENSIVE COMPOUND COMMINUTED FRACTURE OF THE SPHENOID,
WITH RUPTURE OF THE INTERNAL MAXILLARY ARTERY, AND
SUBSEQUENT NECROSIS.

(Under the care of Dr. E. W. COLLINS.)

IN November last, a fine healthy boy, fourteen years of age, was struck in the left temple by a moulding cutter, propelled with considerable force from some machinery eighteen feet distant, which he was minding in a saw-mill. He was taken up senseless, and bleeding so profusely from the wound, that he quickly lost a large amount of blood. He was carried to the hospital in a state of syncope, due to the hæmorrhage and to concussion of the brain. A large lacerated wound in the left temporal fossa commenced immediately above the centre of the zygoma, and passed directly upwards for several inches. From a superficial examination, it was evident that the depth of the wound was considerable. Owing to the collapse, the hæmorrhage had ceased. The wound was interfered with as little as possible, and any detailed examination as regarded its depth avoided, in order not to disturb such natural hæmostatic processes as might already have taken place. Such superficial branches of the temporal artery as spouted when the wound was exposed were ligatured. The wound itself was cleansed, and its edges were brought together with sutures. Firm pressure was maintained over the wound by a large compress and knotted capeline bandage.

At his visit on the following morning, Dr. Collins learned that severe reactionary hæmorrhage had taken place at 5 A.M., which the resident pupil had great difficulty in arresting by continued pressure

over the wound. He had the boy then conveyed to the operating theatre, in order to thoroughly examine the wound and adopt such measures as might be necessary to prevent further recurrence of hæmorrhage. That the bleeding was arterial and from a vessel of considerable size, he was convinced by the time of its occurrence, its profuseness, and the difficulty experienced in its temporary arrest. Ether having been administered and the compresses removed, masses of coagula were seen filling the wound, and bleeding immediately took place. Clearing away the coagula, Dr. Collins passed his forefinger downwards and backwards through the wound, between the zygomatic arch and the pterygoid ridge of the sphenoid, into the zygomatic fossa, where the internal maxillary artery lies. The zygoma was felt bared of periosteum to some extent, but not broken. In the upper wall of the zygomatic fossa, the top of the finger passed into a large fissure, where the base of the great wing of the sphenoid was so extensively fractured that the pulsations of the brain were perceptible. No loose pieces of bone were felt. Meanwhile, arterial blood rushed so very profusely from the deepest part of the wound, either from the internal maxillary artery itself or from one of its larger branches—possibly the middle meningeal—that the boy, weakened by the two previous hæmorrhages, became alarmingly collapsed. By the aid of the hypodermic administration of ether, he rallied. Direct digital pressure within the wound somewhat controlled, but did not completely arrest, the flow. The depth from the surface of the zygomatic fossa in which the forefinger was buried; the narrow undilatable channel leading to it between the zygoma and sphenoid, which admitted little more than the finger; and the constant welling up of blood through the wound, rendered it impossible to ascertain with exactness the source of the bleeding. But one immediate hæmostatic measure was applicable, direct compression within the wound. Ligation of the carotid artery was reserved as a *dernier resort* in case of the failure of compression. The entire wound was carefully plugged from the bottom with long strips of lint; this most effectually checked the hæmorrhage.

The gradual removal of the plugs was commenced on the fourth day; from this time they were thoroughly carbolised. On the ninth day, the last plug was floated out without recurrence of bleeding. At each dressing, when the wound was filled with water, the fluid rose and fell in unison with the pulsations of the brain. Steady and progressive improvement was maintained daily. No untoward intracranial or other complications arose, owing, no doubt, to the very free bleeding, aided by ice to the shaved head, bromide of potassium, and purgatives.

The wound rapidly healed by granulation to a certain point. The sinus, which continued to discharge in January, afforded evidence that necrosis of the fractured sphenoid had taken place. The boy was sent to his home for some time, to allow the gradual and complete separation of the dead bone before its removal was attempted. On his return at the end of six weeks, the probe immediately struck loosened dead bone. On the following morning, having opened up the wound in the temporal fossa, Dr. Collins removed many large detached sequestra of the sphenoid. Smaller pieces subsequently exfoliated, and were withdrawn from time to time; till, finally, the last piece was extracted about five months after the accident, and the wound completely healed. The boy has presented himself at the hospital on several occasions, and is apparently in the enjoyment of excellent health, both mental and bodily.

In his remarks upon the clinical features of interest in this case, Dr. Collins drew attention to the symptoms presented by a man, under his care some months previously in the same ward, who had sustained severe cerebral concussion, with, probably fracture of the petrous portion of the left temporal bone, the result of a fall on his head from a scaffold. Considerable collapse and loss of consciousness existed. Both pupils were equally dilated, though perfectly sensitive to light, and the pulse from the outset was remarkably slow (about 40) and weak—conditions which continued for some weeks after admission. A flow of blood from the left ear was soon replaced by a clear fluid, which ran away for twelve hours. Tenderness on pressure existed over the mastoid and auditory processes. A few days after admission, his urine was found albuminous to the extent of one-ninth. Convalescence was extremely slow, lasting over several months. Even when last seen, the man was very anæmic, weak, and unable for mental or bodily exertion, pain in the head being readily excited. The albumen had disappeared from his urine.

From the marked and prolonged slowness of the pulse, dilatation of the pupils, and temporary albuminuria, succeeded by such tedious and imperfect convalescence, Dr. Collins formed the idea that, in the last-mentioned case, besides a probable fracture of the base involving the pars petrosa, a certain amount of hæmorrhage into the cavity of the

arachnoid had also taken place, which gradually became encysted and partly absorbed. He referred to the researches of Mr. Prescott Hewett and other writers, in connection with the pathogenesis of such arachnoid cysts as the result of hæmorrhage.

REVIEWS AND NOTICES.

ON THE TREATMENT OF WOUNDS. CLINICAL LECTURES. By SAMPSON GAMGEE, F.R.S.E., Surgeon to the Queen's Hospital, Birmingham, etc. London: J. and A. Churchill. 1878.

MR. GAMGEE has recently devoted a course of lectures to the important subject which has of late years been attracting much attention from all surgeons who have the advance of their calling really at heart, and which may almost be said to have divided the profession by the heated discussions to which it has at times given rise. So much has this been the case, that it has become difficult for any surgeon who has stepped from the ranks of conservative orthodoxy to avoid becoming a partisan of this system or of that, and it is universally allowed that one of the privileges of partisanship is to decry all other systems than your own. Mr. Gamgee takes his stand, not simply as a partisan, but as the champion of a system of surgical dressing, and, as such, he claims his just rights. The main features of his system are the entire absence of moisture in the dressings, the maintenance of a moderately firm and uniform pressure over the wounded parts, and the insurance of absolute immobility and rest. The principal dressings advocated by Mr. Gamgee are cotton-wool, carded oakum, and styptic colloid; and these may be used either singly or in combination; and, to insure rest, millboard splints are in many cases superadded. The greatest care and nicety are employed in applying the dressings, and by these means Mr. Gamgee has been enabled to treat, with remarkable success, many cases of the most severe forms of surgical injuries. Mr. Gamgee does not give us the statistics gathered from his practice; but, from the data which his lectures supply, we may justly infer that his results have been considerably better than those which are usually met with in hospital practice.

He is not, however, content with bringing forward the most powerful argument in favour of his own system, viz., that it has enabled him to achieve results which have generally been looked upon as almost beyond the reach of surgical skill, but he endeavours to bring its merits into still greater prominence by annihilating the claims of other systems. A few, almost contemptuous, sentences suffice to dispose of plain old-fashioned water-dressing; but a far more imposing rival is found in the antiseptic system of Professor Lister; and it is the vigorous attack which he directs against this method of dressing which constitutes the *pièce de résistance* of Mr. Gamgee's book. We cannot but regret, however, that Mr. Gamgee should in this instance have broken the rule which he laid down for himself, to describe the various methods by which wounds may be successfully treated without entering upon controversial matter; for his careful description of the procedure adopted by Professor Lister, with the results of which Mr. Gamgee expressed himself highly pleased, is to some extent marred by the spirit of antagonism which he displays towards the whole system. Of these results, he says: "Collectively and separately considered, these results are admirable." Such being the case, why attack the method of dressing which produced them? The truth of the germ-theory is not yet completely decided, one way or the other, to the satisfaction of the whole scientific world, and it certainly cannot be decided on *à priori* grounds. Still less can we expect to come to any *à priori* conclusion as to its applicability to practical surgery. The only way by which the matter can be settled will be by the comparison of statistics of the various methods of dressing, drawn up with great accuracy and on a sufficiently large scale to reduce the chances of fallacy to a minimum. These statistics have not yet been published; and we think, therefore, that it would have been better if a surgeon of acknowledged scientific reputation like Mr. Gamgee had waited, before attacking the system, until he had more data at his disposal. That these data may be obtained, it is absolutely essential that men, possessed of the patience and ardour of Professor Lister, should look steadily forward, year after year, accumulating results and perfecting their methods. Their earnest belief in the truth of the hypothesis which guides them, far from being an embarrassment in their work, is in reality essential to its proper performance; and we, therefore, differ altogether from Mr. Gamgee when he insinuates that the germ-theory is standing in the way of advance in surgical dressing. We cannot accept the argument, that the process of dressing is too elaborate to be used at the pit's-mouth or on the battle-field. If it be ultimately found that a certain number of lives or limbs are saved by the antiseptic dressing, which would have been lost had other methods been adopted, this dressing should be used whenever practicable.

When we cannot have the best, we must be content with the best possible; and there is no worse fallacy than to suppose that, because a method cannot be universally adopted, no attempt should be made to adopt it at all.

It is curious to find that, whilst he has no mercy for the antiseptic theory, Mr. Gamgee in practice falls back upon it to some extent, for the three principal dressings which he advocates, viz., oakum, cotton-wool, and styptic colloid, are all used on account of their antiputrescent qualities. Of oakum, he says, "its antiputrescent qualities make it specially valuable when wounds are discharging"; of styptic colloid, he says, it is "also valuable for its antiputrescent properties"; whilst he quotes with evident approval M. Guérin's communication to the Académie de Médecine, in which the following passage occurs. "Cotton-wool, while preventing putrid fermentation, does not offer any obstacle to the penetration of air. . . . It only bars the passage to the parasites and other germs of fermentation contained in atmospheric air."

We have no wish, neither do we feel it possible at present, to pass any judgment on the antiseptic question; but we feel assured that nothing will be gained by attacks upon it based upon grounds which are entirely *à priori*. If the result were bad, there would be some excuse for attacking the method; but, so long as the results are acknowledged to be excellent—and, indeed, by many eminent surgeons of all countries believed to be incomparable—the method may very well be left alone until an inquiry can be made, with ample data, and in a truly scientific manner.

Apart from this matter, however, we have nothing but praise for Mr. Gamgee's work. He is clear in his descriptions of both his own method of dressing and of those of other surgeons, and a considerable number of cases are detailed in illustration. In the closure of arteries, Mr. Gamgee prefers torsion wherever this is practicable. He strongly advocates non-intervention in depressed fractures of the skull even where the fracture is compound, so long as there are no brain-symptoms. Throughout his work he appears as a champion of conservative surgery in its highest degree of development; and his book is, therefore, well calculated to advance the practice of the great art of which he is an able teacher.

THE ELEMENTS OF THERAPEUTICS: A CLINICAL GUIDE TO THE ACTION OF MEDICINES. By DR. C. BINZ, Professor of Pharmacology in the University of Bonn. Translated from the Fifth German Edition, and Edited, with Additions in conformity with the British and American Pharmacopœias, by EDWARD I. SPARKS, M.A., M.B. Oxon. London: J. and A. Churchill. 1877.

It is but rarely that a foreign work on therapeutics is translated into English; and, although Professor BINZ is a high authority, and Dr. SPARKS a very excellent translator, we fail to see any advantage possessed by these *Elements* over our own approved manuals; rather the reverse. Those who make a special study of therapeutics will find in it an useful summary, but those that expect a practical clinical guide may be disappointed.

The classification is simple, if not scientific, and is in part physiological, in part chemical. The twelve chapters deal briefly with twelve classes: 1-2. Nerve depressoria, excitantia; 3. Ethero-olea; 4. Emollientia; 5. Adstringentia, amara, alkalina; 6. Plastica; 7. Antidyscratica et antiseptica; 8. Antiseptica; 9. Antipyretica; 10. Evacuanta; 11. Caustica; 12. Mechanica.

The depressants are made to include opium, belladonna, physostigma, and aconite, chloroform and iodoform, ether and amyl-nitrite, the alkaline bromides, and oxide of zinc. By John Harley and others, belladonna is reckoned a cardiac stimulant; and Professor Binz records that it increases the pulse-rate; sometimes, but rarely, it seems to depress nervous subjects; yet it scarcely finds a consonant place in classification between opium and aconite. It cannot be that the ultimate poisonous effect is taken as a basis for its position; were it so, all poisons would come in the same category; for death by poison comes always with depression at the last. And again, digitalis, which in its full action is a typical depressant, comes in the second class—of excitants—with caffeine and ergot, tobacco and strychnia, ammonia and alcohol. Such conjunctions and disjunctions are rather novel than consistent.

Treating of ethereal oils, their antiseptic power, their lessening of reflex excitability, and their increasing the colourless blood-corpuscles, are recorded; but a large part of the section goes in simple enumeration of drugs and preparations—e.g., a page and a half to syrups and tinctures of orange, lemon, and ginger. It is true, that American preparations are given for comparison, but we scarcely appreciate the advantage that Dr. Sparks seems to expect from this. He hopes that the comparison may lead to simplifying both *Pharmacopœias*—a good

hope, doubtless; but materials already exist for use when the time is ripe, and the volume is not large enough to spare room for so much pharmacy. At the same time, we may allow some use in the comparison for those physicians who see many American patients on their travels. The retention by Dr. Sparks of the metric system is also, in one sense, a move in the right direction, but we think its adaptation to prescriptions really the last to be made; for us to use it for this purpose, before it is sufficiently vulgarised, would only lead to mistakes.

Referring to individual drugs, we find special attention given to their physiological action (only when important), brief notices of experimental research, and ingenious theories in explanation; but the statements are not very well arranged, nor are they easy to follow or grasp, so that one requires to be already fairly acquainted with recent work, in order to appreciate and digest them; and in the therapeutical part, to which in a "clinical guide" we naturally turn, we find little, if any, guidance or detail. The speciality of the work is rather that its endeavours to reason out the bearings of ascertained physiological fact, than to be guided by observations of disease. This is high scientific ground. In the statements themselves, there is no waste of words; they imply, we need scarcely say, intimate acquaintance with modern as well as original researches, and will well repay thorough digestion by an earnest student. It would be impossible, however, to practise from the book alone; it must be looked on rather as a summary and a text. Names of original writers are often given, but no references, which we much regret. About the confession of ignorance on certain points there is no scruple. Thus, "our clinical knowledge of hyoscyamus is thoroughly imperfect"; "we have very little scientific knowledge of pulsatilla" (*pace* Baron Störck); "nothing definite is known about the therapeutic use of aconite" (page 22) etc.

The first chapter, on opium, will illustrate most of our remarks. Morphia is taken as its representative, the therapeutical points of difference between it and the crude drug being disregarded. Small doses excite for a time; large ones quickly stupefy and paralyse, especially in highly organised nervous natures; the drug diminishes also the activity of respiratory centres in the medulla and the functions of cord generally, not of striped muscular tissue. Small doses stimulate the vaso-motor system, contracting the arteries; large ones paralyse, and depress temperature. In narcotised animals, septic injections produce no fever. Morphia diminishes intestinal sensibility, not the secretions; it diminishes carbonic acid, not urea; large doses paralyse the dilating power of the sphincters. The cells of the cerebral cortex have decided affinity for the drug, and are paralysed by it. Natural sleep is regarded as the result of fatigue of these cells, produced by accumulated products of tissue-change, and this result is imitated by morphia. It produces also anemia of brain; but this cannot be a main condition of sleep, because alcohol and chloral produce a sleep in which the vessels are not contracted.

As a remedy, morphia is used to diminish central and peripheral nervous excitement in many conditions, as in pneumonia, bronchitis, intestinal catarrh, typhoid fever, salivation, etc.; a mere enumeration, without any qualifying remarks. Its cautious use as an antidote to belladonna is recommended. The maximum dose of pure opium is set as fifteen *centigrammes* (two grains and a quarter); and we learn that in Germany the physician is required to place a note of admiration (!) on his prescription ordering this.

Then come three and a half pages enumerating the preparations of the drug, and a page as to its hypodermic use, one-thirteenth of a grain being indicated as the first dose. Cannabis Indica follows in the same section, occupying only a few lines. We learn only that it is said to induce sleep without unpleasant effects; nothing as to its value in dysmenorrhœa, menorrhagia, or neuralgia.

In regard to other drugs, nitrite-amyl, chloral, caffeine, ergot, mercury, certain sections may be more detailed; and we must add that all good new remedies receive at least a mention, and that Dr. Sparks has himself added to the text many useful paragraphs. But it remains that the treatise is essentially one of "elements"; and, whilst it has a value as a text and a summary, and a special value as representing the teaching of a distinguished professor, it is not likely to supplant the more practical English and American text-books already in use.

REPORTS ON VENEREAL DISEASES AMONG EUROPEAN TROOPS IN INDIA.

THE reports just published of the Lock hospitals—nine military and four civil—of the Madras Presidency, give full details for the year 1876 of the number and character of venereal diseases affecting the European soldiers, and the women registered under the Contagious Diseases Act in that presidency. They are chiefly interesting as affording data whereby to judge of the working of the Act in diminishing venereal

diseases. Most, if not all, the reports assert the benefits of the Act; but they all also agree in lamenting its inefficacy to meet the entire evil. In general terms, it may be admitted as a manifest fact that the destruction of the sources of a contagious disease must *pro tanto* diminish the spread of the contagion. But, in dealing with this particular contagion, there exists, as we find, an insuperable obstacle to its entire repression. Parent Duchâtelet forcibly felt this, and acknowledged that the root of the evil, and the main production of it, would never be reached unless clandestine prostitution could be controlled. This standing difficulty the medical authors of these reports acknowledge. In small towns, no doubt, the police can, in a large degree, lay hands effectively on the female sources of the disease; but, in large cities everywhere, and in country districts of India, this seems impossible. Prostitutes in India are not regarded as social outcasts. Prostitution, we are told, is there a recognised trade, "a form of religious consecration". Besides this, venereal diseases are very common in domestic life in the rural districts of India as well as in the towns, and "are not regarded with abhorrence, as in England". The worst "cases of syphilis in females which are admitted to hospitals come from country districts, and occur in the persons of married women or of widows who are not prostitutes". Under these conditions, it is no wonder that medical officers find their efforts largely neutralised. Clandestine prostitution is very extensive, and escapes control. Another obstacle arises in the very working of the Act. Its rigorous enforcement tends to produce the very evil it would cure. The result, we read, of an effective registration of women and of a detective agency is this: "A gradual diminution in the number of registered prostitutes; an abandonment of the station by them; an increase of clandestine prostitution; a diminution in the amount and severity of syphilis among the non-registered." Under these circumstances, we need not be surprised if the statistics give us no striking evidence of the benefit of the Contagious Diseases Act. Clandestine prostitution is widespread, and the worst form of diseases exists amongst the non-registered. Indeed, a comparative reading of the reports of the medical officers shows that much caution is required in judging of the actual effects of the Act in the diminution of venereal diseases. It is generally admitted that these diseases in India, as elsewhere, are of a far less severe character now than they were fifty years ago, and far more amenable to treatment. This fact may be in part attributable to the elimination of what Mr. Syme used to call the mercurial disease in syphilis, in consequence of its treatment without the mercurial poisoning of other days. Then, again, conclusions from the statistics of one district, or from the comparison of any two years, are full of fallacy. Different districts give great differences with regard to the ratios to strength of admission to hospital of European soldiers.

The following, for example, are the numbers—ratios to strength per thousand—of European soldiers admitted to hospitals for venereal diseases during 1876 in the nine different districts of the Madras Presidency:—320, 280, 279, 210, 126, 166, 125, 98, 94. In all these districts, the Contagious Diseases Act is in operation. Taking the total number of cases during the last seven years which have occurred in these districts, the general average seems to be much the same. This may be inferred from the following table, which gives "the ratio per cent. of admission from venereal disease to strength".

1870	..	..	15.41	1874	..	..	18.59
1871	..	..	17.37	1875	..	..	19.32
1872	..	..	16.42	1876	..	..	17.92
1873	..	..	14.08				

These percentages are calculated on the total number of European soldiers, varying from 8,900 to 10,000, during the years given. In the report, we read, as a comment on these figures, that "venereal affections generally seem to have their times of increase; and that there are periods of maxima and minima every fourth year". In two of the stations where there are no Lock hospitals, and where the number of troops is 134 and 150, we find that, in the first, the ratio of admissions in 1864 per 1,000 was 44.7, and in the latter 386.6. These figures show plainly enough what caution is required in judging statistically as to the effect of the Contagious Diseases Act. The health officer of Madras, in his report, says: "It is constantly being asked, Has the Contagious Diseases Act done any good?" And he answers the question by what he seems to consider an unanswerable reply: viz., "that out of 10,827 European troops and 1,400 married women, having 2,900 children born to them and now living, not one of these children has been a subject of syphilis. This can scarcely be believed in a country of so much venereal disease. . . . The absence of all diseases amongst the children speaks well either for the freedom from syphilitic disease in the Madras Presidency or the morality of the married soldiers and their wives." Now, this asserted freedom from venereal diseases may be inferred from the fact that, of 10,827 soldiers, 1,852 were, in

1876, admitted into hospital for venereal diseases; and we have no information given us as to the condition of the children in former years to use as a comparison; and no account is taken of the great mildness of the character of venereal diseases at the present day in India. The fact, therefore, on which the health-officer relies is not of much value as it stands at present.

SYNOPSIS OF THE DISEASES OF THE LARYNX, LUNGS, AND HEART; comprising Dr. Edwards's Tables on the Examination of the Chest. By F. DE HAVIDLAND HALL, M.D., Assistant Physician to the Westminster Hospital. London: J. and A. Churchill. 1878.

THIS tabular form of showing the diseases of the larynx is quite novel, and may with advantage be extended still further in a new edition; to all students of laryngoscopy the tables are invaluable, and now that the use of the laryngoscope is no longer confined to a few specialists, but is in frequent employment with practitioners, their value will be enhanced. Our examining bodies, it is to be hoped, will be alive to the necessity of testing the knowledge of candidates in medicine upon these diseases of the larynx which, by the aid of the laryngoscope have been brought to light, and, but a few years ago, were almost unknown.

There is one very much neglected point in ordinary clinical teaching, upon which the late Dr. Hughes Bennett and Sir Wm. Ferguson insisted strongly in their clinical lectures; viz., making the students thoroughly acquainted with normal healthy structures, and the normal and healthy sounds of the various organs of the body. This is particularly necessary with the sounds of the chest before proceeding to learn diseased ones. The student could not do better than take Table II of Dr. HALL's synopsis, and examine as many healthy adults as he can come across, and so educate his ear. The arrangement of the chief diseases of the chest in parallel columns of symptoms, physical signs, and *post mortem* appearance, started by Dr. Edwards and extended by Dr. Hall, is most convenient; as, at a glance, the student can see what conditions are to be met with in any given stage; and, for the purposes of examination, this is invaluable, as it enables the student to place before the examiner in the best possible light the knowledge which he possesses, and the examiner is saved a great deal of trouble. Moreover, the plan inculcated in these tables of examining the chest in a methodical manner, making use of the methods of inspection, palpation, percussion, and auscultation, in the order given, facilitates a thorough examination of the chest, and prevents anything from being overlooked; and, after all, the definition of "genius being attention to trifles," is not far short of the truth. More mistakes are made in a physical examination of the chest from the disregard of a systematic plan, than from any other cause. The same may be said of medicine generally. A student cannot too early initiate himself into a habit of examining the body on a fixed and definite plan. Let the system be based upon what plan he may find easiest to himself, but let the order of his examination be always the same.

Not the least valuable part of the synopsis are the tables of differential diagnosis. These tables do not partake of the objectionable type of books brought out by "grinders"; they are skeletons which the students can habituate in his study of other treatises in medicine; and are invaluable aids, also, by the bedside, enabling him readily to compare signs met with in disease with those observed in health.

NOTES ON BOOKS.

Clinical Work is the pleasant and rather novel title of a quarterly journal of Therapeutics and Public Health, edited by Dr. Andrew Davison, and published at Port Louis, Mauritius. The field of observation, if not large, includes many opportunities of interesting study; and the present number has some valuable notes on Malarial Fever, Dysentery, Tannin as a substitute for Quinine, and other subjects which are natural to the soil and climate.

The first number of *Brain, a Journal of Neurology*, is extremely good. It has a valuable series of original papers, all of which deserve reading. Those by Mr. Jonathan Hutchinson and Dr. Bevan Lewis are of the first order of merit; while M. Durel, in relating his recent valuable researches on Brain Traumatism, and Mr. G. H. Lewes on Motor Feelings and Muscular Sense, are distinctly original, although not altogether beyond the regions of actual doubt. The reviews are able, and the summaries well chosen. Altogether, this is the best neurological journal which has yet appeared, and, if it can be maintained—as we believe it can—at its present standard, deserves a permanent success. It will be simply indispensable to working students of the physiology and diseases of the nervous system.

SELECTIONS FROM JOURNALS.

SURGERY.

REFLEX PARALYSIS FROM PHIMOSIS AND ADHERENT PREPUCE.—Dr. W. H. Whitehead reports the following case in the *Cincinnati Medical News* for November 1877. John A., aged 7, was perfectly healthy up to the age of four, when he began to have convulsions, and continued to have them, without impairment of health, up to the age of six. Then he began to be clumsy, and finally became generally paralysed. When first seen by Dr. Whitehead, he could not move hand or foot, nor articulate a word; his expression was somewhat idiotic; his bowels were constipated, and he had been as long as ten days without a motion, even after taking several doses of castor-oil. On examining the abdomen, the penis was accidentally touched, when the organ became erect, and the boy instantaneously had a convulsion. His mother said that with every fit the penis became erect, and that he had as many as sixteen in twenty-four hours. On examination, he was found to have phimosis with adherent prepuce. He was circumcised, and the adherent membrane torn from the glands. Behind the corona was impacted sebaceous material. No medicines were given. On a next visit, two days later, the boy was sitting in a chair, with more intelligent countenance; his bowels had been moved regularly, and he had had only one convulsion. Five days afterwards, he could walk across the room, and had had no convulsions. In two weeks, he had very much improved.

TREATMENT OF FRACTURED CLAVICLE.—In the *Chicago Medical Journal*, Dr. H. Van Buren recommends the following method of treating fractured clavicle. A bandage three or four inches wide, of double thickness and sufficient length, is made. On one end a loop is made by returning the bandage upon itself and securing by stitches. The hand of the injured side is passed through the loop, and the loop is carried up to a point just below the axillary margin. This bandage is then passed directly across the back, and under the sound arm, and over the sound shoulder, and returned across the back and stitched to itself at the point where the loop is formed. The arm of the injured side is then flexed with the hand on the chest, pointing in the direction of the sound shoulder. Another bandage of double thickness, and of the same width, is pinned or stitched by one end to the lower margin of the first, in front of the sound shoulder. It is then passed diagonally downward, and across the chest, under the hand and forearm, which has been flexed upon the chest, and carried around the arm at the elbow, and back on the dorsal surface of the forearm and hand to the point from which it started, and this end is also pinned to the first bandage. The lower margins of this bandage are stitched together for a distance of three inches at the elbow, thus forming a trough for it to rest in. The same may be done at the upper end, in which the hand may rest. This sling serves the triple purpose of drawing the lower end of the arm forward and upward, and thus throwing the injured shoulder backward; it supports the forearm and hand in a comfortable and quiet position; and, last, it prevents the first bandage from cording under the sound arm, by its attachment to its lower margin.

MIDWIFERY AND DISEASES OF WOMEN.

SURGICAL TREATMENT OF INTRA-UTERINE SUBMUCOUS FIBROIDS.—Dr. E. T. Easley (*Richmond and Louisville Medical Journal*, February) offers the following conclusions on this subject. 1. Cutting operations, for the removal of submucous intra-uterine fibroids, are not justifiable, unless it is evident that their presence endangers life. 2. Primary enucleation, when at all practicable, is slightly preferable to the secondary method. 3. In secondary enucleation, the surgeon need not be solicitous to remove the growth *en masse*; but when the process is once set up he may, with great certainty, rely upon its piecemeal disintegration. 4. In primary procedures, the treatment should be chiefly such as is best calculated to limit shock, and, afterwards, to nourish the patient and guard against pelvic inflammations. 5. In the secondary method, most authorities say the ergot of rye should be given to the extent of maintaining vigorous uterine action. Decomposing discharges and shreds of slough should be carefully removed, the patient's strength be sustained, and all constitutional measures to prevent septic infection strictly enforced. Locally, detergent fluids are to be freely used, and the utmost cleanliness observed. 6. The mortality has exceeded one-half, and it is not likely that it will ever be reduced to one-third, of all the subjects of operation.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 18TH, 1878.

CHOLERA IN THE RED SEA.

It is now possible to recount with some degree of completeness the general facts relating to the recent outbreak of cholera in Western Arabia and on the east coast of the Red Sea. It would be premature to discuss the very important bearing of these facts upon the vexed question of quarantine. Indeed, at a recent meeting of the Epidemiological Society, at which Mr. Netten Radcliffe communicated to the members the details of the outbreak as then known, he deprecated such discussion until later in the year, on the ground that, until the autumn had come and passed, we could not be quite sure that some parts of Egypt—Upper and Middle, if not Lower—had escaped infection. In this view of the question, the Society, as a whole, concurred; and we are not prepared to say that it was not the proper course for a scientific society to pursue. Mr. Radcliffe, moreover, showed how that, supposing, as is to be hoped will be the case, Egypt should escape any manifestation of cholera this year, the question as to the part which quarantine may have had in securing its exemption will be a very thorny one. For the recent extension of cholera into Western Arabia has not been the only recent extension of cholera beyond the boundaries of India. The disease spread to the frontier of Persia in 1876, and then appears to have died out. It is probable, therefore, he argued, that we have been witnessing in Western Arabia, as in the countries bordering Northern India, a partial extension of the disease, and not the beginning of a pandemic. The point here raised will prove a knotty one; and, for the present, we must leave it to the epidemiologists to knock their heads against it in their own good time.

Meanwhile, our Levantine friends are by no means disposed to postpone the discussion of the question referred to, and their conclusions therefrom. Quarantine was *their* bridge of escape from a great danger; and the danger having been avoided, as they think owing to this bridge, they are not in the least disposed to doubt the means by which they escaped. In truth, we learn that the facts of the recent extension of cholera in Western Arabia and on the Red Sea coast furnish, in the estimation of our Levantine brethren, a triumphant vindication of quarantine. At present, without committing ourselves to an opinion upon the subject, we may say (except for the important reservation as to other recent extensions of the disease made by Mr. Netten Radcliffe) the facts appear to be in favour of this view. At any rate, we cannot affect surprise that they should be regarded as proving it, so far as our present information stands. We do not propose to discuss the question at present; but it will be well that we should set forth the several facts bearing upon it as they have now become known to us.

We assume that the disease which has lately caused so much anxiety in the Red Sea was cholera, although doubts have been expressed on this subject by certain persons who are stated to have witnessed the malady at Jeddah. But it is quite incredible, having regard to the familiarity which the medico-sanitary agents of the Egyptian and Ottoman Governments have lately acquired with malignant cholera,

that a mistake could have been made in diagnosis by them. Indeed, unless the symptoms which characterised the progress of the malady in the recent outbreak, as detailed to us, were a pure invention, we know not what the disease could have been unless it were cholera. The doubts raised in this case seem to be of much the same character as those which have been raised as to the recent existence of plague in Mesopotamia. The doubters in the last-named instance, while denying the presence of plague, admit the existence of a plague-like malady new to medicine, and which they would designate "bubonic fever" or "plague-like malarial fever". In like manner, the doubters in the first-named instance, while refusing to admit the recent presence of cholera in Western Arabia, grant the existence of a "choleraic disease", and in effect, if not in words, would name it "choleraic fever". When we are reduced to the dilemma of choosing between the acceptance of a disease which is well known and a new disease which so closely simulates the other that it must be named for it, we shall be pretty safe in assuming that the known disease is in question.

The existence of cholera in Western Arabia, at Mecca, appears first to have become known to the Egyptian General Board of Health on the 1st of January of this year. Two days before this day, the first ship bringing pilgrims returning from Mecca brought up at the quarantine station at Tor, in the Gulf of Suez. The news of the appearance of cholera at Mecca was presently confirmed, and measures were taken by the Egyptian Board which practically amounted to an entire cutting off of all communication, whether by sea or land, with the infected locality until the outbreak of the disease came to an end. As the facts relating to the disease accumulated, it became known that cholera had first been recognised at Mecca almost immediately after the termination of the rites of last year's pilgrimage, and at a time when the pilgrims were dispersing rapidly. But there is little doubt that the disease showed itself earlier than the 23rd, and that a knowledge of its existence was either unknown to the Ottoman sanitary officials or suppressed by them. Of the source of the disease in Mecca nothing is as yet known; and, under the circumstances of its first announcement, it is to be feared that nothing will now be ascertained. Of the caravans of pilgrims leaving Mecca of which we have any knowledge, almost all carried the infection with them. In Mecca, the disease lasted until January 11th, and within that period killed, as is reported, seven hundred and eighty-five persons. The pilgrims returning to Jeddah carried the disease with them thither, and in that town it occasioned two hundred and seven deaths, the last occurring on February 27th. Pilgrims and troops travelling from Mecca to the towns on the coast south of Jeddah also carried cholera along with them, and the disease showed itself in Gofudah and Hodeida and some intermediate places. The northern caravans appear to have borne the infection more freely along with them than the southern. Thus the Syrian caravan, consisting of five thousand persons, lost one hundred and sixty-nine from cholera between Mecca and Medina; and the Bagdad caravan, consisting of two thousand five hundred persons, lost ten. The disease was introduced into Medina, and killed over one hundred people there. The Egyptian caravan, consisting of eight hundred and fifty persons, did not have a single case of cholera on its route homeward. The infection does not appear to have been propagated from Medina, and among the numerous pilgrims who proceeded thence to Yembo to embark for the sea-route no case of cholera was reported; but during the stay of these pilgrims at Yembo, twenty-nine fatal cases of diarrhoea occurred.

The great interest of this outbreak, so far as Europe is most immediately concerned, rests in the transmission of cholera on the sea-route from Jeddah and Yembo to Suez. About sixteen thousand pilgrims travelled homewards by this route, and underwent quarantine at Tor. Thirteen deaths were reported during the passage, of which one only was assigned to cholera, and five to diarrhoea; and, during the stay of

the pilgrims at Tor, the number of deaths from cholera was six, and of diarrhoea fifty-two. The pilgrims were detained at Tor until the remotest chance of cholera existing among them seemed to be excluded, when the quarantine was raised, and the pilgrims were despatched to their several destinations, those destined to other countries in the Mediterranean than Egypt being sent through the Suez Canal and quarantine. It is believed that no evasion of the quarantine at Tor occurred. Several native craft with pilgrims on board, and bound for the African coast, attempted evasion; but it is said that the measures adopted to arrest these craft at their several destinations before the pilgrims and crews landed were successful. The Egyptian Board of Health, in fact, believes that the stream of infection in course of flow from Jeddah and Vembo to Suez and Lower Egypt was effectually stopped at Tor, and that Egypt has thereby been saved from the introduction of the disease into her midst.

Has this stoppage been so effectual as that Board believes; and, if so, has Egypt thereby been saved from another epidemic of cholera? The answer to these questions is not wholly upon the surface. We shall postpone their consideration for the present; but meanwhile we would observe that the Epidemiological Society could not render a more useful service to the profession, than by subjecting them to detailed discussion when the time serves.

A SCOTCH CAUSE CÉLÈBRE.

SINCE the trial of Dr. Pritchard at Glasgow in 1865 for the murder of his wife and mother-in-law by aconite, no case has come before the Scotch Criminal Courts which has excited so much interest as that of M. Chantrelle before the High Court of Justiciary in Edinburgh. To find any case similar to this in the records of our English courts, we must go back to the trial of William Palmer, who was convicted in May 1856 of the murder of his friend Cook. Aconite, strychnia, and morphia were the poisons selected by the three criminals; and the mode of administration was carefully chosen in each case, with the intention of misleading the scientific witnesses and defeating chemical research.

The case of M. Chantrelle, which was the subject of a trial in Edinburgh during the last week, presented the same scientific difficulty as that of Palmer. Although recently administered, no trace of the poison by which death was said to have been caused could be detected in the dead body of the victim. Hence we find the counsel in the case of Chantrelle resting the main part of his defence on this fact, and adopting the language of the late Serjeant Shee in defending Palmer: "If he died of it, the poison must have been there; and, if there, it must have been found."

The prisoner Chantrelle was indicted for administering an opiate poison to his wife on the night of January 1st, 1878. There was no direct evidence of the administration; it could only be inferred from the medical and other circumstances surrounding the case. The evidence showed that the parties had lived unhappily; but there was nothing in the conduct of the prisoner at the time of this occurrence to lead to the belief that he would destroy his wife by poison. On December 31st, she was in perfect health, in good spirits, and occupied herself in household work. In the evening, she had some champagne with her husband, and went to bed as usual. On January 1st, she felt unwell, and went to bed early. At 9.45 P.M., she was seen by her servant lying as if in her usual health. After this, the prisoner went to his wife's bedroom. How long he stayed there, and when he returned to his own room, is a matter of conjecture. The servant heard a groaning at six in the morning, when she got up. She went to the deceased's room, and found her insensible, groaning, and lying on her left side; the clothes greatly disturbed. She found it impossible to rouse her or to make her speak. The bedroom-door was open, whereas it was

generally shut; while the gas was out, although it was usually kept burning. She called the prisoner, who tried to rouse the deceased, but without success. He sent the servant out of the room on some pretext; and, on her return, she found him coming from the window, which he had opened; and he then asked the witness whether she did not smell gas. In a minute or two, she perceived it, although she had not perceived it in the room at any time previously that night. In reference to this fact, which is of importance in relation to the allegation of gas-poisoning, it was subsequently found that the gas-pipe, which was behind the shutter of the window from which the prisoner was seen coming, had been quite recently broken; and, as the gas had been shut off at the meter, that which gave the smell was the residuary gas contained in the pipes.

Two medical gentlemen, who were called to see the deceased, at first suspected that it was a case of gas-poisoning. The facts above mentioned, however, were not consistent with this theory; and, in the judgment of these gentlemen, as well as of others who were subsequently consulted, the symptoms and appearances were not such as would be produced by gas.

The deceased was removed from her bedroom at half-past eight A.M.; she was taken to the Infirmary at two, and died at four o'clock P.M. The main question at the trial was, What was the cause of death—the breathing of gas, or a narcotic poison administered by the prisoner? The circumstances were adverse to the theory of gas-poisoning; and it was alleged, on the part of the prosecution, that this theory had been put forward by the prisoner to conceal the real cause; the prisoner having broken the gas-pipe in the bedroom, so that there might be an escape at the time his wife was discovered. Until he had had an opportunity of doing this, there was no smell of gas; but the deceased was at that time quite insensible. Besides, as the gas was shut off at the meter, the contents of the pipes only would have been discharged, had there been a spontaneous leakage during the night from any accidental cause. This would not have sufficed to produce gas-poisoning, especially as the door of deceased's room was found open.

Dr. Littlejohn, who examined the body, found it in all respects healthy. There was no organic disease. The appearances were consistent with narcotic poisoning; but, as the learned judge observed on this part of the evidence, the *post mortem* examination could throw no light on the question of opiate-poisoning. Opium left no marks of its action, and no traces of opium could be detected in the body by the two principal scientific witnesses, Drs. Littlejohn and MacLagan.

A remarkable feature of this case is that, although the viscera yielded no traces of opium or its principal constituents, morphia and meconic acid, yet the clothes worn by the deceased supplied the chemical evidence which was required.

It was proved that, on the sheet upon which the deceased lay during the night and down to the period of her death, as well as on her night-dress, there were yellowish stains and other stains of a darker colour. The constituents of opium (morphia and meconic acid) were found in these stains by Drs. MacLagan and Littlejohn, as well as by Professors Fraser and Crum Brown. The evidence given by these experienced experts on this fact is conclusive and satisfactory.* It was suggested

* In order to weaken this part of the case, Mr. Falconer King, city analyst, was called for the defence, and according to this witness, to quote the words of counsel, "the reactions they obtained were not conclusive proofs, were not proofs at all; they were scouted by Mr. Falconer King as proofs of the existence either of meconic acid or morphia". On turning to the report of Mr. King's evidence, we find that the tests for meconic acid and morphia were not properly applied by him. Corrective experiments were not performed by this gentleman on his first results; hence the apparent discrepancy between his statements and those of the four eminent experts called for the prosecution. The suggestion made by Mr. King, that a crystal of morphia would have furnished better evidence than that presented, will appear absurd to those who know that there is nothing characteristic about this crystal of morphia, and that it could not be pronounced to be morphia except by the application of the tests actually employed by the experts and objected to by Mr. King. It would, besides, be a novelty to obtain hexahedral prisms of morphia from such slight yellow stains caused by opium on linen as are here described. The Lord-Advocate's cross-examination of this witness showed that he had omitted a number of precau-

that these stains had the properties of extract of opium. Some had been produced by vomiting, others by parts of the sheet coming into contact with the dress.

From these results, all the experts came to the conclusion that, at some time during the night of January 1st, the deceased had had administered to her (for suicide could not be suspected) a dose of extract of opium. It was proved that the prisoner was the only person about the deceased who had the opportunity of administering a narcotic; and, further, that he was in possession of numerous drugs, including opium, of which he had a fluid extract. It was also proved that he had procured a drachm of this substance in November 1877.

The evidence, scientific and general, therefore, showed that the prisoner had clearly the means and opportunity of administering poison; and the other accompaniment of guilt, motive, was not wanting. This hardly comes within the scope of medical criticism; but it may be observed that there was circumstantial evidence that husband and wife had lived unhappily. The prisoner had insured her life for £1,000 in an accidental death insurance company, and he was, therefore, interested in her death from any accident such as gas-poisoning. The prisoner had many drugs and poisons in his possession; he knew their properties, and had threatened to kill his wife with poison which, as he said, the Faculty of Edinburgh could not detect.

A very skilful and elaborate defence was made by Mr. Trayner, the counsel for the prisoner. Although he denied that death had taken place from opium, he suggested no reasonable cause for the coma and the other narcotic symptoms, or for the fatal results after about the average period. He could suggest no disease which would have destroyed life under the circumstances, and have left no trace of its existence in the body! Like a judicious advocate in a bad case, he contented himself with criticising the evidence of the medical witnesses for the prosecution, without substituting any theory of his own to account for death. The following extract from his clever address involves so serious a scientific error that we cannot do otherwise than expose it. He is represented as saying that "he believed this was perhaps the first criminal case in which the jury had been asked to hold a person guilty of poisoning, where nothing in the body killed had been found to show the cause of killing". This statement implies that no person has ever been convicted of poisoning unless a portion of the poison had been found in the body after death. The fallacy of this proposition was well exposed on the trial of W. Palmer in 1856. It is well known that the jury convicted that notorious criminal, although the cause of the killing was not found in the body of his victim.*

In the annals of criminal poisoning, this case will take rank with those of Palmer and Pritchard. In it we find a clever well informed man coolly laying his plans to destroy his wife by narcotic poisoning, secretly giving it to her in a form to operate quickly, and in a quantity not to admit of any detection in the body; trying to make it appear as poisoning by the escape of gas. Yet his ingenuity failed him at all points. There was no necessity for his suggesting any cause of death, such as gas-poisoning, or for breaking the gas-pipe in the bedroom to give plausibility to his suggestion. These acts served only to raise suspicion, and, as a rule, every effort made by a criminal to avert suspicion adds to the force of the circumstantial evidence against him.

tions in using his tests, and that, had these been observed, his results would have substantially agreed with those obtained by the witnesses for the prosecution.

In his address to the Court after his conviction, the prisoner utterly repudiated the chemical defence set up for him in reference to the detection of morphia and meconic acid. He admitted that opium was in the stains, but that he did not put it there. He suggested that the stains had been rubbed in by some person.

* In Alison's *Criminal Law of Scotland*, page 75, is recorded the case of a woman Humphreys, tried and convicted at Aberdeen in 1830 for murdering her husband, by pouring oil of vitriol down his throat. The man survived two days. Not a trace of the poison was discovered in his body, but some spots of vitriol were found on the night-dress of the woman! This was the only evidence; but it was accepted as satisfactory proof, and the woman was executed for the crime.

Using the language of one who has commented on this case: "His motives for the crime of which he has been found guilty; his ability to commit it; his various ineffectual attempts to hide it afterwards, all combined against him, and led to his conviction."

WE regret to announce the death of Dr. Jephson, who expired at his residence, at Leamington, on Tuesday last. We hope next week to publish a memoir of this well-known physician.

AN anonymous benefactor has founded a prize of 6,000 francs (£240), which will be awarded by the Academy of Sciences, Paris, in 1880, for the medical application of the researches of M. Pasteur.

M. LANNELONGUE has investigated the inflammation of the apophyses during the period of growth. These inflammations are often due to muscular fatigue.

MR. JOHN ERIC ERICHSEN, F.R.S., will preside at the annual festival, in aid of the funds of University College Hospital, to be held at Willis's Rooms, King Street, St. James's, on Tuesday next, at 6.30 P.M., when it is hoped that old students will liberally support him.

M. TILLAUX has performed coxo-femoral disarticulation with the thermo-cautery and the galvano-cautery, a proceeding which he recommends in cases where complete hæmostasis is necessary.

DR. FANO has put forward a new theory of visual accommodation. According to his view, the notion of variable distance of objects is due to the formation of more or less distinct images on the different regions of the retina.

AT a meeting of the Lancashire Branch, held last week in Liverpool, it was unanimously resolved to oppose any Bill for the amendment of the Medical Acts which did not include provision for the compulsory formation of conjoint examining boards, and for the direct representation of the profession in the General Medical Council.

M. ROGER-MARVAISE has again laid on the table of the Chamber of Deputies a restrictive proposition for regulating the practice of medicine in France by foreign physicians and surgeons, graduates of foreign universities.

A MEETING of the Metropolitan Counties Branch of the Association will be held at 11, Chandos Street, on Wednesday next, at 8 P.M., when papers on Vaccination will be read by Dr. E. C. Seaton and by Dr. John Greene of Birmingham. It is hoped also that a communication on the subject will be made by Mr. Ceely of Aylesbury. The well-known reputation of these gentlemen as authorities in matters relating to vaccination is a sufficient guarantee that their communications will be of great interest and value, and it is hoped that the members of the Branch will attend in large number on the occasion.

MR. JOHN BRIGHT has once more expressed himself publicly in favour of selling indulgences to propagate small-pox. He is of opinion that the payment of the first fine should serve to procure immunity from further prosecution; in other words, that every father should be at liberty to sacrifice the life of his children by omitting to protect them from the infection of small-pox, and to set up the foci of a dangerous and infectious disease, on payment of twenty shillings. A more pernicious and surprising doctrine was, perhaps, never before put forward by a statesman of position.

THE duties of medical officer of health are sometimes performed under difficulties of an almost insurmountable kind. Dr. Bristowe has endeavoured to "inspect" the gipsy encampments at Dulwich, which are described as being the source of intolerable nuisances; but, owing to the appearance of several ferocious dogs kept by the gipsies, he had to beat a retreat. The magistrate "felt powerless to act"; and Dr.

Bristowe, under the fear of being reduced to a similar state of powerlessness, very naturally refuses to act. The tax-gatherer ought to try to collect licence-money for these dogs, which appear to possess unusual privileges.

M. MAGNAN has been studying afresh the physiological relations of substances having a serial chemical relation. Examining the physiological relations of allylic alcohol, he has arrived at the following principal conclusions. Allylic alcohol slowly precipitates albumen, renders brown the defibrinated blood, to which oxygen cannot restore its colour: it kills the figurate ferments, and arrests the movements of inferior organisms; but it has no action on the soluble ferments, and does not paralyse the properties either of diastase or of ptyaline. It is less rubefacient than essence of mustard. It is a rather powerful poison, which kills dogs in forty minutes. In the series of monatomic alcohols, $C_nH_{2n+2}O$, the transpirability increases with the volatility, and the figure which expresses it is about the same as the index for carbon in the formula.

EARL RUSSELL.

WE are happy to learn that the improvement in the health of Earl Russell continues, especially as regards strength and consciousness: there is also less fever.

INSTITUTION CONTRACTS.

A NUMBER of wholesale grocers, who were found to have supplied Hanwell Asylum with "cocoa" consisting of 25 per cent. of added starch, 32 per cent. of sugar, and 3 per cent. of red earth, justified themselves on the ground that the contract price was only £2 per cwt., while it is well known that genuine cocoa sells at the rate of £7 per cwt.; and that it could not, therefore, have been in the minds of the committee that they were going to be supplied with genuine cocoa. This is, of course, not a valid defence; but it is undoubtedly the fact that the committees of many workhouses, hospitals, etc., are in the habit of giving out contracts for necessary articles of daily diet at prices which preclude the possibility of the old people, sick people, and children under their care being supplied with genuine and unadulterated food. It has been conclusively shown, by series of analyses published by Mr. Wanklyn for the Government, that the workhouse milk generally is skimmed and watered; and our own published investigations show the same state of things to prevail largely at hospitals. To this, and as partly explaining it, we may add that we are informed that vendors of pure milk on the largest scale, such as the Aylesbury Dairy Company, habitually decline to send in contracts for such institutions, as the prices offered are such that it is not possible that pure milk should be supplied. The kind of economy which encourages and accepts spurious, deteriorated, and impoverished articles of food for the carefully limited dietary of public institutions, in order to effect an apparent saving, is most honoured in the breach. Some improvement has been effected in many of the principal metropolitan hospitals since we have repeatedly called attention to the subject; but there is still much room for further improvement.

VACCINATION AND INFANT MORTALITY.

ON the strength of a spuriously arranged Parliamentary return, which owes its origin to the ingenuity of anti-vaccinationists, a mischievous assertion is being widely disseminated, that there has been a marked increase of infant mortality in England since the Vaccination Act of 1853 made infant vaccination compulsory. Unlike many other of the reckless assertions of this party, this assertion can be very easily disposed of by the simple statement of the fact, that English infant mortality has declined, and not increased, since vaccination became compulsory. The return in question does not afford any information relating to infant mortality from *all causes*, but only from a selected list of fifteen specified causes, the value of the supposed connection between which and vaccination may be inferred from these including diarrhoea, cholera, and diphtheria. It appears to be true that the mor-

tality from these selected diseases has increased; but the return carefully keeps in the background the more than compensating decline of mortality from the other causes. The unvarnished facts of English infant mortality from *all causes*, during the past thirty-one years, are as follows. During the seven years 1847-53, before vaccination became compulsory, the deaths of infants under one year of age were equal to 156 per 1,000 births registered; during the next fourteen years, when, in the words of the return, vaccination was obligatory, the rate of infant mortality declined to 153 per 1,000; and in the ten most recent years 1868-77, during which, in the words of the return, vaccination has been enforced, infant mortality further declined to 152 per 1,000. In the face of these facts, the assertion of a recent increase in the rate of infant mortality, and its attribution to vaccination, is being scattered broadcast among the poor and ignorant, in order to promote anti-vaccination opinions. Unfortunately, the return to which we have alluded is so ingeniously contrived that its figures have been very generally misunderstood; and the increased infant mortality, from the fifteen selected specified causes, has been mistaken for an increase in the rate of infant mortality from *all causes*. It is impossible to condemn too strongly the publication, in the form of Parliamentary returns, of such worthless and misleading statistics as those to which we have alluded. The cost of such a return must be considerable; but its power for mischief, as it appears, is still greater.

VIOLENT DEATHS.

THE deaths referred to different forms of violence during the first quarter of the present year were 4,086, and were fewer than in any quarter since the second of 1873, notwithstanding the increase of population; they were equal to an annual rate of 0.67 per 1,000 persons living, and to 2.9 per cent. of the deaths from all causes. In the agricultural counties of the South Midland and Eastern Divisions, the death-rate from violence did not exceed 0.43 and 0.46 per 1,000, whereas it was equal to 0.72 in the Northern, 0.74 in the Welsh, and 0.93 in the North-western Divisions, in each of which the greater part of the population is engaged either in mining or manufacturing industries. In the twenty large towns, the death-rate from violence averaged 0.82 per 1,000, and ranged from 0.25 and 0.46 in Portsmouth and Brighton, to 1.16 in Birmingham and 1.24 in Liverpool.

THE FRENCH POISONING CASE.

REFERRING to the recent trial of the chemist Danval for poisoning his wife (which has lasted a week, and has excited great public and scientific interest), our Paris correspondent writes:

"The accused, Danval, a pharmacien, was charged with having caused the death of his wife by slow poisoning with arsenic. They were only about eighteen months married, for the last twelve of which the victim was always more or less ailing. She was troubled with almost incessant diarrhoea, vomiting, a parched mouth, and a sense of burning in the throat. These symptoms were accompanied with steadily increasing debility and emaciation, of which she eventually died; but, as the medical men who were called in from time to time for advice could not discover any malady to account for the above symptoms, this, coupled with the brutal treatment of the husband, awakened the suspicions of the young woman's parents, caused the exhumation of the body thirteen days after burial, and led to the arraignment of their son-in-law. To bring home the charge against the prisoner was a most difficult matter, and only for the discovery of the presence of arsenic, infinitesimal though it was, the accusation would certainly have broken down, and yet it was this part of the evidence that was most contested. Dr. Bergeron, already known for his experience in matters of medical jurisprudence, assisted by Dr. Delens and M. l'Hôte, a distinguished chemist, was engaged for the prosecution. These gentlemen detected arsenic in the stomach, liver, and intestines, but the quantity was so small (one milligramme, or 15-thousandths of a grain) that it was considered insufficient by the defence to cause death. Whereupon other experts were called in, among whom were, M. Bouis, formerly Professor of Toxicology at the Arts et Métiers; and Dr. Cornil, Agrégé of the Faculty of Medicine, and one of the most distinguished histologists of our time. These gentlemen declared that, owing to the absence of the lesions characteristic of poisoning by arsenic, death must have taken place by other cause or

causes. Here I should mention that Dr. Cornil merely gave his opinion on the written report that was presented to him, for he had nothing to do with the necropsy. Professor Gubler was then called in, and he declared that the characteristic lesions of arsenic-poisoning are not always present, as it depends on the mode and length of time of its administration. Dr. Gallard was incidentally called in, and he declared that not only that death in this case could not have been caused by arsenic-poisoning, but that the quantity found in the body might have been absorbed from the particles emanating from the curtains in the bedroom, which were dyed with aniline. When doctors disagree, who is to decide? or, as the French say in such cases, 'Hippocrate dit Oui, Galien dit Non.'

THE ARMY HOSPITAL CORPS.

ON the occasion of the review of the troops quartered at the Camp at Aldershot, on the 13th instant, by Her Majesty, the Queen saw march past the saluting-point, for the first time, a large body of the Army Hospital Corps. According to the description of one of the correspondents of the *Times*, "the rear of the column was brought up by the Army Hospital Corps, perhaps the most useful body of men on the ground. Their marching was most creditable, and their appearance neat and smart". The men to whom these laudatory remarks refer were not a small party brought together for the occasion, but equalled in strength a regiment of the line—about nine hundred strong—and were fully trained and equipped for taking the field. They were under the command of Deputy Surgeon-General W. A. Mackinnon, C.B., and the medical officers acting under him. Few probably realise the immense change in the status and position of the Army Medical Department, which is indicated by the mere fact of medical officers marching past and saluting with drawn swords on parade and in the presence of the Sovereign. It is little less than a revolution in the traditions of the medical service, and must have been the subject of much criticism among the various arms of the service who witnessed the occurrence for the first time in a review of British troops. We believe that there is solid ground for anticipating that the command with which the army surgeons have at last been invested over the men specially trained to execute their directions, will be found to conduce greatly to the benefit of the sick and wounded soldiers of the army, not only on occasions of active service in the field, but on all occasions. It must insure more strict attention to instructions, and will show the men that they are to look up to their immediate superiors for interest in their welfare, and not, as has hitherto been the case, to other officers who had no means of rightly judging regarding them or their conduct. At the same time, the medical officers will feel that they are no longer in the anomalous position of having men given to them for the purpose of assisting them in their duties without having any direct authority over them, or possessing any means of enforcing obedience to their professional directions. We congratulate the officers of the Army Medical Department on this important alteration in the regulations affecting their service, the results of which it will require some time to fully appreciate.

REVACCINATION IN THE FRENCH ARMY.

WE were recently led to make some exposure of the spurious and misleading anti-vaccination statistics, which are widely circulated. We did so because the occurrence of small-pox in the French and German armies during the war of 1870-71 had been advanced by the President of the "National Anti-compulsory Vaccination League" as a proof of the futility of revaccination in warding off the disease. Our observations were chiefly derived from the experience of the effects of revaccination in the Prussian army of late years, and they sufficiently showed the utter groundlessness of the statements which had been set forth regarding its inefficacy as a prophylactic measure so far as that army was concerned. We have since been put in possession of a few notes on the subject of revaccination in the French army by Dr. Vallin, who holds an influential position in the Val-de-Grâce at Paris. The information contained in them has some features of special interest, and is well worthy of record. Dr. Vallin mentions

that a ministerial decision was come to so far back as the year 1858, chiefly at the instigation of Michel Lévy, that all soldiers should be revaccinated at the time of their entrance into the French army. The measure, however, remained a dead letter, although attention was repeatedly called to the subject. This fact was attributable partly to want of energy on the part of superior officers in insisting upon its execution, and partly to difficulties in procuring vaccine matter in sufficient quantity. The surgeons of regiments contented themselves with vaccinating all those soldiers who did not bear evident traces of vaccinia or small-pox. As to the outbreak of small-pox in 1870-71, Dr. Vallin writes, it may be affirmed that, in one hundred thousand soldiers called by the necessities of the war, ninety thousand had not been revaccinated; while a certain number who, although placed on the military rolls, never joined their regiments, from various causes, had probably not even been vaccinated. Since 1871, stricter measures have been taken to cause every soldier to be revaccinated, and they have been particularly enforced during the last four or five years. All the regiments in a garrison now send their men at stated periods to the military hospital, where vaccine-bearing children have been previously assembled by the medical officers, an indemnity being paid to the mothers for their attendance, and from these children the men, without exception, are vaccinated or revaccinated, as the case may be. As an indication of the advantageous effects of this system, it is mentioned that whereas, when revaccination was tried in the regiments, not more than four or five in a hundred proved successful, now in the hospitals revaccination gives from 30 to 36 per cent. of successful results. Dr. Vallin has had special opportunities of observing the effect of revaccination when outbreaks of small-pox have occurred, as he has charge of the small-pox patients at the Val-de-Grâce, when there are any. Records are kept of every patient, and these show that very rarely indeed is there mention of the man actually attacked by small-pox having been successfully revaccinated during the preceding or antecedent year. More frequently, the statement occurs that the man has been "revaccinated without success". Lastly, in nearly half the cases of small-pox, there is the positive fact that the men had not been revaccinated, either because they happened to be absent from the regiment with the commanding officer's leave, or detached on some outpost, at the time of the general annual revaccination, or because they had been less than a year with the corps, and that the epoch of revaccination had not arrived at the time when they were attacked. When writing his letter, Dr. Vallin happened to have at hand the annual report for the year 1873; and, on referring to this, he found there were only 132 cases of small-pox in the whole French army of 391,000 men. This was an exceptionally fortunate year probably, but it is interesting to note that, of the 132 cases which did occur, 4.8 per cent. had neither been vaccinated nor had had small-pox, 9 per cent. had previously had small-pox, 77.2 per cent. had been vaccinated but not revaccinated, while 9 per cent. had been both vaccinated and revaccinated. The general effect of Dr. Vallin's observations in the French army has been to lead him to regard vaccination as the truest and most reliable prophylactic measure against the disease of small-pox.

VOLUNTARY LOCK HOSPITALS.

IT has been repeatedly asserted by the opponents of the Contagious Diseases Acts, that, if these were repealed, voluntary efforts would be found amply sufficient to provide and maintain the necessary lock hospital accommodation. During the last debate in the House of Commons, on a motion for the repeal of the Acts (July 19th, 1876), Mr. Stansfeld is reported in the *Medical Enquirer* to have used the following words: "I believe that when this legislation is removed—and it will ultimately be removed—there will be an immense and favourable revulsion of public feeling in regard to this part of the subject; and that voluntary, philanthropic, and religious zeal, in co-partnership with medical skill and medical philanthropy, will find means by which far more good can be accomplished than by any compulsory laws." As we cannot agree with the right honourable gentleman in believing

that the Acts will be repealed, and that we shall have an opportunity of seeing his day dream fulfilled, we may profitably take a view of the past and present condition of matters as regards voluntary lock hospitals; and as charity begins at home, though it does not end there, we would respectfully call Mr. Stansfeld's attention to the county of Yorkshire, with its ten members for the three ridings and thirty-one for the boroughs. Now, it is remarkable that Yorkshire furnishes a large contingent of opponents to the Acts, among them being, in addition to Mr. Stansfeld, the Right Honourable W. E. Forster, Sir Harcourt Johnstone, Mr. Mundella, Mr. W. H. Gladstone, and other less prominent members. It is still more remarkable that Yorkshire does not possess a single lock hospital nor one lock ward in any of its general hospitals. In the Hull General Infirmary, a few cases of venereal disease are admitted yearly, and isolated as much as possible. Cases are also admitted into the Sheffield Public Hospital; but with these exceptions, such cases are excluded from Yorkshire hospitals. It is now nearly eight years since the first attempt was made to ensure the repeal of these Acts, during the whole of which interval the most active opposition has been going on, and large sums of money have been spent, and yet lock hospitals are as conspicuous by their absence in Yorkshire as they were then. Now we must be frank with our readers and the public, and truth compels us to state that only very little good can be effected by voluntary lock hospitals; the exhaustive inquiries into this subject by the late Mr. Acton, by Mr. James Lane, and by Mr. Berkeley Hill, all showing conclusively that prostitutes will not enter hospital until seriously diseased, and will too often leave long before they are cured. Still, it is open to the opponents of the Acts, who hold a contrary opinion, to prove their sincerity in a very practical manner by establishing at least one lock hospital in a locality where it is greatly needed. We would suggest the seaport of Hull, which has been shown to be a hot-bed of venereal disease, especially syphilis. No doubt the members we have named will contribute liberally, and have the hearty co-operation of many others. It will be all needed, since there is no more severe test of clarity than that which is represented by a lock hospital. It was the absence of voluntary lock hospitals, and the persistent refusal of the governors of general hospitals to admit women with venereal disease, which compelled the Government to establish those in Aldershot, Chatham, Colchester, Portsmouth, Devonport, etc.; the number of beds in which, now amounting to six hundred and forty-six, is far greater than those provided in all the voluntary lock hospitals of the three kingdoms. We trust that the foregoing facts will receive due attention in the forthcoming debate on the 22nd instant.

DO BACTERIA EXIST IN LIVING ANIMALS?

IN the able lectures on the Infective Processes of Disease, delivered this year by Dr. Burdon Sanderson as Brown Professor, and published in January in the columns of the BRITISH MEDICAL JOURNAL, he quoted and appeared to confirm the experiments of Dr. Tiegel, of which he accepted the conclusion, that bacterial germs exist in the interior of the glandular organs of healthy animals during life. The question is one of the highest scientific interest, and of direct application to the principles and practice of antiseptic surgery; since, if wounds are liable to bacterial contamination from within, the basis of antiseptic precautions addressed *at externam* is very sensibly weakened. Mr. Chiene of Edinburgh and Dr. Ewart of University College have, therefore, repeated Tiegel and Sanderson's experiments *under antiseptic* precautions of a simple kind; the result is to show, both by negative results and by severe test-experiments, that in the organs of healthy rabbits, removed immediately after death with antiseptic precaution, no bacteria are found, and that it may fairly be concluded that neither bacteria nor their germs exist in the healthy organs of these animals during life. By way of indicating the relation of their researches to the germ-theory, the authors of the research point out that if neither bacteria nor their germs are contained in the healthy blood, milk, or other secretions (as Professor Lister

has proved in his address, published in the BRITISH MEDICAL JOURNAL of October 6th, 1877); nor in the healthy liver, spleen, kidneys, pancreas, lymphatic and other glands, as the present researches seem to prove—then there is no possible channel left through which bacteria can reach a wound from within; so that, in order to prevent putrefaction and the evils which follow it, it is only necessary to adopt an antiseptic method which will prevent living bacteria or their germs from entering the wound from without.

INQUESTS.

WE learn from the recently published quarterly return of the Registrar-General that during the first quarter of this year, 6,785 inquest cases were registered in England and Wales, being equal to 4.9 per cent. of the total deaths; the proportion was smaller than in any quarter since the first of 1872. In the twenty large towns, the proportion of inquest cases averaged 6.0 per cent., against 6.2 per cent. in the corresponding period of 1877, and ranged from 2.6 and 2.8 per cent. in Brighton and Sheffield, to 8.0 per cent. in Birmingham and Leicester, and 9.4 per cent. in Manchester. The fact that only 2.8 per cent. of inquests were held in Sheffield, whereas the proportion was 6.3 per cent. in Leeds, is only reconcilable on the assumption that either too few inquests are held in Sheffield, or that the number in Leeds is unnecessarily large. As bearing directly upon these wide variations in the proportions of inquests held, it may be noted that in Leeds last quarter the proportion of *uncertified deaths*, that is, of deaths registered without the production of a certificate either from a registered medical practitioner or a coroner, did not exceed 3.0 per cent., whereas it was equal to 6.9 per cent. in Sheffield. The registration of deaths without the production of certificates of their causes, affords dangerous facilities to conceal negligence, if not crime.

LEAD-POISONING BY FLOUR.

DR. ALFORD, in his report on the Taunton Rural Sanitary District, details the particulars of a local outbreak of lead-poisoning for which he could not account, as it occurred in the same part of his district, but in houses far apart. He analysed the water, cyder, preserved fruits, etc., but without detecting any lead; but, on careful inquiry, he found that the families had one thing in common—viz., they all had their flour from the same mill. An analysis of the flour showed the presence of lead; and, on going to the mill, he ascertained that, during the miller's absence, the holes in the stones had been filled up with lead. Of course the lead was removed, and the disease gradually disappeared. Some of the cases were of a very severe form; and it appeared, on further inquiry, that this is a practice of by no means uncommon occurrence; so that, especially in country districts, this source of lead-poisoning must not be forgotten.

SIR EVERARD HOME ON INTRAVENOUS INJECTION OF MEDICINAL AGENTS.

DR. GOODBRAKE writes to the *Chicago Medical Journal and Examiner*:—I have thought the enclosed scrap, taken from the *Pittsburgh Gazette* of July 7th, 1878, might be of sufficient interest to deserve a place in the *Journal and Examiner*.

"*Interesting Discovery.*—In the history of medicine, since the discovery of the circulation of the blood by Dr. Harvey, we have not heard of any of equal importance, except a discovery lately made in England by Sir Everard Home, which will most probably overturn the whole of the present practice in medicine. It has been a prevailing idea that a drop of any fluid introduced or injected into any of the veins produces immediate coagulation of the blood; but Sir Edward Home has ascertained by repeated experiments that medicines directly injected or introduced into the veins produce their effects more rapidly, with more benefit, and with less injury to the system, than when they are swallowed and then pass from the stomach into the circulation. Sir Everard Home has ascertained, not only from experiments made upon himself, but upon many others, that a *vinous infusion* of the *Achillea autumnale* or *meadow saffron*, injected into the vein of the ankle or leg, will cure the most violent gout. Sir Everard states that he completely recovered from a most violent attack of the gout in less

than twenty hours by injecting into the circulation sixty drops of this medicine. Sir Everard mentions that infusions of ipecacuanha and jalap, injected into the jugular vein, produced their respective effects of vomiting and purging much more rapidly, and with more ease to the patient, than when taken by the mouth. An infusion of rhubarb, when injected, causes a profuse flow of urine. In short, according to the experiments of Sir Everard Home, all medicines whatever act better, and are less injurious to the constitution, when injected into the veins than when swallowed by the mouth. Although the reputation of Sir Everard Home in the science of medicine is of the first rank, yet we would wish to have more satisfactory evidence of the effect of his practice before we should recommend a trial of it. We have no doubt that all those sciences immediately connected with the animal and vegetable kingdoms are yet in their infancy, and that great improvements will be made before the *lapse of many years*."

THE MORBID ANATOMY OF TETANUS.

DR. E. AUFRECHT of Magdeburg (*Deutsche Medicin. Wochenschrift*, April 8th) gives an excellent account of the morbid appearances found in the spinal cord of a case of tetanus. The patient, a labourer aged 41, got a compound dislocation of the thumb, which was treated by Lister's method. Eight days afterwards, spasm of the muscles of the jaw and neck set in, for which Dr. Hagedorn stretched the median nerve, but with no good result, as the patient died two days after the first appearance of the tetanic symptoms. At the *post mortem* examination, the sac of the spinal dura mater contained a considerable quantity of serum, and the cord, both grey and white matter, was obviously hyperæmic. After hardening for three months in a solution of bichromate of potash, which was changed every day or every second day, sections were made and carefully examined with the microscope. Throughout the cord, the vessels were found distended with red blood-corpuscles; this hyperæmia involved arteries, veins, and capillaries, as was proved by careful isolation. Around the larger vessels, especially in the lumbar region, there were found masses of a hyaline-looking substance, which appeared either dull or with short bright transverse striation. This material adhered to the adventitia, even when the vessels were isolated. He is inclined to regard this material as fibrin, but is bound to point out that it was present also in the cavity of the central canal. More frequently, dark granules of pigment and fatty-looking molecules were present in the adventitia. In the white substance, he found many granules of pigment, etc., and many of the nerve-fibres had fine granules in their medullary sheaths, which gave these latter a dusty appearance. The most marked changes were found in the cells, those of the cervical region having the lesion most pronounced, while, on passing down the cord to the lumbar region, the departure from the normal became less and less, although even in the latter region the morbid appearances were still manifest. These alterations were diminution in the size of the cells, increase of pigment, loss of their processes, disappearance of nuclei and nucleoli, the cells becoming of a diffuse yellow colour and containing refractile drops, or looking like structureless yellow lumps. The cells of the anterior horns of the lumbar region were quite normal, except perhaps a slight excess of pigmentation; those of the posterior horns were in various stages of degeneration. In the cervical region, not one single normal cell could be seen; they were represented by rust-coloured lumps without nuclei, nucleoli, or processes. In addition to the changes in the cells themselves, the grey matter contained many fine granules and coarser angular coloured grains, which quite resembled the pigment-grains of the cells. These were grouped especially round the central canal, which seemed wider in the cervical region. The epithelium of the central canal was normal, but the lumen was in many places narrowed: an appearance, he believes, not due to his mode of preparation. There were also around the central canal many globular bodies without any contour, which resembled oil-globules. Dr. Aufrecht compares these appearances with those described by Lockhart Clarke, W. H. Dickinson, and Tyson. He agrees with Lockhart Clarke in describing the change in the cells as granular degeneration; but differs from him in so far as he is rather inclined

to regard their cell-changes as primary; in fact, as a parenchymatous inflammation analogous to what takes place in the cells of the liver and of the sympathetic ganglion, and not as secondary to the vascular disturbance. He is by no means sure that the masses around the vessels were really fibrin, but is disposed to consider them colloid. This part of the paper seems rather weak, and we are by no means convinced by his arguments; for instance, he contends that, as the hyperæmia extended for the whole length of the cord, while the changes in the parenchyma diminished in their intensity in passing downwards, therefore there was no relation between the two; that the granules were not numerous around the vessels; and that some of the fibrin-looking material lay in the central canal. He contends that there is nothing characteristic of tetanus in this material, as Hayem found it in two cases of acute diffuse central myelitis. This we should not dispute, as we rarely expect to find anything characteristic in the nature of an exudation. Dr. Aufrecht's observations are an important addition to our knowledge of the morbid changes in tetanus, and go to support the view that the lesion consists in an acute diffuse central myelitis.

RESUSCITATION OF THE APPARENTLY DROWNED.

THE following letter has been addressed to the Royal Medical and Chirurgical Society by the Royal Humane Society.

"Royal Humane Society, 4, Trafalgar Square, March 30th, 1878.

"Sir,—I am instructed by the Committee of this Society to write and request that the Royal Medical and Chirurgical Society will favour them by reappointing the Council or Committee (which some years since, at the request of this Society, inquired into the various methods of treating the apparently drowned, and which resulted in the recommendation of a modified Silvester system, as now used and circulated by this institution), with a view to inquiring into, and, if advisable, recommending the adoption of, the new method recently brought before the public by Dr. B. Howard of New York, and with which I believe you are acquainted. This method was exhibited at the Society's receiving-house on Thursday last, and the many professional and other gentlemen then present thought it advisable to obtain, if possible, from your learned body an authoritative opinion of the merits of this new method, so clearly brought forward by Dr. Howard. I believe that Dr. Howard will be glad to attend any meeting of your learned Society, so as to answer any questions you may wish to put, or to demonstrate his plan. Trusting that an early reply may be given, so that action may be taken before Dr. Howard leaves Europe, I have the honour to be, sir, your obedient servant,

(Signed) LAMBERT YOUNG, Secretary.

"The Secretary of the Royal Medical and Chirurgical Society."

In accordance with this request, we learn that a Committee has been appointed by the Royal Medical and Chirurgical Society, consisting of some of the surviving members of the old Committee appointed on this subject in 1862, and others, as follows: Professors Lister, Burdon Sanderson, and Curnow; Drs. Seveking, Lauder Brunton, Andrew, Ralfe, John Williams, and George Harley.

GUY'S HOSPITAL.

THE biennial dinner of this medical school was held at Willis's Rooms on Tuesday last, when Mr. Thomas Bryant occupied the chair, and was supported by Mr. Lushington (the Treasurer), Sir William Gull, Dr. Owen Rees, Mr. Cock, and the members of the present staff of the hospital. About two hundred and twenty old Guy's men with their friends attended, and very pleasant and successful was the gathering. After some formal toasts, Dr. Spry and Mr. John Gill returned thanks for the Army, Navy, and Reserve Forces; the latter gentleman having but recently returned from Turkey, where he was engaged during the late campaign as a medical officer in the Sultan's army. Dr. Wilks, in proposing the toast of the President, Treasurer, and Governors of Guy's Hospital, mentioned how intimately the prosperity of the hospital was bound up with that of the medical school. The Treasurer replied. The Chairman, in an eloquent speech, proposed the toast of the evening, Prosperity to the School of Medicine and Surgery attached to Guy's Hospital; and Mr. Cock and Dr. Habershon replied. The former was received with cheers again and again renewed, and gave his

experience of the School at Guy's at its separation fifty years ago from St. Thomas's Hospital, and of its subsequent independent growth. Dr. Pavy proposed the Universities and Medical Corporations; to which Sir William Gull replied, observing that he thought there would come a day when there would be but one Corporation of Medicine. He concluded by proposing the Chairman's health, which was very heartily received by the company. Dr. Owen Rees proposed the Past and Present Students of Guy's Hospital; to which Dr. H. N. Davies replied on behalf of the past students, and Mr. P. Horrocks and Mr. W. C. James for the present students. The health of the Honorary Secretary (Mr. H. G. Howse) was then proposed by the Chairman, and heartily responded to, all present recognising how much the success of the meeting was due to his excellent organisation.

ST. JOHN'S AMBULANCE ASSOCIATION.

At a meeting held on Saturday last at the house of Dr. Sieveking, at which several of the metropolitan hospitals were represented, and also the Council of the Order of St. John, the following resolutions were passed.

"1. That each hospital in London forming an ambulance committee should endeavour to guarantee lecturers to the St. John's Ambulance classes in the metropolis.

"2. That the classes should be examined by the Government military instructors detailed for the Order by the Army Medical Department.

"3. That classes of men or women who have obtained certificates may be formed for further instruction under members of the hospital staff; the pupils to receive the further examination from special hospital examiners.

"4. That, in the event of war, in which England may be engaged, the hospitals, through their ambulance committees, will aid the Order in finding surgeons, dressers, and nurses for any field-hospital or train which it may send out in support of the Army Medical Department; and that the Order will employ no one from any hospital without reference to that hospital's ambulance committee."

It is proposed to form a Central Committee, consisting of the medical members of the St. John's Central Committee, with the addition of the chairman and secretary of the ambulance committee formed at the hospital. Several classes for instruction have been opened, of which one commences in Albany Street on the 20th instant, under the direction of Mr. Edmund Owen of St. Mary's Hospital.

EMPHYSEMA AS AN AID TO OPERATION.

DR. BOUREL RONCIÈRE (*Archives de Méd. Navale*, No. 2, 1878) describes a method of blowing air into the subcutaneous and intermuscular tissue, with the effect of dissociating and isolating the different layers and the superficial tissues, and with the object of facilitating surgical operations. It is employed at the hospital at Buenos Ayres, and is effected thus. In the vicinity of the tumour, the skin is perforated with a trocar; and to the cannula is attached an air-pump. The tissues in the neighbourhood are compressed to prevent undue diffusion of the emphysema; and the air is driven in by a few strokes of the piston in quantity sufficient to distend the surrounding cellular tissue and dissociate the various layers. The enucleation of tumours and the discovery of the vessels are said to be much facilitated by the process, which is described as being free from bad results. It has been employed in a large number of important operations: strangulated hernia, removal of cervical and submaxillary and axillary adenomata, ligation of large vessels, etc.

SCOTLAND.

GLASGOW MILK-SUPPLY.

THE Glasgow Town Council have had prepared a Bill to regulate the milk supply and to amend the "Sale of Food and Drugs Act, 1875", and have remitted to their Parliamentary Bills Committee to adopt the necessary steps for getting the Bill introduced into the House of Commons by a private member of Parliament, with a view to legislation on the subject, this session if possible.

THE WATER-SUPPLY OF ARBROATH.

A SERIOUS interruption has occurred to the water-supply of Arbroath. The water is pumped up from a deep well in the neighbourhood, and although there is a double set of pumping gear, there is only one boiler, which is found to be leaky. On Thursday of last week, workmen began to repair the boiler, and the pumping in consequence had to be stopped; the quantity stored in the tank having become exhausted, the supply of water to the town ceased in the afternoon. The pumping was not resumed before Sunday.

FINE ART LOAN EXHIBITION AT GLASGOW.

LAST week, there was opened in Glasgow a Fine Art Loan Exhibition, the proceeds of which are to be devoted to the funds of the Royal Infirmary. That institution, owing to the competing claims to support of the recently established Western Hospital, to the dull state of trade, and to the unfortunate action taken by a certain section of the community in regard to the question of internal management and the religious denominations of the nurses, has suffered a diminution of income amounting last year to over £1,000. Under these circumstances, a number of public-spirited gentlemen, acting on a happy suggestion of one of their number, resolved to try if they could not at once raise a sum to provide against such deficiencies and promote the art education of the city, by bringing together a portion of the pictorial wealth known to exist in the private galleries of the west of Scotland. The enthusiasm of the promoters would seem to have been quite equalled by the generosity of the spirit in which they were met. Requiring only about five hundred pictures, they have had about a thousand to choose from. Not only so, but in many cases the owners of the works undertook the burden of insurance, the committee being only called upon to incur liability for £10,000, out of a total value of something like a quarter of a million. Many collectors went further, and delivered their pictures at the galleries free of charge. The result may be regarded as one of the most important exhibitions of the kind ever held north of the Tweed.

THE HEALTH OF SCOTLAND.

THE monthly return of the Registrar-General for Scotland, of the births, deaths, and marriages, registered in the eight principal towns of Scotland in April, has been issued. During the month, there were registered the births of 4,060 children; of whom 2,067 were males, and 1,993 females; 322 of these, or 7.9 per cent. of the whole, were illegitimate. The rate of illegitimacy varied in the different towns from 4 per cent. in Greenock to nearly 12 per cent. in Dundee. The deaths of 2,837 persons were registered. This mortality is at the annual rate of 23 per 1,000 persons in Greenock, which is the lowest, and 34 in Paisley, which has the highest percentage; 43 per cent. of the whole number of deaths were those of children under five years of age. The zymotic diseases proved fatal to 450 persons, constituting 15.9 per cent. of the total mortality. The prevalence and fatality of whooping-cough in Glasgow and in Aberdeen, of measles in Edinburgh and in Dundee, and of measles and diarrhoea in Leith, caused the above rate to be exceeded in each of these towns. Whooping-cough was the most fatal of the epidemics. The deaths from inflammatory diseases of the respiratory organs, not including consumption, whooping-cough, or croup, amounted to 28 per cent. of the whole mortality.

DEATH OF SIR JAMES COXE.

THE medical profession in Scotland has just lost one of its ablest members in the person of Sir James Cox, M.D., Commissioner in Lunacy, who died on Thursday, the 9th ult., at Folkestone, after a very short illness. He was on his way home from a tour on the continent, where he had been spending a short holiday from his official duties. Sir James was born in 1811, and took the degree of M.D. in the University of Edinburgh in 1824, after an extended medical and general education in Göttingen, Heidelberg, and Paris. He was appointed, in 1855, one of the members of a Royal Commission "to in-

quire into the condition of lunatic asylums in Scotland, and the existing state of the law in that country in reference to lunatics and lunatic asylums". The report of the Commissioners drawn up by Dr. Cox, and presented to Parliament in 1857, was an able document, and led to the passing in the same year of an Act establishing the General Board of Lunacy for Scotland, with Dr. Cox and Dr. W. A. F. Browne as Medical Commissioners. Since that time, he has been a most diligent and able member of the Board; and to him, in a great measure, are due its highly satisfactory working and valuable results. The honour of knighthood was conferred on him in 1863. Sir James was president of the Medico-Psychological Association in 1872, when it met in Edinburgh; and delivered an inaugural address, which was characterised by great boldness and breadth of view. His loss will be greatly felt by a very large circle of friends, medical and general, to whom he was endeared by many sterling qualities of head and heart.

DIAMOND ROCK-BORING.

ABOUT four months ago, it was stated that an attempt was being made to reach the deep water-bearing strata at the west of Edinburgh, for the purpose of furnishing a supply of an unlimited quantity of water to a large brewery. Success has attended the operations, which were conducted with the diamond rock-boring machinery. At the depth of six hundred and fifty-seven feet from the surface, water was tapped, and a supply of twenty gallons per minute, or twelve hundred gallons per hour, has been secured.

ABERDEEN HOSPITAL FOR SICK CHILDREN.

THE report of this institution, instituted only sixteen months since and already in a condition highly gratifying to its promoters, has just been issued; and states that, six months ago, the hospital was opened and immediately filled, so that the directors will now avail themselves of further accommodation at their disposal. The accounts show a favourable balance. The medical officers, Dr. W. E. Stephenson and Dr. R. J. Garden, to whom the thanks of the directors were given for their valuable services, received one hundred children as in-patients; of those, fifteen remained in the hospital. In the out-door department, 1,059 children had been treated.

ADULTERATION OF FOOD.

THE Glasgow city analysts report that, during the last quarter, they had made analyses of only four articles of food: two of sweet milk and two of confections, all of which were found to be genuine. It was pointed out that the very small number of samples which had been analysed was due to the dead-lock they had come to in regard to the administration and exposition of the law regarding the adulteration of food. It has been suggested that some amendment of the Adulteration Act may be got when the Council are putting before the legislature a short Bill, which is at present under the consideration of the Health Committee, to deal with the milk question.

THE DRAINAGE OF HAWICK.

THE drainage of this burgh has for several years engaged the attention of the Commissioners of Police, and various preliminary steps have been taken towards accomplishing the object in view. Surveys have been made and plans prepared, and, but for the difficulty of the disposal of the sewage, operations would have been begun long ago. It was at one time suggested to empty the sewage into the Teviot, at some distance below the town; but the plan met with so much opposition from various quarters that it had to be abandoned. Public feeling and the wisdom of Parliament having decided that the rivers were no longer to be regarded as the main sewers of the country, the Hawick Commissioners delayed proceeding with the drainage of the burgh till they should be advised as to, and employ, the best means of disposing of the sewage otherwise than by emptying it from one main outfall into the river. Recently the Board of Supervision has made strong representations on the subject to the Town Council, and they have been compelled to take the matter up in earnest. Messrs. Leslie C.E., were

instructed to prepare a scheme for the purification and disposal of the sewage; and the purification works on their plans have already been completed. The sewers are being laid in straight lines, having man-holes or lamp-holes at all the angles, which at once afford access to them and act as ventilators. The system of purification adopted by the engineers may be described as a combination of the best known means in operation elsewhere, viz., precipitation, assisted if necessary by lime and other chemicals, and land filtration. The main drain carries to the purification-works, in combination with the house sewage, the refuse scourings and washings from the factories and the spent liquids from the dyeworks. From the precipitating tanks the water is distributed over a field five acres in extent, collected again in deep drains, and finally allowed to fall into the river a mile below the town. The solid refuse is to be sold for manure. The cost of the whole works will be considerable, the present estimate being over £20,000.

IRELAND.

TYPHUS fever is stated to be very prevalent in the Ballinasloe Union.

THE Marquis of Sligo has promised to secure a supply of water for Westport at his own expense.

ON last Saturday, a lunatic residing near Lurgan committed suicide by throwing himself under an engine on the Great Northern Railway; and, a couple of days afterwards, a woman who was subject to epileptic fits placed her neck on the rails in front of an approaching train, and was instantly killed.

RATHMINES MAIN-DRAINAGE.

THE Main Drainage Board of the Rathmines and Pembroke Townships, two important suburbs of Dublin, at a meeting held on the 7th instant, accepted a tender for constructing a main outfall and intercepting sewers at a cost of about £77,000.

SANITARY CONDITION OF ARDEE DISPENSARY DISTRICT.

DR. MOORE, sanitary officer, having reported unfavourably of the sanitary state of the town of Ardee and the surrounding district, the Local Government Board have recently drawn the attention of the guardians to the neglect of sanitary arrangements, and regret that they have not taken steps to remedy the evils complained of. They state that this important matter demands their prompt and effectual attention, the board, as the sanitary authority, being responsible for all questions relating to the sanitary condition of the town as well as other parts of the union. Dr. Moore remarks that there are no sanitary arrangements carried out in his district, and that the same condition of things remains as before the Sanitary Act came into operation.

RATHDOWN UNION.

AT a meeting of the Board of Guardians of this union last week, two additional cases of small-pox were reported from one of the union districts; and a complaint was made by one of the guardians that three patients had returned from Dublin as convalescent from the disease. It was pointed out that a prosecution could be instituted, and it was recommended that the clothes should be burned in such cases, the patients referred to having been brought into the workhouse hospital. It is a very serious matter to discharge small-pox patients from hospitals whilst they are liable to carry the infection to others, and it is one which, it is affirmed, has on more than one occasion occurred in the institutions which admit this class of cases in Dublin.

THE QUEEN'S UNIVERSITY IN IRELAND.

A VACANCY having occurred in the Senate of this University by the resignation of Mr. W. Mac Cormac of St. Thomas's Hospital, since appointed one of the University Examiners in Surgery, a movement has been instituted to endeavour to secure the seat for a representative

of the medical graduates:—as Mr. Mac Cormac was—in the person of Dr. W. Thornley Stoker. The large number of medical graduates in the University Corporation entitle them to adequate representation on its Senate. Dr. Thornley Stoker is a distinguished graduate of the University, and holds a high professional position; being Professor of Anatomy in the School of the Royal College of Surgeons, and Surgeon to the Richmond and to Swift's Hospitals. Dr. W. Thomson and Dr. Roe of Dublin are the Honorary Secretaries of Dr. Stoker's Committee. The next examinations in the Faculty of Medicine will be held in Dublin, commencing on June 3rd, and terminating on June 14th.

THE LIFFEY NUISANCE.

IN connection with the high death-rate of Dublin—which, not inclusive of the number of deaths from small pox, has existed for some weeks past—the extreme offensiveness of the atmosphere in the neighbourhood of this river is worth noting. Memorials complaining of the nuisance caused by the operations at the bridges in course of erection, and before alluded to by us, have been presented to the Public Health Committee. They, however, have been “referred on”, and reports subsequently received from engineers; but nothing, so far as we are aware, done in abatement. As showing the extremely polluted condition the bed of the river must be in, and the depth of filth lying on it, we may mention that the mud, etc., from the lowest excavation overlying the rock for the central coffer-dam for the new bridge, had a most offensive smell, and that the eyes of the workmen were affected by it in a remarkable manner.

THE ADELAIDE HOSPITAL.

THE vacant surgeoncy to this hospital caused by the retirement some months since of Mr. Albert Walsh, was filled on the 9th instant by the appointment thereto of Dr. Kendal Franks, the junior in point of professional standing of the several candidates. Dr. Franks graduated in medicine in 1875. He is a M.D. of the University of Dublin, Surgeon to the Throat and Ear Hospital, and Demonstrator of Anatomy and Private Teacher in the School of the Royal College of Surgeons.

LADY-DOCTORS.

AT the last monthly examinations of the King and Queen's College of Physicians in Ireland four ladies presented themselves; one for the final examination for the licence to practise medicine, and three for the previous examination. Mrs. Clark, who is a M.D. of the University of Berne, passed the final examination, and Miss Bartholomew the previous. The other two ladies were unsuccessful. Mrs. Clark also obtained the licence of the College to practise midwifery.

PHARMACEUTICAL SOCIETY OF IRELAND.

SIR DOMINIC CORRIGAN—to whose great exertions on behalf of this Society its establishment and present satisfactory condition are mainly due—having in consequence of his advancing years resigned its Presidency, the Council held a special meeting last week to elect his successor. Dr. Aquilla Smith, the Vice-President, who was proposed and seconded for the office, declined the honour, although quite willing to remain Vice-President, as he could not spare time for the efficient performance of the duties of the post. Accordingly, Mr. Tichborne, the well-known chemist, was unanimously elected President of the Society.

THE IRISH MEDICAL ASSOCIATION.

AT the last quarterly meeting of the Council of this Association, “The Medical Act, 1858, Amendment Bill” was taken into consideration. The Committee of Council had prepared a valuable document, embodying their “Observations” on the Bill; and these were, in the main, after full discussion, unanimously approved of. We have not space to give the text of the entire document, which bears evidence of acute and intelligent study of the Bill in all its points, and should be carefully studied by those anxious not to allow the present opportunity of ob-

taining satisfactory medical legislation slip. The two main reasons why the Council of the Association think that the Duke of Richmond's Bill cannot be considered as satisfactory are:

“1. That the Constitution of the General Medical Council is not affected by the Bill, while the General Medical Council, as at present constituted, only directly represents the Government and the Corporations, but scarcely at all the great bulk of the medical profession. That, while it is owing to the failure of the Corporations to adopt conjoint examinations, and the omission of the General Medical Council to enforce uniformity of examination and education, that the proposed legislation has become necessary, yet the regulation of examinations is to be almost altogether vested in the representatives of the licensing bodies. The Council of the Irish Medical Association consider that the Bill should provide for the direct representation of the great body of the profession in the General Medical Council; each division of the kingdom being duly represented.

“2. That the Bill does not make any efficient provision for uniformity of examination, and still leaves the nineteen portals open for admission to the *Register*. Experience has proved that a majority of the medical authorities are indisposed to unite for the promotion of conjoint examination schemes, and unless some power of compelling united action be provided in the Bill, there is no prospect of a single examining body being formed for each division of the United Kingdom.”

We are glad to know that the Council of the Irish Medical Association have warmly responded to the request of the Medical Reform Committee of the British Medical Association, to lend its powerful aid in amending this Bill.

BELFAST HOSPITAL FOR SICK CHILDREN.

IN a few months, it is intended to remove this institution to the new hospital now being erected in Queen Street. The cost, when completed, including furniture, will be somewhat over £5,000, of which sum £1,000 is still required; and the Board of Management hope that the affluent members of the community who sympathise with the work in which it is engaged will come to their assistance and contribute the necessary amount.

QUARTERLY REPORT OF THE HEALTH OF IRELAND.

DURING the December quarter of the past year, the births registered amounted to 32,278, being equal to an annual ratio of 1 in every 41.4, or 24.2 per 1,000 of the population; and the deaths to 21,802, affording an annual ratio of 1 in every 61.2, or 16.3 per 1,000. The deaths from the eight principal zymotic diseases numbered 2,181, or 10.0 per cent. of the total deaths registered, and 40.9 in every 100,000 of the population. Small-pox caused 11 deaths, all of which took place in Dublin; diphtheria, 70; fever, 571; diarrhoea, 407; and simple cholera, 9. The deaths from measles and its sequelæ amounted to 553, which, added to those in the previous quarters, make a total of 1,484 in the year; a mortality higher than that for any of the preceding ten years, and considerably over the annual average for that period. Scarlet fever caused 262 deaths, being 82 over that of the preceding quarter; and whooping-cough 298, this latter disease showing a gradual decline from the first quarter of the year. Erysipelas was epidemic in Larne District, Antrim, and prevailed in portions of Midleton Union, Cork, where some children, who had been recently vaccinated, were attacked with the disease. Sanitary matters do not show much improvement, as the complaints from registrars are numerous in reference to overcrowding, bad sewerage, impure water-supply, and general neglect of sanitary regulations in their various districts. The deaths of 18 persons were recorded as being 100 years of age and upwards, one woman's age, who died in Kenmare district, being returned as 114.

WEARDALE RURAL (Stanhope and Newlandisch)—Mr. Arnison commences his brief report by stating that there has not been any epidemic in the district during the year; that the death-rate was about 17 per 1,000, which is above the rate for 1876. The births had, however, increased, as they were 223, against 159 in the previous year. The district is reported as being in a good sanitary condition, and free from all serious diseases.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

ON Tuesday, May 7th, the annual general meeting of the Poor-law Medical Officers' Association was held at the Freemasons' Tavern. Dr. JOSEPH ROGERS presided.

The CHAIRMAN, in an exhaustive address, laid before the meeting an account of the work done by the Council of the Association during the ten months since the last meeting in July 1877. He commenced by stating that, in consequence of the facilities afforded by Mr. Ernest Hart, the editor of the BRITISH MEDICAL JOURNAL, a large proportion of the work had already appeared in paragraph form. That very valuable assistance enabled them to send forth their views relating to Poor-law medical relief clothed with the editorial garb, and enabled them to influence by this means not only medical men, but the general public. After making this acknowledgment, he proceeded to give the details of the business of the Association, which may be briefly stated as follows. The Council had had a correspondence with the Local Government Board on the question of fees for operations, and the reply of the central board was published in the BRITISH MEDICAL JOURNAL of July 28th. In the same number were published a letter from a workhouse medical officer as to vexatious duties which were thrust upon him, and the advice tendered by the Council with good effect. On August 4th, a paragraph was inserted, drawing attention to the harsh treatment of Mr. Downes, a medical officer of forty years' standing and seventy-eight years of age, by the West Bromwich Board of Guardians, who refused superannuation. Sir Trevor Lawrence brought the fact to the notice of the President of the Local Government Board, who, by an inspector, urged the justice of the claim upon the guardians, but without effect. The next number of the JOURNAL drew attention to the maladministration of medical relief in the same Union. The paper on Poor-law Medical Relief, read by the Chairman at the Manchester meeting of the British Medical Association, was published on October 13th. That meeting was attended by the Guardians of the Manchester and adjacent unions, and the results, although not immediate, would ultimately be good. He had read papers on the subject at Plymouth, Newcastle, Norwich, Sheffield, Framlingham, Worcester, Edinburgh, and Manchester, in addition to delivering addresses in the metropolis. On October 6th, appeared a copy of a resolution passed by the Council, condemnatory of the proceedings of the Cardiff Board of Guardians towards Mr. James Milward, and thanking his colleagues for memorialising their Board in favour of him. In November, the Council again considered the case of Mr. Downes, and passed a resolution in reference to the action of Mr. Long, Local Government Board Inspector, and the general question of superannuation allowances. In the same month, the Council made representations to the Local Government Board on the question of granting increased facilities for making *post mortem* examinations in workhouses; but the Local Government Board refused to modify the almost prohibitory arrangements at present existing. The certification and removal to asylums of lunatics had also been considered by the Council, and reference was made to the case of the removal of a woman by the Chairman to Caterham, and the action of the Medical Superintendent thereon. In his (the Chairman's) opinion, this case proved the necessity that the profession generally should be better acquainted with pathological appearances. Mr. Bates had been assisted in resisting the treatment he experienced at the hands of an *ex officio* member of the Bridgend and Cowbridge Board of Guardians. Effective aid was also given to Mr. Powell in his dispute with the Bromyard Board of Guardians on medical extras. Subsequently, the Council interfered on hearing that the same board had made an appointment contrary to law; the nearest patient of the gentleman appointed was five miles from his door and the farthest eleven, and there were medical men practising in the district. On the facts being laid before the Local Government Board, the appointment was cancelled. In March, the Council addressed a letter to the Local Government Board on the question of the refusal of the Saffron Walden Board of Guardians to pay a fee to Mr. Buck, for attending the child of a labourer who had sustained a fracture of the leg. The family of the man had previously received medical relief; but in this instance the medical officer did not obtain the usual order, and it was refused after his attendance had been given. This was, in the judgment of the Chairman, so important that he hoped some discussion would take place upon it. Other matters of minor importance had occupied the attention of the Council, and, although the matters stated comprised no small amount of labour, it gave but a very imperfect idea of the work done by Mr. Wickham Barnes, the Honorary Secretary, and Dr. Rogers, the Chairman of Council, whose advice and assistance were sought by Poor-law medical officers in all parts of the country; and, in responding to such appeals,

they had been able to add greatly to the comfort of their less fortunately situated brethren.

At the request of the Chairman, Mr. Barnes read the reply of the Local Government Board to the letter of the Council in the case of Mr. Buck, which stated that the Board had no power to order the guardians to pay Mr. Buck a fee for his treatment of the child. He (Mr. Barnes) thought this was a very important case, and one which should be taken up; because, had Mr. Buck refused to attend the child, he would have been ruined in the estimation of the public.

The CHAIRMAN stated that he had been informed that when the Local Government Board Inspector waited upon the Board of Guardians in reference to the matter, the relieving officer was called in, but not Mr. Buck.

Mr. BALDING asked whether the Local Government Board made any order for attendance in urgent cases.

Mr. CORNWALL said a medical officer had no right to attend any case without an order.

Mr. YOUNG remarked that the state of the law justified them in abstaining from having anything to do with a case in which an order was not given. They might just do something to make the sufferer comfortable by putting an injured limb in the best position.

Mr. JACKSON said people with more than 16s., or even 30s. a-week, were considered fit cases to receive medical relief in Birmingham.

The CHAIRMAN suggested that he and the Secretary should be instructed to request Dr. Lush to bring the matter under the notice of Parliament by a question to Mr. Selater-Booth.

Mr. CORNWALL suggested that this case should be supported by as many others as they could gather.

The CHAIRMAN said he would be happy to communicate such cases to Dr. Lush; but the rules of the House of Commons would prevent their being put forward when the question was asked on Mr. Buck's case.

After some further discussion, the suggestion of the Chairman was approved.

Officers.—The next business brought before the meeting was the election of officers for the ensuing year. Dr. Lush, M.P., was re-elected President of the Association; the Vice-President, the Council, and the Honorary Secretary were also re-elected.

The *Financial Statement* was presented; and from it it appeared that there was an available balance at the bankers' of over £80.

Votes of Thanks.—On the motion of Mr. CORNWALL, a vote of thanks was passed to the editors of the medical journals for the assistance they had given the Association in reporting their proceedings from time to time.—The thanks of the meeting were also given to the officers for their services during the past year.

Alleged Neglect.—Dr. GARLAND of Yeovil stated that some time since a charge of neglect made against him, of neglecting a patient, was fully investigated, and he was exonerated from blame; since then, the case was brought up again, and he was asked to attend again with his witnesses. He wished to know if he would be justified in refusing to do so, but to offer any farther information required by letter.

An opinion was generally expressed that Dr. Garland should decline to reopen the case; but no resolution was passed upon it.

Increase of the Association.—Dr. E. DIVER spoke at some length on the means for increasing the number of members and improving the status of the Association. He said they ought to hold such a position that the President of the Local Government Board would think it an honour to come to the Association dinner.

Mr. BARNES said there was a great difficulty in carrying out what Dr. Diver suggested, owing to various causes, one being the apathy that existed among the Poor-law medical officers.

The CHAIRMAN said that all the steps Dr. Diver had suggested that they should take had already been taken. He found great difficulty in obtaining any change in the Poor-law system, as was shown in the agitation of 1864. He had hoped that the improvement made in London would have been extended to the country, but when he proposed it it was coldly met.

Mr. BALDING said they were labouring under a difficulty in having to deal with a sort of unknown body. If they could deal directly with the President of the Local Government Board, he would be more ready to listen to them.

In a discussion which followed, the opinions of members were very favourable to an alteration of the law to make the allowance of pensions by boards of guardians to medical officers compulsory; but no resolution was passed upon the matter.

This concluded the business of the meeting.

Dinner.—In the evening, the members and friends dined together, under the presidency of the Chairman. Among the guests were Mr. Ernest Hart and the Rev. James Williams, Vicar of Camberwell. A fter

the usual loyal toasts, the CHAIRMAN proposed the health of Mr. Ernest Hart, to whom, he said, was due the initiation of the famous inquiry into the condition of the Metropolitan workhouse infirmaries, which was carried through with the assistance of Dr. Anstie and Dr. Carr, and subsequently the formation of the Workhouse Infirmaries' Association, which obtained from Parliament Mr. Hardy's Act, the Magna Charta of Poor-law medical reform; and ever since he had continued to render the most willing and valuable aid to the Poor-law medical officers and to this Association.—Mr. HART, in replying, said the metropolitan asylums, which were now the boast of London, were modelled precisely upon the lines of Poor-law medical reform, which he had laid down in a paper in the *Fortnightly Review*, entitled "The Hospitals of the State", of which five thousand copies were reprinted, partly at the expense of Mr. John Storr, a valued friend of this and all social reform, to whom he had been introduced by Dr. Rogers. Dr. Rogers had devoted energy and talents, which would have adorned the highest positions in this or any profession, to the service of the poor and the promotion of Poor-law reform. His life-long labours had conferred inestimable benefits on the sick poor and on his profession, and deserved perpetual memory. The powers of association were very great, and if this Association selected and defined its programme it could hardly over-estimate its capacity for good.—The indefatigable services of Mr. Wickham Barnes, and the public-spirited and self-denying activity on behalf of the Association of Mr. Cornwall and Dr. Pinder, and others who gave much time to the Association, were subsequently mentioned with due honour.—Regret was expressed that the meetings were not more numerous attended.

THE MEDICAL ACTS AMENDMENT BILL.

THE Medical Reform Committee have drawn up the subjoined petition which has been placed in the hands of the Duke of Westminster, K.G., for presentation to the House of Lords.

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The humble petition of the Medical Reform Committee of the British Medical Association sheweth—

That a Bill, intitled an Act to amend the Medical Act, 1858, has been brought into your Right Honourable House.

That, in that Bill, no provision is made for the introduction of direct representatives of the profession in the General Medical Council.

That the Bill does not provide compulsory enactments for the establishment of a conjoint board, for the examination of medical candidates in each division of the kingdom, on the principle of equal fees and equal examinations; and that such enactments are indispensable, in the interests of the public, to abolish the competition downwards in the granting of medical licences and diplomas.

That the British Medical Association numbers upwards of seven thousand members of the medical profession, and comprises a large proportion of the physicians and surgeons of the public hospitals and of the professors and lecturers attached to various schools of medicine throughout the kingdom.

That the British Medical Association has always occupied a prominent and influential position with respect to medical reform, and that the Medical Reform Act of 1858 was, in great measure, due to the efforts of the Association.

That, notwithstanding the passing of that Act twenty years ago, many grave defects still exist in the granting of qualifications to members of the profession.

That there are at present nineteen universities and medical and surgical corporations in the United Kingdom, each of which is empowered to grant one or more qualifications, each qualification entitling the possessor to be placed on the *Medical Register* as a legally qualified practitioner, and thereby enabling him to practise all departments of the medical profession, although possibly only qualified in one.

That the requirements of the various universities and corporations from candidates vary greatly in extent and character, and that an unworthy competition exists in the granting of degrees and licences; and candidates rejected by one examining board are known to have succeeded, without further study, in obtaining the licence of some other board of less stringent requirements.

That candidates who have obtained the degrees of Doctor of Medicine and other qualifications have, when seeking medical appointments in the army and navy, been frequently rejected by the Government examining boards for those services.

That the fee charged for granting diplomas ranges from half a guinea to more than a hundred times that amount.

That the General Medical Council, as now constituted, consists of seventeen members, who represent the several universities, medical and surgical corporations, and licensing bodies of the United Kingdom, and of six members nominated by the Crown, together with a President chosen by the other members of the Council.

That the great majority of the members nominated by the Crown are intimately connected with the universities and corporations, and that there is no direct connection between the General Medical Council and the general body of the registered members of the profession.

That, owing to the medical practitioners having no direct representatives in the Council, the profession evinces but little interest in its proceedings—a disadvantage which has been admitted in the debates of the Council.

That the representatives of the universities and corporations in the General Medical Council are not paid by the bodies which they represent, but out of a fund provided by the general body of the profession, which is unrepresented therein.

That the introduction into the General Medical Council of representatives elected by the profession would give the profession more confidence in the Council than at present, and would also add to the knowledge of the Council with respect to the needs of the public and of the profession in medical education, medical jurisprudence, and Poor-law medical relief, and would tend to balance the present overwhelming influence of corporation representatives.

That the demand for direct representation of the profession in the General Medical Council is in accordance with the almost unanimous voice of the profession.

That at each annual meeting of the Association held since 1866, as in Dublin in 1867, in Oxford in 1868, in Leeds in 1869, in Newcastle in 1870, in Plymouth in 1871, and in Birmingham in 1872, as well as at a special general meeting of the Association held in London in May 1870, for the express purpose of considering medical reform, resolutions were passed, with scarcely a dissentient voice, in favour of the necessity of direct representation, and the Association and the profession continue to demand it.

Your petitioners pray your Right Honourable House not to pass that, or any other Bill, unless provision be therein made for direct representation of the profession in the General Medical Council, and for the compulsory establishment of conjoint boards of examination, on the principle of equal fees and equal examinations in each division of the kingdom.

And your petitioners will ever pray, etc.

EDWARD WATERS, M.D., Ex-President of the British Medical Association, Chairman of the Medical Reform Committee of the British Medical Association.

Chester, May 14th, 1878.

COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

THE forthcoming election of Fellows into the Council of the above institution has brought an unprecedented number of candidates already into the field to fill the three vacant seats which will be caused by the retirement, in the prescribed order, of Mr. Erasmus Wilson, F.R.S., Mr. Henry Lee, and Mr. Barnard Holt. These gentlemen, it is understood, will offer themselves for re-election; they will be opposed by the following fresh candidates, whose names we publish in the order of seniority of fellowship; viz., Mr. Joseph Lister, F.R.S., now of King's College, December 9th, 1852; Sir Henry Thompson, of University College, November 10th, 1853; *Mr. John Wood, F.R.S.*, of King's College, May 11th, 1854; *Mr. Henry Power*, of St. Bartholomew's Hospital, December 1st, 1854; Mr. Edward Lund of the Manchester Infirmary, June 12th, 1863; and Mr. John Gay, a late member of the Council, who lost his re-election last year by only a few votes, much to the regret of many of his colleagues in the Council and of friends outside. We have always, however, contended that seniority in the College should rank from the date of membership, and this gives to Sir Henry Thompson undoubted seniority, since he became member, we believe, in 1848, and obtained the Jacksonian Prize in 1852, before Mr. Lister became connected with the College. Sir Henry Thompson has twice received the Jacksonian Prize of the College. As already stated, nine candidates to fill three vacancies in the Council of the Royal College of Surgeons is an unprecedented event; and, as if this be not enough, the names of two more gentlemen have been mentioned. The gentlemen whose names appear in *italics* in the above list are members of the Board of Examiners.

UNIVERSITY OF LONDON.

THE annual meeting of Convocation of the University of London was held on Tuesday last; Dr. STORRAR in the chair. At the commencement of the proceedings, Dr. Carpenter laid on the table the new supplemental charter. On the motion of the Chairman, this charter, bearing date the 4th of May, was accepted. Dr. Pye-Smith having moved "That the report of the Annual Committee be received", and Dr. M. Baines having seconded the motion, Mr. A. P. Hensman said the question had arisen whether it was not desirable that the House should have some independent power. A strong feeling had, he remarked, been evinced in favour of such a change. Convocation consisted of about one thousand six hundred members, filling various positions in life; and, in his opinion, it was time that such a body should possess greater powers.

The report having been received, Dr. Pye-Smith moved the adoption of the following resolution, recommended in paragraph 9 of the report: "That, while Convocation recognises the advantage of examinations conducted by a body independent of the teachers of the candidates for degrees, it also recognises the fact that examinations exercise an important influence on the course of study pursued in the institutions where the candidates for degrees are chiefly educated; and that, with the view of creating and preserving a harmony between the requirements of the University and the course of study pursued in those institutions, it is expedient that they should be brought into closer connection with the Senate."—Dr. M. Baines seconded the resolution, and it was adopted almost unanimously.

Mr. John Hennell proposed on behalf of Mr. J. Anstie, who was absent, the adoption of the following resolution, recommended in paragraph 11 of the report: "That, with this object, it is desirable for the Senate to exercise its power under the present charter of revising the list of affiliated colleges, and from time to time of admitting to or excluding from this list, according to the position taken by these colleges at the University examinations for degrees, and on such other grounds as the Senate may in each case determine." The motion, having been seconded by Mr. J. W. Bone, was opposed by Mr. A. B. Hopkins.—Mr. W. Shaen and Mr. A. K. Rolliit supported the resolution.—Dr. Grece moved the previous question, and Mr. Hensman seconded this amendment.—Mr. R. H. Hutton felt that the resolution was right in principle, though there might be difficulties in carrying it out.—After some discussion, the amendment was negatived, and the resolution was then adopted.

On the motion of Mr. A. McDowall, it was resolved, after a short discussion: "That it would be desirable that the educating bodies included in the revised list should be invited to communicate, by delegates or in writing, with the Senate, and that facilities should be afforded to such delegates of deliberating together, and of communicating with the Senate, especially on the subject of examinations."

On the motion of Dr. Weymouth, seconded by Mr. Murch, it was further resolved: "That it is desirable for the examiners of the University, either in faculties or collectively, to form a board, one of whose functions would be to consider and report upon any subject connected with the examinations which they might deem of importance to the University."

Dr. Pye-Smith moved, and the Rev. Josiah Miller seconded, the following: "That it is desirable that the University should take advantage of such opportunities as may present themselves of promoting, by the institution of University chairs or otherwise, the cultivation of such higher or less usual branches of study as can be more conveniently or more efficiently taught by a central body." Mr. R. N. Fowler opposed the motion on financial grounds, there being no funds, he observed, to carry out such an object.—After a long discussion, in which objections of the same kind and others of a different character were urged by several speakers, Mr. Cozens-Hardy moved the previous question. This having been seconded, after some discussion it was negatived by thirty-nine votes to twenty-three; after which the original resolution was adopted.

On the motion of Dr. E. B. Baxter, it was further resolved: "That it is desirable for the Senate to consider the importance of recognising independent research in the examinations for the higher degrees in such way as the Senate may approve."

On the motion of Mr. Magnus, it was resolved: "That it is desirable that in any new charter a clause should be inserted giving to the University the power of examining and inspecting schools"; and on that of Mr. W. Shaen: "That it is desirable that the graduates be represented in the Senate by a larger number of members nominated by Convocation."

The proceedings then terminated.

DEATHS FROM ANÆSTHETICS.

IT is our painful duty to record this week two deaths from the administration of anæsthetics.

CHLOROFORM IN DENTISTRY.

THE remarks which we last week made reprehending the use of chloroform in dentistry, *à propos* of two cases of death in the dentist's chair recently reported in America, have received an unexpected and painful application in London this week. On Saturday, the Coroner for West Middlesex held an inquiry at Shaftesbury House, High Street, Kensington, as to the death of Mary Dolores Dormer, aged 10, daughter of Mr. Herbert Francis Dormer. Mr. John Saxty Good, a dentist, of 17, Phillimore Place, Kensington, stated that on Thursday last Mrs. Dormer brought the child to him for the purpose of having some teeth taken out; and, at the special request of Mrs. Dormer, an anæsthetic was administered by Mr. Thrupp, who always assisted the witness. No examination was made as to the physical condition of the child previous to the operation, and Mrs. Dormer was not in the room. A mixture of ether and chloroform was used. The child did not struggle at all. As soon as she became sufficiently affected by the anæsthetic, the operation was performed. Three teeth were removed, when a shadow seemed to pass over the child's face. The usual remedies were applied for restoring her, but without avail. She died in a few minutes. Mr. James Godfrey Thrupp, 37, Elgin Road, Kensington, said he was a surgeon. He had made the administration of anæsthetics his particular study, having practised at St. George's Hospital for some years. The child appeared to be perfectly healthy, the heat of the body being normal. No examination was made by thermometer. About a drachm and a half of the anæsthetic was taken, and the child was reduced to a state of total insensibility. After the operation was finished, a change came over the child, and the witness knew by the symptoms that she was either going to vomit or die. The circulation of the blood suddenly failed, and death immediately ensued. The jury returned a verdict that death was caused by syncope from the administration of chloroform, and that the death was due to misadventure. It is painful to add to the distress to which so shocking a misadventure must, we apprehend, give rise; but we cannot help asking Mr. J. G. Thrupp whether, "having made anæsthetics his particular study", he has not long since arrived at the conclusion that peroxide of nitrogen is by far the safest anæsthetic for dental purposes; and what were the reasons which induced him to forego the safer anæsthetic and employ the more prolonged but more dangerous one. Mr. Thrupp is of course not unaware of the very strong views which were publicly expressed some time since by Mr. G. Pollock, an eminent and much esteemed teacher at St. George's, as to the grave responsibility which attaches to the use in any case of any other than the safest anæsthetic. Is it ever right to use chloroform for dental purposes? We wish the Odontological Society would pronounce an authoritative opinion on that subject; and we should hope that, if they were to do so, they would absolutely forbid it.

STRANGULATED HERNIA: DEATH DURING THE ADMINISTRATION OF ETHER.

A COAL-PORTEr, over fifty years of age, was admitted into the London Hospital for strangulated hernia last week. He was a well-developed man, and had been the subject of inguinal hernia more than three years, but till the last week had always been able to restrain it, and had never worn a truss. He had never experienced any special inconvenience from the rupture till four days before his admission to the hospital, when he was troubled with abdominal pain, complete obstruction of the bowels, and frequent vomiting, latterly becoming fecal. His general health had been failing in an increasing degree during the last few years, so that he had sought medical advice. When admitted to hospital, he complained much of abdominal pain, and was unable to reduce his rupture. When examined, he presented a large scrotal hernia, somewhat tense. During the examination, he began vomiting fecal matter. Taxis having been used, but the symptoms remaining unrelieved, it was considered advisable to place the man under an anæsthetic. The house-surgeon accordingly administered ether, using not more than an ounce and a half in all. The patient came under the influence of the ether rapidly, and without difficulty or adverse symptoms. The local examination was then proceeded with. The patient's respirations were perfectly regular, and his pulse good, when, about six minutes after inhalation began, a sudden spasmodic inspiratory sound was heard, as if he were choking. His tongue was immediately drawn forward with the forceps; but respiration had ceased, although his pulse continued to beat for another half-minute. Silvester's artificial respiration was employed, but no spontaneous in-

spiratory effort followed. During the artificial respiration, some fecal matter came up into the mouth. These efforts were continued a quarter of an hour, but proved useless. At the *post mortem* examination, the left ventricle was found contracted; but the heart appeared healthy. The lungs were extremely congested. There was fecal staining of the œsophagus and larynx, but no such matter had been drawn into the lungs. The liver was healthy. The kidneys were slightly granular, but not congested. The portion of small intestine which had been strangulated was about twenty inches in length, extremely congested, with commencing peritonitis upon its surface. It must be remembered that in such a case as this, where strangulation had existed four days and was attended with constant vomiting and a feeble circulation, there were many circumstances predisposing to death besides the administration of ether.

HARVEY TERCENTENARY MEMORIAL FUND.

WITH much pleasure we are able to announce the continued growth of this Fund, which now amounts to £1600. In order that the wishes of the promoters may be realised, there is needed now only a sum of about £400 more, which it is hoped will be shortly subscribed. Amongst the more recent contributions is a liberal donation of fifty guineas from the Royal Medical and Chirurgical Society. Mrs. Balderson has also given £25; the Harveian Society of London, ten guineas (second donation); Professor H. W. Acland, five guineas; Dr. Henri Guéneau de Mussy, five guineas; Mr. E. Lund, two guineas, etc. Subscriptions will be thankfully received by Sir George Burrows, Bart., or Mr. Prescott Hewett, the honorary treasurers; by Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone, the honorary secretaries; or they may be paid in to the account of the Fund at the Western Branch of the Bank of England, Burlington Gardens, London, W.

EFFECTS OF DEPRIVATION OF WATER.

A VERY interesting and graphic account of the sufferings produced by deprivation of water is given in the *American Journal of the Medical Sciences* for April, by Dr. J. H. King, Captain and Assistant-Surgeon in the United States Army. The writer was one of the party sent in search of the lost men. It appears that on July 26th, Captain Nolan, Lieutenant Cooper, and forty troopers of a cavalry regiment, started in search of Indians in Texas. The guide, anxious to keep the Indian trail, neglected his landmarks, and could not find water in the evening. The scanty supply of water which had been taken in the men's canteens was exhausted in the early part of the march. Next day, the heat was excessive; a search for water was made in vain, and the men were becoming faint and exhausted.

"The next day found them still marching onwards, and the midday tropical heat causing great suffering. The desire for water now became uncontrollable. The most loathsome fluid would now have been accepted to moisten their swollen tongues and supply their inward craving. The salivary and mucous secretions had long been absent; their mouths and throats were so parched that they could not swallow the Government hard-bread; after being masticated, it accumulated between the teeth and in the palate, from whence it had to be extracted with the fingers; the same occurred with mesquite-beans and whatever else they attempted to eat. The sensibility of the lingual and buccal mucous membranes was so much impaired that they could not perceive when anything was in their mouths. The condition of the 'prima viæ' may in a degree be realised, when it is explained that brown sugar would not dissolve in their mouths, and that it was impossible for them to swallow it. Vertigo and dimness of vision affected all; they had difficulty in speaking, voices weak and strange-sounding; and they were troubled with deafness, appearing stupid to each other, questions having to be repeated several times before they could be understood; they were also very feeble and had a tottering gait. Many were delirious. What little sleep they were able to get was disturbed with ever-recurring dreams of banquets, feasts, and similar scenes, in which they were enjoying every kind of dainty food and delicious drink.

"At this stage they would in all likelihood have perished had they not resorted to the use of horse blood. As the animals gave out, they cut them open and drank their blood. The horses had been so long deprived of every kind of fluid that their blood was thick, and coagulated instantly on exposure; nevertheless, at the time it appeared more

delicious than anything they had ever tasted; in fact, every one was so eager to obtain it that discipline alone prevented them from struggling for more than the stinted share allowable to each. The heart and other viscera were grasped and sucked as if to secure even the semblance of moisture. At first they could not swallow the clotted blood, but had to hold it in their mouths, moving it to and fro between the teeth, until it became somewhat broken up, after which they were enabled to force it down their parched throats. This horse-blood quickly developed diarrhœa, passing through the bowels almost as soon as taken. Their own urine, which was very scanty and deep-coloured, they drank thankfully, first sweetening it with sugar. The inclination to urinate was absent, and micturition performed with difficulty. A few drank the horses' urine, although at times it was caught in cups and given to the animals themselves. They became oppressed with dyspnoea, and a feeling of suffocation as though the sides of the trachea were adhering, to relieve which they closed the lips and breathed through the nose, prolonging the intervals between each inspiration as much as possible. Gazing on each other, their lips thus closed were observed to be covered with a whitish, dry froth, and had a ghastly, pale, lifeless appearance, as though they would never be opened again. Their fingers and the palms of their hands looked shrivelled and pale; some who had removed their boots suffered from swollen feet and legs.

"The situation was now desperate, and feelings akin to despair took possession of them—suspicious ideas towards each other came over them, and they lost confidence in each other. They again saw the sun set, and another night was spent on these untrodden wastes, without alleviation of their misery. Persistent wakefulness now aggravated their mental anguish, and in vain at every halt they lay down and tried to sleep.

"Their deplorable condition continued to gradually grow worse, until 5 A.M., July 30th, 1877, when, providentially, part of the command succeeded in making 'Double Lakes'. At this time, a number of men were missing, some having been unable to keep up with the main column, while others had strayed after water."

The next morning, relief arrived. The condition of the men when seen is thus described by Dr. King:

"The demands of their systems were so imperative that the inclination to drink was irresistible; it seemed impossible to refrain from pouring down water, notwithstanding that their stomachs would not retain it. As they kept filling themselves with water, it was vomited up; the same thing occurred when they endeavoured to eat dry food. Warm coffee was the only thing they had that revived them at all, until after Captain Lee met them.

"Although water was imbibed again and again, even to repletion of the stomach, it did not assuage their insatiable thirst, thus demonstrating that the sense of thirst is, like the sense of hunger, located in the general system, and that it could not be relieved until the remote tissues were supplied. Moreover, the activity of this regenerating process was prevented by the deficiency of water in the absorbent vessels themselves. The same cause is competent to explain the overpowering dyspnoea, which threatened the existence of these men; for only moist membranes allow the free passage of gases which must take place in respiration. The lungs of these men were filled with the purest air, yet they appreciated an almost overwhelming sense of suffocation. Another point worthy of our attention is the loss these men must have sustained by integumentary and pulmonary exhalations. The mean daily exhalation of watery vapour in expired air, Valentin estimates at one and one-fifth pounds avoidupois, and the daily loss by cutaneous transpiration at about two pounds; in the case before us, the quantities were influenced and increased by the conditions of temperature, exercise, etc.

"The superior endurance of the mule over the horse was obviously manifested on this scout. The horses' tongues were swollen, mouths and systems generally affected much in the same manner as the men's; they could not chew or swallow grass; many gave out completely. On the other hand, the mules, comparatively unfatigued, would crop the grass and graze at every halt.

"It is essential to remember that the sensations of thirst, to which these cavalymen almost succumbed, were intensified by the dry state of the atmosphere; they were toiling over arid plains and elevated plateaus in a climate noted for its lack of moisture.

"On August 1st, 1877, Captain Nolan heard that fourteen of his followers had managed to get all right as far as the Supply Camp. His total loss, therefore, after this disastrous scout, only consisted of two men dead and two missing, supposed to be dead."

MISS DE LISLE ALLEN, a daughter of the late Dr. de Lisle Allen, has devoted herself, with promise of success, to the musical profession, and will give her first concert at St. George's Hall, Langham Place, on Saturday, May 25th.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH.

AN Ordinary Meeting of this Branch will be held at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, May 22nd, at 8 P.M., when papers on Vaccination will be read by Dr. E. C. Seaton and Dr. J. Greene of Birmingham.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*
W. CHAPMAN GRIGG, M.D. }

57, Doughty Street, W.C., May 13th, 1878.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE next meeting of the above District will be held at Lewes, on Friday, May 24th, at 3.30 P.M.: N. P. BLAKER, Esq., of Brighton, in the Chair.

Dinner will be provided at 5.30 P.M.

Notice of intended communications is requested by the Secretary on or before Wednesday, the 14th instant, in order that they may be inserted in the usual circular.

THOMAS TROLLOPE, M.D., *Honorary Secretary.*

9, Maze Hill, St. Leonard's-on-Sea, May 7th, 1878.

BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the Session will be held at the Museum and Library, at the top of Park Street, Bristol, on Wednesday evening, May 29th, at half past Seven o'clock; H. MARSHALL, M.D., President.

The evening will be devoted to a discussion on Alcohol in Health and Disease, which will be introduced by Dr. E. L. Fox.

E. C. BOARD, } *Honorary Secretaries.*
R. S. FOWLER, }

7, Caledonian Place, Clifton, May 14th, 1878.

BORDER COUNTIES BRANCH.

THE spring meeting of this Branch will be held at the Keswick Hotel, Keswick, on Friday, June 7th: President—Dr. LOCKIE; President-elect—Dr. GILCHRIST.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to the Secretaries.

R. MACLAREN, M.D., Carlisle, } *Honorary Secretaries.*
JOHN SMITH, M.D., Dumfries, }

Carlisle, May 11th, 1878.

THAMES VALLEY BRANCH.

THE next general meeting will be held on June 13th, at the Greyhound Hotel, Richmond, at Six o'clock.

Papers will be read by—

1. Mr. Balmanno Squire: The Use of Chrysophanic Acid.

2. Dr. Trouncer:

3. Dr. Atkinson: Vaccination and Revaccination.

Dinner at the above hotel at Seven o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary.*

Kingston-on-Thames, May 13th, 1878.

EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held at Peterborough, on Friday, June 21st, at 11.30 A.M., in conjunction with the Cambridge and Huntingdon and South Midland Branches: THOMAS J. WALKER, M.D., President elect, in the Chair.

After Branch preliminary business at 11.30, there will be a general meeting about 12.15, when the President-elect will read an address; at the conclusion of which, he kindly invites members to luncheon at his house before the next general meeting at 2.15 P.M., for papers, discussions, etc.

Gentlemen wishing to read papers, or to dine, are requested to communicate as early as possible with one of the Honorary Secretaries.

WM. A. ELLISTON, M.D., Ipswich, } *Honorary Secretaries.*
J. B. PITT, M.D., Norwich, }

Norwich, May 14th, 1878.

STAFFORDSHIRE BRANCH.

THE third ordinary meeting of the Session will be held at the Mines' Drainage Office, 22, Darlington Street, Wolverhampton, on Thursday, May 30th, at 3 o'clock P.M.

VINCENT JACKSON, } *Honorary Secretaries.*
J. G. U. WEST, }

Wolverhampton, May 5th, 1878.

SOUTH EASTERN BRANCH: WEST SUSSEX DISTRICT MEETINGS.

THE next meeting of this District will take place at the Marine Hotel, Worthing, on Thursday, May 30th, at 3.15 P.M.; A. H. COLLET, Esq., in the Chair.

The dinner will be served at 5.30 P.M.

Notice of intended communications is requested by the Honorary Secretary on or before Tuesday, the 21st instant, for insertion in the circular convening the meeting.

WM. J. HARRIS, *Honorary Secretary.*

13, Marine Parade, Worthing, May 11th, 1878.

MIDLAND BRANCH.

THE annual meeting of this Branch will be held at Lincoln, on Thursday, June 27th: President—C. H. MARRIOTT, M.D.; President-elect, A. MERCER ADAM, M.D.

Members desirous of reading papers are requested to communicate with

C. HARRISON, M.D., *Honorary Secretary.*

Lincoln, May 14th, 1878.

NORTH OF ENGLAND BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held in the Board Room of the Guardians, Hexham, on Thursday, April 25th; S. W. BROADBENT, Esq., President, in the chair. There were present twenty-six members and three visitors.

New Members.—The following gentlemen, members of the Association, were duly elected members of the Branch: H. W. DAVIES, Esq., Jarrow-on-Tyne; Samuel Edwards, Esq., Tynhoe; Cottenham Farmer, Esq., Hexham; L. J. HOBSON, M.B., Newcastle-upon-Tyne; W. H. WALKER, M.D., Aldborough; Samuel Warren, M.B., Castle Elen.

Habitual Drunkards Committee.—The SECRETARY read the report of the Committee of the Association. It was moved by Dr. EASTWOOD, seconded by Mr. G. B. MORGAN, and carried by acclamation: "That Dr. Philipson be appointed to represent the Branch in the Committee."

Harvey Tercentenary Memorial.—The SECRETARY read a communication from the Central Committee. On the motion of the PRESIDENT, seconded by Dr. BYROM BRAMWELL, it was resolved that the sum of five guineas should be contributed by the Branch to the fund.

Medical Reform and a Petition to Parliament.—Dr. EASTWOOD introduced the question, and presented the petition to the House of Lords, which was duly signed by the President, the other officers, and the members.

Papers.—The following papers, &c., were read:

1. Drs. STAINTHORPE and FARMER: Case of Aortic Aneurism in a boy aged 13.

2. Drs. STAINTHORPE and FARMER: Case of Contracted Knee-Joint, recently operated on by Division of the Tendons and Forcible Extension.

3. Dr. BYROM BRAMWELL: On the Differential Diagnosis of Aortic Aneurisms and other Intrathoracic Tumours, with cases and specimens.

4. Dr. E. C. ANDERSON: On Leucine and Tyrosine, and their diagnostic value in disease, with cases.

5. Dr. JAMES MURPHY: Exhibition of Tarnier's Obstetric Forceps.

6. Dr. JAMES MURPHY: On Puerperal Convulsions.

7. Dr. J. C. MURRAY: Case of Difficult Instrumental Labour, from Deformed Pelvis.

8. Dr. M. MCW. BRADLEY: *Post Partum Hemorrhage*, with Notes of Three Cases successfully treated by Compression of the Abdominal Aorta.

9. Dr. PHILIPSON: Notes of a Case of Hematuria.

Votes of Thanks.—On the motion of the PRESIDENT, a hearty vote of thanks was accorded to the readers of papers, also to the Chairman and Guardians for the use of the room for the purposes of the meeting.

Dinner.—The members and their friends dined together at the White Hart Hotel. The President was supported on the right by the Rev. Canon Barker (Rector of Hexham), and on the left by Major Nicholson of Hexham. After the loyal and other customary toasts, the President gave the British Medical Association, and success to the North of England Branch, which was heartily received and warmly responded to. Other toasts followed, namely, that of the President, the President-Elect (Dr. Moore), the Honorary Secretary (Dr. Philipson), and Dr. Stainthorpe, to whom they were indebted for the admirable arrangements of the meeting and dinner.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 3RD, 1878.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

Rupture of the Fetal Head.—Dr. CORY showed a foetal head, with a rent situated on the left side of the coronal suture, through which brain-matter had escaped. The tear was at first supposed to have been produced by the forceps; but it was subsequently ascertained that the student in attendance had used a hair-pin to rupture the membranes, at which time the injury to the scalp had probably been produced. There was a tumour attached to the sacrum, which impeded delivery, and craniotomy would in all probability have had to be performed.

Cancerous Polypi Removed during Pregnancy.—Dr. GALABIN exhibited two specimens of cancerous polypi of the cervix uteri, which he had removed from pregnant women, and showed microscopical sections of them. Both specimens, he said, were instances of a somewhat rare combination of pathological products, viz., myoma and carcinoma. The smaller tumour, which was about the size of a Spanish chestnut, was removed by means of the galvanic cautery at the fourth month of pregnancy, the patient having suffered from excessive hæmorrhage. Delivery took place naturally at full term, since which there had been no trace of recurrence. The larger tumour was removed by the galvanic cautery at the eighth month of pregnancy, the patient being much reduced by continued hæmorrhage and persistent vomiting. Premature labour occurred twenty-four hours after the operation, the child presenting by the breech, and being lost from the slow yielding of the cervix. The patient apparently recovered, but died some months later, probably from some internal extension of the disease. The tumour appeared to have originated in an epithelioma, the nested masses being very distinct.

Cystic Disease of the Fetal Kidney.—Dr. GERVIS exhibited a specimen of this disease, from a case which had occurred in the practice of Dr. Fletcher of Earl Soham. Extreme difficulty was experienced in the delivery of the body of the foetus, and ultimately it was found necessary to eviscerate. Dr. Gervis had on previous occasions exhibited specimens of hydrometra and hydronephrosis, occurring in the foetus, as causes of difficult labour, but this was a specimen of a still rarer foetal disease.—In reply to Dr. HEYWOOD SMITH, Dr. Gervis said that, previously to her confinement, the mother had been in perfect health.

Congenital Syphilis.—Dr. WILTSHIRE exhibited a photograph of an infant aged five months, who came under his care at St. Mary's Hospital, with enormous enlargements of the shoulder-joints, hip-joints, and knee-joints. The swellings came on very rapidly, and fluctuation was distinct in them. The child was remarkably anæmic, and presented in his face and elsewhere signs of congenital syphilis. The abscesses were tapped with the aspirator, and a large quantity of pus was withdrawn. The child, however, died soon afterwards; and, at the *post mortem* examination, the affected joints were found to be disorganised and the epiphyses separated. The liver was the seat of an abscess, which was apparently due to the breaking down of a syphilitic gumma.

Cancer of the Body of the Uterus.—Dr. SQUIRE exhibited a specimen of cancer of the uterus, where carcinomatous degeneration had proceeded to its most extreme point without pain ever having been a marked symptom. A. B., aged 58, unmarried, began to suffer two years ago from a sanious vaginal discharge. This was arrested for a time by general tonics, but reappeared a few months later. Vaginal examination then showed the uterus and cervix to be small and perfectly movable. The patient felt quite well till a year ago, when febrile disturbance set in, with evening exacerbation. A resistance was felt in the right hypogastric region and tenderness was complained of there; the cervix was still movable and appeared healthy. The patient lost flesh. From these symptoms and the family history, cancer of the body of the uterus was diagnosed. During the last three months of life, phlebitis occurred

in each leg, and did not cease till a fortnight before death, when collapse set in. Fæces subsequently passed from the vagina, and the patient gradually sank. On *post mortem* examination, no secondary deposits were found in any viscera; there were no enlarged glands; the peritoneum was smooth and free from adhesions, except in the pelvis, where the small intestines were attached to the uterus on the right side, while the upper part of the sigmoid flexure had been drawn down into the pelvis and become adherent to the uterus. Perforation had occurred, allowing the escape of fæces. The ovaries were small, but not diseased.

Rupture of the Uterus.—Dr. JOHN WILLIAMS showed a specimen of rupture of the uterus, the rent being situated in the anterior aspect of the cervix. The patient in whom it occurred was under the care of Mr. Marshall of Colney Hatch Asylum, and, when first called to the case, Dr. Williams found her with extensive emphysema of the head and face, and of the whole trunk. The child was presenting by the breech, and he delivered without difficulty. The placenta was slightly adherent, and on separating it he felt a rupture in the cervix, apparently not implicating the peritoneum. At the *post mortem* examination, the cervix was found to be the seat of a rent of about an inch and a half in length, surrounded by a sacculated pouch; the broad ligament in its neighbourhood was excessively distended with air.—Mr. MARSHALL gave a history of the case previously to its being seen by Dr. John Williams.—The PRESIDENT suggested that the uterus should be submitted to microscopical examination. Many cases of so-called spontaneous rupture of the uterus had been recorded, but information was still wanted as to the histological characters of the organ in such cases.—Dr. BRAXTON HICKS considered that rupture of the uterus seldom, if ever, occurred now-a-days from excessive and violent action, as described in the textbooks. Probably such an accident had been eliminated by our improved methods of delivery.

Two Cases of Repair of the Female Bladder and Urethra formed the subject of a paper by Mr. LAWSON TAIT of Birmingham. The first patient, S. H., aged 21, came under Mr. Tait's care on April 30th, 1877, two months after delivery. Ever since labour, her urine had dribbled away. On examination, the vestibulum vaginae was found to be merely a mass of cicatricial tissue, of almost cartilaginous hardness, and this extended up the posterior wall of the vagina for nearly two inches, and embraced the lateral walls of the passage for about half an inch further. On the anterior aspect, everything seemed gone, save the apex of the urethra, of which about three-eighths of an inch were left. At the roof of the vagina, a hard thick ridge ran across from side to side, and on the posterior surface of this the os uteri was discovered. In front of this ridge was a protrusion of mucous membrane, which was identified as the remains of the bladder, by the fact that the two ureters were discovered upon it. The anterior edge of this protrusion was adherent to the rim of the os pubis, and the whole of the mucous area was not much larger than a five-shilling piece. No trace of the anterior wall of the bladder could be found on careful search. Such being the state of things, Mr. Tait conceived that, if he could make anything in the shape of a tube out of the cicatricial tissue in the vaginal wall, he might, by releasing the ridge at each side, bring it and the uterus down, and, folding the remains of the bladder upon itself and fastening it to the new tube, might at least make a receptacle for a small quantity of urine. Accordingly, on May 15th, he made two flaps, each about an inch long, out of the tissue behind the symphysis pubis, and joined them in the middle by silver sutures. He did not attempt even to look at them again till July 14th, when he found the operation had practically failed. He, therefore, on July 18th, proceeded to make two similar but larger flaps, consisting of everything he could raise from the bone, and again united them in the middle. On examining the parts two months later, he found that a canal, three-quarters of an inch in length, and allowing the passage of a No. 6 catheter, had been formed. A few days later, he proceeded to make a raw surface on each side of this bridge at its upper end; he then made a deep incision at each end of the tense ridge at the upper part of the vagina, and, after arresting the hæmorrhage, pared the edge of the ridge and fastened it down to the raw surface with sutures, with the exception of one corner, where a free exit for the urine was left. On October 11th, he found that the whole of his proceedings had been successful, the artificial urethra leading into a bladder-cavity, and nothing remaining but to close the provisional orifice. This was done on November 17th, a cannula being kept in the urethra for twenty-four hours. The patient left the hospital on November 28th, unable to retain her urine, but returned on January 1st, when it was found that the urine escaped through one of the stitch-holes. A few days after this was healed, she began to have a sense of desire to pass urine, and was able to remain dry for about an hour. Since then, the quantity retained had increased from half an ounce to four ounces, and she described the feeling as being that almost of a

new life. In commenting on the reappearance of sphincter action after utter destruction of the sphincter muscle, Mr. Tait put forward two explanations: first, that some of the involuntary muscular fibres of the vaginal submucous tissue had taken on the action of a sphincter; and secondly, that a valve-shaped opening had been made, which only yielded on pressure being exerted upon it by the contraction of the muscular tissue in the remainder of the bladder when overdistended. The second case was that of Mrs. M. H., who since her last confinement, in January 1862, had been subjected to a variety of surgical proceedings for a "tear in the bladder", but without avail. In March 1877, Mr. Tait found a large irregular opening, extending from within an inch of the cervix uteri to within a quarter of an inch of the meatus urinarius, admitting of the protrusion of the anterior wall of the bladder. This opening was narrow at its two extremities, but very wide at the point where the trigone and neck of the bladder should have been, and thus tissue was lost just where it was most wanted. On March 17th, Mr. Tait operated upon the narrow part of the opening above, and lifted two urethral flaps with the view of forming the basis of a new urethra. The second part of the operation failed; it was, however, repeated with perfect success on April 6th. On May 16th, he operated on the remainder of the aperture by making two large wedge-shaped flaps, the axis of which coincided with the circumference of the vagina. The free truncated ends coincided with the margins of the fistula, and the lateral margins of each flap were formed by somewhat divergent incisions, which traversed round quite one-fourth of the circumference of the vagina. The flaps were then carefully joined at their apices, and the lateral margins stitched down so as to ease the apices of as much strain as possible, a drainage-tube being fastened in at the outer end of the lower left-hand incision. Union took place, except in a small portion for which the same operation was repeated on a smaller scale. The stitches were removed a fortnight later; and in a few days, the patient began to pass small quantities of urine with voluntary effort. By February 7th, 1878, she was passing eight and nine ounces of urine regularly, and was as well and as comfortable as she ever was in her life. In accordance with the President's request, Mr. Lawson Tait then demonstrated on the black-board the steps of the operations, adding that he had seen the first patient only a few days ago, and had found the shrinkage of the parts very considerable. The length of the urethra was now not more than a quarter of an inch; but it still served to keep the patient dry. In reply to Dr. Aveling, he said that the drainage-tube used in the first operation was one of Chassaignac's coiled wires; and that in the three cases in which he had employed it, he had not been troubled with the deposit upon it of phosphatic concretions.—Dr. AVELING had found that the concretions might be prevented by injecting twice a day a weak solution of nitric acid.—Dr. CLEVELAND asked whether it was necessary to keep the sutures in for so long a time as in Mr. Tait's cases. Did not the adhesions become sufficiently strong in fourteen or twenty-one days to admit of their removal with perfect safety?—Mr. LAWSON TAIT had never seen sutures do much harm by remaining in for long periods; but on this point he would appeal to Dr. Marion Sims, who had had probably more experience on the subject than any English surgeon.—Dr. MARION SIMS said that where there was plenty of tissue left, the operation for vesico-vaginal fistula was so easy, that we scarcely thought of recording successful cases; but those of Mr. Lawson Tait fell in quite a different category, and might be looked upon as most exceptional. He had hitherto regarded those cases in which the neck of the bladder was destroyed as all but incurable; and only a fortnight ago, he had reported unfavourably on such a case. Mr. Lawson Tait had, however, now laid down and followed out a new principle of action, and had invented a procedure which had never been tried before. As to the phosphatic deposits which had been mentioned, he believed that they never occurred except where the surface was denuded of epithelium. They might easily be cured by injecting a solution of nitrate of silver. The sutures, he believed, need never remain in longer than eight or nine days; otherwise, they were apt to excite a degree of ulceration which made it necessary to remove them.—Mr. TAIT said, in reply to Dr. Heywood Smith, that he did not attach importance to any particular kind of needle, but he liked the tubular needle very much indeed. Those usually employed made far too large holes, but he had had a special instrument made for him in Paris. As a rule, however, he thought the best needle was that invented by the late Professor Simon of Heidelberg, who was by far the most successful operator in these cases, and from whose teaching he had first derived the feeling that no case ought to be regarded as entirely hopeless.

Rupture of the Uterus.—Dr. HICKINBOTHAM of Birmingham contributed the notes of the case of a patient aged 32, who, when in the ninth month of her sixth pregnancy, fell off a chair on September 16th, 1875, and profuse hæmorrhage immediately followed. On Dr. Hickin-

botham's arrival a few minutes after, she was blanched and pulseless, and the floor was covered with blood. The hæmorrhage came from an opening in the posterior aspect of the uterine wall, which easily admitted two fingers, and through which the edge of the placenta could be readily felt. The os was undilated, and at least one inch from, and anterior to, the wound. A soft sponge soaked in cold water was at once pushed tightly up to the uterus, and ether and brandy administered. The idea of transfusion had to be given up, the apparatus being found out of order. The patient slowly rallied; and on examination twelve hours after the accident, the wound was found gaping, but there was no hæmorrhage from it. Labour came on on the 18th, and the head of the child was found greatly stretching the wound. The os was therefore pulled backward, so as to divert the stress of the pain from the rupture. Delivery was safely completed, and the patient had gradually recovered, though still very exsanguine. From the condition of the placenta, it had evidently been compressed by the foetal head. In explanation of the position and causation of the wound, Dr. Hickinbotham added that the patient had probably fallen with her abdomen across some part of the chair, and that the pressure ruptured the uterus in that part which happened to be weakest, and which was, in this instance, a point opposite to where the injury was received.—Mr. EDWARD SKINNER of Sheffield also narrated a case of this accident, which occurred in a young woman, aged 23, who was suddenly taken ill on the evening of January 2nd, 1877, with pain in the abdomen. She rapidly became worse, and when seen by Mr. Skinner was pale and collapsed, with a cold clammy skin and imperceptible pulse. The os uteri was found closed, and there was no hæmorrhage. She died about two hours after. On *post mortem* examination, the pelvis was found to contain a very large clot, with a three months' foetus in it, and part of the membranes and placenta, the other portion being still in the uterus, and projecting from a rupture an inch and a half long in its posterior wall. The walls of the uterus in the neighbourhood of the rupture were about half the thickness of the other parts and soft. The patient had had one confinement previously, from which she had made a good recovery; and there was nothing in her history to point to anything but spontaneous rupture. The week previous to her death, she was in bed two days, complaining of pain in the abdomen, but was not seen by any medical man. This was believed by Mr. Skinner to be really inflammation of the uterus, which led to the subsequent softening and thinning of the uterine walls.—Dr. BRAXTON HICKS said that the case reminded him of one of intramural pregnancy, in which the foetus was expelled *per vaginam*, but the placenta was retained, and the patient died from internal hæmorrhage. A rupture had taken place through the peritoneal surface at the situation of a large sinus.—Mr. LAWSON TAIT mentioned a case of hæmorrhage into the peritoneal cavity, now under his care, which he believed to be due to rupture of the uterus. He had twice drawn off the effused blood by tapping, but it had again accumulated, and the condition of the patient was so severe that he proposed, in a day or two, to open the abdomen, and endeavour to discover the source of the hæmorrhage.—Some remarks were also made by Dr. CLEMENT GODSON, Dr. SQUIRE, and Dr. MALINS of Birmingham.

A Case of Puerperal Convulsions was contributed by Dr. W. T. GREENE. The convulsions appeared to have been mitigated by the use of morphia suppositories, and disappeared on the fourth day after delivery, after which the patient made a rapid recovery.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 2ND, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Caries of Cervical Vertebra.—Mr. EDMUND OWEN exhibited a little girl with caries, who had suffered from neuralgia of both sides of the head and neck, and who walked with the greatest care, crying if anyone attempted to touch her. There was no retropharyngeal abscess. He fixed on a Sayre's "jury-mast", and the pain ceased immediately; and the girl was now quite happy running about the ward.—Drs. CLEVELAND and BUZZARD asked some questions, to which Mr. OWEN replied.

Blepharospasm ending in Recovery.—Dr. BUZZARD related a case of this rather rare affection in a man aged 50. It commenced by the eyelids closing spasmodically every few seconds. He was in excellent health in other respects. When talking or eating, the spasm was worse. After trying various points by pressure, he found that pressure on the tragus of the ear of that side checked the spasm. There was no apparent deafness, but some loss of hearing could be detected by Galton's whistle. Some wax was discovered in the ear, and removed; after which the constant current was applied. The spasm ceased during

the time the current was applied; and the permanent condition was improved on each application. A blister was also applied behind the ear. The case got quite well. Irritation of the fifth nerve was a common cause of blepharospasm; or it might be due to local irritation in the head and face. In this case, the auriculo-temporal branch of the fifth nerve was involved.—Mr. POWER said temporary spasm might result from overwork and imperfect nutrition of the nerve-centres, when tonics did good. The condition when established was very intractable.—Mr. SEWILL spoke of a case of spasm of the masseter muscles cured by extraction of some teeth.—Mr. E. OWEN, Dr. JOHN WILLIAMS, Mr. CRIPPS LAWRENCE, Dr. NESBITT, and Mr. GEORGE FIELD spoke; after which Dr. BUZZARD replied, saying that no internal treatment was adopted. The removal of the wax was the chief factor, though the use of the galvanic current might aid in the cure.

Epithelioma of the Rectum.—Mr. E. OWEN spoke of a case in a woman aged 39, of ischio-rectal abscess, followed by fistulous drains and a discharge. The granulations assumed an epitheliomatous character, and were removed; but the case grew steadily worse, and she died. The kidneys were found extensively diseased. There was a history of syphilis.—The PRESIDENT, Drs. DOUGLAS POWELL, MACLEAN, BUZZARD, and Messrs. POWER and HLYCOCK spoke; and Mr. OWEN replied, saying there were a number of small cells scattered throughout the kidneys.

Fibroid Tumours of the Uterus treated by Sclerotic Acid.—Dr. JOHN WILLIAMS related two cases of uterine fibroid treated by sclerotic acid. This acid readily dissolves in water, and in so far differs from ergotin. A woman aged 34 had suffered from severe flooding for some time. A fibroid tumour was detected; and half-grain doses of this acid were injected under the skin of the abdomen twice-a-week. The flooding was much reduced, when the woman went into the country; and then it returned. When she came back to town and the acid was again injected, the flooding was checked as before. The tumour was reduced in size. Like results were attained in a similar case, including a decrease in the size of the tumour. The injection caused some little pain at the time, but that was all. It was followed in about half-an-hour by uterine pains.—Drs. MAJOR, BUZZARD, CLEVELAND, BANTOCK, and PERCY BOULTON spoke; and the PRESIDENT said that, where the tumours were peritoneal, ergot in any form did little good. The pressure of the muscular fibres of the uterus in the growth caused the reduction in bulk.—Dr. WILLIAMS replied to the various questions put to him; after which the meeting adjourned.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, FEBRUARY 6TH, 1878.

WILLIAM SANDERS, M.D., President, in the Chair.

Gottre.—Mr. SPENCE showed a goitre, removed from a young girl aged 13. It was very large, and constricted by the omohyoid, sterno-hyoid, and sterno-thyroid muscles, so that it looked as if there were distinct tumours below the angles of the jaw. There was little hæmorrhage during the operation, and that only from superficial incisions. When the tumour was removed, the trachea was seen to be compressed so much that it looked as if tracheotomy would be necessary. The patient suddenly sank next morning, probably from œdema glottidis.—A sister of this patient, aged 9, had also a similar large tumour, which had benefited from blistering.

Excision of the Tongue.—Mr. SPENCE showed two specimens of excision of half the tongue. The tongue and tonsils in one case were large and swollen, but the disease seemed to be confined to the one side. He removed the diseased part with the knife and thermo-cautery. On dividing the jaw in the middle line previously to this, the disease was seen not to be confined entirely to the one-half of the tongue, but to extend obliquely at the tip. In the other case, the disease was less extensive, and the mouth was not swollen. He removed the diseased part, two lines in front of the base, and did not divide the jaw and cheek.

Disease of Shoulder-Joint.—Mr. SPENCE showed a specimen of disease of the shoulder-joint, of great interest pathologically. The case was that of a child aged 14, with a large abscess around the shoulder-joint, from disease in the surgical neck and tuberosities, extending down to the shaft. At a recent meeting, he had shown a specimen of caries of the neck of the femur. In this case, the incipient disease of the cartilage was seen to be spreading from the diseased state of the underlying bone.

Removal of the Ulna.—Mr. SPENCE showed a specimen of the greater part of the shaft of the ulna. A large abscess had formed, and irritative fever was present. He opened the abscess, and, finding the bone bare, stripped the periosteum off and removed it. The abscess, however, continued to discharge, and, as he found on examination that it commu-

nicated with the joint, he excised the upper part of the ulna. The result had been good, and it would be interesting to see how the humerus played on the upper part of the ulnar shaft.

Cancer of Lip and Jaw.—Mr. SPENCE showed a tumour removed for cancer of the lip affecting the jaw. Part of the jaw, masseter muscle, and the submaxillary gland were therefore removed.

Examination of the Ear.—Dr. KIRK DUNCANSON showed Weber-Liel's ear-magnifier and ear-microscope, as described in No. 10 of the *Monatschrift für Ohrenheilkunde*, October 1870. After many failures, he had finally succeeded in having the instrument so constructed as to be of thoroughly practical benefit in the diagnosis and treatment of diseases of the ear. After having, by the usual means of examination, obtained a knowledge of the condition of the external ear-passage and drumhead, the structure, movements, etc., of the membrana tympani and the deeper structures of the ear could be minutely examined by the ear-microscope. With the ear-magnifier, as well as with the microscope, by exhausting the air in the cavity, or by forcing air into the cavity, the action of the membrana tympani under these coarser impressions could be seen. With the microscope, by previously having dusted the membrane with flour, the observer, by singing or speaking into the tube, could observe the separate particles, as it were, forming into lines, which enabled the vibrating capabilities of the various parts of the tympani to be measured by means of the micrometer in the eyepiece of the instrument. For example, it would be noticed how slight the movements of the outer segments of the drumhead were in comparison with those of the posterior segment. In certain pathological conditions of the membrane, it would be observed that the capability of excursion of the parts was not diminished, as was generally supposed, but was much increased.

Diseases of the Kidney.—Mr. D. T. HAMILTON showed microscopic preparations illustrative of diseases of the kidney, and, among others, that accompanying scarlet fever. In all the cases which he had examined, the change had been essentially that of an acute interstitial affection, characterised by the production of large dépôts of inflammatory cells between the convoluted tubules of the cortex, sometimes distributed diffusely, but much more frequently in and around the glomeruli themselves. The lesion, which was most typical, corresponded to what has been described by Klebs as "glomerulo-nephritis". In one instance, the appearances, both to the naked eye and microscopically, were quite characteristic. The organs were taken from a child who had suffered from postscarlatinal dropsy, and died with uræmic symptoms. They were about twice the natural size; the capsule was non-adherent, and, on stripping it off, an extremely pale yellow mottled surface was left, with, here and there, congested venous radicles. On cutting into the organ, the cortex was found to be enormously enlarged, of a pale yellow colour, and had a mottled appearance very much like, at first sight, the mottling seen in parenchymatous nephritis. On closer inspection, however, the pale spots producing the mottling were seen to be rounded, and corresponded to the situation of the Malpighian bodies. The microscopic examination confirmed this opinion. The first thing that seemed to take place was a proliferation of the connective tissue nuclei within the Malpighian tuft, giving rise to great constriction of its blood-vessels. The Malpighian capsule then participated in the same process, becoming much thickened. Finally, for a short distance around the Malpighian body, there was very considerable inflammatory exudation of a similar nature, but limited to this neighbourhood. The epithelium in most of the convoluted tubules seemed comparatively normal. There was no blocking up of the tubules, and it was only here and there the epithelium appeared to be at all fatty. The lesion was entirely different from that met with in acute tubular nephritis, any alteration which might exist in the epithelium of the tubes being undoubtedly secondary to the much more evident and much further developed acute interstitial change. The medulla, further, was deeply congested, apparently from the obstruction to the circulation in the Malpighian tufts. The lesion seemed to be a very fatal one, and was usually accompanied by coma and convulsions. In other cases of scarlet fever which Mr. Hamilton had examined, the lesion was always markedly interstitial, affecting the cortex chiefly, and characterised by the deposition of inflammatory material between the convoluted tubules. In those cases where there was a tendency to resolution, it was apparently brought about by the inflammatory cells becoming fatty, instead of organising; they broke down after a time, and were absorbed. The other specimens were illustrative of different forms of Bright's disease, with more special reference to chronic interstitial nephritis, which, in all respects, was a truly inflammatory process, and similar in its different aspects to like affections in the liver and lung, although by no means necessarily accompanied by them. Preparations from a case of pyelo-nephritis were also exhibited, showing a complete infiltration of the organ, with putrefactive or-

ganisms of the micrococcus variety. The affection presented exactly the same features as a diphtheritic mucous membrane, and undoubtedly was dependent on the same cause, namely, the introduction of some septic material into an organ previously weakened by disease. The beginning of these cases was usually a catarrh of the whole genito-urinary tract, following the passage of the catheter. There could be little doubt that this latter was the means by which the septic virus was introduced. The subsequent course of the disease consisted in the formation of a diphtheritic surface in the bladder, ureters, and kidneys themselves. The introduction of the catheter into a healthy bladder had evidently no effect; it was specially where there had been an old standing cystitis that it was so extremely dangerous.

Sanitary Association.—Professor FLEEMING JENKIN read a paper on a Sanitary Association for the inspection of houses.—Dr. TAYLOR asked if this Association contemplated the inspection of dairies.—Mr. JENKIN thought this lay more in the province of medical men and chemists. The drainage and ventilation of dairies, however, would be inspected.—Dr. TAYLOR would not feel safe under the protection of this Association, unless dairies were inspected.—Dr. GRAINGER STEWART said that, so soon as he had heard of the formation of this Association, he had come to the conclusion that it would be a great boon. Along with others, he had seen only too often how defective the drainage arrangements in Edinburgh houses were. One house, situated in the best part of Edinburgh, was well known to be exceedingly unhealthy. On examination, it was found that, just as manufactories consumed their own smoke, so this house consumed its own sewage; for in the whole basement-storey there was an accumulation of filth. There was an excellent drain, but nothing in it, so that he got an Irish labourer to crawl through from one end to the other. It was then found that a grating had been fixed at one end to prevent the entrance of rats into the house. This became blocked, and, through the rat-holes, the sewage percolated into the basement. Then, again, in a school where there was typhoid fever, the drains were looked to and cesspools in front of and behind the house cleared. But, after some fatal cases, further examination was made and a huge cesspool found under the base of the house. Such cases showed how much inspection was needed. In the first house, the inmates thought they were delicate; in the second, they considered themselves well until the typhoid came. He had risen to say how useful he believed such an Association would be, and that he intended to become a member of and take an interest in it.—Dr. JAMES CARMICHAEL wished to say that he thought the proposal inapplicable in a large number of cases, viz., in the houses of the poorer classes. He hoped that Professor Jenkin's ingenuity would overcome this, and that soon such inspection as he advocated would be compulsory.—Dr. A. G. MILLER directed attention to two points. In the first place, while Professor Jenkin had admitted that doctors had very frequently detected defective drainage, he yet spoke as if they should now give up attention to such matters. He thought, however, that medical men should be associated with the engineer, and that the latter should submit his plans to him. In the second place, while he had no objection to the Association, he thought it should go further. Prevention was better than cure. The drainage in Edinburgh houses was simply disgraceful. He hoped the day would come when a builder, who willingly and knowingly used bad drains, would be put on trial for his life, or at least severely punished.—Dr. J. A. RUSSELL said that, as much building was going on now, the Association could do something at present to prevent a bad system of drainage being adopted. They could only tinker the old houses, but the drains in new ones could be rightly arranged without cost. The plan of having pipes so placed as to be available for inspection could be easily enforced. Quite recently, on looking at a new terrace being built, he noticed that the soil was so wet that he only hoped the builder himself would occupy the basement. In other cases, all sanitary laws were set at defiance. He had seen the Lord Provost, and suggested that certain sections of the English Acts might be adopted in the new Police Act. He received a letter, saying that some of them would, but that others were already in the Provisional order. They were of no use, however, as they were not enforced, and would not be until public opinion was educated to ask for them.—Dr. A. SIMPSON felt greatly indebted to Mr. Jenkin for his clear exposition of the objects and method of working of the Sanitary Association. Immediately after he had an opportunity of examining the constitution of the Association, he had sent in his name as a member. He was glad the subject had been gone into so fully and admirably, and that its importance had been recognised by so large a meeting. He could add many instances such as Dr. Grainger Stewart had already given. Indeed, they had all seen enough to make them grind their teeth at architect, clerk of works, or plumber who should thus sow the seeds of death. Probably all medical men shared the feeling expressed, that more could be done in the way of extending

compulsory inspection; yet the Sanitary Association deserved credit for taking the first steps towards its realisation. They would be glad to have the scope of the Association so extended. One effect would be that none would go into a new house without a previous inspection of its drainage arrangements. He thought it would be well if, by a vote of thanks, the Society stamped with its approval the views of Mr. Jenkin. They heartily wished the Association success, although its efficient working would shorten their visits and attendance on patients; for not only did defective drainage cause disease, but it also greatly aggravated it. He moved: "That the Society accord a cordial vote of thanks to Professor Fleeming Jenkin for his paper on the working of the Sanitary Association, and declare its strong sympathy with its objects."—Dr. BLAIR CUNYNGHAME thought that it would be a good thing if the Association exercised a supervision over work, such as plumbing, while it was being done.—Dr. CLOUSTON concurred with all who had already spoken as to the immense importance of the subject. He had been educated unfortunately in prehygienic times, when hygiene was sneered at, and the health of the scavengers of Paris brought forward in proof of the harmlessness of the absence of sanitary precautions. Twelve months after his appointment to a large asylum, he lost thirty patients. He did not at first think that there was anything wrong with the drainage, but he soon found out they were as bad as they could possibly be. An enormous amount of money was spent in putting matters right, with the result of abolishing disease. When appointed, after this, to another large asylum, built under the direction of two of the most distinguished Edinburgh architects, he found the place surrounded by a series of small cesspools, causing continually septic diarrhoea. Since this was put right, the health had greatly improved and the sick diminished by a half. He felt strongly that this inspection should be extended to public institutions. Some of these were as bad as they could possibly be. For inspection, they would pay according to their number of patients; but forty or fifty guineas was nothing to such institutions. He agreed with Dr. Cunynghame as to the absolute badness of plumbers' and architects' work. Almost the first step in the right direction would be to poison them all off. Of all professions, plumbers were the most uneducated and pigheaded that could be imagined. He seconded Dr. Simpson's motion.—Dr. BRYAN WALLER gave one or two instances of bad sanitation, which had come under his own observation.—Mr. SPENCE said that Dr. Clouston's remarks brought to his recollection an instance where the fault lay in over-engineering. In the part of the surgical hospital where he had charge some time ago, there was a system of ventilation by heated air, exhausting cylinders, etc. In three months, hospital gangrene appeared, and even scratches and healing stumps were affected by it. When, however, the patients were removed to a place well ventilated by doors and windows, they recovered in about a week. He did not like special arrangements, unless there was a head engineer inspecting. The system of ventilation he had spoken of had acted well in another institution; but, when inspected in his wards, an essential part was found not to be in working order, so that, unless the nurses had opened the windows, the patients would have been suffocated. He had accordingly returned to the old system, and never regretted it.—Dr. FOULIS, as a medical man, had made up his mind to join this Association for the two reasons, that efficient inspection was necessary to ensure that defects would be corrected for the present and prevented for the future. He had seen cases where two or three members of a family died in twenty-four hours, in spite of all that could be done by the medical attendant. Professional men, called in, said there was nothing wrong with the drainage; but, two weeks afterwards, half a ton of fluid filth was found under the kitchen floor. Efficient inspection would have prevented this. In another instance, these officers were called in to inspect a house where a bad smell was perceived. They said there was nothing wrong, but yet, it was afterwards found that the sewage from a water-closet above was percolating between the walls of the room. All medical men should consider it their duty to bring before their patients the fact that a poison could be swallowed, although it was not smelt. Every one now a-days was learning physiology, *i. e.*, the laws of health. Let them encourage this, as it would promote the subject of sanitary reform.—Dr. ARGYLL ROBERTSON concurred with those who had already spoken that the Association was ably devised to meet a crying evil. He wished to direct Mr. Jenkin's attention to the fact that, during the absence of people in the country, the water in the proposed trap would evaporate. He would like to know how this could be obviated.—Dr. PETER YOUNG approved highly of Professor Jenkin's project, but objected to a duty being thrust on private individuals which public ones should perform. In the case of public buildings, they could not get a certificate from the burgh engineer that all was right. In this there was something wrong. Private associations, however, could not do what public ones should.—Professor JENKIN said that, in his reply, he would begin

at the end. Public inspection would not do, as it would be the compulsory public inspection of the internal fittings of a house. Then compulsory inspecting powers were often vexatious. Another objection, too, was that they exacted a minimum, so as not to be harassing. The private association, however, would recommend what was best, as it was not compulsory to adopt it. They would make arrangements to criticise drainage, etc., in progress in new houses. Dr. Argyll Robertson's remarks were important, and he did not know at present what could be done. A communication with the air could, however, be made. He cordially agreed with all Mr. Spence said. They would be ready to inspect plumbers' work, and any plans submitted to them; but to recommend any special men would be invidious. They would be only too glad to inspect public buildings, at appropriate charges, in proportion to size, etc. They had no desire to exclude medical men from their plans. Nothing would help their Association so much as the co-operation of the medical profession. In the last place, there were undoubtedly many who were too poor to pay a guinea, and yet too rich to ask alms. They might have a lower rate for such, or the plan of co-operation might succeed.—The vote of thanks was carried unanimously.—In conveying the vote of thanks to Professor Jenkin, the PRESIDENT pointed out how closely the matter was connected with medical men. They had fought the battle of sanitary reform single-handed, with neither engineers nor the public on their side. He further supported the Sanitary Association because it did not proceed on a one portal system, letting loose a flood of half educated men on the country, but cultivated the best men and gave them the best opportunities for study. If the Association did good, and if its work were good, then all classes would join it; for even the poorest would make almost any sacrifice to secure the health of their family. The debate had been a most interesting one.—Professor FLEMING JENKIN thanked the members for their cordial vote of thanks, and expressed his deep sense of the great importance of the efforts medical men had made in the matter of sanitary reform. He had no wish to exclude them now, but would always be glad of their advice, whether they knew much about such matters or were ignorant of them. Engineers were now coming to the assistance of medical men, and he hoped their co-operation would be effectual.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

APRIL 5TH, 1878.

ALEXANDER PATTERSON, M.D., in the Chair.

Pott's Disease of the Spine.—Dr. G. H. B. MACLEOD described the best method of examining a case of Pott's disease of the spine, and demonstrated on a patient the application of Sayre's method of treating such a case. He had tried glue, starch, paraffin, and plaster of Paris, and preferred the latter as being cleaner and more easily handled. Dr. Macleod stated that the generally accepted view that spinal disease was due entirely to constitutional causes was not borne out by facts, as many cases had no history but that of a blow or fall having been sustained in a perfectly healthy patient.—Dr. M'EWAN said he had tried the treatment in several cases with good result; but he preferred paraffin, which melted at 129 deg., as it was lighter than plaster of Paris.—Dr. MORTON thought that all the cases were connected more or less with a diathetic cause, and not entirely due to blows or falls.—Dr. PATTERSON agreed with Dr. Morton as to the cause being constitutional.

PATHOLOGICAL AND CLINICAL SOCIETY OF GLASGOW.

TUESDAY, JANUARY 8TH, 1878.

JOSEPH COATS, M.D., President, in the Chair.

Acute Tuberculosis.—Dr. GAIRDNER showed the parts from a case of acute tuberculosis. The lungs, kidneys, and liver were full of milary tubercles; there was a small tubercular mass in the cerebellum; the ventricles of the brain were dilated with fluid, and the white substance softened; and the membranes of the brain were inflamed. The patient, W. H., aged 26, a boilermaker, was admitted into the Western Infirmary on December 30th, 1877. There was a great difficulty in obtaining facts as to the previous history, owing to his lethargic condition, but it appeared that his name had been inscribed upon the list for admission about a fortnight before as a case of phthisis. The apparently most urgent symptoms, however, were evidently those of cerebral oppression; and a suppression of urine absolutely, for three days after admission, raised a presumption that there might be a renal origin for the disease. On the other hand, the presumption of phthisis was corroborated by the physical signs in the chest, by the temperature, which

ranged from 100 deg. to 101.2 deg., and by the bodily conformation; but not all by the symptoms, there being almost no cough and no dyspnoea; respirations 26, pulse about 90. There was rather violent typhoid delirium at night, subsiding during the day; a dry brown tongue; no paralysis; no convulsions; the pupils acted to light, and were not either remarkably contracted or dilated. Frerichs's test for carbonate of ammonia in the breath gave inconclusive results. On the fourth day after admission, after a dose of compound jalap powder, followed by squill and spirit of nitrous ether, fourteen ounces of urine were procured by the catheter; specific gravity while warm 1030, very acid, no albumen, biliary reaction with nitric acid. On the next day, the coma was deeper, but still no convulsions and no paralysis, but occasional slight subsultus tendinum; temperature maximum, 102.8 deg.; pulse varying from 72 to 116; respirations a little over 20, perhaps with a very slight "cerebral" character of rhythm, but not very much; no cough, and an entire absence of respiratory oppression. From this to the death of the patient, on January 5th, 1878, there was scarcely any change, except deepening of the coma and increase of weakness. The evidence, however, derived from the statements of his wife during the last day of his life, tended to confirm the idea of positive cerebral disease as opposed to uræmic coma. She declared positively that, for six months at least, he had complained of frequent vomiting and headache, which symptoms were ascribed in the first instance to the bad air in which he worked, filled with the vapours of paraffin-lamps, etc. That the vomiting was a symptom of considerable importance, was made clear by her referring his emaciation to it chiefly, as she said he could never retain enough of food to nourish him; and, even when he was after a time laid up by a severe cold resulting in a cough and spit, the vomiting continued, and the headache appeared to be even increased by the cough, attracting attention in the form of a severe pain referred to the left temple. The breathing became difficult, and on several occasions mouthfuls of blood were spat up. His wife appeared not to have apprehended any positive cerebral mischief up to the moment of admission; and never at any time noticed any marked aberration of mind, nor yet squinting, deafness, loss of vision, or anything which presented itself as unusual or dangerous in respect of the brain. Her account of the family history was pretty distinct, and showed the death of the mother and one brother from chronic chest-disease; while a sister died in childhood; leaving only one brother, considerably younger than the patient, alive and healthy. The father was still alive, bedridden, and suffering evidently from pulmonary disease. Of her own children by the patient, four in number, three had died during infancy. The diagnosis in this case was correctly made; but it was interesting to observe how many of the conventional symptoms of tubercular meningitis, especially as it occurs at infantile ages, were absent. The presence of tubercle in the lungs was truly inferred from the physical signs present, but its amount and general diffusion were not suspected. The solitary ulcer found in the small intestine and the considerable amount of tubercle in the kidney and liver were also out of the range of diagnosis. Iodide of potassium was administered, but without any definite result.

Early Fetus.—Dr. HUGH MILLER showed a fetus at the sixth week of intra-uterine life. The mother was a multipara, and there were no special causes to bring on abortion. The membranes and parts of the fetus were in a complete state.

Diphtheritic Exudation.—Dr. JOSEPH COATS showed a diphtheritic exudation obtained from the throat of a patient of Dr. Cameron. The specimen had been kept in spirit before it was examined, but Dr. Coats had no difficulty in making out masses and swarms of micrococci in the exudation. These masses consisted of minute closely set granules. The granular masses of micrococci were found in the diphtheritic exudation and in the lymph-channels of the mucous membrane of the fauces. Recklinghausen had also found similar material in the kidneys; and others had seen them in the skin in erysipelas. It was inferred that the minute organism was the cause of the inflammatory condition in the throat in diphtheria.—Dr. DOUGALL inquired whether the micrococci had been found in the blood of the patients in diphtheria. It was just as likely that the micrococci were the result as the cause of the diphtheria.—Dr. A. ROBERTSON expressed a doubt as to whether these were really organisms, and, if so, whether they were related to the disease.—Dr. G. BUCHANAN asked if the micrococci were always present, or were merely accidental, in the exudation, which he had always looked on as an exudation in the ordinary course of asthenic inflammation.—Dr. RENFREW said he had seen such white diphtheritic coatings on excoriations in asthenic states (e.g., dropsy) on other mucous membranes than that of the throat.

Pathology of the Lungs.—Dr. JOSEPH COATS showed sections of the lung-tissue in hæmorrhagic infarct and in acute pneumonia. Cohnheim had said that in hæmorrhagic infarct there was a leakage of the cor-

pules through the walls of the vessels, and consequently a filling of the air-cells with red corpuscles, but no fibrin. In pneumonia, on the other hand, there was fibrin with inflammatory cells in the alveoli. Dr. Coats's specimens bore out Cohnheim's views.

Malposition of Teeth in Rabbits.—Dr. DOUGALL showed two rabbit beads, in which from a slight displacement of the jaws, probably after injury, the upper and lower teeth had ceased to meet accurately, and the normal attrition had consequently been in abeyance. The teeth, however, had grown at the usual rate, and thus there was an enormous elongation of nearly all the teeth, more especially of the front ones. In a case recorded by Cuvier, the teeth had grown so long that one of the lower incisors had perforated the eye of the rabbit. Both of the rabbits from which the heads were taken were in good condition. The teeth, which were overgrown, formed a perfect curve.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 3RD, 1878.

FREDERICK A. HEATH, M.R.C.S., President, in the Chair.

Restoration of Lower Jaw after Resection.—Mr. BRADLEY showed a case of restoration of the lower jaw after excision. The left half of the inferior maxilla had been removed subperiosteally six weeks before for a myeloid tumour, and at the date of the meeting, bony reproduction of the part removed was almost complete.

Amputation of the Thigh.—Mr. BRADLEY showed a case of amputation of the thigh for alveolar sarcoma, in which there had been no return of the disease since the operation, twelve months before. Mr. Bradley advocated the use of long posterior skin-flaps and short anterior flaps, when it was elected to amputate the thigh by the flap method. He urged the superiority of this operation over the one now in vogue, on account of the great tendency of the posterior flap to retract, and stated that drainage might easily be effected from the sides of the wound or by buttonholing the hinder flap.

Splint for Knee-Disease.—Mr. BRADLEY exhibited a splint for diseases of the knee-joint. It consisted of a straight back-splint, with a foot-piece erected at an angle of 45 deg. This rotation outwards being the most comfortable position, and the one which the limb naturally assumed on lying flat on the back, was, therefore, that in which the most complete rest was obtained. He had employed it in the infirmary for the past six months with good results.

Suture-Needle.—Mr. BRADLEY exhibited a very ingenious needle, invented by a recent hospital patient, who had suffered greatly from the dragging of wire sutures through the edges of an incised wound. The wire passed from an eyelet at the side through the head of the needle; then a burr was put on the other end by means of a broad-nibbed pair of tweezers; this allowed the passage of the wire through the side eyelet-hole, but not through the hole in the head, and thus the wire (necessarily less bulky than the needle) offered absolutely no resistance in its passage through the skin.

Lamp for Mercurial Fumigation.—Mr. BRADLEY exhibited an improved lamp for mercurial fumigation, which permitted, *inter alia*, of being extinguished by a small handle without moving the gauze covering.

A Small Child.—Mr. CULLINGWORTH mentioned the case of a remarkably small child which had been under his observation at St. Mary's Hospital. The mother had been delivered prematurely about the end of the seventh month. The child was brought to the hospital when it was four weeks old, on account of its "not thriving"; it then measured fourteen inches, and weighed exactly two pounds; it had a quantity of hair, and the forehead was covered with long down. There was an entire absence of subcutaneous fat, which gave the features the appearance of wrinkled age. The food consisted of sweetened milk and water given very frequently, a few drops at a time. The child lived to the age of six weeks; convulsions occurred during the last three days of life.

Tumour of the Cerebellum.—Dr. EMRYS JONES exhibited a cerebellar tumour, and related the history of the case. R. H., a lad aged 7, was admitted as a patient to the Eye Hospital, suffering from great headache, loss of vision, and unsteady gait, with a decided tendency to fall backwards. Ophthalmoscopic examination revealed double optic neuritis; the right optic nerve was quite atrophied. He died suddenly after a convulsive fit of an hour's duration. At the necropsy, the brain was found to be well developed. The veins were congested. There were about two pints of fluid. The right lobe of the cerebellum was quite replaced by a round well-defined tumour about the size of a hen's egg, which, on examination, was found to be a glioma.

Palpebral Nævus.—Dr. EMRYS JONES also exhibited a case of nævus of the palpebra in a child three months old. Its size was three

inches by one inch and three-quarters, occupying the whole of the upper lid. Several patches of the skin covering it were of a bright scarlet colour and nævoid; other patches in the interval were free and of the normal colour. It had been gradually increasing in size. The treatment adopted was electrolysis.

Scarlatinal Endocarditis.—Dr. HUMPHREYS exhibited some specimens of scarlatinal endocarditis. Out of seventeen inspections which he had made during the past fifteen months in cases of scarlet fever and its sequelæ, he had found evidence of endocarditis in four instances. The first was that of a boy aged 4, who died after two days' illness. Here two of the segments of the aortic valve were fused together; the mitral valve was healthy; the two layers of the pericardium were adherent. There was, however, a previous history of rheumatism. The second case was that of a boy aged 8, who died on the fourth day of illness. The aortic valves were reddened and swollen, and two of its segments had fused together. There was slight reddening and thickening of the edges of the mitral valves. The third case was that of a boy aged 8, who died on the fifth day. Here the anterior cusp of the mitral valve, with its attached chordæ tendinæ, was greatly swollen. The fourth was that of a girl aged 3, who died of nephritis six weeks after the onset of scarlet fever. The edges of the mitral valve were thickened and stained. The left ventricle was dilated, and contained an *ante mortem* clot at its apex. There was a recent infarction of the spleen.

Syphilitic Liver.—Dr. ROSS exhibited a liver from a boy aged 11, who was the subject of congenital syphilis. The organ contained half-a-dozen gummata, each being about the size of a walnut.

Contributions to the Pathology of the Brain.—Dr. ROSS showed the brain from a man who received an injury over the right eyebrow ten days before death. The bone was not fractured. The patient lay in a somnolent condition, but was not wholly unconscious, and there was no paralysis. Two days before death, the left facial muscles began to twitch; and some hours later spasmodic movements began in the left arm. Just before death, he had a severe general convulsion. An abscess about the size of a hen's egg was found in the prefrontal region of the right hemisphere. Dr. Ross pointed out that, from the molar lesion in the frontal lobe, a molecular disturbance had extended, which affected, first, the posterior part of the second frontal convolutions (centre of facial muscles of opposite side), then the ascending frontal and parietal convolutions (centre of movements of opposite arm), and finally the disturbance had not merely affected the parietal lobule (centre of movements of opposite leg), but had also become diffused through the whole of the cortical motor area of both hemispheres, causing a severe general convulsion.—He also showed the brain from a man who had received a wound on the right side of the occiput with a sharp instrument, which had penetrated through the skull. The patient lived several weeks afterwards, and the scalp-wound had completely healed; but a small aperture was found in the skull. Some days before his death, he had a severe general convulsion; but the prominent symptom was delirium, especially at nights. There was some hyperæsthesia of the left side as a temporary symptom, but no other sensory disturbances. At the necropsy, evidences of meningitis were met with, particularly over the occipital and parietal lobes of both hemispheres; and to this the delirium and convulsions were probably to be attributed. In addition, an abscess, about the size of a hen's egg, was found in the substance of the right occipital lobe. The fibres radiating from the posterior third of the internal capsule were not completely interrupted; but a large number of them must have been destroyed. The absence of distinct sensory affections during life showed that the centripetal fibres passing to the cortex were not collected into distinct bundles like the centrifugal fibres, and that the sensory inlets to the cortex did not possess a definite localisation like the motor outlets.—He also exhibited the brain from a boy aged 4, whose case he brought under the notice of the Society two months ago. The diagnosis then was descending sclerosis of the right lateral column of the cord, and two tubercular tumours: one situated in the medullary substance immediately beneath the sulcus of Rolando of the left hemisphere; and the other in the left lobe of the cerebellum. At the necropsy, sclerosis of the right lateral column could be detected with the naked eye. Several tubercular tumours, each about the size of a hazelnut, were found in the left sulcus of Rolando; and another about the size of a pigeon's egg in the left lenticular nucleus, which had pressed inwards on the internal capsule, so as to have interrupted the motor tract. The right and middle lobes and a portion of the left lobe of the cerebellum were occupied by a tubercular mass.

Removal of the Penis.—Mr. STOCKS showed a man, whose penis he had removed in November last in a novel manner. The urethra was quite patent at the orifice, and he could pass urine with perfect ease. The operation was performed thus. A narrow-bladed knife was passed between the corpora cavernosa and the corpus spongiosum about an

inch behind the diseased part, and the former bodies were divided directly upwards. The knife was then placed in the bottom of the wound and carried directly forwards for about one-third of an inch, and then diagonally downwards and forwards forming an inferior flap. The urethra in this part was then freed from the corpus spongiosum, and loosened slightly from its attachments. The skin-flap was turned upwards, and a small slit or button-hole made in it, through which the loosened urethra was drawn by forceps and held until the skin-flap was adjusted and secured. The cut end of the urethra was then stitched to the edges of the button-hole. There was a redundancy of skin, but it formed an admirable artificial foreskin to protect the tender orifice of the urethra from injury, and formed no impediment to micturition when drawn back in the ordinary manner.

Osteoid Cancer of the Arm.—Mr. STOCKS showed a young man aged 25, from whose arm he had removed an osteoid cancer. The tumour, which weighed nearly four ounces and was almost bony to the touch, was situated in the triangular space between the pronators and supinators immediately below the elbow-joint. No attachment to the bone, though looked for, could be detected. He recovered favourably. The growth of the tumour had been exceedingly rapid. Seven weeks only had elapsed since he first noticed anything wrong. The circumference of the arm was three inches greater than that of the other. Dr. Dreschfeld had examined the tumour, which was of a rare and unusual type, microscopically, and reported that it consisted of an osseous matrix arranged in lamellæ which contained proper bone-corpuscles with lacunæ and canaliculi. In the intervals there was found a soft structure, in which were seen large multinuclear cells, large cells with one nucleus, and free nuclei, together with fine fibres and granular matter.

BRITISH MEDICAL ASSOCIATION.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

MARCH 14TH, 1878.

SAMPSON GAMGEE, F.R.S. Edin., President, in the Chair.

Thymol.—Mr. LAWSON TAIT showed specimens of thymol and thymolised lint and cotton-wool for the antiseptic treatment of wounds. He had employed them all in a number of operations during the last two months, rigidly carrying out antiseptic precautions, and he was much gratified at the results obtained.

Ovariectomy.—Dr. MALINS showed an ovarian cyst taken from a patient upon whom he had performed ovariectomy on February 26th. It weighed one pound nine ounces, and contained twenty-five pounds of fluid. The growth had been rapid, extending over twelve months only; the cyst had been tapped ten weeks previously. The patient had done well since the operation.

Loose Cartilages in the Knee.—Mr. H. G. LOWE exhibited two specimens of loose cartilages removed from the knee by Mr. Bartleet by opening the joint antiseptically. The first case was that of a man sixty-five years of age; the bodies had been noticed seven years. Four cartilages were removed. The second patient was a man aged 32; the bodies had been noticed sixteen years. Twenty-five cartilages were removed. Microscopic examination showed that the bodies consisted of hyaline and white fibrous cartilage, which had in parts undergone calcification; there was no true bone.

Ostetric Tractors.—Mr. MORGAN of Lichfield showed a pair of detached tractors applicable to any existing curved forceps, and intended to apply Tarnier's idea to them at a trifling cost, without adding to our stock of instruments one which is both cumbersome and costly. Each tractor was about twelve inches in length, with a ring at one end for the hand to pull by, and a short blunt hook at the uterine end, which hook fitted it to the fenestræ of the blades from without inwards. When these tractors were applied to the forceps, power was obtained of pulling in a new direction, namely, in that of the axis of the inlet of the pelvis. The tractors were bent slightly away from the forceps' blades at a point about three inches from the uterine end, so as not to press injuriously on the perineum.

Ring for Fastening Midwifery Forceps.—Mr. MORGAN showed a strong India rubber ring, about thrice the size of those used on umbrellas, designed to supersede the use of clips or tapes for fastening together the handles of midwifery forceps. The ring did not exercise injurious pressure on the chi's head.

Carbonised Cotton Wool.—Mr. SAMPSON GAMGEE presented specimens of carbonised cotton-wool, prepared by Messrs. Robinson at the Wheat Bridge Mills, near Chesterfield. He pointed out the evils resulting from the use of cheap wadding and cotton-wool, which, being largely manufactured from cotton-waste, contains irritating mineral oil.

BRITISH MEDICAL ASSOCIATION.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MARCH 6TH, 1878.

FRANCIS OGSTON, M.D., President, in the Chair.

Thrombosis of the Cerebral Sinuses.—Dr. SMITH-SHAND reported a case of this disease. B. G., aged 46, married and having had nine children, was admitted into hospital complaining of severe pain in the head. She stated that she had been quite well up to six weeks before admission, but had then struck her forehead against a gas-bracket and received a small wound. She had had, a week after this, severe rigors, with a sharp shooting pain in the right eye and ear, and noises like bells in the head. She had never been free from pain since that time, and sometimes had had great exacerbations. The head-symptoms were somewhat relieved by profuse menstruation coming on about one week after the pain began, but returned on its cessation. She had not been able to leave her bed since the menses disappeared; and had suffered, in addition to the pain in the head, from vomiting, constipation, impaired sight and hearing on the right side, confusion of ideas, and slight delirium. She had never had any paralysis of motion or loss of general sensation. Two weeks before admission, she observed matter coming from the ear. On admission, a cicatrix was seen on the brow; purulent discharge issued from the right ear; there was a swelling behind and below that ear; and pain increased by pressure all over the scalp, and by percussion over the mastoid process. There were pain and difficulty in swallowing, and inability to open the mouth, except slightly. The tongue was moist and yellow; no appetite; bowels confined; skin dry and hot; temperature normal; pulse 88. She had great thirst; no vomiting. There was no history of previous disease. She was ordered iodide of potassium, and poultices to the neck and throat. On the seventh day after admission, having in the interval appeared slightly improved, she complained that the pain was much worse and that she could get little or no sleep. The right eye was more prominent than the left, and the pupil was dilated. The right tonsil was found to be pushed inwards and forwards. She was ordered a blister to the back of the neck. On the eleventh day, she was not improved; and had, in addition, pain on pressure over the thyroid cartilage, with feeling of suffocation. Seven days after this, she became delirious and unconscious, the delirium being low and muttering, and, after recovering consciousness for a short time, she passed into a state of coma, rolling her head from side to side on the pillow, and died two days afterwards comatose. At the *post mortem* examination, there was profuse discharge of foetid matter from the right ear, caused by an abscess in the neck bursting into the external auditory meatus. The abscess extended from the base of the skull to the root of the neck behind the clavicle; the carotid artery, with its coats slightly degenerated, lay to the inside of it, and the internal jugular vein lay loose in it. The coats of the vein were thin and sloughing, covered with small pale granulations. On laying it open, it was found to contain pus; it was closed above by a solid thrombus, and below its lower valves closed it by their union. The solid thrombus above extended into the skull, along the right lateral sinus and the longitudinal sinus of the brain. Pus escaped from the abscess upwards into the cranial cavity, where the dura mater was torn from its attachment to the jugular foramen, but there was no escape before this. On removing the dura mater, a patch about the size of the palm of the hand of recent lymph, infiltrated with pus, was found covering the middle of the convex surface of the left hemisphere. There were no other adhesions of the dura mater to the brain. The brain weighed forty-four ounces; it was uniformly firm in texture, but otherwise healthy. It was covered with purulent lymph at the base over the pons Varolii, around the infundibulum of the pituitary body, and back part of the notch of the cerebellum. On the upper surface, the vessels of the pia mater were more or less abnormally injected with blood in patches. There was no subarachnoid effusion, nor any into the ventricles. The origins of the cranial nerves were not materially interfered with by the effusion. The right Casserian ganglion was softened and pulpy. There could be no doubt that the cause of the symptoms was the injury to the forehead; but the order of the formation of the thrombi was not clear. The part in which softening occurred was generally the oldest, and this would point to the jugular clot as having been first formed. Erysipelatous inflammation might have followed the injury to the brow, although there was no history of this, and purulent infiltration of the tissues of the neck, with consequent thrombosis of the internal jugular, afterwards extending backwards into the lateral and longitudinal sinuses; or, as a result of the injury, a small thrombic mass might have been carried by the facial into the internal jugular vein. More likely, however, from the symp-

toms, the progression of the thrombosis was by the ophthalmic vein to the cavernous and lateral sinuses.

Case of Starvation.—Dr. COWAN began by remarking that the case was not in itself very remarkable, but was brought before the Branch more on account of the exceptional circumstances attending it. The patient was picked up in mid-ocean, in an attempt to escape from the French naval service. On being picked up, he was found to be about twenty-eight years old, well built, and of average size. On being placed on a cot on the main-deck, it was observed that his eyes were much sunken, very glassy, with a peculiarly anxious or even suspiciously apprehensive look, giving the impression that he was a lunatic. The eyelids were red, as if from weeping, or this might have been from the action of the salt-water on them directly, or from its evaporation. The tongue was intensely red, except a narrow white furred line running down its centre from tip to root, and the edges alone were moist. The teeth were covered with a darkish coating resembling slime. The skin was dry and hard, giving off a smell like a bundle of clothes which had been opened after having been saturated with salt-water and was in process of drying. There did not appear to be very great emaciation, but he was unable to stand. Over the matrix of each nail, both on the fingers and toes, there was a small phlegmonous abscess, and, where these had burst, there was a discharge of a small quantity of very thin ichorous pus. The heart's action, as he lay quiet, was tolerably good, the pulsation being 66; but, on speaking or exerting himself in any way, there was a marked increase. The history was as follows. Along with another deserter, the patient left his ship in the post-captain's boat, for an island to which the trade-wind might have been expected certainly to have carried them safely in twenty-four hours. After clearing the land, one of the oars broke, and they having no sail, and the wind having shifted, the boat missed the island and drifted till picked up in mid-ocean. The voyage began on September 18th, and the man was picked up on October 8th. They had in the boat three cakes of chocolate, weighing altogether six ounces, which were expended on the third day. There were neither spirits nor wine, but there was a small quantity of tobacco, which, however, was not of much use, as lights failed. Much rain fell during the latter part of the voyage, and there was a considerable quantity found in the boat. After nine days, the other man threw himself into the sea. This was the account given by the survivor; but it was a matter of doubt as to whether he had not prolonged his own life by an act of cannibalism. The treatment pursued was sponging the body with soap and hot-water, and then giving small quantities of arrowroot or sago, with beef-tea or extractum carnis in which was a little sherry or brandy. He was fed every two hours. On the second day, he had boiled-fowl with rice, with beef-tea, and tea and bread. After he had been on board thirty-six hours, his bowels were moved, the evacuations being of a light colour and mostly watery. Very little urine was passed, and no thirst was complained of. On the third day, he had, in addition to his former diet, calves'-foot jelly, with a fair allowance of brandy. His pulse this day rose from 66 to 84. He was then transferred to the French authorities at Port France, and when last heard of, a few days afterwards, he was waiting his trial by court-martial for desertion.

BRITISH MEDICAL ASSOCIATION.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

MARCH 21ST, 1878.

M. K. ROBINSON, M.D., in the Chair.

Hydrophobia.—Mr. CLEMENT WALTER reported a case of hydrophobia. The patient was a man aged 37, and he had been bitten twenty-four days before the symptoms came on. The usual remedies were tried without avail, and the case came to a rapid termination, the man dying thirty-six hours after his being seriously ill. One marked feature in this case was the excessive terror at any noise or approach, and the paroxysms were so violent that it was found impossible to use the subcutaneous injection, as any attempt to do so brought on extreme spasms.

Diagnosis of Stone in the Bladder.—Mr. TEEVAN read a paper on the importance of an early diagnosis of stone in the bladder.

Foreign Body in the Female Bladder.—Mr. WACHER showed a foreign body which he had removed from the bladder of a female. It consisted of a hair-pin, thickly encrusted with phosphate of lime, was of a whitish grey colour, and weighed three drachms and thirty-seven grains. The girl, aged 14, had been admitted into the Kent and Canterbury Hospital when the hair-pin was first passed into the bladder, but it could not then be found, and she was readmitted six months afterwards. There were symptoms of inflammation of the bladder,

thick ropy urine containing pus, pain in micturition, and, on admission, retention from the foreign body blocking the passage. Mr. Wacher dilated the urethra with one of Weiss's three-pronged instruments, and extracted the substance with a pair of dressing forceps. The girl had incontinence for six weeks, after which she perfectly recovered.

Disrupture of the Lower Epiphysis of the Tibia.—Mr. W. H. COKE read a case in which a lad ten years of age, who was under his care at the Ashford Cottage Hospital, had, by jumping from a cart when in motion, sustained a compound displacement of the shaft of the tibia from its lower epiphysis. The bone protruded for an inch and a half on the inner side of the leg at a point corresponding with the junction of the epiphysis. The principal vessels were uninjured, and the fibula unbroken. Under chloroform, an attempt was made to reduce the fracture, but this could not be effected till half an inch had been removed from the lower end of the shaft. The case ultimately did well, and the boy had a very useful limb, without perceptible shortening, and with no impairment of the movements of the joint.

BRITISH MEDICAL ASSOCIATION.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

MARCH 29TH, 1878.

F. MANSER, Esq., in the Chair.

Diffused Melanotic Cancer originating in a Mole.—Dr. FAIRLIE CLAKKE read notes of a case of diffused melanotic cancer. The patient was a married woman. When she was forty-five years of age, a small black mole, which had existed all her life on the third toe of the left foot, began to enlarge and give pain. After a variety of milder measures had been tried during a period of two years, the mole was freely excised. A month later, two enlarged glands were removed from the left groin. They were both infiltrated with an inky material. These operations seemed to improve her state, and nothing was seen of her for five months. Then it was found that the whole left leg was cedematous and speckled over with black spots—some large, some small. The adjacent skin also had an inky hue. From this time, the melanotic patches increased in number and extent, and it became apparent that the liver, and probably other viscera, were implicated in the disease. Four months later—or about two years and nine months from the date when the mole first began to enlarge—the patient died. It was found that the whole skin, subcutaneous tissues, and muscles of the left leg were black or speckled with melanotic tumours. The viscera of the thorax and abdomen were dotted in a similar manner. The liver and lungs were studded with large nodules, while the lymphatic glands were converted into black masses. The heart, the spleen, and the kidneys were apparently free from the disease. The head was not opened. The case was illustrated by two sketches, showing the appearance of the left thigh at different stages of the disease, and by a microscopic section.

Relief of Dropsical Limbs.—Dr. MILNER BARRY showed Dr. Southey's trocar and cannula, illustrating its use by the history of two cases of cardiac disease and dropsy. Dr. Barry also gave an interesting *résumé* of the means resorted to for relieving dropsical limbs, tracing them down from the earliest times to the present. Scarification was used two thousand years ago by the Greeks, and then by the Romans and Arabians. The classical case of Dr. Samuel Johnson, thus relieved by Dr. Heberden and Mr. Cruikshank, was also mentioned. Incision was introduced by Dr. Meade a century ago; afterwards by Dr. Mason Good in 1825; and recommended by Dr. Todd thirty years since. Acupuncture was introduced, in 1823, by Dr. Churchill, advocated by Dr. Graves, and afterwards by Sir T. Watson. And lastly, the use of the trocar and cannula was first mentioned in a report of the Clinical Society, in 1871, by Dr. Hanfield Jones, and more immediately introduced by Dr. Southey in a paper read to the Clinical Society in April 1877.

Membranous Dysmenorrhœa.—Dr. RANKING read further notes of a case of membranous dysmenorrhœa, brought before the meeting last year. The case was much benefited by the application of Chapman's spinal hot bag to the lumbar region for two hours three times a day, and ten drops of Donovan's solution three times daily, taken internally, for three months. The general effects produced were: 1, diminution of suprapubic pain during the intervals; 2, shortening of the intermenstrual periods; 3, diminished formation and thickness of the membrane, it becoming less leathery and more distinctly cellular; 4, increased facility of separation of the membrane, and more rapid and complete expulsion; 5, shortening of the menstrual period from ten to four days; 6, more rapid recovery, in consequence of the diminution of pain and uterine action; 7, benefit indirectly accruing from dimi-

nished bruising of the cervical canal; 8, smaller quantity of morphia required; 9, no iodism or mercurialisation.—Dr. HOLMAN strongly advised dilatation and incision of the os and cervix in such cases.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, MARCH 15TH, 1878.

WILLIAM COLLES, M.D., F.R.C.S.I., in the Chair.

Fracture of the Spine.—Dr. WARREN read a paper on this subject, in which he related two cases of fracture of the spine, that had been treated in Stevens's Hospital. In both cases, the injury was the result of indirect violence, death occurring in twenty-four and thirty-four hours respectively. In the first case, the fracture took place at the seventh cervical vertebra; the paralysis of motion and sensation was complete, and the reflex excitability of the lower limbs was entirely lost. The temperature was 101 deg. Fahr. In this case, the *post mortem* examination showed that the spinal cord had been completely torn across and otherwise extensively lacerated. In the second case, the injury was higher up, viz., at the fifth cervical vertebra; paralysis of motion and sensation was not complete, and reflex movements could be excited in the lower extremities. Temperature 106 deg. Fahr. Here the necropsy revealed no laceration of the cord, but there was pressure on it from the displaced bone, and in the centre of the cord was a blood-clot. A comparison of these cases helped to confirm the observation that rupture of the spinal cord produced only a very slight rise in temperature; whilst continued irritation was productive of well marked thermal symptoms. In further confirmation of this, and as illustrative of how high the temperature might rise in spinal injuries, the writer related the remarkable case brought before the Clinical Society of London by Mr. Teale of Scarborough, in which the temperature rose to 122 deg. Fahr., and yet the patient recovered. (See BRITISH MEDICAL JOURNAL, March 6th, 1875.) Dr. Warren said he wished to draw the attention of the Society to a method of treating bed-sores, so distressing a feature in protracted spinal cases, which had not as yet received much attention in Dublin, i.e., by galvanism. This method, which was first brought before the profession by Dr. Crusel of St. Petersburg, had been attended with such surprising results in the hands of Hammond, Spencer Wells, and others, that it was, he thought, worthy of a more extended trial. The method of applying it was simple; a clean silver plate of a size corresponding to the ulcer was placed over the sore, a zinc plate, under which was placed a piece of chamois-leather wet in vinegar, having been laid on some part of the neighbouring healthy skin. The current was completed by a copper-wire joining the zinc and silver plates.

Green Tea as an Antidote in Poisoning by Opium.—Mr. TUFNELL read a paper on this subject, which had been forwarded to him by Dr. James Sewell, Professor in the University of Quebec. The case from which the author drew his conclusions was that of a lady who had been for some time under his care. At 11 P.M. one evening, he was hurriedly sent for; on arriving, he found her totally insensible, with pin-hole pupils, an imperceptible pulse, and, though almost incredible, only three respirations in two minutes, with all the other signs of opium-poisoning. He ascertained that, being in pain, she had taken three drachms of Battley's liquor opii sedativus every three hours till sleep was procured; altogether, he calculated she had taken three ounces and a half of Battley's solution. He immediately prepared a strong infusion of green tea, half-a-pint of which was injected up the rectum, where it was retained for half an-hour. This was repeated at intervals till 4 A.M., when she had so far recovered as to be able to speak; and at 8 A.M. she was pronounced out of danger; but, even then, her sight had not recovered, and she requested the gas to be lighted, though the sun was shining brightly into the room.—Dr. H. KENNEDY expressed his surprise at the rapidity of the cure, although no mention had been made of emetics, or the stomach-pump having been used. He thought there must be some error of observation or in the report of the case. Strong coffee, he said, had for a long time been a favourite antidote; and, as the active principle of tea and coffee was essentially the same, it seemed but reasonable to expect similar results; moreover, green tea had been used as a stimulant in fever by Drs. Percival, Grimshaw, and others in Dublin.—Dr. E. H. BENNETT thought that the thanks of the Society were due to Dr. Sewell for having brought this subject before them, though not a member. He agreed with Dr. Kennedy, that the facts as stated were very hard to credit.—Dr. BIGGAR, in seconding the vote of thanks, mentioned several cases of recovery under his care after poisonous doses of laudanum.—The vote was then carried by acclamation.—Mr. TUFNELL said that Dr. Cameron, Professor of Chemistry in the College, had undertaken a series of experiments to test the antidotal effects of green tea in opium-poisoning.

Epithelioma of the Lip, with Microscopic Sections illustrative of the various Stages of the Disease.—Mr. RICHARDSON, in explaining the sections, directed special attention to the papillomatous projections so well marked in the older growths, and suggested the question as to whether these papillomatous projections were new formations, or only altered papillæ.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 9TH, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Horse-shoe Kidney.—Dr. FINNY showed a specimen, from the body of a male subject in the dissecting-room, which illustrated the union or fusion together of the lower portion of both kidneys. The united portion of the kidneys lay on the abdominal aorta, about half-an-inch above its bifurcation. The inferior mesenteric artery, the spermatic vessels, and the ureters were in front of the horse-shoe. The renal arteries ran a normal course, but two arteries were connected with the kidneys inferiorly: one, on the right side, sprang from the aorta three-quarters of an inch above its bifurcation; the other, on the left side, took its origin from the left common iliac artery. The distribution of the venous system of the kidneys was normal. The hilum of each kidney was remarkably large.

Cerebro-Spinal Meningitis.—Dr. HAYDEN exhibited the brain and spinal cord of a man aged 24, intemperate, a plasterer by trade, who died after a few days' illness, of cerebro-spinal meningitis. It was the third fatal case of the disease he had seen within the past two months. There were large blotches on the skin, of a light purple tint. Coma, right hemiplegia, and proptosis were the final symptoms. After death, five or six ounces of serum escaped from the arachnoid cavity. The arachnoid itself was opaque and very vascular, but no effusion of lymph or pus was noticed. The cerebral ventricles contained clear serum, and the choroid plexuses were unusually vascular. The left middle cerebral lobe was softened. As regards the spinal cord, it was diffident in the middle of the dorsal region, and the membranes were hyperæmic.—Dr. NIXON regretted that the sympathetic system had not been particularly examined; and Dr. J. W. MOORE alluded to the coincidence of cerebro-spinal meningitis and small-pox.

Amphoric Resonance in Solidification of Lung.—Dr. NIXON presented the thoracic viscera of a man aged 56, who died of suppurative pneumonia. His tongue was extremely dry and brown, pulse rapid, temperature 102 deg. to 104.5 deg., and respirations 36 to 40. Physical signs of solidification of right lung were all present. At the base of this lung, amphoric resonance became developed; and ultimately there was pericardial friction. After death, section of the affected lung presented a marbled appearance. The upper lobe was friable and in a state of purulent infiltration. A portion of lung-tissue in the centre of the lower lobe was permeable to air, and this imprisoned air probably gave rise to the amphoric resonance. There was extensive recent pericarditis, with only a small pericardial effusion.

Scrofulous Ulceration of Leg.—Dr. E. H. BENNETT showed the left lower extremity of a man aged 25, which presented some striking pathological changes. Disease set in eight or ten years before, beginning at the toes, some of which were amputated to effect a cure. The limb became exceedingly deformed, the leg being bent across the body at right angles to the thigh. In consequence of this deformity, amputation was performed. The cartilages of the knee-joint had nearly disappeared from want of use. The leg was covered with superficial ulcerations, but there were no deep sinuses. The skin, fasciæ, and periosteum were all fused together into one rind. The muscles were converted into a peculiar fatty mass, and there was fatty degeneration even of portions of the tarsus, tibia, etc. None of the characters of the so-called lupoid ulceration were noted. The urine was that of amyloid degeneration of the kidneys.

SATURDAY, MARCH 16TH, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Effects of Chronic Osteitis in Scrofula.—Dr. E. H. BENNETT exhibited sections of the limb shown at the previous meeting, and demonstrated that the primary disease had been osteitis of the bones of the leg, which was complicated by scrofulous ulceration of the integuments. The bones of the foot were entirely degenerated; their tissue was occupied or replaced by fat, while the joints of the tarsus and ankle were ankylosed from disuse. While the foot and lower segment of the leg exhibited the most extreme degeneration of the bones, the upper and middle segments of the leg bones were excessive in weight with the hardness and irregularity of chronic osteitis.

SATURDAY, MARCH 23RD, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Double Ureters.—Mr. FRANK THORP PORTER exhibited a specimen of double ureters in a male subject aged about 30. The two ureters united into one trunk nearly an inch above the entrance into the bladder. The supernumerary ureter, surrounded by fat, came off at the upper part of the hilum of the kidney; while the other arose in the normal situation. The capsule of the kidney was loose. The ureter of the other kidney was quite normal. There was cirrhosis of the liver and chronic pneumonia in the same subject.—Dr. FINNY mentioned a case in which double ureters existed on both sides, all four vessels opening separately into the bladder.—Dr. BENNETT regarded double ureters as a common abnormality.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 5TH, 1878.

T. CREED, M.D., in the Chair.

Use of Mercury in Inflammations.—Dr. J. C. THOROWGOOD read a paper on the use of mercury in certain inflammations. The object of the paper was to show with what success mercurial preparations might be employed against persistent bronchial inflammations, arising from cold, and occurring in persons of febrile temperament and average strength. In feeble and aged persons, mercury might be injurious. The author was of opinion that, while many years ago mercury was given far too freely, yet now practitioners were becoming unduly timid in its employment. Reference was made to a paper on the treatment of pleuritic effusions by the late Dr. Hope (in 1841), where thirty-five cases of pleuritic effusion consecutively were cured by the employment of mercury internally and by inunction. Dr. Thorowgood quoted cases of pleurisy and peritonitis very successfully treated by pilula hydrargyri cum scilla, and also by calomel and opium; he had never seen any injurious effect produced by this kind of treatment, and only once any sign of salivation. When absorption commenced, and the pulse and temperature fell, mercury should be discontinued as a rule.

CORRESPONDENCE.

THE MEDICAL DEFENCE ASSOCIATION AND THE NEW MEDICAL BILL.

SIR,—I shall feel obliged if you will permit me to inform your readers that the Duke of Richmond and Gordon, Lord President of the Privy Council, has kindly consented to receive a deputation from the Medical Defence Association on Monday next, in order that the members of the Association may have an opportunity of stating their views on the Bill to Amend the Medical Act of 1858 now before the House of Lords.

The Council of the Association having considered the Bill at several meetings, has adopted a memorial to be presented to the Lord President of the Privy Council, in which the chief points requiring further legislation are set forth. Briefly, these are as follows:

1. That a State Examining Board for each division of the kingdom be instituted, and that the examinations for the licence to practise be full and complete in medicine, surgery, and obstetrics.
2. That existing corporations retain the power to grant degrees and diplomas, but these should be regarded as honorary distinctions only.
3. That the General Medical Council have the power to register colonial practitioners, provided that they produce satisfactory evidence that they have passed an examination equal to that of the State Examining Board.
4. That no foreign practitioner be admitted to the *Medical Register*, or be allowed to practise in this country, unless he produces evidence that he is qualified to practise in his own country.
5. That the examinations for women should not be less stringent than those required to be passed by male candidates.
6. That the profession have direct representation on the General Medical Council.
7. That the public be efficiently protected against unqualified practitioners, and that the General Medical Council be required to prosecute those who falsely assume medical titles, or, being unregistered, practise medicine or surgery for gain.

The Council of the Association is of opinion that the above views fairly represent those of the general body of the profession. Should any registered practitioner, although not a member of the Association, wish to join the deputation, I am sure the President and Council will

gladly welcome him. The deputation will meet in the waiting-room at the Privy Council Office, Whitehall, on Monday next, at a quarter to three o'clock P.M.—I am, sir, your obedient servant,

GEORGE BROWN, Hon. Sec. Medical Defence Association.

12, Colebrooke Row, N., May 15th, 1878.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

HASTINGS.—Mr. Ashenden reports the birth-rate in 1877 to have been 27.74 and the death-rate 16.08 per 1,000 population, and the infant mortality 11.5 per 100 births. The deaths from diarrhoea were more numerous in 1877 than in 1876, which is an exception to the rule elsewhere; but the total zymotic death-rate for Hastings and St. Leonards is small, viz., 1.1 per 1,000. There were 97 deaths from tubercular diseases, of which 42 were of visitors. The total number of deaths of visitors was 127, or rather above 20 per cent. of the whole number. The new filter-beds are said to "answer the purpose"; but the water contained more iron than usual. Analyses were made of eight well-waters, which were bad; and only nine articles of food were analysed, viz., six of mustard and three of milk. The sanatorium is open, and has been used for scarlatina cases; and the mortuary is finished. The report also contains a meteorological report by Mr. A. E. Murray.

WATFORD.—After stating the amount of sanitary work that he had done in 1877, Mr. Brett says that the Watford water "is the purest, most wholesome, and most palatable it is possible to have", although he admits that it is hard, being derived from the chalk. He discusses the question, Is hard water injurious to health? and concludes that it is not, "because lime is food—that is to say, necessary for life". He also says that fatal illness has been caused by the entrance of sewer-gas into houses, but does not give any instances. There were five deaths from small-pox, one from scarlet fever, one from diphtheria, and one from typhus. The death-rate is returned at 15.7 per 1,000 calculated on the population of 1871, after excluding all the deaths in Leavesden Asylum, or, after allowing for increase of population, only 13.2 per 1,000.

REDDITCH.—Non-fatal cases of zymotic diseases constituted nearly one-third of the total number of cases of sickness reported to Mr. Page during the year. The birth-rate was 39.7, the death-rate 18.3, and the zymotic death-rate 2.1, per 1,000 population. There were 13.4 deaths under one year in each 100 births. Mr. Page gives a list of the localities specially inspected by him, in addition to the house-to-house inspection which he had carried out; as well as a list of the sanitary work performed by the inspector, which indicates a considerable amount of work for so small a place. A very large proportion of the houses are occupied by artisans and labourers; there are numerous public-houses, and comparatively few of the better class; so that the death-rate is lower than might have been expected. Besides a number of carefully compiled tables, there is a list of sanitary recommendations for the consideration of the local authority.

STRETFORD.—The number of births registered in 1877 was 525, and of deaths 325, of which 38 were caused by scarlet fever, chiefly in the old part of the town, which is badly drained. One peculiar arrangement is noted; viz., the placing of "closets next to the scullery, with fireplaces in them". These are being made less noxious by frequent emptyings; but we should have thought that their removal to a distance from the houses, and re-erection without fireplaces, would have been far better. An inspection of all the old houses is being made, and many nuisances have been abated. Mr. Pottinger recommends the filling up of the cesspools, and "the introduction of a sanitary pan", which is to be emptied once a week. He also objects to the slaughter-houses, and proposes that an *abatir* should be built in their place.

RYDE.—The birth-rate of this health-resort is stated by Dr. Platt Wilks as having been 24.25, and the death-rate 15.2, per 1,000 inhabitants, or, excluding the deaths of non-residents, 14.5 per 1,000, in 1877. The infantile mortality was small; viz., 5 per cent. of the total births, and about 7½ per cent. of all the deaths. There were only 19 deaths from zymotic diseases. Although it has not been necessary

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
- TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
- THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.
- FRIDAY** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY....** St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- TUESDAY.**—Pathological Society of London, 8.30 P.M. Mr. Nettleship: Carcinoma of the Orbit. Dr. Peacock: French Millstone-maker's Lung. Dr. P. Irvine: Cerebral Aneurysms. Dr. Cayley: Cerebral Embolism. Dr. T. Fox: Anatomy of Dysidrosis. Dr. K. Taylor: Cavity in the Spinal Cord. Mr. Spencer Watson: 1. Polypus from Nose, Antrum, and Orbit; 2. Colloid Cancer of Breast. Mr. Pearce Gould: Aneurysm of the Pulmonary Artery. Dr. Leared: Ovarian Cysts from Twin Infants. Mr. Adams: Spontaneous Rupture of the Esophagus. Dr. Lanchester: Primary Cancer of Lung. Dr. Greenfield (for Dr. Saunders): Specimens of Biliary Cirrhosis. Dr. S. West: Aneurysm of Pulmonary Artery, with Fatal Hæmoptysis. Dr. Murchison (for Dr. Bancroft): Specimens of Filaria.
- FRIDAY.**—Clinical Society of London, 8.30 P.M. The President (for Dr. Day): "Sequel of Case of Chylous Discharge from Leg"; Dr. Farquharson, "Case of Quinine Rash"; Mr. Cripps, "Case of Gastrostomy for Intestinal Obstruction"; Dr. Murchison, "Incubative Period of Scarlet Fever, and of some other Diseases"; Mr. Bryant, "Sudden Death following Tapping of an Hydatid of the Liver"; Mr. Brown, "Sequel of a Case of Cancer of the Tongue".—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. B. Thompson Lowne, "On the Structure of the Eyes of Insects".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.
- AUTHORS** desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.
- PUBLIC HEALTH DEPARTMENT.**—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**

BACCHUS.—From the annual statement of the receipts and payments of St. Thomas's Hospital, it appears that £512 16s. 1d. was paid for porter, £435 15s. 6d. for wine, and £497 10s. 4d. for spirits, making a total of £1401 4s. 11d.

UNQUALIFIED ASSISTANTS.

SIR,—I am afraid, from your remarks in the *JOURNAL* of this day, that you seem to have your vengeance wreaked on a hard struggling class—I mean "medical assistants *sine diploma*". After what has fallen from the Lord Mayor of Dublin and other people, I am afraid the poor unqualified medical assistant will not be able to hold up his head. I shall venture to state the position I hold, and then I venture to ask anybody whether I am not practically qualified. I matriculated at the London University in 1863, and served an apprenticeship to a physician of five years' duration. In the last year of my apprenticeship I had the dire misfortune to lose both my parents, one three months after the other; but, owing to the kind help of some relatives, I had money lent me to proceed with the hospital courses. I passed the first half of the M.B.C.M. Aberdeen, and now I am an assistant near the hospital. Little can you guess, sir, the hard struggling London life I have had. Although I am not fully qualified yet, still I will leave it to any practical man to say whether I am not able to prescribe and attend cases surgical, medical, or midwifery.

I heartily sympathise with the medical assistant, especially a man of no pecuniary means, and I hope and trust you will do the same.—I am, sir, your obedient servant,

London, May 4th, 1878.

UNDERGRADUATE.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MEDICAL REFORM AND THE CONJOINT SCHEME.

It certainly is rather startling to be told, and to have the assertion repeated in Parliament, that the British Medical Association wishes the scheme for a conjoint examining board to be made compulsory, when, on putting the question to himself, any member of the Association may find that, far from wishing it, he has the greatest objection to it. You will allow me, therefore, as a member of the Association, to protest against any such use of the collective term as is here made. The British Medical Association consists of all its members, and we know of no section of it which has a right to appropriate to itself the designation to the exclusion of any other section of the body; still less to represent certain opinions as those of the Association, when they are only the opinions of a portion of it. We trust that no member of the Association will permit himself to be carried away by the expression. Taking it at what it is worth, let him ask himself whether the opinions attributed to him be really his.

That the scheme in question is not wanted by the Medical Association, by the profession, or by the corporations, is amply proved by the fact that, though at any time during the last few years they had the option of forming such a conjoint board, they have not formed it; nay, they have resolutely opposed it; yet in the face of this we are gravely told that the British Medical Association rejects the Medical Act (1858) Amendment Bill "because it is permissive in respect of a conjoint scheme, and on another ground". Now, it is the scheme itself that is objected to. That it is permissive, is the only ground on which it is tolerated in the Bill at all; but the sooner it is removed from it the better. It is too clear that its being permissive is only meant as a stepping-stone, from which, at some future time, it may be made compulsory. It is a ploy, very common in politics, of trying what can be effected on the many by dint of repetition—an effort, in short, to get the profession sufficiently familiar with the idea to be able at last to force it on its members. It would appear, too, as if it emanated from the profession; and yet several years' acquaintance with it provokes the remark of Dr. W. T. Gairdner of Glasgow, "the more we look at it the less we like it". When members of the profession repudiate it thus, it is to be hoped that we shall hear no more of its being the wish of the British Medical Association, which itself is still far from being the profession in Britain.

We object to the scheme of a conjoint board for the three kingdoms of Great Britain and Ireland, or for any of them separately, being, by Act of Parliament, made compulsory. There is no valid reason whatever that Parliament should interfere to place the direction or ordering of the medical education of the country in the hands of a few men, however eminent their names may deservedly be in the profession or with the public. The wider the basis of direction, the better for the practitioner and the public. Nor do we see any beauty in the so-called uniformity it is hoped would result from the adoption of the scheme; rather the reverse. A severe blow would be dealt at medical education by the endeavour to force it into one groove, which the scheme, if adopted, would in time certainly do; for all teaching in that case, to command the special success required under the scheme, would be directed, not to give a substantial knowledge of the subjects taught, but merely to pass its men, by lecturing in the manner most pleasing to the examining boards. It is well conceived in the interest of the "crammer", but in that of sound education it is difficult to imagine a worse. It would simply lead to a system of cramming, which is one of the inevitable results of that system of perpetual examinations now so much in vogue. Let any one consider whether this cultivates the intellect or encourages thinking. It is merely a strain on the memory, under which that latter too frequently breaks down.

As to the talk of competition downwards, we should like to see proof of this. It has been asserted that men have been admitted into the medical profession who do not use the English language correctly, and we are left to infer that their being so admitted has been a sort of bribe deliberately held out to them by certain schools unknown. Passing over the paltry nature of the bribe, we would only remark that the tendency has been in quite an opposite direction of late; but it would be interesting to have the examples of the incorrect use of the English language adduced, as well as the names of the schools at which the delinquents studied. It might be as well to know whether such an expression as "different to", which one so frequently finds, is among the examples objected to; and if the complainers would lay down some rule by which the hopeless confusion existing in the minds of some with reference to the verbs "to lay" and "to lie" might be obviated, it would be hailed as a boon, however small; meanwhile, it may be as well to remember that they who live in glass houses should not throw stones. There may be some slight inaccuracies passed over by examining boards, but those bodies by no means examine, nor could they; all the writings of the examined; nor is the proposed conjoint board likely to be faultless. There are many institutions in the country (the more the better if they can find room which hitherto have given a sound medical education, nor has it been shown that they have deteriorated lately; nay, there has been a laudable effort on the part of most of them to improve their teaching, and in this they have been very successful. Whence, then, the need of interference? One can surely acknowledge excellence in schools other than one's own; or are we to be so much the slaves of habit that we are to consider that alone right to which we ourselves are accustomed, and everything else necessarily wrong? That, truly, would show want of education as well as narrowness of mind. Yet it seems to be taken for granted that they are all bad, except one, and that is to be chosen as a model—not that it is the best, but simply that some few men in a certain locality in any of the three countries happen to know most about it, and little or nothing at all of the others, and that little seen through coloured spectacles, and to the usages of this model the medical education of the country is to be made to bend. Now, we say nothing against any one school, and we have a sincere admiration for many of the men at several different schools, but that restricted vision which can see good only in the school to which one has been accustomed is to be severely censured. Surely there is good in all; without it, none of them could have sprung up or continued, and each is most probably adapted better than any of the others to the circumstances of the country in which it is placed. That each has sprung up and grown to be what it is without any special fostering care from the State, is a proof of this. This spontaneous development is the healthiest state of existence, not only for medical but general education. It must be left unfettered. The system that would force all minds to pass through an unvarying ordeal, both as to matter and manner, is to be condemned. That there are national differences of mind is too apparent to require proof. Develop what is worth developing in each, but do not stifle them by needless and injurious legislation.

The plea that the scheme is devised in the interests of the public is as worthless as it is indefinite. There are several different bodies in Britain whose licence to practise is fully recognised as valid on all hands, just because the education required by them in the candidates for their several diplomas is acknowledged to be sufficient, and is assuredly above what, vaguely designated as a minimum, might fairly be demanded under any new scheme whatever, under a conjoint board or otherwise. These licensing bodies are all known. It is as easy to verify their diplomas for registration under the present system, as it could be did they all emanate from any one licensing body. The protection to the public is absolutely the same. If the *Register* be inefficient now, there is nothing in the proposed scheme which will alter it. If we could get an Act of Parliament protecting the public against itself, which could be enforced, then we might have some chance of protecting the public. But the public does not want this protection: it deliberately, and with its eyes open in many instances, prefers the unqualified man, and that, too, in cases where fees are no object, and where consequently one might justly expect greater discrimination.

Neither is the scheme a good one if we look upon it from the point of view of the expense that would be entailed under it. Its immediate effect would be to increase the cost of medical education, already too great, by at least one-fourth—a result not in favour of the country, however it might be to the advantage of a few. This in itself is to be deprecated, since its tendency is to cut off from the medical profession some of the best thinking power this country or any other produces; for examinations must be paid for, and they must be held somewhere. Whether the student went to the examiner or the examiner to the student, the cost must equally be met by some one. Then, the inevitable “crammer” must be paid; and this institution of cramming would flourish under the scheme more than now, since this prevents himself being taken at a disadvantage, the strange student would put himself under the care of some kind guide to the examinations. Whether this is a desirable state of matters we do not stop to discuss. The fallacies of examinations generally have been pretty frequently exposed. Examinations should never be trusted to as the sole, or even as a principal, test of real education. A man let trusted to, as the ad alluded to above, a few of the pet hobbies of his examiners, is sure to stand high in them; but the frothy kind of display they call forth soon evaporates, and is no criterion of the education of the man.

Not to trespass further on your space, we should advise all men who care about the subject to read the capital letter of Dr. W. T. Gairdner of Glasgow in your issue of the 20th April. If we mistake not, Dr. Gairdner dislikes the centralising tendency of the scheme as much as we do, and he equally condemns the policy of useless interference with schools which have amply proved their capability of coping with any in the land.

R. S.
Heckfield, Hants, April 25th, 1878.

WORMS IN THE (ESOPHAGUS OF THE DOG.

SIR,—In reply to “Jo. C.”, I believe there is no doubt that the filaria sanguinolenta is introduced by the mouth in food taken by the animal, and bores its way through the oesophagus. In one of the specimens I exhibited at the Pathological Society some weeks since, two of these worms could be distinctly seen penetrating the oesophagus. With regard to the filaria Bancrofti (filaria anguinis hominis Lewisii), I do not think either alcohol, tobacco, or salt has any influence on them, because many of the Chinese partake freely of a strong spirit made from rice called “samshoo”; and I think I may say all live extensively on salted provisions and smoke native tobacco, which is, though, of a very mild description. Some also are opium smokers. Small doses of turpentine taken internally by those affected with filaria seem to diminish their number.

I was somewhat disappointed the other evening at the Medical Society of London, on the reading of Dr. Manson's paper on filaria by Dr. Cobbold, who very kindly came down for that purpose, at the little interest taken in the subject by the profession at large, as evinced by the small attendance, and also at the premature closure of the discussion. This I state because it has already been demonstrated that filaria can be imported by any person possessing them in their blood, especially where the mosquito exists; and doubtless in this manner they were introduced into Australia, and probably they have been also in San Francisco, as to both these places large numbers of Chinese emigrate. We have many Chinese over here at the present time, and may yet have a much larger number. Some one or more may possibly be the host of this parasite; and it is not impossible that either the fly or some other flying insect may act as intermediate host, or nurse, as Manson expresses it, instead of the mosquito, and thus we may yet have this terrible scourge inflicted on us.

I should like to know whether any of the profession in Japan have yet investigated this matter in chyluria, hæmaturia, elephantiasis, lymph-scrotum, or any forms of lymphatic disease. Truly yours,
GEO. CHAS. COLES.
April 1878.

ATTENDANCE ON FAMILIES OF MEMBERS OF THE PROFESSION.

SIR,—The writer will be much obliged by an answer to the following. He attended, gratuitously, for many years the family of a medical man who is long since dead, and whose family was in affluent circumstances from hereditary property on both sides. The widow left two children—one a daughter, long since married to a benefited clergyman; the other a bachelor son, who need not have many wants on which to spend his means. No charge was ever made to the widow; but lately, after her death, I thought it not unfair to make a moderate charge for attendance during her last illness, and during the last year or so of her life, she leaving much property to be divided between two not necessitous children. The question is, was it professional to send in a charge of about seven pounds, which I did, or should I have remained content for my services to be gratuitous as before? I should not omit to say that the widow was not illiberal in showing her appreciation of the attendance required on past occasions.—I am, etc.,
R. G.

THE BRUSSELS DECREE.

SIR,—As your correspondent “C. B. G.” has been at Brussels getting his M.D., I have no doubt that many practitioners that have an eye upon the degree would feel obliged to him for the information that he offers through your columns—viz., sending the notes of the questions asked at the examination for publication. There is a person residing in London who sends private circulars to individuals stating that he can influence the University to grant the degree on a medical examination. Is it possible? Should the Medical Acts Amendment Bill pass into law, can an M.D. Brussels of 1878 be registered (I mean when the holder's name is already on the *Register* in consequence of British qualifications)?—Yours, etc.,
RHYS.
May 1878.

* 1. I very much doubt whether any person has such an influence with the University as is mentioned by our correspondent. 2. The degree would be registrable if—as probably would be the case—the University were one of those recognised by the Medical Council.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than Thursday, Twelve o'clock.

FEES OF MEDICAL WITNESSES.

SIR,—I shall be obliged if you can help me with information as to the fees a medical witness is entitled to, as I have not found the practice to agree with that laid down in the diaries. I was subpoenaed to attend the March Assize in this city in the case of Regina v. Stevens—a case of malicious wounding—and was in attendance for several hours on Wednesday, the 20th, (the date fixed in the subpoena), Thursday, Friday, and Saturday. The trial eventually came off on Saturday, the 23rd. During this time I could get no information as to when I should be wanted. Since the trial, I am offered two guineas instead of four, as I expected. On writing to Mr. Bovill, the Clerk of Assize, to know why I am not paid a guinea a day, he replies that I am only entitled to two guineas—one for attendance before the grand jury, and one at the trial—and that there is no reason that he can see why I should have been allowed more, as I reside in the city, adding that the solicitor for the prosecution should have given me notice when I should be required. I shall be glad if you can tell me—1. Whether or not I am entitled, as stated in Lettis's *Medical Diary*, to one guinea a day for every day from the date of subpoena to the day of the trial. 2. What remedy I have in the present case, and how is it to be carried out. To London, as house-surgeon at Guy's, I have been paid a guinea a day in criminal cases from the commencement of assizes to the day of trial, although the case may not have occupied more than a couple of hours when called on.—Yours faithfully,
JAS. BANKART.

19, Southeyhay, Exeter, May 13th, 1878.

ENQUIRENS.—We do not think that, under the circumstances stated, our correspondent has any legal property in the prescription.

DEATH FROM CARBOLIC ACID POISONING.

SIR,—In your last issue, under the heading of “Death from Carbolic Acid,” you allude to “a case that occurred in the Homerton Small-pox Hospital.” Kindly allow me to say that this is an error: no such unfortunate event has ever taken place here.—Truly yours,
WM. GAYTON, Medical Superintendent.

The following communications have been handed to the General Manager:—Mr. J. Lewis, Birmingham; Dr. Charles Dyce, Edinburgh; Mr. Fredk. Eastwood, Huddersfield; General Banking Company; Mr. J. C. Sargeant, London; Mr. B. B. Joll, London.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifeshire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. Alfred Carpenter, Croydon; Dr. J. G. McKendrick, Glasgow; Dr. E. Waters, Chester; Dr. Ringrose Atkins, Waterford; Dr. Bradbury, Cambridge; Mr. T. Spencer Wells, London; Dr. Joseph Bell, Edinburgh; Dr. Leslie Jones, Blackpool; Dr. R. J. Lee, London; Mr. A. Doran, London; Dr. W. H. Corfield, London; Dr. J. W. Moore, Dublin; Dr. J. N. Vinen, London; Mr. J. E. Ingpen, Putney; Dr. R. Maclaren, Carlisle; Dr. Lombe Athill, Dublin; Mr. Richard Barwell, London; Mr. T. M. Stone, London; Dr. Harris, Worthing; Dr. J. Milner Fothergill, London; Our Paris Correspondent; Dr. Saundby, Birmingham; Dr. Grigg, London; Mr. F. R. Morgan, Morriston; The Secretary of the Royal College of Surgeons of Edinburgh; Mr. F. Page, Newcastle-upon-Tyne; Mr. Richard Davy, London; The Secretary of the Medical Society of London; Mr. J. B. Richards, Torquay; The Secretary of Apothecaries' Hall; Mr. C. F. Maunder, London; The Secretary of the Obstetrical Society; Mr. R. L. Bayley, Stourbridge; Mr. Coles, London; The Registrar-General of England; Mr. Ernest Carr Jackson, London; Mr. S. C. Smith, Halifax; The Registrar-General of Ireland; Mr. G. Eastes, London; Dr. Edis, London; The Secretary of the Quekett Microscopical Club; Dr. A. S. Taylor, London; Dr. Dudfield, London; Mr. G. Brown, London; Mr. Thomas Jones, Manchester; Dr. R. L. Batterbury, Berkhamstead; Inquirers; Mr. D. S. Bradley, Chesterfield; Mr. F. Eastwood, Huddersfield; Mr. John H. Morgan, London; A District Medical Officer, Granada, W.I.; A Provincial Practitioner; Mr. W. C. James, London; Mr. J. A. Francis, Southsea; Dr. Rabagliati, Bradford; Dr. J. B. Pitt, Norwich; Dr. Allan Sturge, London; Dr. J. Seaton, Sunningford; Dr. B. Pitt, Norwich; Mr. T. Hulmes, London; Dr. Eames, Manchester; Miss Allen, London; Dr. B. Howard, London; Messrs. Tweedie and Co., London; Mr. Boyd B. Joll, London; Dr. J. Milner Fothergill, London; Dr. Tripe, London; Mr. T. W. Hubbard, Lenham; Dr. Burnley Walker, Huddersfield; Mr. J. Thorsby Jones, Rochester; Dr. Gayton, Homerton; Mr. W. J. Harris, Worthing; Mr. Joseph Lewis, Birmingham; Dr. Thomas Birt, Leamington; Dr. Arthur Davey, Guernsey; L.R.C.P., Southam; Mr. Jas. Bankart, Exeter; Dr. G. J. Hearder, Carmarthen; Dr. Thinn, London; Dr. R. L. Bowles, Fulkstone; Dr. Glyn White, Liverpool; Assistant-Physician, London; Dr. Chambers, London; Dr. Warner, London; General Banking Company, London; etc.

BOOKS, ETC., RECEIVED.

Insanity in Ancient and Modern Life; with Chapters on its Prevention. By Daniel Hack Tuke, M.D. London: Macmillan and Co. 1878.

CLINICAL LECTURE

ON

LATERAL CURVATURE OF THE SPINE.

Delivered at University College Hospital.

By CHRISTOPHER HEATH, F.R.C.S. Eng.,
Holme Professor of Clinical Surgery in University College, London.

BEFORE bringing into the theatre a patient suffering from lateral curvature of the spine, I propose to say a few words on the disease and its causes, and to illustrate them on the back of a healthy young patient. In the first place, cases of lateral curvature of the spine are much more common in private than in hospital practice, and among the well-to-do rather than among the poorer classes. The complaint is much more frequent among females than males, for reasons which I will give presently; and especially common among young ladies from fourteen to twenty, whose dressmaker or dancing-mistress is the first to notice that one shoulder is "growing out". And yet we get cases from time to time in hospital practice, due either to old hip-disease, as in the patient coming here to-day, or from young persons carrying heavy weights habitually on one arm, as in errand-boys and nurse-girls.

I need hardly remind you, I hope, that the vertebral column is, owing to its construction, both elastic and flexible, and that it is maintained erect and at right angles to the pelvis by double sets of muscles, which in health exactly counterbalance one another. In this healthy girl whom I place before you, the legs are of the same length, the pelvis is consequently horizontal, and the spine vertical to it and straight. Now, I put a book beneath her right foot, and immediately the right side of the pelvis is correspondingly raised, and I make a little hollow in the right loin and curve the lumbar spine to the left. If that condition were maintained long enough, we should get a "compensating curve", as it is called, in the dorsal region (fig. 1)—*i.e.*, the weight of the head and trunk being thrown a little out of the perpendicular, an involuntary effort is made to restore the equilibrium by throwing the shoulder to the opposite side; and you can easily understand that if this effort be perpetually going on, deformity will eventually result. The same thing occurs if I take away the book and get the girl to "stand at ease"—*i.e.*, to throw her left foot forward with the knee bent, for you will see at once that the left side of the pelvis is lowered and the lumbar spine curved to that side. Nobody stands habitually at "attention" with both knees straight; but as we shift from one leg to the other every few minutes, we do our spines no harm. The same induced curvature of the lumbar spine can be shown if I make the girl sit down, and then raise one side of the seat more than the other.

You will see, now, how important it is in every case of spinal curvature to ascertain whether the pelvis is horizontal and the legs of the same length. This can be done readily enough, as in the patient before us, without any undue exposure of the person. But lateral curvature begins in another way, and in patients whose lower limbs are quite symmetrical. In weakly girls who have outgrown their strength, the muscles of the back are not strong enough to maintain the spine erect under the weight of the head and thorax, and the spine tends to assume curves both in the dorsal and the lumbar regions; for though we conventionally speak of "compensating" curves as if they followed one another, they are really produced together. Now, why should the dorsal curve be almost invariably to the right and the lumbar to the left, and not the converse? The reason is, no doubt, that the great majority of mankind are right-handed, and that the right limb, being more developed, is heavier, and the muscles which support it stronger, than on the left side. But, in addition to this, we must take into account the peculiar type of respiration in the female—that it is much more thoracic than

in males, and particularly that the upper ribs move much more freely, the breasts of women rising and falling with each respiration in a way never seen in men. Now the important inspiratory muscle, the serratus magnus, takes its fixed point from the scapula and is inserted into the upper ribs, and must draw them upwards and backwards equally in health, but to one side more than the other, if from any cause the muscles are unequally developed, or if, as shown to you by Dr. Sayre last year, the pressure of the head and thorax upon a weakly supported spine tends directly to produce a rotation of the vertebrae. Undoubtedly the action of a non-counterbalanced serratus is to produce rotation of the vertebrae also, for the ribs act as long levers attached to their respective vertebrae, and hence one of the earliest changes in lateral curvature is a rotation of the vertebrae, so that the transverse processes on one side become unduly prominent by the sides of the spinous processes. Of course, the ribs, moving with the vertebrae, must be thrown back on the right side, and by their angles thrust out the scapula, thus causing the "out-growing shoulder"; and at the same

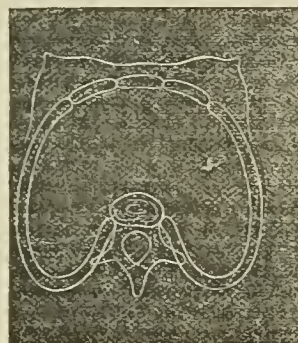


Fig. 2.

time, the left ribs being advanced, push forward the breast. Let me illustrate this by means of a diagram (fig. 2), and let me also warn you not to mistake a healthy breast thus thrust forward for one affected with disease, since you may be consulted for that symptom alone by a patient unaware of her deformity.

I will now dismiss the healthy subject, and bring in the patient suffering from actual curvature. This young woman, who is now aged 20, suffered from hip-disease on the left side at eight years old, and the result has been, as commonly happens, that the limb on that side has not kept pace with its fellow in growth; and as she stands now in slippers, you can see that the left side of the pelvis drops, and that there is a well marked lumbar curve to the left, with a so-called compensating curve of the ribs and dorsal spine to the right. Notice particularly how the right hip appears unduly prominent, and how the right scapula is thrust out. Now I will proceed to raise the left foot, so as to bring the pelvis straight, and you see at once a diminution in the lumbar curve, which of course cannot be rectified in a day; still less can the dorsal curve and rotation be put right without assistance, and that I propose to give by applying a plaster-of-Paris jacket after Sayre's method. Whilst the house-surgeon is making the necessary preparations for this, let me say a few words about other modes of treatment.

In cases where the curves are recent and slight and the patient young and flexible, a great deal can be done by employing the methods which I demonstrated at the beginning of this lecture on a healthy back with the view of producing curves for demonstration—only of course reversing the method. Thus with the ordinary form of curvature, where the dorsal curve is to the right and the lumbar to the left, it is obvious that we must raise the left side of the pelvis in order to straighten the back. Half an inch, gradually increased to an inch, added to the left boot will do a good deal, and the regular use of the sloping seat of Mr. Barwell one to two inches higher on the left side than the right, will do more to relieve the deformity, provided the muscles are not over-fatigued, and the patient has a pair of well-made stays to take off some of the weight of the trunk. Gymnastic exercises and calisthenics also are useful in strengthening the muscles, and particularly the action of climbing, which closely resembles the "self-suspension" recommended by Sayre, of which I shall speak directly, and which I have found to be an excellent method for cases not severe enough to require a plaster-of-Paris jacket.

In more severe cases, we have until recently had to rely upon some form of "spinal support"; and I show you here one or two specimens, only to warn you against employing them. I have tried them, both in hospital and private, and I must say I have never seen any good result; and I have watched the progress of cases in the hands of others more experienced than myself with as little benefit. The principle of all is the same: a steel pelvic-band with a crutch on each side is supposed to hold the trunk firmly, whilst a pad is worked by a lever with cog-wheels against the dorsal projection on one side and the lumbar curve on the other. Theoretically this is very satisfactory, for if with my two hands I grasp this patient on each side, you can see that I might in time push her back straight. But then you must remember that I am able to exercise a combination of complicated movements which no machinery can imitate, and that I occupy the enormous vantage ground

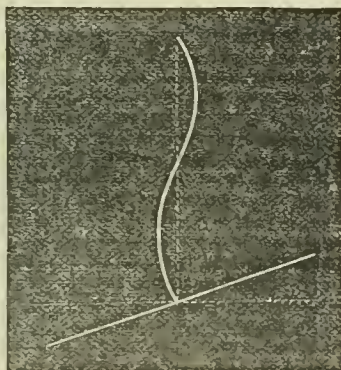


Fig. 1.

of standing apart from the patient, with my base of support on the floor. It is conceivable that if a spinal support could be made to be fixed in the ground and yet grasp the patient, it might effect some good; but as the modern machines are made to take the pelvis of the patient as their supposed fixed point, they are of no service, since they slip up and down as the screws are worked and as the patient's body moves. The proof of this is seen in one of the supports I show you, in which, in order if possible to counteract this "riding" tendency, an iron has been added, passing down the leg to a socket in the boot. Not only do these machines fail to do good, but they do positive harm by preventing the proper exercise of muscles; and yet they are extensively applied, and applied, too, to my certain knowledge, to cases where no apparatus at all could be required, the patient's back having nothing the matter with it!

And now we will suspend our patient, that you may see the effect of taking off the weight of the head and thorax, and of hanging the weight of the pelvis and lower limbs on the curved spine. Here we employ Sayre's triangle and slings; but for the patient's own use in exercising herself, I have had a much cheaper and less formidable set of pulleys made, which I have found to work well in private cases. It is simply a set of double pulleys, with a screw which can be fastened into the top of any ordinary bed room doorway or other convenient beam. It has the same head-piece as Sayre's, but no axillary straps or crossbar, which, indeed, are unnecessary for "self-suspension". A young lady can take this about with her when visiting friends without attracting attention, which could hardly be the case with a folding tripod.

We will now put on the knitted jersey with the "dinner-pad" over the abdomen and cotton-wool over the breasts, and apply the plaster-of-Paris bandage, strengthening it on the projecting side with strips of tin. While this is being done, I will give the mother of the patient directions as to the after-treatment which must be carried out. In the first place, we must raise the left side of the pelvis by adding half an inch to the heel of the left foot, which has already concealed in it a heel of three-quarters of an inch, which, however, is not sufficient. Next the patient must learn to exercise herself three times a day by adapting the head-sling and then, with the hands well over the head, suspending herself until only the toes touch the ground. While in this position, she is to take three deep breaths or inspirations slowly, and then lower herself again; and this, after a minute or two's rest, is to be repeated three times. In the intervals, she is to walk without fatiguing herself and to lie down for half an hour after each exercise. She has a comfortable home and is well fed, and, at present at least, requires no special medicine. In a fortnight's time, gentlemen, this patient will come before you again, and we shall then be able to judge of the amount of improvement which is likely to take place.

CHRYSOPHANIC ACID OINTMENT IN PSORIASIS.—Dr. Neumann of Vienna thus endorses (*Wiener Mediz. Presse*, No. 14-16, 1878) Mr. Balmanno Squire's treatment of psoriasis by an ointment of chrysophanic acid, as first communicated by Mr. Squire in this country at the latter end of 1876. After giving due credit to Mr. Squire, and to the other English observers who followed him in this research, the professor winds up his paper with the following summary. 1. Chrysophanic acid derived from Goa powder is an excellent remedy for herpes tonsurans, pityriasis versicolor, and psoriasis vulgaris. 2. Psoriasis in its earlier stages begins to disappear after a few applications of the drug, and in a far more unequivocal manner than under any other remedy that has ever yet been used against psoriasis. 3. Even inveterate forms of the disease can be abolished by means of chrysophanic acid, and it is quite the exception to find them oppose any protracted resistance to it. 4. Chrysophanic acid is a perfectly painless application to the diseased skin. The morbid phenomena occasioned by it on the healthy skin result apparently from the admixture of resinous matter with the acid. 5. As a result of this mode of treatment, psoriasis belongs no more to those skin-diseases which in an high a degree are a source of misery to the patient, and it has now become an easy matter to cure relapses. Every patient with psoriasis that I have as yet treated by this means gives the palm without hesitation to this method of treatment in preference to all others. In any case, this at the least is emphatically true; namely, that the therapeutics of skin-diseases have for the last ten years been enriched by but few remedies which have been crowned by so eminent a success as the one in question. 6. There are other skin-diseases, also, which are curable by chrysophanic acid. 7. He expresses a hope that this method may be examined by other observers; and he does not doubt that it will soon permanently assume its due rank amongst the treasures of therapeutics.

REMARKS

ON

THE MINUTE ANATOMY OF THE SMALL RED GRANULAR KIDNEY.

By GEORGE JOHNSON, M.D., F.R.S.,

Professor of Clinical Medicine; Senior Physician to King's College Hospital; etc.

IN the March number of the *London Medical Record*, Dr. Saundby has given a clear and complete *résumé* of an able and interesting lecture by M. Charcot on what he designates "epithelial visceral cirrhoses". The lecture which Dr. Saundby has analysed is published in *Le Progrès Médical* of December 22nd, 1877, and February 2nd, 1878. M. Charcot's observations relate to the lung, the liver, and the kidney; and he shows that analogous changes occur in each of these organs. In his description of the structural changes in the small red kidney, he entirely confirms the account which I first gave of those changes in the thirtieth volume of the *Medico-Chirurgical Transactions*. Histologically, he says, there are two prominent facts: 1. The epithelium of the convoluted tubes undergoes granular degeneration, and finally disappears; 2. The connective tissue which surrounds and sustains the tubes is developed in excess. But he requests special attention to one particular: "At a given time, the dark granular epithelium which in the normal state lines the convoluted tubes is replaced by a cuboid epithelium resembling that of the collecting tubes." "This change", he says, "has been described by all histologists who have been engaged with the subject: George Johnson, Cornil, Ranvier, Kelsch, etc. It seems to be a fundamental characteristic of the small red kidney, and, if met with in other forms, is so only accidentally and in places."

After describing analogous changes in the lung and the liver, and stating that the changes found in these different organs are, (1) modifications of the granular epithelium, (2) modifications of the connective tissue-wall supporting this epithelium, he inquires which of these two is primary, and expresses his belief that it is the epithelial change; and therefore he calls the structural change "epithelial cirrhosis". Amongst other arguments in favour of this view, he says there is much reason to believe that epithelial tissues have an autonomous existence independent of subjacent structures, or at least without direct participation with the connective tissue in which they rest, except "for the supply of interstitial liquid: a necessary influence for the maintenance of vitality in all the tissues".

It is satisfactory to me to find that my views as to the relation of the epithelial and the interstitial changes which are found in the small red kidney are thus confirmed by so able an observer and so eminent a pathologist as M. Charcot.

In the lecture referred to, Charcot makes no reference to the state of the renal arterioles; but MM. Cornil and Ranvier, in their *Manuel d'Histologie Pathologique* (part 3), not only give the same description and illustration of the epithelial changes in the kidney, but they give drawings of the thickened arterioles which are identical with those which I first published in the thirty-third volume of the *Medico-Chirurgical Transactions*. This thickening of the arterial walls, however, they look upon as the result, not of a physiological hypertrophy, but of a chronic arteritis.

All the characteristic specimens of renal arterioles in the form of disease under consideration show an inner longitudinal and an outer circular layer of fibres of nearly equal thickness. I formerly supposed that the inner longitudinal as well as the outer circular layer was muscular; but I am now convinced that the inner is the thickened elastic coat; and, since this thickened inner layer in a hypertrophied renal arteriole has precisely the same structural appearance and arrangement as the elastic layer in the larger but still microscopic arteries, I cannot but look upon it as being thickened by a true hypertrophy or overgrowth of the normal tissue. And a probable explanation of this hypertrophy of the elastic inner tunic of the arterioles is to be found in the need for resisting the tendency to elongation of the arteries by the distending force of the hypertrophied left ventricle. The tortuosity of many of the hypertrophied renal arterioles shows that they have become more or less elongated by the injecting force of the heart, notwithstanding the increased thickness and strength of their longitudinal elastic tunic; and it can scarcely be doubted that, but for the

strengthening of the elastic coat by this hypertrophic thickening, the elongation and tortuosity of the arterioles would be much greater than they are. The tortuosity of the hypertrophied renal arterioles is well shown in my first illustration of this subject (*Med.-Chir. Trans.*, vol. xxxiii, p. 114), a copy of which is here given. (Figs. 1 and 2.)



Fig. 1.—Portion of Renal Artery in the normal state, showing the relative thickness of its coats. c. Circular fibres. l. Longitudinal fibres. Magnified 200 diameters.

In a leading article in the *JOURNAL* of April 6th, reference is made to Dr. Ewald's paper in Virchow's *Archiv* on the Changes in the Arterioles in Bright's Disease. Dr. Ewald appears to have looked for hypertrophy of the arterioles in the pia mater alone, and therefore his

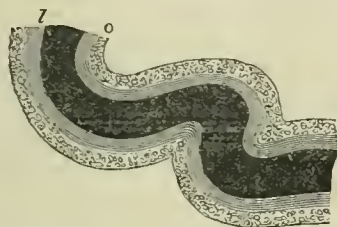


Fig. 2.—Portion of Artery from a Granular Kidney, showing great hypertrophy of its coats. c. Circular fibres. l. Longitudinal fibres. The canal of the vessel is filled with injection. Magnified 200 diameters.

observations are incomplete, and insufficient to support the objections which he raises to my explanation of the relationship between the arterial and the cardiac hypertrophy. In the cases in which he found hypertrophy of the heart without hypertrophy of the arterioles of the pia mater, it is probable that the arterioles in other tissues, more especially in the skin, may have been sufficiently hypertrophied to explain the cardiac hypertrophy; and, on the other hand, it is obvious that hypertrophy of the arterioles of the pia mater without arterial hypertrophy in other tissues would not cause cardiac hypertrophy. Therefore arterial hypertrophy limited to the pia mater may be unassociated with hypertrophy of the left ventricle. In reply to Ewald's argument, that "the absence of cardiac hypertrophy in amyloid and atheromatous thickening of the arterioles is against the vascular changes as causes of the heart-affection", I beg to say, as I have often said before, that, while this shows that mere degeneration of the walls of the arterioles, with consequent loss of contractile power, is not the cause of the hypertrophy of the heart, it is entirely in accord with the view that arterial contraction and resistance, with resulting arterial hypertrophy, are the main cause of the hypertrophy of the left ventricle associated with chronic renal disease. Ewald's theory, that the resistance which causes the arterial tension and the cardiac hypertrophy originates in the capillaries, and not in the contracting muscular arterioles, appears to me to be inconsistent with the facts and with the doctrines of vasomotor physiology. It is suggested that the polyuria of granular kidney is the result of increased pressure on the Malpighian capillaries consequent on capillary obstruction in front. To this I object, that increased pressure on the Malpighian capillaries would cause, not a copious secretion of urine, but an abundant transudation of albumen; whereas we find that, in cases of granular kidney with the evidence of high arterial resistance afforded by the great hypertrophy of the arterioles, albumen in the urine is rarely copious, usually scanty, and sometimes entirely absent. On the other hand, we have the clinical fact that when, as a result of valvular disease of the heart, the return of venous blood from the kidney is impeded, the increased pressure on the Malpighian capillaries is associated with a scanty secretion of highly concentrated urine, which, too, is often copiously albuminous. It appears, then, that the effect upon the urinary secretion of an impediment in front of the Malpighian capillaries is the exact opposite of that which the theory in question assumes it to be.

DR. MENZEL of Trieste, a surgeon who had already gained for himself a considerable reputation, has recently died at the early age of 32. While attending the Congress of German Surgeons in Berlin last month, he was attacked with hæmoptysis, and, after a brief illness, died of acute phthisis in the Augusta Hospital. He was one of the most eminent disciples of Billroth's school.

CLINICAL LECTURE

ON

ANTISEPTIC OSTEOTOMY FOR ANKYLOSIS AND DEFORMITY.

By RICHARD BARWELL, F.R.C.S.,
Surgeon to Charing Cross Hospital.

[Concluded from page 707 of last number.]

GENTLEMEN,—A few words remain to be spoken concerning a different deformity, which I have kept for separate consideration, because of late some curative operations, with which I will contrast my own, have been introduced. The ordinary knock-knee, or *genu valgum*—a very common deformity—is always accompanied by obliquity of the femoral condyles, in such manner that the inner lies on a plane lower than the outer. I say accompanied by, and not, as is usually said, produced by, because I conclude from the great lateral looseness of the knee-joint that a certain yielding outwards of the tibia is likely to be the *primum mobile* of the deformity, and the faulty growth at the lower end of the femur, a secondary condition, superinduced by changes in the amount of pressure. I conceive, then, the malady not as a mere lengthening of the inner condyle, but as an obliquity of the whole lower epiphysis, caused by increased thickness of the entire epiphysal mass on the inner, or decreased thickness on the outer side. However this may be, it is certain that when the deformity is fully developed, the exaggerated projection downward of the internal condyle—in other words, the obliquity of the joint-surface—is the obstacle to rectification of the limb. The problem of surgery is to discover the best and safest method of overcoming or evading this obstacle.

Examination of the results obtained or not obtained by instrumental treatment, criticism of some earlier operations, such as cutting out a piece of the tibia, even sawing off the lower end of the femur, lie beside my purpose: I only wish to direct attention to the operations of Dr. Ogston (Aberdeen) and of Dr. Macewen (Glasgow). Dr. Ogston's method consists in passing a knife, then a saw, obliquely from above the inner condyle into the knee-joint, over the anterior surface of the femur, to midway between the two condyles: the inner one is then very nearly sawn off from before backward; the thin remaining portion of bone is broken by forcing the tibia into its normal position; and the condyle, thus pushed up on the femur, is allowed to attach itself in the new position (*Edinburgh Medical Journal*, 1877, p. 782; Langenbeck's *Archiv*, vol. xxi, p. 537). Dr. Macewen's method is thus described:—"An incision was made over the inner condyle of the right femur, the centre of which corresponded with the upper part of the condyle, the object being to go as near the knee-joint as possible without opening it. A V-shaped portion of bone was struck out by the chisel from the inner side of the condyloid extremity of the femur; the remainder of the bone was broken, and the limb was brought round straight."* (*Lancet*, March 30th, 1878.)

Both these operations appear to me more severe than the exigencies demand. Of Dr. Macewen's, it is to be observed that two of the three cases suppurated, and under such circumstances there would seem to be some danger of extension of the inflammation to the knee-joint. From the description given in that gentleman's paper, and quoted above, it is difficult to make out in what direction the triangle of bone is struck out; but I suppose it to be horizontal. If I be correct in this supposition, the section would, I think, of necessity interfere with the epiphysal function, thereby in all probability affecting the subsequent growth of the limb.†

Dr. Ogston's operation is also rather severe—even, it would seem.

* In his paper, Dr. Macewen claims to be the first in England who performed antiseptic osteotomy. I am not concerned here to dispute the assertion, which, although his case has only just been published, is doubtless correct. I would, however, point out that, in his osteotomy for ankylosis of the knee, he cut out a wedge of bone from the front of the femur. This procedure is not only different to mine, but is one that I deprecate as unnecessarily severe. Nature supplies a wedge of new bone to fill up an angular gap left between a deflected straight section with much greater precision than that with which a surgeon can cut out a piece to avoid a gap: the limb will not be shortened, and the bone will heal much more quickly and surely if a mere straight division be made.

† While the above was in press, I have received a note from Dr. Macewen, in which he informs me that the incision in the soft parts is vertical; the wedge-shaped piece of bone is oblique, sometimes horizontal.

hazardous.* To pass a saw into the knee-joint, and then to partially fill that cavity with bone detritus, and the oozing from cancelli, is a procedure whose innocence could only be proved by a goodly array of thoroughly ascertained cases. It must also leave behind a femoral joint-surface greatly altered, and provided with a peculiar shelf and sharp prominence, with which the tibia cannot possibly fit; therefore one would like some after-history concerning the reliability and usefulness of the articulation. However, it is not my wish to criticise either of these very ingenious procedures, merely than to show cause for the suggestion of a different operation, which, although performed in two stages, is less severe, and gives very excellent results. The following case sets forth the method I have adopted.

Kate L., aged 14, was admitted under my care into the Charing Cross Hospital on February 5th, 1878, in the hopes that a severe *genu valgum* of the left limb might be rectified. She is a healthy, but not strongly constituted, child. The plate gives a fair idea of the condition of limb. This child was for certain reasons not photographed. Her limb was laid on paper, and its outline carefully traced; also an iron wire was bent and moulded accurately to its outer side. From these tracings and moulds the plate has been drawn. I also procured a paper tracing from the healthy limb of a girl of equal age.



Fig. 5.

the tibia horizontally, just below the tubercle, and so deflected the lower part of the limb that the foot occupied the same place as that of a healthy limb, and applied the plaster-of-Paris bandage.

March 15th. There has been neither fever nor pain, and the wounds healed within the week.

Results.—The limb is now of very good form, and is strong; the knee-joint, not having been interfered with, is perfect (fig. 6). I was anxious, when I undertook the above operation, so to arrange that the limb should not merely look straight while the knee was extended, but that during flexion the tibia should move in its normal plane—that is to say, that in every posture of the limb, whether the median, turned out or in, flexion of the knee should always bring the heel in a circular line towards the tuber ischii: any deflexion outward or inward from this course would be a manifest result of error. This consideration caused me to take such pains, by the aid of tracings and mouldings, to divide the rectification of the deformity equally between the parts above and below the knee-joint. The result is perfect. The limb is shapely, not only while extended, but also in flexion; and in every position the heel, when the knee is quite bent, lies close to the tuberosity of the ischium.

There are now under my care two or three cases of exaggerated deformity—at hip, at knee, in the shafts of bone, which I show you as demanding treatment by this method; but I shall not for the present say more on this subject, having given ample grounds to justify the operation, and more especially having shown that the severer measures—the taking out wedges of bone—are quite unnecessary.

* It is only right to say, that in a private letter Dr. Ogston tells me that he believes the operation has been performed about thirty times, and he is not aware of any ill effects having followed.



Fig. 6.

CLINICAL COMMENTS

ON

DYSIDROSIS AND ITS MORBID ANATOMY.

Delivered at University College Hospital.

By TILBURY FOX, M.D., F.R.C.P.,

Physician to the Department for Skin-Diseases.

GENTLEMEN,—For some years I have taught that there exists a special inflammatory disease of the skin, commencing in the sweat-apparatus, and characterised in its early stage anatomically by the development of little vesicles imbedded in the skin, which occupy the site, and are produced by the distension, of the sweat-ducts by fluid sweat rapidly becoming mixed with and altered by inflammatory fluid. This disease is usually confounded with acute eczema.

A typical case was admitted into the Hospital a fortnight ago, under my care, and exhibited the disease in both its earlier and later stages. I pointed out to you amongst other things the naked eye characters of the disease at its commencement; how the ridges of papillæ on the palms appeared to be redder and more distinct than usual, from the fact that they were in a state of tumefaction; how the sweat-follicles, or rather their orifices, appeared to be peculiarly distinct and recognisable; and how these follicles were apparently distended to form vesicles, which looked like little sago-grains imbedded in the skin. At least, these early vesicles were seen to be deeply seated and not produced by any elevation of the cuticle, and we thought we could make them out to occupy the site of the sweat-ducts, and trace transitional stages between increased distinctness of the follicular orifice and the formed vesicles. I explained also that the sweat-duct opening could be clearly made out in the centre of the imbedded vesicle.

I promised to try to obtain the patient's consent to the removal of a piece of skin for careful examination; and you will be glad to hear that I have succeeded. Some of you saw me mark between two ink lines a portion of skin containing a few ridges of papillæ, where I stated that characteristic vesicles existed in an early stage, *i.e.*, about the fourth day of the disease. The portion of skin was removed, and Dr. Crocker kindly took charge of it for the purpose of preparing some microscopical sections, which he has accordingly done with much success. Dr. Crocker and I have carefully examined these preparations, and I will now acquaint you briefly with the main results obtained. You shall examine, however, some of the preparations for yourselves.

It has been stated lately by several observers that dysidrosis is not a disease of the sweat-apparatus, and Dr. Robinson of New York especially, in a recent article in the *New York Journal of Dermatology*, professes to have proved that the vesicles are formed by distension of the rete mucosum by inflammatory fluid effused from the vessels of the papillæ; and he figures the vesicles seated over the papillæ.

Whether Dr. Robinson's case was a true instance of dysidrosis or not I cannot say, but our present case undoubtedly is; and what we find in our specimens is conclusive evidence that the sweat-ducts are very large and in some cases distended at their upper part, and that the vesicles are formed in connection with the sweat-ducts. Out of seventy or eighty specimens, we can only detect two instances of vesicles having any definite relation to the papillæ. The majority are distinctly formed *between* the papillary projections of the rete, their central axis being opposite to or a continuation of the depression in the rete answering to the usual spot where the sweat-coil enters the rete from above. In some cases, the duct, as it enters the rete, seems larger, as though commencing to dilate; but we can trace the sweat-ducts entering the little vesiculations or globular dilatations, sometimes at the central point of their summits, at other times more to the side, but still distinctly entering. We can see the sweat-ducts leaving the base of the vesiculations, in some cases at the central point. In some specimens, the duct projects slightly into the vesicles, and then its continuation is seen running from the direction of the bottom of the vesicle and continuing its course through the corium. There is one remarkable specimen of a twin vesicle with two contiguous sweat-ducts clearly entering the vesicles. In none is the horny layer of the cuticle raised into vesiculations at the early stage of the disease. We have searched in vain for the early phenomena of *eczematous* inflammation. In our sections, the sweat-ducts are everywhere unusually well seen: Dr. Robinson figures none. As to the changes that go on in the deeper portions of the sweat-gland, further investigation is needed; but I have

little hesitation in saying that I regard the appearances seen in some of the sections as indicative of commencing inflammation. The cell elements of the wall of the gland ducts and of the tissue of the gland-coil and its envelope seem augmented.

To my mind, the views I have taught in this School about dysidrosis are fully vindicated by these preparations. In my *Atlas*, published in 1877, I remarked that "if the skin be examined at an early stage with a lens, in many cases it will be seen that these little pearly spots answer exactly in situation to the sweat-ducts, and indeed they are distensions of the sweat-apparatus. This has been represented in fig. 3, which was the exact appearance seen in the case, and which was most plainly put by several others beside myself. This conclusively proves that the disease is essentially a disorder of the sweat-apparatus". As to the mechanism of the production of these vesicles, I wrote as follows, in 1873. "It seems to me that there is a sudden efflux of sweat, and the flow is so rapid that it cannot escape, the whole gland is distended, at least its duct, and the fluid presses up from below only to hock up the upper portion of the duct by pressing together the twists of the duct in that part of the cutis where it runs in a spiral manner. If there be sudden pressure from below, the spiral twist of the duct must greatly favour the dilatation of the duct. In sudamina, I take it, the opening is plugged by exuviae, and the sweat finds its way laterally between the horny layers of the cuticle....." I think the basis of the above explanation holds good. Dr. Crocker and I propose to work out the anatomy of dysidrosis, as far as we can, more fully, and to place on record our joint observations on the matter. I thought it well, whilst the clinical features of our recent case were fresh in your minds, to show you these specimens, and thus vindicate the correctness of my teaching on the subject during the last few years.

[The above noted points were then fully demonstrated by the specimens.]

DIPHTHERIA.

By ROBERT BELL, M.D., F.F.P.S. Glasgow,

Physician to the Glasgow Institution for Diseases of Women and Children, etc.

In January 1876, it was my privilege to publish in the JOURNAL a short account of the plan of treating diphtheria, which I have adopted during the past few years. It is now my desire to detail the history of other cases of the disease which have passed under my notice since that date. It will be remembered that, under the treatment which was advocated, all the patients recovered, with the exception of two, who proved themselves so obstinate that any attempt to carry out my wishes was frustrated. Since the publication of the paper referred to, I have met with at least eight well marked cases of this disease, all of which recovered. I am induced to give an account of my further experience of this mode of treatment for many reasons, chief amongst these being that my medical brethren, who were in communication with me on the subject after the appearance of my former paper, may have further proof to support them in their endeavours to combat the disease by the means which have proved so successful in my hands.

Cases I and II, M. F. and A. F., sister and brother, aged 10 years and 8 years respectively, were both prostrated on the same day. The film was spreading very rapidly over the tonsils, and there was considerable fever. The throat of each patient was freely painted every two hours with the following application: glycerine of carbolic acid, the strong liquor of the perchloride of iron, and sulphurous acid, of each three drachms; and the following mixture was given: chlorate of potash, two drachms; sulphurous acid, two and a half drachms; glycerine, one ounce; and water, to four ounces; two tea-spoonfuls to be taken every two hours. In this way, while the patients were awake, an antiseptic was brought into contact with the diseased surfaces every hour. Port wine, soups, and milk were also given freely. The tonsils had only been painted a few times when the film showed signs of ceasing to spread; and within four days all the diphtheritic membrane had disappeared, and, saving a considerable amount of prostration, the patients were pretty well. A course of tonic treatment, however, soon removed this debility.

Case III was confined to one member of the family, but the disease was epidemic at the time. The patient was a girl thirteen years of age. The treatment as described above was adopted, and the disease ran very much the same course as in the two first mentioned cases.

Case IV was the most intractable attack of diphtheria that I have seen. The patient was an only daughter, aged 16, and before her illness was a remarkably healthy looking girl. I saw her first on the 26th December last, and then considerable areas on both tonsils were covered with the fungoid deposit. The treatment was immediately

commenced, and most rigorously carried out; but in this instance, it seemed for some time to have no control over the disease, for the false membrane continued to spread, till on looking into the throat nothing could be seen but the diphtheritic deposit. The treatment, however, was persevered in most persistently. Unfortunately, when the disease was about its worst, I became so unwell that I could not leave my bed for a day, and a friend kindly took charge of the case for me, who saw that my instructions were most rigidly carried out. The father of the child, feeling desperate, asked to be permitted to see me in bed, to ascertain if nothing else could be done to relieve his daughter, my friend having looked upon the case as hopeless. I suggested a consultation, but the consultant said he could only confirm what my substitute had already said. Both, in fact, viewed the condition of the patient as being beyond hope of recovery. During all this time, be it remarked, the antiseptic application to the throat had the effect of preventing the poison from being absorbed into the general system, and on this account, I thought there were still reasonable grounds for hope. Having made the parents understand this, I urged them to persevere most conscientiously with the treatment, which they did; and with the assistance of my friend Dr. Brock, nothing was lost for want of a thorough application of the remedies. On January 3rd, the symptoms began to abate; and from that time, her recovery was uninterrupted.

Cases V and VI were brother and sister, the only children of the family. Their history is very similar to that of Cases I and II, and their recovery was quite as complete; though, in the girl, there still exists a great weakness of the throat, rendering her very prone to tonsillitis.

Cases VII and VIII are very recently recovered from an attack of diphtheria. They are now quite rid of the disease, but are still suffering from the resulting weakness. They are likewise brother and sister, four and six years of age. It may be interesting to note that the laundrymaid in this family had an attack of diphtheria about eighteen months ago, from which she recovered under similar treatment.

Since the above was written, another child of the same household has been attacked, but is now on a fair way to recovery.

I would remark that, in every house where the above cases occurred, the arrangements for supplying the inmates with water were defective. In every instance, the drinking-water was drawn from a cistern, which was placed above the water-closet and bath-room; and when the cisterns were examined, they were found to contain an immense accumulation of slimy matter of a green colour, which under the microscope proved to be loaded with minute organisms, the greater number of which were of the same form as blood-corpuscles, and about the $\frac{1}{1000}$ of an inch in diameter. There can be little doubt that these microscopic bodies were the germs from which the disease sprang; and there can no estimate be formed of the immense amount of preventable zymotic disease which is constantly attacking the community under similar unsanitary conditions. It behoves us, then, as custodians of the public health, to insist that such unscientific, nay criminal, modes of constructing houses be prevented.

P.S.—The above paper was written in the autumn of last year, and within the period which has elapsed since then, twelve other cases of diphtheria have come under my observation, all of whom have recovered under the same treatment. I may mention that five out of this number occurred in one family. Again the cistern-water was at fault.

EXCISION OF THE TONGUE BY IMMEDIATE LIGATION.

By WILLIAM FEARNLEY, L.R.C.S. Edin., Lerwick, Shetland.

THE publication of Mr. Lund's case of removal of the tongue by scissors induces me to publish the following case.

Christina J., of Tingwall parish, came into Lerwick to consult me regarding a sore on her tongue. She came to me on November 6th, 1875. She was then aged 66; was living with a sister older than herself; had a good family history; had enjoyed average health all her life; had never been married. I found a large "sore" on the right border of her tongue opposite to and touching the only tooth in her head: a molar in the lower jaw, with a sharp inner edge. The sore had all the characters of an epithelioma, and involved the anterior third of the posterior half of the right lateral half of the tongue, which was much indurated. The glands were, so far as I could make out, unaffected. I recommended extirpation, to which she readily consented. She, with her sister, took a suitable room in the town, and on the 9th I, with two assistants, proceeded to remove the whole organ.

She was put deeply under the influence of chloroform (given on four

thicknesses of towel); and I seized the tongue with a pair of forceps, and transfixed the tip of it with a needle carrying a stout double thread, which was afterwards looped and given to an assistant, by which he pulled the tongue well out of the mouth. I then laterally transfixed the tongue with a blanket-pin, beginning at the right angle of the mouth and bringing it out at the left, and by this means carried the pin immediately in front of the epiglottis. I then placed a single loop of very stout whiplcord around the tongue behind the pin, giving it one turn of a knot, ready to be tightened. Next, I divided the attachments of the tongue to the floor of the mouth by means of a pair of scissors, while it was being dragged well out by the looped thread—taking care to hold the face well sideways and close as possible to the pillow. Then I quickly severed the tongue with the whiplcord, which cut it much as it would cut hardened butter in frosty weather.

There was very smart hæmorrhage during the time the scissors were being used, and the patient lost, as near as I could tell, about three ounces of blood. There was no further hæmorrhage after the tongue was removed—never a drop from the surface traversed by the whiplcord; and no ligature, or even mopping of parts with styptic, was required. The patient remained in bed three days, and went home—on foot, I believe—on the eighth day, a distance of eleven miles.

She had eight months of comparative health, when the cancer returned, this time in the larynx, and ended her life thirteen months after the operation.

I saw, during my student-days, the late Mr. Nunneley of Leeds remove tongues by his method; and afterwards, as an Edinburgh student, I saw the procedure of the late Mr. Syme carried out. In using the *déraseur*, surgeons use the quite unnecessary precaution of waiting each time, after giving the handle a turn, half a minute or more, thinking thereby to prevent hæmorrhage. After a thirteen years' experience of the application of torsion among the so-called lower animals, I am in a position to state that no more blood is lost after the most speedy severance of actively vascular parts by the most rapid strangulation than is lost by the measured torsion at present resorted to. Further, I have not seen, even by Mr. Syme's operation, the tongue and its attachments more completely removed than was quickly effected by my simple proceeding.

MORPHIA AND A TELL-TALE AS AIDS TO COMPRESSION IN ANEURISM.

By C. F. MAUNDER, F.R.C.S.,
Surgeon to the London Hospital.

In my Lettsomian Lectures of 1875,* I drew attention to the value of morphia as an aid to compression, as a substitute for chloroform and its attendant risks. I illustrated its use in the case of a gentleman who "dozed, took his meals, smoked his pipe, and submitted to continuous digital compression for twenty-three hours, with scarcely a complaint; and, at the expiration of this time, expressed himself as capable of enduring treatment many hours longer". The following is another example of the value of the drug.

In February 1877, Mr. —, who is now forty-two years of age, was advised that he was the subject of an aneurism of the popliteal artery. He was put to bed and treated for the first ten days with a bag of shot weighing eight pounds placed over the common femoral artery. During the next month, a tourniquet was substituted, and worn during eighteen hours out of the twenty-four over the superficial femoral artery. His health now began to fail; treatment was discontinued; and he went to his business, the tumour being smaller and pulsation less marked. During the last three months, the swelling and the pulsation had both increased, associated with pain and general discomfort about the knee.

March 29th, 1878. I found Mr. — with an aneurism of the size of a large orange occupying the upper half of the popliteal region, and bulging somewhat to the inner side of it. Continuous digital compression with a weight of ten pounds was advised, aided by morphia, if necessary.

March 30th. Mr. W. R. T. Hawkins and Mr. Albert E. Jones of the London Hospital commenced the compression treatment at 11.45 A.M., the common femoral being the artery selected; and they maintained complete occlusion of this vessel for the space of half an hour alternately. At 4 P.M., the patient suddenly complained of severe pain (distal occlusion?), commencing in the calf of the leg, and running up along the aneurism and femoral artery. A quarter of a grain of

morphia was now hypodermically injected, and relief afforded. From this time, when the gentleman compressing was relieved by his colleague, and the pressure for the moment somewhat relaxed, the force of the pulsation in the aneurism was observed to be gradually diminishing. At 8 P.M., an assistant was recruited, in order to help in the continuation of the compression through the night.

March 31st. At 2 A.M., another paroxysm of pain occurred, after which pulsation was scarcely, if at all, perceptible; and a firm swelling occupied the seat of the aneurism, the disease being practically cured. At 10 A.M., no pulsation could either be felt or seen. One or two arteries could be detected meandering the knee. Compression was continued during the day as a precautionary measure. Throughout the whole time (thirty hours), the patient lay on his back, with the thigh rotated outwards, and the leg flexed at a right angle on this. An indicator (which consisted of a penholder with a piece of paper like a flag placed between the ribs, and which marked the presence or absence of pulsation in the aneurism) was lodged like a finger-post in the flexure of the knee, and acted like a tell-tale to the compressor. Mr. — took food at intervals, and was cheerful and chatty, except when asleep. An injection of morphia was resorted to four times.

The skin over the seat of compression, which had been protected by the occasional application of French chalk, was slightly reddened only, and was the source of the least possible discomfort to the patient, who said he could have borne the treatment many hours longer.

CASE OF PARALYSIS AFTER APPLICATION OF A PLASTER BY AN UNQUALIFIED PERSON TO THE NAPE OF THE NECK.*

By E. RICE MORGAN, M.R.C.S.Eng., Morriston.

X. M., AGED 25, living at Landore, workman in a tinworks, had been suffering for about six years from a skin-affection located at the back of the neck; whether sycosis—an unusual situation I admit—or some other cutaneous disease, I am unable to say, for I did not see the man in the early stage; in fact, not until the skin-affection had been effectually got rid of. His previous history was good; he had never had paralysis of any kind before, nor could I find any traces of a specific history; and I have grounds for saying that up to October 1877 he was a strong healthy man.

When I first saw the patient in October 1877, he was in a very dangerous state. His face was very swollen and painful; his eyes were suffused; his tongue was very foul; pulse quick and compressible; throat dry and sore, accompanied by cold clammy sweats; and I came to the conclusion that he was suffering from blood-poisoning, and thought it was probably due to arsenic. At the back of the neck was a large deep slough as large as the palm of one's hand, and I then elicited that, about nine days previously, a certain unqualified practitioner had applied a plaster to the nape of his neck to cure, as he said, the skin-disease. For a few days, the prognosis was very doubtful, and, though I treated him for blood-poisoning from some metal, I was unable to obtain any portion of the said plaster to find out by analysis its ingredients.

These bad symptoms gradually gave way, but, about the tenth day, I found he had lost all motor power in the arms and legs. Sensation, however, was unimpaired; nor did he lose power of speech or consciousness, and he had control over all the sphincters. The spinal cord being, as I judged, implicated high up, I was afraid that possibly the muscles of respiration would become affected; but, fortunately for the man, this did not occur.

After careful treatment, specially with sulphate of magnesia, iodide of potassium, and cinchona, the man quickly improved. The large wound left by the plaster gradually healed; the appetite returned, and with it strength. The return of power to the muscles, however, was very gradual; and it was nearly four months before he could place his hand upon his head; but this improvement has been going on uninterruptedly. His legs, of course, have been much slower in recovering.

March 29th, 1878.—He now looks quite fat, as compared to what he was four months ago. He can take a spoon in his hands, and carry food in it to his mouth, and can give a very fair grip to one's hand. The extensors are less powerful than the flexors. The muscles of the legs during the past month have also made rapid progress; for he is now able, when sitting, to lift them up and keep them out straight for a second. When once put up to stand and allowed to lean against something, he is able to remain thus unaided. Six weeks ago,

* *Surgery of the Arteries*, pp. 15. London: Churchill.

* Read before the South Wales and Monmouthshire Branch.

he could not do this. For the past fortnight, he has been amusing himself with one of Maw's galvano-electric machines under my tuition. Latterly he has been taking iron and cod-liver oil with a nourishing diet; and I have now every reason for thinking he will make a good and complete recovery.

What was the pathological condition of the spinal cord in this case? What was the poison? Did this plaster, of whatever it was composed, placed over the cervical region, and producing such a deep slough, implicate that portion alone of the spinal cord, causing myelitis or some other condition, or did the poisoning effect of it range over a larger portion of ground, and set up a subacute inflammation of the whole tract of the cord?

I ought to state that the unqualified person, frightened, I presume, at the serious effects of his nostrums, did not claim any payment for his valued advice.

In conclusion, I would beg to suggest that such a case as this ought to be published and widely circulated to warn the ignorant against placing themselves in the hands of quacks; for though, as a rule, their nostrums are harmless, yet we have grounds for knowing, as in this case, that they sometimes use drugs, of the dangerous effects of which they are not aware, but for which they are morally liable.

CLINICAL MEMORANDA.

ASPHYXIA SUCCESSFULLY TREATED BY DR. HOWARD'S METHOD OF ARTIFICIAL RESPIRATION.

A SHORT time since, I had an opportunity of testing, in two cases of asphyxia, the value of Dr. Howard's method of artificial respiration.

CASE I.—This was one of diphtheritic croup in which tracheotomy had been performed, and apparently the child had died during the operation; she was pulseless, had ceased to breathe, and the heart-sounds were inaudible. There being no time to lose, I applied the method vigorously, and, in about five minutes, she drew a short breath, which was soon followed by regular breathing. She lived for seven days, eventually dying from the disease for which the operation had been performed.

CASE II.—In another case of asphyxia occurring while a patient was under chloroform—though not arising from that anæsthetic—it was thought advisable also to empty the stomach of its contents. Dr. Howard's method was employed with excellent result, the stomach and even the rectum being emptied almost immediately. The respiration also returned, and the patient, who was about fifty, eventually made a good recovery.

W. C. JAMES, House-Surgeon, Guy's Hospital.

DIPHTHERIA: CROUP: TRACHEOTOMY.

DR. SEMPLE, in his kindly criticisms on my paper (May 4th), assumes that, in the first two cases related, *because* I saw patches of false membrane *therefore* they were cases of diphtheria; and, in the third case, notwithstanding my statement that I saw false membrane flapping through the wound, he assumes, *because* the other evidences were unfavourable to the diphtheritic theory, that I was in error, and that the case was one of ordinary laryngitis with œdema glottidis, "and that in the worst of them, as is shown in Dr. Bowles's third case, the operation of tracheotomy has a much greater chance of success".

This simply leaves the question where it was; given false membrane, therefore diphtheria. Dr. Moxon and others have demonstrated that false membrane is often present in burns and other traumatic cases; and, in my paper, I adduced positive evidence of a similar kind.

Lastly, Dr. George Johnson, in a contemporary, so far changed his front as to state that bad strains as well as diphtheria are responsible for false membranes. This, from so eminent a physician, is at least an important breach in the walls of the argument; which, if once gained, decides the point that false membrane does not *always* imply diphtheria, and we shall have idiosyncrasy, and local and other, at present, unknown causes rushing in and crying aloud in the moment of victory for their share in the etiology.

Whether it was really false membrane or the lining membrane of the trachea which we saw flapping through the wound I confess I cannot *prove*, but the probability is at least strongly in favour of the former; both Dr. Lewis (not Jervis) and myself are certain it was *within* the trachea, and have no doubt whatever but that the child in its awful struggle for life coughed up and swallowed, as children do, the dangerous if not false membrane which had so nearly cost the little thing its life.

ROBERT L. BOWLES, Folkestone.

OBSTETRIC MEMORANDA.

RETENTION OF THE PLACENTA.

ABOUT sixteen years ago, Mrs. G. arrived in London, and was seized with pains and threatened premature birth at about six months. I ordered perfect rest, etc., and matters went on comfortably for a few days, when the fœtus was expelled. The funis was torn off short at the os, which was rigidly contracted; and I determined not to interfere. During the whole time of retention, I was kept in constant anxiety, as periodical flooding came on; and, on one occasion, I took the late Dr. Cape of Curzon Street, Mayfair, with me in consultation. After examination, we agreed nothing could be done but wait patiently. On the nineteenth day, the placenta was expelled in a perfectly healthy condition without a sign of putrefaction.

HUGH DAVIES, Surgeon, 42, Dorset Street, Portman Square.

RUPTURE OF THE UTERUS.

ON May 29th, 1875, under "Obstetric Memoranda," I published in the JOURNAL notes of a case of rupture of the uterus, which occurred in the year 1853. In that case, the rent was near the fundus, and the symptoms more definite and protracted than in the following one, which has features entitling it to be also recorded.

M. T., aged 37, mother of three living children, and said to have had good confinements, was taken in labour on February 25th, 1878. I visited her at 10.20 A.M. She had had pains since 8 A.M., which seemed natural and frequent. The passages were spacious and lubricous; the os about the size of a shilling, thin but dilatible. The waters had not escaped, and there had not been any show. The head was at the brim, presenting in the first position. The abdomen was more than ordinarily pendulous. Labour did not progress much, although the pains appeared to be strong and at short intervals. She had some warm tea. The os enlarged to about half-a-crown, and, a little before 12 A.M., the membranes were broken, with a view to relieve distension and change the character of the labour. The head advanced into the brim, and the patient remarked that she "could feel it getting lower". There was not any complaint of fixed pain in the abdomen. The progress being slow, which I attributed to the size of the head (the patient stated that she was a month over her time), I left at 1.55 P.M., as I resided within two hundred yards, and promised to return in half or three-quarters of an hour, with direction to send if I were required. I returned at 2.45 P.M., and, directly I entered the house, the nurse told me the pains had ceased, and she thought the woman was dying. I made a rapid examination: the os was well dilated, and there was no hæmorrhage into the vagina. The upper part of the head was firmly wedged in the pelvis. The patient said, "Lift me up; give me some brandy", and directed me to a cabinet. I immediately gave her some port-wine, which she swallowed. She was pulseless, evidently moribund from shock (syncope), not from asphyxia or coma. I next gave her a teaspoonful or two of whiskey, meanwhile slapping her face with a wet towel; but she died, with slight convulsive twitches about the mouth, at 3 P.M., a quarter of an hour after my return. Myself and the nurse were the only persons in the house at the time of death; hence I did not feel justified in performing gastrotomy, or in attempting to effect delivery *per vias naturales*. The death surprised myself as much as others. In public practice, an endeavour would, of course, have been made to rescue the child.

A *post mortem* examination was obtained twenty-one hours afterwards. The examination was made in a dark inconvenient room, on a low bed, in the presence of Drs. Byerley and Craigmile. Only the abdomen was investigated, which was extremely prominent. Section was made from the mid-thorax to the pubes. The abdominal parietes were very thin and free from fat. The uterus was exposed, and above the pubes a triangular effusion presented itself under the visceral peritoneum, which membrane was unruptured. About one pound of dark clots was removed, and much fluid blood with a sponge, when a rent was discovered just above the os pubis, anteriorly, extending to about one-third of the circumference of the lower segment of the uterus, through which the fingers could be introduced against the fœtal head. The muscular tissue of the womb was torn in a ragged manner, similar to (allowing for difference of structure) laceration of the corpus striatum in cerebral hæmorrhage. The rupture had evidently happened at the thinnest part of the uterine wall, about opposite to the greatest diameter of the cranium of the fœtus. An incision was made from the fundus to the cervix, and the child, a girl, seen *in situ* in the first cranial position. The upper part of the head was wedged into the brim, requiring force for its extraction. The child was large, especially its head, and the placenta implanted at the fundus posteriorly. The uterine tissue

was pale, pink in colour, about an inch in thickness at the fundus. Dr. Craigmile kindly examined specimens from the margin of the rent and also from the fundus. He found the involuntary muscular fibres everywhere perfectly healthy, not showing the slightest trace of fatty degeneration or of infiltration. Sections of the hardened uterus confirmed his observations.

In such a case, the only explanations of the abrupt collapse were plugging of the great vessels, concealed hæmorrhage, or rupture of the uterus. The symptoms were syncopal in kind, and there was not the breathlessness associated with embolism or thrombosis. Moreover, the symptoms were very sudden as a result of rupture, and there had not been any previous complaint of pain. Hence, prior to the examination, I could only attribute the death vaguely to shock. The rupture occurred at a very usual spot; namely, near the junction of the uterus and vagina, and at an early period of labour, which is also common. When did the laceration take place? The pains existed at 2 P.M., and at 3 P.M. the patient died. According to Dr. Rigby (*System of Midwifery*, 1853), the posterior wall is slightly more obnoxious to the lesion than the anterior, but they appear to be almost equally liable to the injury. The case is interesting as a contribution to obstetrics, especially in its medico-legal aspects, concerning an accident which, though familiar, is comparatively rare. A moral may be drawn from the absence of interference with the labour, as, had any manual or instrumental procedure been resorted to, the rupture might have been ascribed to violence rather than to the spontaneous efforts of parturition.

W. BOYD MUSHET, M.B. Lond., M.R.C.P.

ANENCEPHALOUS FŒTUS.

ON May 5th, 1878, I was sent for to attend Mrs. C., a multipara, who had been in labour twelve hours. On examination, I found the face presenting, and that the cranium was wanting. As the pains were weak, though constant, and the woman was exhausted, I assisted delivery by traction during the pains, firmly grasping the face with my left hand. The placenta came away naturally. The child proved to be an anencephalous monster, as I expected; its limbs moved spasmodically, and its heart beat strong and regularly for about twenty minutes after the funis was severed, but it never breathed.

On *post mortem* examination, the body was that of a fully timed female child, without calvarium or brain. The spinal cord terminated in a thickened membrane, which was attached to the interior of a small piece of bone occupying the occipital region. The face was fully developed; the eyeballs, which were very prominent, forming the summit. The internal organs were normal. The lungs contained no air; small portions sank in water.

I had attended the woman between four and five months previously for threatened abortion; the symptoms being accompanied by considerable hæmorrhage, caused by falling and striking her abdomen against a doorstep.

The interesting part of this case is the fact that the fœtus, after sustaining so severe an injury as to arrest the development of the brain, etc., should have reached maturity *in utero* and been born with signs of life. I believe such cases are rare.

T. WELLS HUBBARD, M.R.C.S. Eng., Lenham.

SURGICAL MEMORANDA.

A BLOODLESS METHOD OF PERFORMING TRACHEOTOMY.

DR. BOWLES, in the *JOURNAL* for April 27th, places before the profession with great clearness a difficulty with which the country practitioner has often to deal, which, at certain seasons of the year, he has independently to combat, which, without doubt, causes him intense anxiety, often places his reputation at stake, and, therefore, commands his whole power of self-confidence and strength of presence of mind. I do not wish to enter into the pathologico-anatomical controversy on croup and diphtheria at the present moment, nor to enter into the differential diagnosis between the two. My intention, in this communication, is merely to tend, if possible, to remove the principal feeling of anxiety and danger which naturally associates itself to the mind of the general practitioner when the urgent necessity shows itself; the question of life or death is an immediate one of performing the operation of tracheotomy.

We all know that the statistics in favour of tracheotomy below the age of three are not very favourable, some practitioners in Germany even refusing to perform the operation in croup or diphtheria, while some of the hospitals deny admission to the patients, as it increases

the mortality percentage of their operative treatment to a very great extent. Out of 504 patients on whom the operation of tracheotomy was performed in diphtheria, at Professor von Langenbeck's clinic during the last six years, 357, or 70.8 per cent., died. The sole indication for the operation was the laryngeal stenosis. The causes of death were principally lobular pneumonia, croupous exudation, extending into the bronchi, asphyxia, exhaustion, paralysis of the laryngeal and pharyngeal muscles, and collapse.

The immediate danger and the sole cause of alarm to the inexperienced operator in performing the usual operation of tracheotomy is the bleeding. The operation I am about to describe, which may be considered entirely bloodless, is the one at present almost universally adopted in Germany when operating on children.

This operation of tracheotomy superior was first performed by Rose, Professor von Langenbeck's very able assistant, and is carried out in the following manner. The little patient is slowly chloroformed, the mask being somewhat raised from the face if a paroxysm of coughing should set in. (I have constructed a chloroform-apparatus which may be regarded as an extensively modified Junker's inhaler, by which the amount of chloroform inhaled can be exactly regulated, and the whole apparatus worked with one hand, leaving the assistant the other hand free to feel the pulse, etc., and to assist the operator. This apparatus is in use at some of the Berlin hospitals.) As soon as the patient is chloroformed, a roller is thrust under the neck and the head allowed to fall backwards; this will give the front of the neck an arched appearance, and will throw the important parts into prominence. The operator now seeks the upper margin of the cricoid cartilage with the tips of his fingers, and makes a vertical incision through the skin exactly in the middle line of the neck, beginning about a small finger's width from above the upper margin of the cricoid, and extending about an inch and a half to two inches downwards. The incised parts are drawn asunder, and the cricoid cartilage is thus so far exposed that, after steadying it with a finger, a transverse incision of not quite half an inch in length can be made as near its higher margin as possible. By this incision, the fascia which envelops the thyroid gland and connects it with the trachea is divided through. With a pincette, the operator now seizes hold of the lower border of this transverse incision, and, in the same way as the periosteum is levered off from the bone in a subperiosteal resection, he severs the fascia off from the trachea in a downward direction either with a blunt hook or a director, pushing downwards with the fascia all those veins which cause so many difficulties. As the operator gradually descends with the director, he unloosens the isthmus of the thyroid gland from the trachea, pushing the gland outwards and downwards, and lays the upper tracheal rings quite bare, so that they can now be seized and opened in the usual way.

This operation is particularly applicable to children, especially in those cases where immediate danger is apprehended and the operation is to be performed at once. It is certainly preferable to the operation of tracheotomy inferior, which is performed below the thyroid gland, where the trachea lies much deeper and is covered by an extensive plexus of veins. In the operation just described, which is made above the isthmus of the thyroid gland, the number of cartilage-rings that can be exposed and cut into, will of course be more limited than in the inferior operation, and will depend to a great extent on the size of the gland; but it will also permit, should it be deemed necessary to enlarge the opening, to extend the incision upwards by dividing the cricoid cartilage, which in children none need hesitate to do.

Another great advantage in this operation is the fact that it does away with a staff of assistants. An intelligent nurse alone will be able to do all the assistance that is required. The incised parts can easily be kept asunder with a large strong hair-pin, somewhat stretched to represent a large V, the free ends bent into half-hooks; or two small hair pins can be selected, the free ends bent and inserted under the incised parts on opposite sides, while the head of one pin is fastened to a piece of elastic, which passes round the back of the neck to the head of the other. This operation need but be practised once or twice to insure confidence.

LOUIS HENRY, M.D., L.R.C.P., Amptill Square.

THERAPEUTIC MEMORANDA.

THE KORONIKO PLANT.

SEEING a paragraph in the *Evening Standard* of May 10th referring to the koroniko plant of New Zealand (erroneously spelt "roromiko") as a newly discovered remedy for diarrhoea, I write to say that I can

fully endorse the statement as to its efficacy as an astringent. I have often used it in an up-country district in Hawkes Bay, New Zealand, during the last four years, and have found it even more certain in its effects than the ordinary astringent mixtures. It is an old and well-known remedy amongst the Maories and up-country shepherds, especially for intestinal disturbances arising from drinking stagnant swamp-water in dry seasons. The usual method of using it is by making a strong infusion of the young leaves. The koroniko is a species of broom. I have no doubt that it would make a valuable addition to our *Pharmacopæia*.

JOHN ARTHUR FRANCIS, Southsea.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

DR. GOWERS' CLINIQUE.

Anæmia Estimated by the Hemacytometer.—To ensure greater accuracy in clinical investigations, Dr. Gowers employs the hemacytometer, a modification of Hayem's instrument, for the purpose of ascertaining the number of red and white cells in a given volume of blood. The essential part of the apparatus consists of a glass slip, on which is a cell one-fifth of a millimètre (.0008 inch) deep. The bottom of this cell is divided into one-tenth millimètre squares. Upon the top of the cell rests the glass cover, which is kept in its place by the pressure of two springs. In estimating the number of corpuscles, the patient's finger is pricked; then, by means of a capillary pipette, five cubic millimètres of blood are taken up and well mixed with 995 cubic millimètres of saline solution; a drop of the dilution is then placed in the glass cell, the cover is adjusted, and the slide is placed in the field of a microscope. In a few minutes, all the corpuscles have sunk to the bottom of the cell, and are seen lying on the squares; the number of corpuscles in ten squares is then counted, and this, multiplied by 10,000, gives the number in a cubic millimètre of blood. The degree of dilution and size of the squares are so proportioned that, with normal blood, two squares contain about 100 corpuscles, and the number in two squares thus expresses the percentage proportion of corpuscles to that of health. The proportion of white corpuscles to red, or their absolute number, may be easily determined during the same observation.

An extremely anæmic woman came under treatment as an out-patient on February 20th; the percentage of red corpuscles was found to be 48. She was ordered liquor ferri chloroxydi, and the blood has been examined almost every week since; the percentage of corpuscles has steadily increased, so that within five weeks it has risen to 98; the successive enumerations having given 47, 56, 68, 85, 98 per cent. It is noteworthy that the colour of the blood has not increased in proportion to the increase of the corpuscles, and this appears due to the increase of the number of corpuscles being out of proportion to the increase of the hæmoglobin, which, when the last observation was made, was only one-third of the normal. This is an interesting fact, as showing that iron is capable of increasing the formation of blood-cells, apart from an increase in the hæmoglobin.

A woman, the subject of lymphoma of the neck, presented a florid countenance, but the conjunctiva and lips were rather pale. The blood, as drawn from the finger, when she first came on January 16th, showed 52 per cent. of corpuscles, without any appreciable increase in the number of the white cells. She was treated with phosphorus, in doses of one-thirtieth of a grain, three times a day, gradually increasing the daily dose until she is now taking the one-thirtieth of a grain six times a day. She has several times begged for an increase in the dose, being certain that she was improving, and once spontaneously doubled it; with the effect, however, of causing sickness. There has been a slight diminution in the size of the glands and a very marked increase in the number of red blood-corpuscles, which have risen from 52 per cent. on January 16th to 66 per cent. on February 27th, and 74 per cent. on March 26th. No other drug has been employed, and the patient's conditions of life have remained the same. A precisely similar result has followed the use of phosphorus in another case of the same disease, in which the red globules rose from 52 to 80 per cent. This influence of phosphorus is remarkable when compared with some of its effects, and further observation on the point is needed; but it is in harmony with the observations of Dr. Broadbent, and it is of interest in connection with the benefit observed by Dr. Byrom

Bramwell to result from the use of its congener arsenic in pernicious anæmia.

Secondary Arthritic Changes in Nerve-Lesion.—A woman attending presents now arthritic changes in the fingers, preventing the extension of the joints, with slight wasting of muscles. The case might be mistaken for a primary rheumatic disease, but for the absence of thickening around the joints, and the history, which is of much interest. Several months ago, an incised wound in the palm divided the termination of the ulnar nerve, causing immediate paralysis of all the muscles supplied by it. From the paralysis of the interossei, the fingers assumed the characteristic position: extension at the proximal, flexion at the middle and distal joints. An ascending neuritis followed, with pain and tenderness as high as the brachial plexus, relieved ultimately by free blistering; voltaism having given only slight relief. The injured nerve and paralysed muscles gradually recovered; but, during the paralysis, secondary arthritic changes occurred, probably caused in part by the nerve-lesion, and persisting so as now to lessen greatly the use of the recovered power, and simulate primary joint-affection with slight secondary wasting of muscle.

Epilepsy, with Constant Vertigo, Sensory Aura, and Monocular Diplopia.—This unusual combination is presented by a young man now attending, who has been liable to occasional fits all his life, frequent during the last few years, always occurring in the morning, the convulsions being greater on the left side, which is slightly weak. The fits commence by jerking of the left hand, sparks of "the colour of fire" before the left eye, and inability to hear with the left ear. There is a constant tendency to fall to the left, so that in walking he is obliged to keep the wall on his left hand. Hearing is recovered on the left side to about half its sensibility; the sight of the left eye is of normal acuity; but, on closing the right eye, all objects in the right half of the field of vision appear double, the two images being separate and side by side. Formerly, this diplopia obtained over the whole field, except in central vision. The patient had been seen on one occasion by Mr. Edward Nettleship, who had failed to find any cause for the diplopia or error of refraction. Dr. Gowers thought it possible that both the diplopia and the deafness were the effects on the periphery of the discharging change in the perceptive centre, just as the weakness was probably the consequence of the convulsions.

REVIEWS AND NOTICES.

LECTURES ON SURGICAL ANATOMY. By JOHN CHIENE, M.D., F.R.C.S.E., F.R.S.E., Assistant-Surgeon to the Royal Infirmary, Edinburgh.

The object of this manual is to point out the practical bearings of anatomical details, and, by providing a number of carefully executed engravings, to encourage the student to make for himself drawings of his dissections. Anatomy may be looked at from a morphological, from a surgical, and from an examinational point of view. This latter, often through the influence of examining boards, gains the greatest consideration: the morphology seems only capable of existing in the larger universities; hence the necessity of contenting ourselves with looking at anatomy from the more practical, if less scientific, surgical aspect. This is happily rendered easy by such a manual as we have now before us. Already, in some Continental schools, chairs of surgical anatomy exist; and in this country, the use of works which present to the student anatomical details, so arranged that he is at a glance able to understand their practical bearings, has been long recognised.

The plan of the book is extremely simple, and there is never any difficulty in understanding exactly what is meant, and in being able to find good reasons for all the conclusions arrived at. The object seems often to have been rather to indicate the principal points than to treat the subject in an exhaustive way, thus enabling the student to have the satisfaction of filling in the details from his already acquired knowledge of anatomy and surgery. So much has the surgery introduced increased our interest in the pages, that we almost wish that, after the manner of French authors, Mr. CHIENE had gone more fully into practical details.

Each region is treated separately: the much neglected external anatomy is described, and the structures met with in each region; the changes resulting from dislocations, fractures, etc., are mentioned; and the relations and anastomosis of the vessels fully and accurately gone into.

From the chapter on the elbow-joint, we extract the following. "The sterno-clavicular joint is ligamentously strong, its movements are restricted; the shoulder-joint is muscularly strong, its movements are extensive. Both joints are osseously weak. The elbow-joint is

osseously strong, and ligamentously strong as regards lateral displacements. The strength is such that there is no lateral movement. On the other hand, the strength of the joint in the antero-posterior direction is osseous and muscular; but the bones are so shaped that the movements in this direction are extensive. In these three joints of the upper extremity we have examples of the three sources of joint strength—bone, ligament, muscle. In the lower extremity, it will be found that the hip-joint is strong osseously, ligamentously, and muscularly; the knee-joint ligamentously; and the ankle-joint osseously." In the chapter on Colles's fracture, we find the difference between *penetration* and *impaction* pointed out. "Penetration is the passage of the one fragment into the other; when the distortion cannot be remedied by any justifiable force by the surgeon, then impaction has occurred."

In plate v, fig. 1, the ulnar artery might have been represented behind rather than superficial to the tendons; and in plate vi, fig. 2, reference might have been made to the vein constantly met with at the root of the thumb in excision of the wrist.

The displacements produced by the muscles around the hip-joint and by those of the thigh and leg are mentioned; and, from a consideration of the actions of the latter muscles, "a combination of the long splint to prevent eversion, and the extension apparatus to counteract shortening, along with lateral or anterior and posterior splints, according to the situation of the fracture, is recommended as the most efficacious way of treating the majority of cases of fracture of the femur". For Syme's amputation at the ankle-joint, the following rule is given. "Find the tip of the external malleolus, find the point on the inner ankle directly opposite, the foot being held at right angles to the axis of the leg. Join these points by the shortest road, first across the sole, second across the dorsum of the foot." We miss a figure, showing the vessels and nerves, which the surgeon requires carefully to preserve in the long skin flap.

In the next division, the anatomy of inguinal and femoral hernia is described, also the structures met with in the several operations for lithotomy; in ligation of the iliac arteries; and in performing colotomy. And in the last division, the regions of the cranium, face, neck, and thorax, are each described separately. The cervical fascia and the structures met with in performing the operations of tracheotomy and laryngotomy are so carefully described, that the student will rather have a difficulty in forgetting than in remembering their relations.

Amongst the numerous figures are a series of beautifully clear transverse and longitudinal sections, through the upper and lower limbs, which enable the surgeon at a glance to see the exact relations of the structures he is likely to meet with in performing operations on the living subject.

The work is well worthy its author; and the student will, after its perusal, on account of its simplicity and freshness, have his interest in anatomy increased, and be better able to bridge over the widening channel between anatomy and surgery, and to understand the intimate relations which must ever exist between them. So difficult is it to draw the line between surgical anatomy and operative surgery, that we might suggest to the consideration of Mr. Chiene the advisability of so extending this manual that it will include both.

NOTES ON BOOKS.

Sayre on Spinal Disease and Spinal Curvature: their Treatment by Suspension and the Use of Plaster of Paris Bandage. London: Smith, Elder, and Co. 1877. In this book is described the method of treatment of spinal curvatures by the plaster jacket suspension, of which much has with great reason been heard. It is unnecessary to criticise in detail a book the substance of which is known to very many, and of which the whole contents should be read by every practitioner who is at any time called upon to treat a case of lateral curvature or of Pott's disease. The method of treatment is fully described and illustrated by excellent photographs; so that henceforth every practitioner can treat such cases for himself with little expense or trouble to the patient, and very rare recourse indeed to the instrument-maker. This little book makes a revolution in surgery, and renders simple, easy, painless, and promising a class of cases which have heretofore been the plentiful cause of life-long pain, deformity, decrepitude, and misery; and when curable, have been so commonly by tedious, complicated, and wearisome methods. A good deal of discussion has arisen as to the first beginnings and earliest hints of the method of treatment of spinal curvature by suspension and the plaster jacket which Dr. Sayre has devised and brought to so much perfection, and which we ventured at once to pronounce a great and permanent advance in the healing art. Dr. C. T. Hunter of Philadelphia finds, in Glisson's *Treatise on Rickets* (edition of 1668, page 363), the following

description of the suspension method. "The artificial suspension of the Body is performed by the help of an Instrument cunningly made with Swathing-Bands, first crossing the Breast and coming under the armpits, then about the Head and under the Chin, and then receiving the Hands by two handles, so that it is a pleasure to see the Child hanging pendulous in the Air, and moved to and fro by the spectators. This kind of Exercise is thought to be many waies (ways) conducive in this Affect, for it helpeth to restore the Crooked Bones, to erect the bended Joynts, and to lengthen the short Stature of the Body. Moreover, it exciteth the vital Heat, and withall alureth a plentiful distribution of the Nourishment to the external and first affected parts; and in the meantime it is rather a pleasure than a trouble to the Child. Some, that the parts may the more be stretched, hang Leaden Shooes upon the Feet, and fasten weights to the Body, that the parts may the more easily be extended to an equal length. But this exercise is only proper for those that are strong." Dr. Sayre's method of treatment is daily becoming more generally applied in this country, since his brilliant demonstrations at the Manchester meeting of the British Medical Association and the publication of his book. Besides the admirable results achieved by Dr. Macnaughton Jones of Cork, described in the pamphlet which he has published, and the extensive and successful applications by Mr. Howard Marsh, Mr. C. Heath, and Mr. Berkeley Hill in London, Dr. Macleod in Glasgow has recently publicly demonstrated its successful application there; and Mr. Golding Bird, at Guy's Hospital, has employed it in a large number of cases, of which we shall shortly publish his notes. The results achieved appear, with ordinary care, not only to be uniformly good, but such as heretofore would have been impossible. The simplicity of the treatment, the facility which it affords for locomotion and open-air treatment, its cheapness, its ready adaptation to the needs of the poor and to the everyday practice of the general practitioner, the ease and freedom from pain which it confers, and the ultimate cure which it rarely fails to secure, place it among the most valuable resources of practice, and stamp it as an inestimable boon to humanity. The practical genius, the generous energy, the apostolic fervour which Dr. Sayre devoted to its perfection and to the mission of popularising its use on both continents deserve to be remembered among the most admirable achievements of modern surgery. The book itself is interesting as a novel; it bears the stamp of a peculiar individuality; it is written with a strong enthusiasm; and has exaggerations of style and manner which may readily be excused by all, while, by many to whom the author became known, they will be welcome as recalling the peculiar idioms and combined genius, humour, pathos, and ruggedness which made Dr. Sayre a striking and memorable figure in all the surgical assemblies in which he was seen during his visit to this country.

Chorea and Whooping-Cough, by OCTAVIUS STURGES, M.D., F.R.C.P., London, Smith, Elder, and Co., is an original study by Dr. Sturges of two diseases of which the pathology is still quite unsettled. Dr. Sturges, who has had good clinical fields of observation at the Westminster and the Children's Hospitals, treats whooping-cough as a result of "conveyed nervous impression". It is, however, extremely difficult to reconcile what is known (and accepted by the author) of the contagious character of whooping-cough with the view that it is, like chorea, an essentially functional nervous disorder. As to chorea, Dr. Sturges holds also a theory that it is essentially "functional"; but here again he is confronted, on the one hand, with the relationship of chorea to precedent rheumatism, and, on the other, with the progress of cerebral localisation as a physiological doctrine, which in its proved pathological relation would destroy the view which he advances. On the whole, we cannot admit that Dr. Sturges has made out even a good *prima facie* basis for his views. Nevertheless, like all intelligent studies from nature, these lectures afford interesting and useful reading, and especially so in so far as they accentuate the neurotic side of attacks of whooping-cough.

The Journal of Anatomy and Physiology, conducted by Professors Humphry, Turner, and McKendrick, flourishes none the less vigorously for the fissiparous division which has given life to Dr. Michael Foster's *Journal of Physiology*. The April number, Part III, 1878, is full of good material; among which, particularly interesting to medical readers, are Dr. Creighton's paper on a Pathological Function of Periosteum, illustrating in a striking and original manner its bone-forming function as related to new and malignant growths; Do Bacteria or their Germs exist in the Organs of Healthy Living Animals? by Mr. Chiene of Edinburgh and Mr. Ewart of University College—an experimental investigation leading to a negative reply; and the continuation of Dr. J. W. Dadd's very thorough analysis of the evidences of Localisation of the Functions of the Brain.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 25TH, 1878.

MEDICAL TITLES.

A CORRESPONDENT at Manchester, an M.B. of Edinburgh, writes to us:—

"I take this opportunity of venturing to opine that a great deal of space is allotted to childish whimperings for 'M.D.' from men who had at the proper time not either the steadiness or their fathers the money to enable them to graduate. Although we are distinctly opposed in this matter, I trust you will accept my expression of opinion in a spirit of kindness."

We take the observations of our correspondent in very good part. The grievance of English medical men is, however, not so much, in our opinion, that it is difficult for them, or often impossible, to obtain the title of M.D. after they have entered the profession, as that it is not possible for them to obtain it under ordinary conditions of graduation except by undergoing, like our correspondent, a part of their education in Scotland or Ireland. The provision for conferring university diplomas in medicine on English students of medicine is exceedingly defective, and they are placed at a great disadvantage as compared with the students of Scotland and Ireland. The regulations and examinations of the Universities of Edinburgh, Glasgow, and Aberdeen, and the Queen's Universities, are such as place the degree of Doctor of Medicine within the reach of the great majority of Scotch and Irish students, without any unusual sacrifices of time or money, and without going beyond the ordinary standard of fair preliminary education and good medical instruction, such as are attained by the majority of students, who, being educated in London, Manchester, Liverpool, Birmingham, etc., enter upon practice with the diplomas of the London colleges. The degree of Doctor is no doubt valuable in the public mind, and is, we are told by a stream of correspondents, often important socially and in practice as being supposed to imply a higher degree of preliminary education and medical knowledge. In other words, if two gentlemen settle in a country village or in a town district, one of whom claims an university title to the prefix Doctor, while the other, if he style himself a doctor at all, only does so by reason of that courtesy title which many conceive to attach to the diploma of a physician licensed by a chartered college of physicians, the former has a decided advantage in the first instance and so far as diplomas can give it; of course, personal qualifications in the end settle the question of success more than the possession of parchments, but that is beside the question at issue.

Now, it will hardly be contended that the annual hundreds of practitioners turned out by the metropolitan and provincial medical schools of England, armed with triple diplomas, are less completely educated and equipped for practice than the average diplomates of Dublin, Glasgow, Aberdeen, etc. The difference of the title they bear represents, in fact, little more than the local accident of their birth and place of education, and the form of charter given to the licensing bodies of those places.

Here we see once more the pernicious effects upon the profession in England of the contempt with which the older English universities have treated the study of medicine. The University of London gives only "fancy degrees". Its examinations are so framed as to exclude the multitude of students from attempting to take them. Oxford deliberately suppresses medicine except as the luxury of the few,

with which she is only collaterally concerned. Cambridge is striving with some success to popularise and extend her school, but still can only expect or desire the *élite* of the students, and a moderate number of them. The vast majority of students of medicine in England have been, and are, excluded by present arrangements from university diplomas. Nevertheless, they are as well able to pass university examinations of the good average type accepted in Scotland and Ireland as their more fortunate colleagues in those sister parts of the kingdom. We are distinctly of opinion that there is here a substantial grievance, and one which in any complete system of medical reform ought not to be overlooked. As to the irregular use of courtesy titles, that appears to us to be the natural result, however much open to objection, of the substantial injustice and inequality of the existing state of things. We do not, for instance, clearly see why a member of the London or Edinburgh College of Physicians is not as naturally entitled to the courtesy style of doctor as our correspondent, who is a bachelor of medicine. All social anomalies have a tendency to right themselves in more or less irregular ways. If there were any substantial difference in the medical education and qualifications of an M.R.C.P. of London and an M.B., say of Durham or Edinburgh, which implied a distinct professional difference, we should not find a very large number of reputable gentlemen adhering to the courtesy title of doctor in virtue of their physicianship. But, although technically there is a difference, substantially there usually is not; or, where there is, the balance of educational superiority and accomplishment is as likely to incline on the side of the London physician as of the Scotch or Irish graduate. It is the substance rather than "the show of things" which ultimately decides the settlement of such questions. The legislative bestowal of charters and nomenclature of degrees has been a thing of slow irregular growth in our country, assuming various shapes in different parts of the kingdom, and according to the fashion of the period at which these legal powers have been bestowed. No one can doubt that, if a homogeneous system of examining for diplomas and degrees were to be now established, the same medical grade would be bestowed upon the metropolitan or provincial English students who pass the preliminary examinations and final professional examinations of two or more of the medical corporations as on the graduates of many of the degree giving universities of the United Kingdom. The question of inequality of title has, of course, only become prominent since the Medical Act has conferred equal rights of practice in all parts of the kingdom on all diplomas and degrees conferred in every part of it.

We are far from agreeing, therefore, that the complaints of Englishmen entering upon the practice of medicine, or desiring to improve their legal status in it, as to the difficulty of obtaining the title of "Doctor", to be "childish whimperings". The fault lies neither in their "want of steadiness", nor in niggardliness of their fathers, but in a definite legislative inequality, to which we have more than once referred, and which does not exist in any other country in the world. In our opinion, this is an important point of medical reform, of which the interest will become more generally recognised, and which will, sooner or later, come to the front as calling very urgently for a just solution, such as will satisfy fair requirements without injuring individual interests.

MEDICAL REFORM: DIRECT REPRESENTATION OF
THE PROFESSION IN THE GENERAL MEDICAL
COUNCIL.

SOME of the grounds on which the Association bases its claim for the direct representation of the profession may be briefly recapitulated.

That the Association, by its influence in obtaining the Medical Act, 1858, first called the General Medical Council into existence.

That direct representation of the profession in the Council was distinctly promised to the Association when the *Register* of the profession—one of the objects of the Medical Act—should be completed.

That the present composition of the Council is objectionable, on the grounds of its comprising an overwhelming proportion of corporation representatives.

That Corporation interests have consequently occupied too much of the time of the Council, to the undue exclusion of general and professional interests.

That medical reform has been obstructed by the conflicting interests of the universities and of the corporations, as was the case before the Medical Act of 1858.

That owing to the preponderance of corporation representatives in the General Medical Council, the Council has completely failed to agree respecting either of the two great principles of medical reform.

That the interests of the corporations and of the lecturers connected with them have been the great barrier to the establishment of conjoint boards of examination.

That the sittings of the General Medical Council involve an expense of about £400 for one day, and of about £160 day by day during prolonged sessions.

That, though the greater part of the sittings of the Council has been devoted to the interests of the corporations, the universities and corporations do not contribute to the payment of their representatives upon it.

That the profession, as distinct from the Crown, the universities, and the corporations, found the whole of the fund, amounting to many thousand pounds, on which the Council commenced its sittings, and still maintains it by registration fees.

That direct representatives will have no private or corporate interests to watch over, but will naturally devote themselves to advocating the needs of the profession and of the public.

That direct representatives will improve the Council by balancing the present undue weight of the corporations, will increase the interest and confidence of the profession in its proceedings, and will obviate any antagonism which may unfortunately exist or arise between the General Medical Council and the profession.

That the demand for direct representation is in accordance with the almost unanimous voice of the British Medical Association and of the profession, as tested by the decision of the Association at each annual meeting from 1868 to the present time.

That a canvass of the profession has been recently made by the Medical Reform Committee of the Association: 1. As to direct representation of the profession in the General Medical Council; and 2. The compulsory formation of conjoint examining boards in each division of the kingdom on the principle of equal fees and uniform examination.

That the returns received up to the 18th instant are as follows:

	Aye.	No.
Direct Representation	5075	121
Conjoint Scheme	4910	264

Returns are still coming in, and the replies observe the same proportion. Petitions also have been presented to the House of Lords; and in some places the signatures to the petitions in support of both principles have doubled the replies to the circulars of the Reform Committee received from them.

As was stated in the last number of the JOURNAL, the Council of the Lancashire and Cheshire Branch of the Association, the largest in the kingdom and comprising the flourishing medical schools of Manchester and Liverpool, where a complete education in medicine, surgery, and midwifery is given to a large number of students, unanimously resolved to oppose any Bill which did not grant direct representation and provide for the compulsory formation of conjoint examining boards.

In 1868, the late Dr. Parkes suggested that, if the profession persisted for another year in the demand for direct representation, the claim might then be conceded. Ten years have since elapsed, and the

claim has been made year after year, but the Council have not even discussed it. The present Bill of the Government, when submitted to the General Medical Council, did not provide for the compulsory formation of conjoint examining boards; but that point was fully discussed and voted upon, though it was much to be desired that the vote had been of a more decided character than was indicated by a division of fourteen against ten. The question of direct representation merited equal consideration.

Medical reform is not only submitted to the General Medical Council. In 1857, the Government applied to the Association, to ascertain its views on the subject; and that the Association must now and ever play an important part in connection with medical reform, is a fact which the past history of the Association makes inevitable. The object of the Association has ever been to secure a measure of reform beneficial to the public and just to the profession. It has acted with the greatest forbearance in endeavouring to conciliate support both from the General Medical Council and from the Government. The reproach cannot honestly attach to the Association of any failure that may occur. It has striven earnestly. It has worked openly and fairly, publishing year by year a full and distinct account of its proceedings. Conciliation and co-operation have been its guide-marks in relation to the Government and the General Medical Council. It is fortunate in having secured the support and alliance of the Irish Medical Association, which, as the exponent of professional feeling in Ireland, indorses the views of the Association. To imagine that the Association can abdicate the position it attained before and at the time of the passing of the Medical Act of 1858, and that it alone is to be excluded from all influence in the present conjuncture, will probably prove to be a fatal delusion.

TUBERCLE.

THE question of Tubercle seems entering upon a new and somewhat unexpected phase; indeed, it seems to require the mental agility of a pathological acrobat to understand the series of transformation scenes to which we have been treated. As our readers are aware, since Schüppel's discovery of "giant-cell systems" in scrofulous glands, there has developed a remarkable view that "giant-cell systems" are characteristic of tubercle; this has been maintained by Hering, Buhl, and others on the Continent, and adopted by Green, Hamilton, and many pathologists here. Virchow's followers have shown that giant-cell systems are distinctive of, not tubercle, but cells undergoing caseous degeneration under any and all circumstances; but this has not been regarded. Now, certain eminent French authorities, headed by Professor Charcot, affect to maintain Laennec's views, "slightly modified". They argue thus: Tubercle is characterised by the presence of giant-cells; all caseous deposits in the lungs and glands, at certain stages, may be found to contain tubercle; therefore, all such products are tubercular; and M. Charcot thinks that the "independent existence of caseous pneumonia requires to be supported by new facts". Thaan considers all strumous inflammations tubercular, or rather that all tubercle is the expression of the strumous diathesis; and that, as giant-cell systems are found in strumous glands, tubercle is only a specific product of strumous inflammation. The question of tubercle seems to us to hinge upon this: Is it a specific growth allied to the sarcomata, or is it an inflammatory product? If it be a specific growth, it is certainly determinable in a manner unlike any other member of the class, as the experiments of a few years back showed; and recently Friedländer (Virchow's *Archiv*, November 1876) produced giant-cells, and all by cutting the recurrent laryngeal nerves in dogs. If it be inflammatory, there is an end to all dispute. If the word tubercle could be allowed to mean no more than "papule" or "pustule", that is, a form of inflammation attacking certain structures and giving rise to certain appearances, but depending upon sometimes local and sometimes general causes, a great step would have been made towards the simpli-

fication of this much-vexed and difficult problem. At present, we feel sure that many teachers must be sorely perplexed in their endeavours to be at the same time honest to themselves, and yet to teach such views as are likely to satisfy examiners.

THE total number of ovariectomies performed at the Samaritan Hospital, during the two years 1876-77, was 132; of these, there were 115 recoveries and 17 deaths, giving a mortality of only 12.39 per cent.

THE late Sir Francis Goldsmid has bequeathed £40,000 to University College, and £10,000 to the Hospital. Sir Francis was for many years, up to the time of his death, treasurer of University College; and was a liberal supporter of the Hospital.

M. CONSTANTIN PAUL considers that the anæmic murmur, heard at the base of the heart, arises in the pulmonary artery. He names it the anemo-spasmodic murmur. Unless the heart be depressed, the murmur is heard in the second intercostal space. It is not constant, because the existence of the element of vascular spasm is necessary for its production.

ON Monday last, the prizes in the Medical Department of University College were publicly distributed by Mr. John Simon, C.B.; and on Wednesday, the successful candidates in the Medical Department of King's College received their prizes from the hands of the Earl of Camarvon.

M. GOUGENHEIM adds, in an observation recently communicated to the Société Médical des Hôpitaux de Paris, a new observation of cerebral localisation: a case of monoplegia of the left leg, following a fall upon the head; there was no loss of sensation. The diagnosis was cortical lesion, localised in the upper extremity of the ascending frontal convolution. The *post mortem* examination showed a lesion of the ascending frontal convolution, limited to the external surface of paracentral lobe. This corresponds to Ferrier's determination of the psycho-motor centre of the muscles of the lower extremity.

AT the *levee* held by the Prince of Wales on behalf of Her Majesty on the 17th instant, Dr. Eason Wilkinson, President of the British Medical Association, was presented by Dr. Risdon Bennett, President of the Royal College of Physicians. The presentation list also included the names of the following members of the medical profession: Dr. Matthews Duncan; Surgeon W. Donovan, Army Medical Department; Surgeon H. F. Hensman, 2nd Life-Guards; Surgeon V. Kelly, Westmeath Militia; Mr. W. H. Michael (on being made a Q.C.); Surgeon-Major A. S. K. Prescott; Surgeon J. T. Powell, M.D., 49th Middlesex Rifle Volunteers; Honorary Deputy Surgeon-General C. W. Poulton, M.D.; Surgeon J. J. Routh; Dr. Russell Reynolds, on appointment as Physician to the Household; Deputy Surgeon-General J. Small; and Deputy Surgeon-General W. Williamson.

MR. SPENCER WELLS'S LECTURES.

THE following is a programme of the six lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours, to be delivered in the Royal College of Surgeons on Mondays, Wednesdays, and Fridays, at 4 P.M., commencing on Monday, June 10th, by Mr. Spencer Wells. (It is probable that some variation may be found necessary in the precise subject or order of each lecture.) *Lecture I*: Mode of examining Patients with Abdominal Tumours; External, Internal, and Combined Examination; Form of Note-book for recording Cases; Collections of Fluid in the Abdominal Cavity and in Cysts; Ovarian, Renal, and Hydatid Cysts; Illustrated Specimens from Museum; Chemical and Microscopical Examination of Fluids removed by Tapping.—*Lecture II*: Semisolid Abdominal Tumours; Different Kinds of Ovarian Tumours—their Diagnosis—Complications with Pregnancy; Extra-uterine Pregnancy—Specimens illustrating various other Conditions resembling Ovarian Tumours; Fibroid and Fibro-cystic Uterine Tu-

mours; Tumours of Abdominal Wall; Tumours of Omentum and Mesentery, of Liver, Spleen, Kidney, and Mesenteric Glands; Cancer and Tubercle; Aneurism; Hæmatocele and Pelvic Abscess; Fæcal Accumulation: Phantom Tumours.—*Lecture III*: Surgical Treatment of Ovarian Cysts and Tumours; Tapping, by Abdominal Wall, Vagina, or Rectum; Tapping, with Drainage; Injection of Iodine, or Antiseptics; Incision and Drainage; Ovariectomy—Selection of Cases—Preparation of Patient—Instruments—Anæsthetics; Duties of Assistants and Nurse.—*Lecture IV*: Details of Different Steps in the Operation of Ovariectomy—Position of Patient—Incision—Adhesions—Opening and Emptying of Cyst—its Removal—Treatment of Pedicle—Closure of Wound—Dressing and After-Treatment.—*Lecture V*: Results of the Operation—History of Recovered Patients—Proportion of Incomplete Operations, and the Results—Cases of Recurrence and Second Operation—Successive Changes in the Mode of Operating and After-Treatment.—*Lecture VI*: Antiseptics in Abdominal Surgery; Surgical Treatment of Uterine Tumours. These lectures will appear in the BRITISH MEDICAL JOURNAL.

THE ROYAL HOSPITALS OF THE CITY.

WE desire again to draw special attention to the petition to the Court of Aldermen, which was published in the JOURNAL for May 4th, among the minutes of the Hospital Out-patient Reform Committee, because the Home Secretary has agreed to issue a Royal Commission to inquire into the administration of the Charities of the City; and there seems reason to suppose that, if the Committee were to address itself to him, Mr. Cross would be quite willing to receive a deputation from them, and listen courteously to what they had to say as to including the administration of the city hospitals in the inquiry. We understand that the treasurer of St. Bartholomew's (Sir Sydney Waterlow) is not at all opposed to the most searching investigation being made, and our Committee can hardly allow the matter to remain as it is.

CHARGE OF FEVER-PATIENTS.

A QUESTION of importance was tried last week by the justices, at Abingdon, upon a summons taken out by the Great Western Railway Company against the Rev. Charles Martin, the Warden of St. Peter's College, Radley, and Mr. T. Baker, the medical attendant of the college, for having sent one of the pupils home to his parents by train while he was suffering from scarlatina in a highly infectious stage. It appeared that, previously to the breaking-up of the school for the Easter holidays, the Warden sent a circular-note to parents and guardians to warn them that scarlet fever had appeared in the school, but no notice of the fact was given to the railway company. Before they left, the Warden told the boys that if any of them felt ill they were to be examined by the doctor; but no one presented himself, and neither Dunning, the boy in question, nor any other boy, was medically examined before leaving. Nearly all the boys in the school travelled from Radley by the ordinary trains of the Great Western Railway, being provided with money for the journey by the college authorities. On arriving in London, Dunning was examined by a physician, and found to be suffering from scarlatina in a very infectious stage of the complaint. Mr. Martin, speaking on his own behalf, submitted that he was not "in charge" of the boy, nor did he "aid or assist" him to travel within the meaning of the Act or of the by-law. He disclaimed all responsibility for the boys after the final roll-call. With regard to the substantial part of the complaint against him, he not only could admit no want of caution, but insisted that he had done everything that could reasonably be expected of a head-master so circumstanced. At the same time, he regretted that he had not notified to the company that there was fever in the school. Mr. Baker, in his defence, quoted from medical authorities to show that there was no such symptoms in Dunning's case when he saw him as ought to have led him to diagnose scarlet fever, and that he was justified in attributing the symptoms to other causes. The bench dismissed both summonses. The *Pall Mall Gazette* judiciously observes, however, in reference to this decision, that

it does not appear from the report whether the technical or the substantial plea was the one admitted by the bench in the Warden's case. They may possibly, and perhaps rightly, have held that he did "everything that could be reasonably expected" of a head-master; but, if the technical plea were accepted as valid, the result is rather startling; for it would follow that, whether a head-master does all that can be reasonably expected of him or not in such a case, he is free from legal responsibility, or, in other words, that he might pack off home by train any boy known or suspected by him to be infected with a contagious disease, and that, from the moment of the boy's departure, neither his master nor any one else would be "in charge" of him or would be deemed, although they pay his fare for him, to have "aided or assisted him to travel".

OPIMUM-DUCKS.

IN Mr. Baber's recently published official report on the route of Mr. Grosvenor's mission through the great opium-growing districts of China, between S-ti-chan and Yuman, it is said the whole district is given over, for hundreds of miles, to the cultivation of opium and ducks, called locally "opium-ducks", which frequently supplied Mr. Baber and his party with a meal, and do, he says, really appear to stupefy themselves by feeding on the narcotic vegetable. They allowed the travellers to walk openly up to within twenty yards of them, and even then they rose very languidly. The natives assert that the flesh of these birds is so impregnated with laudanum, as to exercise a soporific influence on the consumer. But a little more careful verification is necessary before a story of this kind is accepted in all its details.

ADULTERATED DRUGS.

FROM a large series of returns by public analysts, collected in the *Analyst* by Mr. Wigner, it appears that, out of the 403 samples purchased, 96 were adulterated: and yet, he says: Notwithstanding this state of things, I do not at present call to mind a single case in which the Pharmaceutical Society has, during the past year, instituted a prosecution for the sale of adulterated drugs. Can it be that the Pharmaceutical Society is fast degenerating into a trade protection society, although privileged and instituted to protect the public against the tricks and shortcomings of the trade?

MORTALITY OF IMBECILE CHILDREN.

THE Managers of the Metropolitan Asylum District have recently published in their minutes the report of Dr. Beach, the medical superintendent, upon the temporary asylum for imbecile children at Clapton, for the year 1877. This report contains some statistics of mortality which are not without interest. The asylum contained 331 patients on December 31st, 1876, and 350 on the last day of 1877; 57 patients were admitted, 23 were discharged, and 15 died, during the year. The average daily number resident was 343. Dr. Beach reports that "the death-rate, 3.8 per cent., is the lowest since the opening of the asylum". Excepting an outbreak of measles in November, which was confined to seven cases in that portion of the detached infirmary used for the reception of patients direct from the parishes, the institution seems to have been free from epidemic diseases. It is especially noted that no fresh case of ophthalmia occurred, "proving that the separate basin and towel system, when efficiently carried out, is an admirable protection against this disease". With regard to the rate of mortality, quoted by Dr. Beach as 3.8 per cent., it is evidently calculated upon the total number under treatment. This, however, is not so correct a basis for calculating the annual rate of mortality as the average daily number resident. The deaths recorded were equal to 4.39 per 1,000 of the average number resident; the rate among the male inmates being equal to 49.5, and among the females to 35.7 per 1,000, respectively. It is satisfactory to hear that the death-rate is lower than in any previous year since the asylum was opened. In order, however, to decide satisfactorily whether this is really a low or a high rate of mortality for imbecile children, some other standard for comparison is desirable. It becomes all the more desirable when we bear in mind

that, according to the English Life-Table, the annual rate of mortality among young persons aged between five and twenty years does not exceed 7.1 per 1,000, and that the rate of mortality at Clapton is just five times this *normal* rate among persons at similar ages. It may be noted that, in the two Metropolitan Asylums at Leavesden and Caterham, the rate of mortality in 1877 was equal to 89.1 per 1,000, against a *normal* rate of 27.7. The actual rate in these two asylums was, therefore, very little more than three times the *normal* rate. It becomes interesting to know whether imbecility is more fatal among children than among adults. Dr. Beach in his report does not give any table of the ages of the patients, although he gives the ages of the decedents. The omission is to be regretted, as it is impossible to calculate the true normal rate of mortality in a population without accurate knowledge of its age-constitution. With a view to comparison with the recorded death-rate in the Clapton Asylum, we will briefly refer to the mortality statistics of the Earlswood Asylum during the three years ending March 1878. Unfortunately, the statistics for this asylum refer to the years ending March, instead of the natural years ending December. The average annual number of inmates at Earlswood during the three years ending March last was 600; and the deaths in the three years were 85, or equal to an annual rate of 47.2 per 1,000. Dr. Graham, the Medical Superintendent at Earlswood, in his annual reports gives a table showing the ages of the Earlswood inmates, from which we have been able to deduce that, during the three years under notice, the number of idiot children aged between five and twenty years averaged 337, and that the deaths in the three years at these ages were 60, showing an annual death-rate equal to 59.3 per 1,000. Among the inmates aged over twenty years, the average annual death-rate did not exceed 31.6 per 1,000. These figures appear to support the supposition that idiocy has a greater influence upon the mortality of children than upon that of adults. The Earlswood Asylum mortality statistics for children during the three years ending March last show a higher death-rate than those for the Clapton Asylum during 1877. Dr. Beach, however, admits that his mortality statistics for that year were more favourable than those for previous years.

SUBCUTANEOUS EXTRA-ARTICULAR OSTEOTOMY FOR GENU VALGUM.

THE operation to which this name has been given was performed for the first time on Friday last, May 17th, at the East London Hospital for Children, by Mr. Reeves, in the presence of several foreign surgeons. Its object, which was thoroughly obtained, is to improve on the method of operating on cases of knock-knee devised and executed by Dr. A. Ogston of Aberdeen; and our object in calling attention to it at this early stage is to induce surgeons to give it that trial and preference which a less severe and equally efficient operation must claim. We give the substance of Mr. Reeves's observations before the operation. In Dr. Ogston's operation, the knee-joint is entered by the tenotome or scalpel, a fine saw is introduced along the knife-track, and the internal condyle is sawn off. This proceeding has now been done about thirty times *antisepsically*; and the results have been, on the whole, very encouraging; yet we have heard of a few cases in which synovitis, followed by severe constitutional disturbance and ending in ankylosis, has occurred. It was to avoid, if possible, these unnecessary complications, that Mr. Reeves thought of the extra-articular method. A scalpel, previously dipped in carbolic oil, was introduced obliquely just above the inner tuberosity, and the soft parts and periosteum were divided; by the side of the knife, a chisel, also dipped in carbolic oil, was introduced, and the internal condyle separated *as far as the cartilage only*; and, the chisel being then used as a lever, the condyle was prised inwards till it was felt to move moderately freely. The limb was then forcibly straightened by Mr. Cæsar and Mr. Parker; a pad of lint dipped in carbolic oil was put over the small aperture; and a long splint, interrupted at the knee, and with a cross-piece at the foot to keep it steady, was adjusted to the straightened

lim As the condyle differs in shape and depth, it is of course necessary to be accurate in chiselling; and, to guide him, Mr. Reeves previously marked out with ink on the skin not only the contour of the condyle but also the direction of the chisel-cut. The greatest depth of the condyle was marked on the chisel, allowance being made for the thickness of the cartilage and of the soft parts; the chisel was then driven home till the mark on it nearly reached the skin. The condyle having been first penetrated in its greatest depth, the chisel was partially withdrawn; its direction was altered, first forwards, then backwards; and, with a few oblique touches, due allowance being made for the varying depths, the condyle was felt to be sufficiently loose, when the instrument was withdrawn and the knee straightened. The joint was not entered; no synovia escaped; and the feeling of resistance to the chisel was not at any time overcome. Had this been the case, the joint must have been opened. It might, *a priori*, be thought that the uncut cartilage, with perhaps some slight uncut bony bridges, would either interfere with the reduction of the deformity or would only yield after being broken. The result so far, in this case, does not confirm the objections, if they be serious objections. Experiment and experience must determine the matter in the case of adults; but in children, in whom the condyles are not completely ossified, and what bone there is in the young cancellous tissue is soft and pliable, these objections do not hold. But, even if the cartilage were to fracture, or even if the joint were entered—say purposely—with the chisel, the proceeding would not be so severe as if done with a saw. Another modification in this operation is noteworthy. It has been said that the internal condyle was separated. It is more correct to say that the greater part of it was almost separated; that is to say, that the chisel-cut did not extend to the intercondylar groove, but only to its inner side. The aim of this is to preserve some part of the inner condyle, which may grow, and thus obviate any possible future *genu extorsum* which may be the consequence of the increased growth of the external condyle. All these operations, which may be termed rapid as contradistinguished from the older methods of splinting and tenotomy, when necessary, are too young to admit of any dogmatic statements about them; but in the meantime we should adopt that method which is effectual and least risky. Delore's, Ogston's, Max Schede's, Annandale's and Macewen's, and the one just described, have all the same object with regard to this deformity; but the methods of executing it differ. One, by *brisement forcé*, separates the upper tibial epiphysis; another removes a wedge from the upper part of the tibia; another attacks the femur; and yet another removes a wedge from the internal condyle. Ogston's method and this agree in principle, but differ in execution and severity. The advantages of the extra-articular method seem to be, greater rapidity of execution, rendering it more strictly subcutaneous; much less damage to the bone, cartilage, and soft parts; no interference with the knee-joint; and, as the condyle is not completely separated, there is less likelihood of subsequent non-union and necrosis. Again, the resulting joint-surface will be more regular; and, by leaving a part of the condyle, the probability of a *genu extorsum* is much diminished. Then there should be no difficulty with the case. As soon as the condyle has become firmly attached in its new position, the stiffness will only be due to having kept the knee fixed for some weeks—say five—and not to ankylosis, which has to be overcome by frequent passive motions under anæsthetics. In the present case, it was endeavoured to make the section on the distal side of the line of junction of the epiphyseal cartilage. This is considered important with reference to the future growth of the inner side of the femur. The operation was not antiseptic in the Listerian sense; it was carried out in the same way as nineteen other osteotomies (five femora, ten tibiae, and four fibulae) by the same operator; and, as in these cases everything progressed as could be wished, no additional precaution was deemed necessary. Even this operation of minimum severity Mr. Reeves would at present confine to those cases of overgrowth of the internal condyle in which the older methods are not applicable or have failed; but, as soon as experience shall have taught that there is nothing to counterbalance its

many advantages, he would not hesitate to recommend and adopt it as the first means in the more severe cases of this deformity. Expensive and somewhat cumbersome apparatus become necessary after tenotomy, etc.; and they will not be needed in the case of surgically displaced condyle, the cause of the deformity—*i.e.*, the overgrown condyle—being put in proper position. It should, in conclusion, be stated that there has been no rise in pulse or temperature, and only such local pain as might naturally be expected.

THE CENSUS OF ADULTERATION.

SOME attempt has been made, on behalf of the Society of Public Analysts, to estimate, from voluntary returns, the work done during the past year in the way of detecting adulteration of food in Great Britain by the public analysts. The returns, although extensive, are incomplete. In reviewing them, Mr. Wigner observes that the first thing which strikes the eye is the vastly different proportions between the number of samples analysed in different districts. Thus, for instance, we find Somersetshire with 814 samples, Surrey with 455, Stafford with 667, and Cornwall with 28, while Norfolk figures with a grand total of 7 samples. In Mile End Old Town, where, according to the previous returns, 1 in 72 samples was adulterated, the authorities appear to consider that enough has been done; and therefore, during the past year, no samples at all were purchased. Hampstead previously showed 1 in every 59 to be adulterated, it now shows 7 in 62, which approaches a little more to the average proportion. At Hackney, where we had before 9 in 214, we now find (omitting 10 waters, all of which were condemned) 20 in 110; in the latter case, it is clear there has been some improvement in the mode of purchasing samples—perhaps instead of inspectors in uniform procuring them, unknown persons have been employed. Scotland, again, appears in a very unfavourable position, the number of samples analysed being only about 350; while Ireland, on the other hand, shows a very large total, mainly as the result of Dr. Cameron's 2,748 samples. Looking at the returns as a whole, they bear out the statements which have been often made, that the Act needs to be made compulsory, and that the samples should be purchased by unknown persons, and not by well-known officials. Viewing the matter in a broad light, it seems an almost incredible thing that, in a country like England, one-fifth of the samples purchased by officials are found to be adulterated within the meaning of the Act. Surely, if one-fifth are found adulterated when purchased in this way, the percentage of adulterated articles obtained by private purchasers must be very much larger.

EFFECTS OF MILITARY DRILL UPON THE HEART.

THE large amount of heart-disease in the British Army has attracted much attention from time to time, especially since Mr. Myers' prize essay was published. It was shown there, that after deducting the effects of alcohol, syphilis, Bright's disease, etc., there was still found a great proportion of heart-disease, which was caused by the uniform or by the drill service. Surgeon F. A. Davy, M.D., thinks that the form of drill in vogue is very injurious, and is the direct cause of much injury to the thoracic organs. It appears that in the "settling-up drill", it is essayed, so far as is practicable, to make the soldier fill his chest and then perform all movements with the chest fully distended with air, the consequences of which are a certain amount of emphysema with more or less embarrassment of the heart. The "stand-at-ease" is too brief for the heart to recover itself, and a condition of irritability or hypertrophy becomes established according to the nutritive powers of the individual. He says, "In the great majority of cases of heart-complaint invalidated (other than those brought about by rheumatic fever, Bright's disease, etc., of which the history is to hand) the early link in the pathological chain was forged in the drill-field. There has preceded the date of appearance at hospital a long period of uncomplained discomfort, often distress, consisting of breathlessness on slight exertion, headache, and 'beating'. Now exertion has become unbearable. A man who never knew he had a heart (an expression

many a soldier has used to me) becomes aware of his possession after a few months' dilating drill. He blames his recently donned pack and traps for his trouble; forgetting that as a civilian he could have carried them manfully across the country for ten or fifteen miles. Now, has this man been enlisted by mistake, or have we made him what he is?" This is a very serious question, and Dr. Davy seems to incline to the latter solution. If the drill be to blame—and it appears to be so—then the sooner it is reformed and brought more into accordance with our physiological knowledge the better.

WATER-SUPPLY IN RURAL DISTRICTS.

AT the meeting of the Congress on Water-Supply at the rooms of the Society of Arts on Tuesday, Mr. A. H. Brown, M.P., read a paper on the results of the recent parliamentary investigation into the state of the water-supply of the rural districts, in which he stated that the principal supply is from shallow wells and streams, which are polluted by every sort of abomination and matter of disgusting origin, and that such water was habitually used by the inhabitants for drinking and other purposes. The result of the discussion was that, by adequate means for securing good pure water, such as deep artesian wells and the utilisation of the rainfall, the water-supply of the rural districts might be completely revolutionised, and a great improvement effected in the public health.

PROPAGATION OF INFECTIOUS DISEASES BY SCHOOLS.

AT the annual meeting of the South Durham Medical Society, the report of the Subcommittee as to the propagation of infectious diseases by means of public schools was brought forward. It stated "that elementary day-schools are one of the chief means by which infectious diseases are spread. The fact that the Education Act makes no allowance for absence from sickness, and that the attendance of children has a direct bearing on the Government grant, causes direct pressure to be brought upon teachers and parents to have children at school, irrespective of their sanitary condition". The Society, therefore, recommended that the medical certificate system be adopted, and that children living in the same rooms as children so suffering shall not be allowed to return to the school without a medical certificate that they may safely do so; that a School Board medical officer be attached to, and paid by, every school authority; and that all the school authorities in the kingdom be asked to unite with the Society in memorialising the Government on the subject.

POISONOUS VIOLET-POWDER.

AN illustration of the injurious nature of the violet-powder commonly vended reaches us from Goole. On April 18th, Mr. G. E. East attended the wife of a sailor in her confinement; and four days afterwards, was asked to account for a rash which appeared on the infant's skin. The rash resembled roseola, and was pretty general upon the body, but most apparent upon the flexures of the limbs and round the throat. Fuller's earth was substituted for the violet-powder that had been used in the dressing of the child, and the rash disappeared in two days. Some of the violet-powder was examined chemically and microscopically by Dr. Parsons, the Medical Officer of Health, who found that it was free from arsenic, but instead of being composed, as such an article should be, of starch or such like bland substance, it consisted almost entirely of powdered hydrated sulphate of lime, probably scented with a little orris-root. The use of this substance for such a purpose Dr. Parsons strongly condemned; the only advantage lying in the deodorising qualities of sulphate of lime. The *Sanitary Record* recently confirmed the statement that an epidemic had been caused by the use of this deleterious violet-powder, and suggests that steps should be taken to prevent its sale. In that opinion we fully concur.

DR. VON B. HOFF has retired from the Professorship which he has held for many years in the University of Munich.

SCOTLAND.

THE temperature in most districts has fallen considerably, and heavy showers of hail and snow, with high winds, have been general. In Fife, the rivers were swollen by torrents of rain; and the Grampian and Ochil ranges were coated with snow, which, however, soon melted.

A SAD event has occurred at Lochinver, Sutherlandshire, in the suicide, by prussic acid, of Dr. James Bruce, a young unmarried man, who has acted as medical officer to the Parochial Board there for the last two years. He left a note for his father, saying that he had been in a desponding state of mind for some time.

THE Secretary of State for India has signified his approval of the arrangements made by the Aberdeen University Court for the supervision, in the house of one of the professors, of any selected candidates for the Indian Civil Service who may attend that University during their time of probation.

A WOMAN at Bellshill is supposed to have been poisoned, by phosphorus, administered in a glass of water, by her son, a collier, about seventeen years of age. A small bottle of phosphorus was found in her house, said to have been used in chemical experiments by an older son. Little hopes are entertained of her recovery.

THE REGISTRAR-GENERAL'S QUARTERLY RETURNS.

WE learn from these that, during the first quarter of the present year, the number of births registered in Scotland was 31,226; of deaths, 20,320; and of marriages, 6,068. The number of the population, estimated to the middle of 1878, is 3,593,929. The birth-rate has been 3.48 per cent., the average being 3.49 per cent. Of these, 8.46 per cent. were illegitimate. The death-rate has been lower than any recorded for this quarter since 1863, being an annual proportion of 25 to every 10,000 of estimated population. In England, the death-rate during the quarter has been computed at 226 for every 10,000 inhabitants, the average being 240. In the rural districts, especially in the islands of Scotland, the diminution of mortality has been very marked. Of the principal towns, Paisley has shown the highest (328) and Perth the lowest (206) death-rate. In Dundee, the death-rate for this quarter of 1877 and 1878 was exactly the same. The marriage-rate has hardly come up to the average rate of the last ten years. Marriages took place at the rate of 83 to 10,000 inhabitants in the large towns; being most numerous in Paisley, 104 to 10,000 inhabitants.

IRELAND.

IN accordance with a resolution passed by the Belfast Board of Guardians at a late meeting, the Local Government Board have directed Dr. Roughan to hold a sworn investigation into the mode of conveying deceased paupers to the place of interment.

LIMERICK LUNATIC ASYLUM.

AT a meeting of the governors of this institution, held on the 14th instant, an official communication was received, increasing the salary of Dr. Courtney, resident medical superintendent, to £500 *per annum* under the recent regulations.

SMALL-POX.

AT a meeting of the Guardians of the Rathdown Union last week, it was reported that eleven small-pox patients had been received into the infirmary, two of which had proved fatal. The Chairman drew attention to the necessity of providing burial in cases of death from the disease occurring in the workhouse, and referred to a case in which the body of one of the patients had remained waiting for the coming of the friends for thirty-six hours, and a pauper inmate, who had voluntarily attended the deceased in lifting the body into a coffin, had contracted the disease, and had since died of it.

ROYAL COLLEGE OF SURGEONS OF IRELAND.

MR. R. BUTCHER has intimated his intention of not seeking re-election on the Council of the College. The following Fellows are, we hear, candidates for seats on the Council, in addition to the existing members who are eligible for re-election: Messrs. H. Gray, Croly, Elliott, Jacob, Madden, Roe, and Thornley Stoker.

RATHFARNHAM AND WHITECHURCH DISPENSARY DISTRICT.

DR. HENRY CROLY having resigned, an election for medical officer to the district will take place on the 3rd proximo. The emoluments of the appointment are £125 *per annum* as medical officer and £30 as sanitary officer, with registration and vaccination fees. It is considered probable that Dr. Croly will be succeeded by his son, Dr. Albert Croly.

TYPHOID FEVER IN COOKSTOWN.

DR. GRAVES, sanitary officer, at a meeting of the Board of Guardians, held last Saturday, complained of the sanitary condition of certain houses in this town in which typhoid fever had broken out. The cause he attributed to defective sewerage, want of proper accommodation, and the existence of open cesspools. An order has been made by the Board to have these premises put in proper order immediately.

HEALTH OF DUBLIN.

THE deaths from zymotic diseases registered in the Dublin district, during the week ended Saturday last, numbered 57, being 28 over the average for the twentieth week of the year of the last ten years. Of this number, 21 deaths are due to small-pox, the registered deaths from which disease, during the last six weeks, have been respectively 15, 9, 21, 17, 12, and 21. The number of cases of this disease under treatment in the Dublin hospitals (including the temporary hospitals in connection with the Union Workhouses) on Saturday last was 270, against 254 on the preceding Saturday; 106 cases were admitted during the week, being 16 over the number in the previous week; 73 patients were discharged as cured, and 16 died.

LIMERICK BOARD OF GUARDIANS.

DR. O'CONNOR, one of the visiting medical officers of the Limerick Workhouse, having lately resigned, an election for his successor took place on the 8th instant, when Dr. James Meehan was selected from among several applicants for the post. The Local Government Board, however, last week communicated with the guardians, and declined to sanction the appointment—for the reason that, some time ago, Dr. Meehan had been sentenced to twelve months' imprisonment for his share in the frauds on the New York Insurance Company, when he was charged with having certified for parties who had not been examined by him. His name was struck off the *Medical Register*, but was subsequently restored by the General Medical Council. The Local Government Board remark that, by this act of the Council, Dr. Meehan was merely enabled to pursue his practice as a qualified medical man, and it was for those who chose to place so much confidence in him as to seek his services as medical adviser to use their own discretion in doing so; but that this was a totally different matter from the Board of Guardians and the Local Government Board appointing and permitting Dr. Meehan to have charge of many hundred of patients daily, who have no voice in choosing their own medical attendant, and who might most reasonably be disposed to place no confidence in Dr. Meehan; also that, by Section xxii of the 6th and 7th Vict., cap. 92, no person convicted of fraud is qualified to act as guardian of the poor, and that such objection seems to apply with peculiar force to paid officers of high position and trust in the workhouse; and the disqualification would probably have been extended to those officers, if it had appeared likely or even possible they would be appointed. The guardians, by a large majority, expressed their belief in Dr. Meehan's innocence, and requested the Local Government Board not to enforce their order, but to wait an inquiry which was shortly to be held in Parliament into the justice of Dr. Meehan's case.

METROPOLITAN COUNTIES BRANCH:
SPECIAL GENERAL MEETING.

A SPECIAL General Meeting of this Branch was held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Wednesday, May 15th, at 4 P.M.: S. W. SIBLEY, Esq., President, in the Chair.

New By-Laws.—An amended code of by-laws was submitted to the Branch by the Council, and was approved.

AMENDMENT OF THE MEDICAL ACTS.

THE CHAIRMAN: The real business of this afternoon is the consideration of the Medical Bills. You are all aware that there are at the present time before Parliament two Bills—that introduced by the Lord President, and that introduced by Dr. Lush. Dr. Lush's, I believe, has the priority in point of time; but I put the Lord President's first, as that which is probably engaging the most extensive amount of attention. These Bills deal with a number of most important questions—questions which the Association has very frequently discussed; and, in order that the matter may be more easily discussed, the Council, as you are aware, have sketched out a few resolutions, which I shall have the honour to propose to you, affirming a number of the great principles that the Association has hitherto approved. Four of these resolutions affirm great principles; the fifth opens the question how these principles are to be applied. The first resolution is:

"That an amendment of the law is required in order to prevent the assumption of medical titles by unqualified persons; and that this Branch regards with satisfaction the proposals to amend Section xl of the Medical Act for this purpose."

As regards that resolution, I think I shall have the support of the whole meeting, when I say that we have long felt that Section xl of the Medical Act was totally inadequate to define the condition of qualified practitioners, that it failed to prevent the unqualified from passing themselves off as qualified; that, in fact, it was totally inoperative. The only apology, I think, that can be made for Section xl of the whole Act is that it was a matter of compromise, and I believe that it was the only clause that could have passed the Houses of Parliament at that time; but, being totally inadequate, it long ago became necessary to revise it. That law is revised, as you are aware, in the Lord President's Bill, and even in still more stringent, and perhaps more definite, language in Dr. Lush's Bill. The second resolution is:

"That every person placed on the *Medical Register* should have a qualification in both Medicine and Surgery, so that the fact of registration may be a guarantee to the public that the individual possesses at least a minimum (and at the same time sufficient) qualification to practise all branches of the medical art; and that, in order to insure this, it is desirable that the formation of conjoint examining boards should be made compulsory in each division of the kingdom."

Now, that is a point which is not included in either the Lord President's Bill or in Dr. Lush's; Dr. Lush's Bill treating only of two matters, the revision of Section xl and the admission of foreign degrees. The Association, I think, has always pronounced an opinion in favour of the conjoint scheme. It has been felt that it was an anomaly not to be tolerated, that a person with a qualification to practise medicine should be allowed to practise surgery, or *vice versa*; and, therefore, it has become with them a matter essential for the public interest as well as for the profession, that every member who enters the profession and becomes a registered practitioner should have a double qualification. The simplest way to carry this out is, no doubt, by a conjoint scheme. The conjoint scheme, as you are aware, has excited a good deal of opposition, especially in the sister kingdoms; but in this part of the kingdom the corporate bodies and the profession at large have pronounced, I think, emphatically in its favour, and, therefore, I have little doubt that this Branch will pronounce a similar opinion. The third resolution is in the following form:

"That it is desirable that the Medical Council should have a disciplinary power over the holders of colonial and foreign diplomas and degrees of the same kind as the medical corporate bodies possess with regard to their fellows and members."

In the Duke of Richmond's Bill, and also in Dr. Lush's Bill, there is a provision made for the placing upon the *Register* those who possess foreign and colonial degrees; but our attention has been called to the fact that members so placed on the *Register* would not belong to any of the great corporations, and, therefore, no body would exercise any power of control over their actions. If a person, for instance, were admitted with a foreign or colonial degree and placed on the *Register*,

he might be guilty of very great improprieties short of criminal offences—which would bring him under the discipline of the Medical Council—and still there would be no power of striking his name off the *Register*. It is, therefore, proposed that a clause should be inserted in the Act which would give the Medical Council a similar power to that which the College of Surgeons and the College of Physicians possess over their members, so that they might be held in some form of check and control from irregularities of practice. That is an omission in the Duke of Richmond's Medical Bill. The fourth resolution is:

"That it is desirable that the voice of the profession should be expressed in the Council by means of direct representation."

That is a great principle, upon which, I think, most of us feel strongly. We feel that the profession should have some, if not an important, place in the management of their own affairs. At present, the Medical Council simply represents a number of important bodies; it does not represent the profession at large. It is felt that, if the profession itself exercised a direct influence in the Council, the cause of medical reform might be assisted, various inequalities might be removed, and the want of perfect operation of the law remedied. Moreover, the present Medical Council very inadequately represents the voice even of the educational bodies. For instance, in England, four members represent the universities, and three the corporate bodies. Now, the universities, of which I would speak with the greatest reverence and respect, are not essentially medical bodies. The older universities contain only a very small number of medical graduates; but the London University contains a much larger number; while the Royal College of Surgeons, which contains the bulk of the profession; the College of Physicians, which contains a very fair number; and the Apothecaries' Company, which also contains a very considerable number, have only three representatives. I think it would be a great improvement in many points of view that the profession should exercise a direct control. I know that this is a matter which will raise discussion, and probably some persons will be ready to advocate "indirect" representation; but I simply content myself with putting forward this resolution, and advocate direct representation. Then comes the fifth resolution. This touches, as you will see, not upon any essential matter that has gone before, but as to how far we shall be guided in our advocacy of, or opposition to, the Bills before us. It is:

"That it is not expedient to oppose the progress of any Bill which may contain satisfactory provisions for—1. The establishment of the conjoint examining boards; 2. The amendment of the Penal Section of the Medical Act; 3. The registration, under proper supervision, of foreign and colonial degrees and diplomas, on account of its not including provision for the direct representation of the profession on the Medical Council."

I feel that there, again, a good deal of difference of opinion will be excited. The question is, if we can get these most important matters settled, are we justified in opposing the Lord-President's Bill, or in opposing both the Bills, because they do not include direct representation? Well, I think that the answer will hinge upon this matter. If the Bill pass, what will be the hope of getting direct representation at a future time? Many feel that, when once these great defects in the old Medical Act are remedied, we shall have little or no hope of a further amendment of the law to secure direct representation. But I think it may be quite possible that, supposing some of these different inequalities are remedied, a further Bill may be brought before Parliament, and we may obtain our direct representation at a future time. I will not delay you any longer, but simply propose these resolutions.

MR. NELSON HARDY: We shall probably all agree in the desirability of obtaining such amendments of the law as are indicated in the first four resolutions which you have placed before us; and, if I thought it at all likely that we should also be unanimous as regards the fifth, I should content myself with simply seconding the motion. As it is, what I say will have principal reference to that fifth resolution; but, first, let me say a word or two about the fourth. I admit at once that there has been for years a very strong feeling of dissatisfaction with the constitution of the General Medical Council; that it is believed to look after the interests of the examining bodies more than the general interests of the profession or the public; and that the great remedy for this state of affairs has been held to be direct representation. But I confess I am not quite convinced by the arguments advanced in its favour, that direct has such great advantages over indirect representation that it alone should be urged as the remedy. Take our own Association, for example. In this Branch, we have, it is true, direct representation on our governing body, the Council; but, in the general body of the Association, we are governed by the Committee of Council, which is an example, not of direct, but of indirect representation, and I for one am not prepared to say that their government is so utterly bad, that we ought at once to agitate for direct representation in it.

There is another consideration with regard to this which I should like to mention. It seems to me that the Bill of the Lord President, which provides for the registration of midwives and dentists by the Medical Council, has introduced a new element into the discussion, and rendered it necessary for us to reconsider our position; for it is undeniable that, if a medical man, by paying his registration fee, acquire a right to vote, a woman, by paying her registration fee as a midwife, will also acquire a vote; and, as it is calculated that eleven thousand five hundred midwives would register, they would, of course, demand a representative on the Council, both as a right and in order to improve its composition. The dentists, in the same way, many of whom would at first be simply chemists, would naturally think that the Medical Council would be much improved by having a knight of the pestle and mortar taking a seat on its board. The principal subject, however, which we have to consider to-day is the fifth resolution. You will notice that, while in the other resolutions it is said to be desirable to get certain specified changes, in this fifth resolution the question is whether it is not expedient to accept some of these desirable things, if you cannot get them all; whether, in fact, half a loaf is not better than no bread. On a subject like this, we may well ask what is the expressed opinion of the Association; and I would remind you on this point that, at the past annual meeting, a resolution was passed by a large majority, directing the Medical Reform Committee to take such a reasonable course as is indicated in this fifth resolution: to give up for a little time grasping at shadows, and devote their energies to securing such solid benefits as were well within their reach. I am well aware that the extraordinary doctrine has been put forth apparently on authority, that the committee appointed by that vote of the Association conceived itself at liberty to disregard the wishes of the Association, because, forsooth, there were but, as some say, thirty-five, and as others more probably say, one hundred, persons present, though only twenty-five were needed to make a quorum; or because notice had not been given when no notice was necessary; or because the instructions given them did not coincide with their own views; or because it was the fag-end of the meeting, or for some other reason. But that is a doctrine which, if it prove anything, proves rather too much. If the vote were invalid for want of greater numbers being present, the Medical Reform Committee of the Association has no existence. If valid, they are in open and avowed rebellion against the legally expressed will of the Association, from which there is no appeal; no, not to the Committee of Council itself. If this be so, look at the position in which the Medical Reform Committee have placed themselves and us. Not only have they not done what they were especially directed to do, but they have actually gone out of their way to oppose the expressed wishes of the Association. They could not even prepare a petition for the House of Lords against the Government Bill without giving a thrust also at any other Bill, such as Dr. Lush's, which corresponds very closely to what they had been directed to prepare. Defeated in the Association, they, using its name, appeal by *plébiscite* to outsiders, and tell the voters, both within and without the Association, how it is imperatively required that they shall vote. It is most humiliating to think of the position of insignificance to which our great association has been reduced, as regards its influence, by the Medical Reform Committee. Just as, eight years ago, it could do nothing but obstruct the passing of Lord Ripon's Bill, thereby disgusting and driving from the Association such men as Acland, Stokes, Paget, and Rumsey, so now, when there are two fresh Medical Bills before Parliament, our Association is, if the Medical Reform Committee have its way, to confine itself to a barren protest against both, and to be utterly impotent for good as regards either; while all other interested bodies—the Medical Council, the Colleges of Physicians and Surgeons, and those defence associations which, in comparison with ours, are but of yesterday—are suggesting improvements to which they find the Duke ever ready to listen, we are to take up the position of Irish obstructionists, oppose all useful legislation that does not give us our hobby. That is evidently not the course which the Committee of our Council who drew up these resolutions recommended us to adopt, and I am curious to hear what arguments can be brought forward in its favour by reasonable men. It will be useless for anyone, no matter how authoritatively he may speak, to tell this Branch how it is imperatively required that we should vote. There are, as I have said, two Medical Bills now before Parliament. One is the Government Bill, which, as originally drafted, contained clauses rendering compulsory the establishment of conjoint examining boards. These have been withdrawn at the suggestion of the Scotch bodies; but it only needs sufficient pressure from without, such pressure as our Association could exert, to get them resuscitated. The other Bill, which is down for second reading to-night, is identical in purpose with that which the Association directed its Committee to prepare. The resolutions now placed before you give us

the opportunity of declining to be responsible for any further obstruction of medical reform. They will, if carried, enable this important Branch of our Association to exercise its legitimate influence upon the medical legislation of the country. On all these grounds, I have much pleasure in seconding the resolutions.

Dr. WATERS (Chester): Though not a member of the Branch, Mr. President, I am bound, as chairman of the Committee to which the gentleman who has just sat down has referred, to say a few words in reply. The gentleman who has seconded this resolution, in a very carefully and sharply worded speech, has indulged himself in a long and exhaustive tirade against the conduct of gentlemen, who, whatever else they have done, must be admitted to have done their best for the Association. Whatever may have been their conduct, they are honourable men; and for any member of this Branch to arraign a body of gentlemen without bringing them all here to defend themselves, is to me one of the most unexampled occurrences that I have ever heard of in connection with the British Medical Association. I am Chairman of the Medical Reform Committee of the British Medical Association. I will not go into all that the Association has done for forty-six years, but the Medical Act of 1858 was certainly passed through its efforts. By that Act, a General Medical Council was created, to whose management medical reform was confided. There was an implied promise before the passing of that Act, that the profession in this country should be directly represented in the General Medical Council, as soon as there was a *Register* of the profession. Nine years passed, and nothing was done. One of the old members of the Medical Reform Committee, Mr. Husband of York, then proposed in council that this question of direct representation of the profession should be brought before the Association; and at the meeting in Dublin, with only two dissentients, it was decided that there should be direct representation of the profession in the General Medical Council. The Committee appointed waited on the General Medical Council, and urged the Council to grant the prayer of the profession. Well, it was not granted. I am not going into it, because all that has been before the Association. The Government brought in a Bill; the Government solicited the opinion of the General Medical Council as to whether there should be any change in its composition. That requirement was not, to the best of my knowledge, acted upon. The Government were told by the Direct Representation Committee that any Bill not making provision for direct representation would be opposed by the Committee. The Bill came before the Lords. The question was mooted there. It came before the Commons; and the Bill was withdrawn. Now, had the General Medical Council responded in the slightest degree to the desire of the profession that there should be some modification of its composition, the Direct Representation Committee would gladly have welcomed any such assurance. The question of allowing the Government Bill to be withdrawn when a Special Committee of the House of Commons was offered, was considered by the Committee; and I may say this, that in communication with members of Parliament of the highest distinction, I was assured that if the Bill passed, then the question of any further medical Bill would not be entertained by the House of Commons. They told me that, if any Bill passes, the House will not entertain that subject again for some years. The question of direct representation is not regarded as a minor one by the profession, and therefore it was that the Direct Representation Committee held to its colours. On what instructions did that Committee act? There had been a meeting at Dublin, where the vote might be said to have been unanimous. There were two dissentients, but one of those dissentients is now a most active and influential member of the very Committee of which I am chairman. I refer to Dr. Stewart. At Oxford, the following year, the same thing was affirmed by the Association. At Leeds, at the next meeting, the same thing occurred. In July 1868, the Metropolitan Counties Branch had a special meeting, and decided that direct representation on the General Medical Council was to be regarded as a *sine quâ non* in any measure of medical reform. It was acting on the absolute instructions of the Association at three of its meetings, and at another meeting which was held in May 1870, specially to consider the question of the Medical Acts, and on an instruction passed unanimously by the Metropolitan Counties Branch, that the Direct Representation Committee declined to accept the Bill of the Marquis of Ripon. But, Sir, I may say that though we did our best not to let that Bill pass without the representation of the profession in the General Medical Council, it was not due to us alone that it was rejected. The members of the Scotch corporations and the members of the Irish corporations were then active in their efforts to shelve the Bill. I believe myself that the probability is that even without the aid of the Association, those corporations would have succeeded in shelving the Bill; as I believe that the present Bill of the Duke of Richmond, even though it accords the conjoint

scheme, will be shelved through the action of the Scotch and the Irish corporations. I believe that the Duke of Richmond's Bill, supposing it to concede the conjoint scheme, has no greater chance of being passed this year than Lord Ripon's Bill had in 1870; and I am expressing not merely my own opinion, but the opinion of members of the House of Commons. A great deal has been said about the improper action of the Medical Reform Committee. The Medical Reform Committee has brought forward its reports year after year at the annual meetings of the Association. In like manner, a report was submitted at the meeting at Manchester, and that report was acceptable to the meeting, when it was proposed to add a rider to the effect that in case it was found that the great features of medical reform could not be included in a Bill, then the enforcement of the penal clause should be made the special subject of a Bill. It was alternative. The proposer of the resolution is present, and he will bear me out when I state that it was put as an alternative measure—that if the Bill of the Association in all its grand features could not be carried, or no movement was likely to prove effectual with regard to it, then the smaller Bill, with its distinct object, should be proceeded with. Having laboured year after year at the great task which I had in view, the removal of a great public hardship, I resigned. The Medical Reform Committee, notwithstanding my resignation, and the resignation of Mr. Husband, who was on the original Medical Reform Committee before the passing of the Act of 1858,—

Mr. HARDY: I would call your attention to the exact resolutions passed. You have not exactly stated them.

Mr. HART: I think Dr. Waters is correct in the manner in which he puts it. The question I asked the meeting was whether, supposing the large features of reform did not come forward, would it not be desirable that the practical question should be urged.

Dr. WATERS: I would say I am not going to be governed by an incomplete report of what occurred. I say that what I state with regard to Mr. Hart's movement upon that occasion is perfectly correct, and that Mr. Hart was extremely sorry that any member of the Committee thought it right to resign on that occasion. The Committee remained none the less efficient without me. Well, that Committee met, and the question was, what was to be done in regard to medical reform; how were they loyally to act as regarded the resolution passed at Manchester; and they decided that they would consult with different members of Parliament, and see what it was possible to do. They did consult with members of Parliament, and the members of Parliament recommended them to go in for the broad features of their Bill, and not to go in for the small Bill alone. They also said that it was a matter of extreme difficulty for private members to carry any measure of great public importance; that it would be certain to evoke opposition. Acting under that guidance, the Medical Reform Committee were not going to bring in any Bill at all this year, but they were going to apply, through one of the most distinguished members of the House of Commons, for a Committee of the House to go into the whole question of medical reform; and in that Committee the questions mooted by different men, by different parties, by different corporations, would have been ventilated, and on the report of that Committee a Bill would be founded in the following year. This distinguished member, acting with other members of the House of Commons, having suggested this course, and, it being brought forward at a regular meeting of the Committee, that course was approved of, because it promised medical reform not on one basis only, but upon the basis of the investigation of a Special Committee, which would sit this year and come to certain general conclusions, which conclusions in the following session would have been embodied in a Bill which would have been discussed *pro formâ*, and we should have had something that would, I hoped, have satisfied the profession. Now, I believe that the Medical Reform Committee, in adopting that course, acted wisely; that it would have been a wild measure to attempt to press forward a Bill in opposition to the Government, and that it was a wise course to ask for this Committee of the House of Commons, which we were assured would be granted. That has been the action of the Committee. Well, then information was obtained that the Government had its own Bill. ["What date?"] I cannot give you the exact date now, but it was some time before the introduction of the Bill. Lord Sandon informed a member of the House of Commons that the Government had a Bill drafted, and that on the face of it it was of no use attempting to bring in a Bill of our own; in fact, the members to whom I refer were desirous to leave the course clear for the Government, as the Medical Reform Committee had for two years past left the course clear for the General Medical Council to do what it could in bringing about a voluntary junction of the different authorities. We had nothing further to do until the Bill of the present Government came in. We then waited upon the Government, and laid before them the importance of

the conjoint scheme and of direct representation of the profession. [Dr. HART VINEN: "What date was that?"] That was as soon as it was found that the Government Bill did not contain either of those provisions—that it was permissive as regarded the conjoint scheme and that no revision was made for direct representation. The Committee waited upon the Government, and I may venture to say that at this moment the direct representation has, I believe, as good a chance of being accepted by the legislature as the conjoint scheme. I am sorry to take up so much of your time, but the Medical Reform Committee has, I believe, done its best. We have been acting on the instructions to which the Association has adhered for years; we have been acting on the instructions of the Metropolitan Counties Branch in times gone by; we are at this moment supported in our demands by the Irish Medical Association; and, at a meeting in Liverpool the other day, specially summoned to consider the Duke's Bill—a much more numerous meeting than we have here to-day—it was unanimously resolved not to accept the Bill unless it provided for the compulsory establishment of the conjoint scheme and for the direct representation of the profession.

Dr. QUAIN: Both or either?

Dr. WATERS: Both. This Branch has done the same thing, and here you are to-day aiming at rescinding action to which you have adhered during the whole of your previous existence. At no annual meetings of the British Medical Association have these points ever been questioned; but now a gentleman makes a very good speech, and wants the Metropolitan Counties Branch to sink into the slough of despond or the mire of inconsistency. I have nothing more to say, as far as I am concerned; but I would say that, if a meeting were held in Edinburgh, with Sir Robert Christison in the chair, and Dr. Andrew Wood and other gentlemen present, and if it was there determined that, if direct representation were conceded, the conjoint scheme could be made a secondary matter, that resolution would in all probability have as great a chance of being carried as this resolution here to-day. But the Association could not possibly be bound in its action by the decision of any Branch. The Committees of the Association hold office under the Association, not from any Branch.

Dr. HART VINEN: Having been a member of the medical profession for more than thirty years, and having from my earliest recollection heard the question of "medical reform" agitated constantly, I may say that I have never yet understood precisely what that formula means, and I do not know now. I am quite certain that every member of the Association gives every possible credit to those gentlemen who have, from time to time, agitated in favour of medical reform, whatever it may be; but, as far as I am concerned, I am very anxious indeed that all these four practically beneficial clauses should be passed, and that they should not be sacrificed merely to a fanciful or sentimental perseverance in securing provision for direct representation of the profession on the Medical Council. I think we ought to be satisfied with half a loaf if we cannot get the whole.

Dr. STEWART: I believe that this is one of the most important subjects that can be brought before the Association, or before any Branch of it; and on this, as on former occasions during the last few years, I see that this Branch seems to take very little interest in this most important question. I look back twenty-five years, and then the medical reform meetings of the Branch were the most numerously attended of all. We used to have them so large there was not room in the place of meeting. That shows that, at one time at least, this Branch had some appreciation of the importance of the subject, and had some intelligent notion of what it meant. I remember that my old friend Dr. Roger of Paris came over, in 1846, appointed by the Minister of Public Instruction, to inquire into the medical organisation of England; and, as a very special friend, he came to me, thinking I could put him in the way of getting some information about it. "Oh, my dear fellow," I said, "it is disorganisation we rejoice in here; there is no such thing as organisation; it is utter disorganisation; there is no order of any kind, and I do not know who can give you an idea of what is really the prevalent state of matters in England. Certainly there is no symmetry, or anything like consistency, in any parts of our system, if you can call the absence of system a system." That was the state of matters which the Association at that time was endeavouring to reform, and it was they who did it. We might have waited till now, and our corporations, of whom we hear so much, would not have moved a finger, content to rejoice in their own large pecuniary returns, the larger the better, even though they degraded themselves in many cases, as I know, by underbidding other corporations and colleges who were more conscientious in their mode of examination. That was the state of matters, and it would have continued till now if it had not been for this Association. It was this Association that began the whole thing, and here lies the strength of my position. They showed that they felt it was a disgrace to the pro-

fession in this country that matters should continue as they were, and so they began their medical reform work almost contemporaneously with the existence of the Association, as Dr. Waters has already told us. It was a grand work. They laboured at it might and main, year after year. This forenoon, I was looking up the report of a deputation that went to Lord Palmerston, when Lord Palmerston said that the state of the profession, as regarded organisation, was deplorable. I think I counted up thirty Members of Parliament, headed by Mr. Macaulay, and including other distinguished names, who waited upon Lord Palmerston upon this same subject; and now we are asked by Dr. Quain and Dr. Vinen: "What is the meaning of medical reform?"

Dr. QUAIN: Present medical reform.

Dr. STEWART: The whole subject was started, carried on, and completed by this Association, so far as it has been completed; and now the very people who rendered the greatest services on this great question are the only people to be excluded from any voice. I say that it is grossly, scandalously unjust. It is like the old boroughmongering, where a pauper voter or two met together to elect a Member of Parliament for a great constituency, while thousands of others were left outside in the cold; and now we are told that these Councils or Senates scattered throughout the kingdom, and not numbering above four hundred or five hundred men in all, are the only medical men who have a right to express any opinion in regard to the shaping of the whole future of the profession. In any discussions on the subject with people who have taken an interest in it, I have found that they are apt to depreciate the work of the Medical Council, and to say that it is a very small work, that their sphere is really an exceedingly narrow one, and I have been asked: "What have you to do with that which is only a technical matter that only those few experts who belong to the colleges or corporations can understand?" I utterly repudiate the notion. The Medical Council has in its hands the whole future of the medical profession as regards its education, training, and so on. Now I say that, if you look over the old Bills introduced by the Committee of this Association, you will see that, from the beginning, they showed the most exact appreciation of what was wanted by the profession for the complete training of the new generation of medical men. There is nothing better now-a-day. Now this proves to me, in the first place, that we may give an affirmative answer to the questions (1), are the medical profession entitled, and (2), if they are entitled, are they qualified, to have a voice in the management of their own affairs? It is the management of their own affairs, of all that concerns them in the training of students, in the systems of education, in the examination, in the discipline of the profession, in the removal from the *Register* if they have behaved wrongly, that is expressly in the hands of the Medical Council. Why, I say, should not a body of highly educated medical men—because, thanks to the efforts made in the last thirty or forty years, the style of education is very much widened—have a right to be heard in these most important affairs as regards their own profession? That is the ground on which I base the whole thing. They have a right to it. As regards this matter of direct or indirect representation, indirect representation simply means that a man is returned for a particular body by a large number of people. But of course the potential people are those who are the administrators; they are, after all, the people who have the real voice in the matter; and, in all matters that concern the interests of that body, they will take the line which seems to them most suitable, independent altogether of the general body, even though, as Mr. Hardy thought right, the representatives should be returned by the whole body of the College of Surgeons, for instance. Supposing in any case there comes a question, such as one between the conjoint scheme and the pecuniary interests of the College, do you think that any body of Fellows of the College who had a vote in these matters would give a vote which they thought would directly tend to diminish, perhaps largely, the revenues of the College? And yet that might be the only way in which the public interests could be consulted. The conjoint scheme is, after all, one of the great questions we have to decide; but if I, as a Fellow of the College of Physicians, for instance, thought that the conjoint scheme would pecuniarily ruin the body to which I belong, do you think I would be quite free to say, "I think it is quite right and proper it should be carried, because it is for the public interest"? No; the *esprit de corps* would carry it. But, if you send men who are independent of all bodies, then they will only consider what is for the good of the public. There are as good men outside the Medical Council as ever have been or will be in it; and many of those men are able to throw light upon the problems that the Medical Council has to discuss, and would greatly strengthen the hands of those who work to overcome obstruction within the Medical Council and to help on that which we believe to be for the interests of the profession and for the public in general. These are some of my reasons for saying I think we should be very much the better for

having an infusion of new blood—an infusion, above all, of men who will be perfectly free and untrammelled. It is said, "You have the Government nominees". Far be it from me to say a single word against the Government nominees—a most noble, distinguished, and admirable class of men; but that is a chance. They are probably the nominees of one man. I suppose it is very likely that many of them were the nominees of Mr. Simon when he was at the Privy Council. I say that is not a decent and proper way in which the whole body of twenty thousand medical men in the kingdom should be content to let matters rest. They should have the acknowledged right of having a say, at least to the number of one-fourth, in managing their own affairs. Now, sir, we are told that the government of this Association is partly indirect. I say there is nothing indirect in it. The Council is composed of men sent up directly from every Branch; the Committee of Council consists of men elected out of that Council. It is as direct as can be. The Council cannot select one single man who has not been sent up. It is a Committee of the Council. The Council simply delegate to these men their powers to carry on the work of the Association. If my observations have been at all to the point, if I have succeeded in making out a very strong case for the right of the general body of the profession to legislate for itself, and if I have at all succeeded in showing that there are ways in which an infusion of men directly sent up by the medical profession to the Medical Council would be useful, I think you will be prepared for my dissenting very strongly from that fifth resolution. Therefore I wish to propose, as an amendment, that the whole of these resolutions be adopted, with the exception of the fifth; and I hope we shall prove ourselves to be in accordance with our former traditions, and with the general feeling and wish of the Association of which we are members, as shown by the canvass which Dr. Waters has made, the result of which, I believe, is 247 against, 5,000 in favour of, the conjoint scheme and direct representation.

Dr. WATERS: There were about 120 "Noes" to direct representation; some of those give "Yes" to the conjoint scheme. There are 49 absolute "Noes" to both questions. There are about 270 "Noes" to the conjoint scheme. So we may say there are 120 against direct representation, 270 against the conjoint scheme, and all the rest affirmative. The affirmatives amount to something more than 5,000 for direct representation, and about 4,800 for the conjoint scheme. I am afraid that those who are opposed to the conjoint scheme are very powerful in Parliament, that they are really not on the Reform Committee, and that they are obstructive. I have seen some Irish members to-day, and there is a strong feeling that if the Bill include the conjoint scheme without direct representation, it will not be carried. With regard to the gentlemen who retired after the meeting at Newcastle, I would say that several of them, just as I did with regard to the Medical Reform Committee, thought the better of it and returned, and one of them has given a "Yes" to direct representation. In opposition to that I would say that there is a gentleman who was for the Bill of the Association and direct representation, but who has given a direct negative in the present instance. That gentleman is now the representative of the College of Surgeons of Ireland on the General Medical Council; and it looks as if this has induced him to modify his views. Sir Dominic Corrigan distinctly said that he was the representative of the Queen's University, and I think Mr. Macnamara is decidedly of opinion that he is a delegate to represent the interests of the Irish College of Surgeons, and ought not to forego those interests for any conjoint scheme, or anything else that may be suggested in the way of medical reform.

The PRESIDENT: I wish to ask Dr. Waters what proportion of replies he had to the number of circulars sent out?

Dr. WATERS: Some of the circulars have no answer to direct representation; but, on mature thought, those gentlemen have signed petitions in favour of it, and those petitions will be presented to the House of Lords. This is the result of deliberation and consideration, and we find that the more men think of the matter the more do they come round to the necessity of direct representation on the General Medical Council. We had about 5,300 or 5,400 replies.

The PRESIDENT: How many were sent out?

Dr. WATERS: Sixteen or seventeen thousand.

Dr. QUAIN: On a former occasion, when the same question was asked, how many replies were received? were there not 9,000?

Dr. WATERS: I use no influence in Chester, but every man there will sign a petition for direct representation and the conjoint scheme, though I do not think more than one-third of the men there have sent replies. They throw the circular on one side; but I believe that if the men were got at the profession would be found to be almost unanimous in favour of direct representation. I believe we have got all the "Noes". Dr. Bell Fletcher spent about £200 in canvassing. If we

canvassed Liverpool and Manchester we should get the same proportion. I believe that the profession is almost unanimous in favour of these demands.

Dr. QUAIN: It is a very remarkable fact that on the occasion to which I refer, when Dr. Bell Fletcher's Committee sent a memorial to the Government, they had 9,000 persons in favour of direct representation. That was eight years ago. Since that time, the profession must have considerably enlarged.

Dr. WATERS: Dr. Bell Fletcher's canvass was made with energy, but it had no effect upon the Medical Council.

Dr. WALTER DICKSON: Have we not wandered from the real question, which is, whether we shall reject the first three items of reform set forth in these resolutions because we cannot get the fourth? I should be much pleased to see the fourth passed, but I am not disposed to refuse the three because we cannot get the fourth. I heard with great interest what fell from Dr. Stewart; and every member of the Metropolitan Counties Branch feels the utmost respect and gratitude to the Committee for the great efforts they have made for many years for the progress of medical reform. We are all anxious for the advancement and benefit of the profession, but we think there are different ways of attaining it. There is no doubt that medical reform embraces the conjoint scheme and direct representation; and I think, from the statement of Dr. Waters of the very small number of gentlemen who are inimical to these projects, that the whole profession may be considered unanimous on this matter; but we must take what we can get. There seem to be great practical difficulties in the way of direct representation. The corporations are very powerful. The members of the Medical Council sent by the corporations are simply delegates, representing moneyed interests. The corporations may improve. We know a great improvement has taken place even in our time. In our early days the College of Physicians and the College of Surgeons were very corrupt bodies, but they have done a great deal to reform themselves. Let us hope that the Scotch and Irish bodies may also reform themselves, and send representatives, not delegates. In some of these corporations there are not only the moneyed interests connected with the members themselves, but pecuniary interests for the benefit of widows and children of members of those corporations, and it therefore becomes very important to have as many people as possible examined; therefore I maintain that, paramount to this question of direct representation, comes the question of conjoint examination. In that way a great deal of real power would be taken away from the corporations, and you would find them much more favourable to the general interests of the profession than at present. Before sitting down, I beg to renew the assurance of the Branch that, so far from disparaging the efforts of Dr. Waters and Dr. Stewart, we look upon them with the greatest gratitude and respect, and feel that the Reform Committee has done an immense deal of good. But it is simply a question of practical attainment whether the one desirable end is not more likely to be attained than the other, and whether (as both in conjunction are unattainable) one alone cannot be got. On that ground I am inclined to think, and I think most members of the Branch will be of the same opinion, that the conjoint scheme of examination is the preferable of the two.

Rev. Dr. HAUGHTON: Although not a member of the Branch, I ask permission to address you. I am a member of the Medical Reform Committee who did not resign, and for this reason: that I agree with Lord Eldon, who said: "You can annoy your opponents much more by staying at your post than by resigning." I never intend to resign, and, as long as the Association does me the honour to keep me on the Reform Committee, I shall give my humble services to it. I certainly felt a considerable degree of admiration for the skill with which Mr. Hart got his snap vote at Manchester.

Mr. HART: I object to that adjective. The discussion was carried on in the most regular manner, and the vote taken in the usual way.

Rev. Dr. HAUGHTON: Then it was not a snap vote. I withdraw the word; but it was clever enough to deserve my admiration. It was a perfectly legal vote, and I accept Mr. Hart's correction. I do not think I ever looked at the wording of it, though I was present at the meeting. It did not revoke one jot or tittle of our former instructions, but added to them the instruction about the prosecution of quacks, whom I do not like any more than other people. Then the Medical Reform Committee, having cooled down a little from the heat of Manchester, were quite ready to carry out the instructions of the parent body. But there loomed in the distance the Government Bill, and we saw then that we had an opportunity of carrying out all the instructions; for nothing would be easier for us than to get that introduced as an amendment to the Government Bill. If it were not for this unhappy resolution No. 5, where, in the most disgraceful way, we show the white feather, I think we would carry out all the programme that the Medical Reform Committee were instructed to carry out; namely, the conjoint scheme,

direct representation, the prosecution of quacks, and the proper registration of fully qualified colonial practitioners. I may say another word of a personal character with regard to the exertions of the Committee. I certainly claim to have done my very best for the Committee. I frequently attended meetings held in Chester and elsewhere, and I did more than that: I used whatever influence I possessed in Dublin in favour of the objects of the Committee. I hold in my pocket at this moment a petition from the University of Dublin to the House of Lords, and I have brought instructions to our representatives in Parliament and our friends in the Government to give their entire support in favour of compulsory conjoint examination. It was like pulling a tooth to get such a petition as that out of an old-fashioned body like the University of Dublin. They are a corporation, and all corporations are afraid to meddle with other corporations. Hawks do not pick out other hawks' eyes; therefore, corporations are always slow to go in for the conjoint examination. They have done so, however, in the long run, and I do claim for myself and the Medical Reform Committee a large share in the credit. The University of Dublin will not petition in favour of direct representation, but they will issue instructions to their representatives to offer no opposition whatever to it. Whatever reconstruction of the Medical Council Parliament, in its wisdom, considers it necessary to make, and must make, as a concession to the men who provide the money, the University of Dublin will not oppose; they will occupy no selfish position, and will not claim the right to have none but delegates, as I heard them called, on the Medical Council. I am not sure that you gain much by having representatives instead of delegates. The representative of the University of Dublin voted against the conjoint scheme, although the University which sent him there is petitioning in its favour. I think that delegation, with all its faults, is better than the unlimited licence given to your so-called representatives.

Dr. QUAIN: In justice to your admirable representative on the Medical Council, I must say that Dr. Apjohn was in favour of one conjoint board for the whole kingdom.

Rev. Dr. HAUGHTON: I am very glad to hear it. The fifth resolution is really a confession of weakness. If I am wrong, I can be answered at the right time. Ever since I recollect it, the Medical Association has always gone for these two great points, the compulsory conjoint scheme and direct representation; and we certainly have proved by waiting that a voluntary conjoint scheme is impossible, at least in Ireland. You remind me of the celebrated voyage of Jonah. You have taken for granted too hastily that we have a Jonah on board the ship; but, if there be a Jonah, I am fully persuaded that you are going to throw the wrong one overboard. I would ask you not to throw any one overboard, and you will carry your point. In the transaction of my University business, I have spoken with many Members of Parliament, and asked them their opinion about these two questions. I told them the profession wanted three things: the conjoint scheme, direct representation, and proper protection against quacks; and certainly, in the proportion of nine to one, they at once admitted that the men who pay the taxes ought to be represented. The whole of the money spent by the Medical Council is paid by the profession at large, and it is an unconstitutional thing—and that argument will tell powerfully in the House of Commons—to tax the profession without giving it representation. The question is not to be decided by medical men or by meetings: it is to be decided by the House of Commons and by votes. Allow me to tell you my experience about the Jonahs. How many votes could be brought up to resist direct representation? There is no strong interest against it. The corporations would like very well to be let alone, and have their delegates or representatives as at present, but there is no strong feeling against it. The delegate generally has a vested interest in the place; it brings him a certain amount of dignity and position, but the College cannot care much about that individual man, and he is the only person whose dignity will be hurt by direct representation. But, if you put forward compulsory conjoint examination, then they will bring up all their forces, and canvass every member in the country. The College of Surgeons of Ireland has a very powerful political party at its back. They have only to say: "Our money interests are in danger", and the members will vote straight for them. I, therefore, think if the Government would take up the direct representation and drop the other, the Bill would have a better chance of passing. The members of the Government have taken every opportunity privately to make themselves acquainted with the wishes of the great corporations. I do not speak with any authority; but I have reason to believe that the Government is most anxious to pass the Bill; and that, sooner than have it shipwrecked, it will accept both the compulsory conjoint examination and the direct representation. That being the case, I do really ask you to consider your decision. You are doing, I think, a rash and dangerous thing. You are certainly expressing a

doubt about the matter. I presume that every one in the room is in favour of direct representation, because the Association is committed to it by No. 4; but No. 5 is a hesitating, uncertain statement, and I think it really risks the whole thing. It shows that there is a division in our camp, and we invite defeat. To return again to my old friend Jonah. When Jonah went overboard, a friendly whale took him on shore, and he was as well as ever after the trip; but, if you drop your Jonah of direct representation now, he will sink into the sea deeper than ever plummet sounded, and no man living will ever see him again. I am only speaking as an outsider, but I am deeply interested in your success, and I think you are doing an unwise thing. It has been frequently said that "half a loaf is better than no bread"; but I think you risk the whole by trying to get your half loaf, and you will get nothing.

Dr. QUAIN: Perhaps J. R. Stewart will remember when Exeter Hall was filled with reformers, including Dr. Marshall Hall, Dr. Grant, Dr. George Webster, and others. There were reformers in London as well as in the country, and you must not give all the credit to one party. I know what medical reform was in those days, but I would like to know what is now intended by the phrase. I know there are many abuses to be corrected, but they are not the things spoken of in the days when there were close corporations. That is all passed and gone. Dr. Waters says the Bill will not pass; I am sorry he does not help to obtain a Bill. I say that "half a loaf is better than no bread", and that you do not risk the whole by getting a part; but every opposition renders it more and more difficult to get this Bill through. I am not going to refer to the immense value of conjoint boards. From the first, I have seen the difficulties; but I believe that, if Scotland and Ireland would meet them with anything like a desire to overcome them, the difficulties would be found to be far less than they seem. For example, Dr. Wood pointed out the other day that it would be impossible to have a conjoint board in consequence of the number of persons to be examined; but the number would not be increased, and many of the persons would be examined only once, instead of three times. I do not think they go earnestly into the question, and see its value, and how it can be carried out; I believe that in Ireland and in Scotland the difficulties are much less than are imagined. Then, with regard to foreign and colonial practitioners, it would be a very great misfortune if a Bill registering colonial and foreign practitioners were carried without having some such clause as is suggested in the third resolution. But most important of all is this penal clause, when we know that in every direction quacks are imposing upon the public. So important is it to have a clause to prevent imposition, that almost everything should be sacrificed to obtain it. I do not myself see the great advantage of direct representation. I believe it is our duty to seek it in our colleges. I believe Dr. Haughton will tell you that the representative of the University of Dublin is nominated by six or eight persons. I think that is wrong. It is very much the same with regard to the Apothecaries' Society. I am surprised that the profession does not seek representation in its own Councils and halls, because it is there that the *morale* of the profession is really to be looked to. I believe that there has existed an error from the first with regard to the duties of the Medical Council. It is simply a body standing between the Government and the public. The public look to the Government; the Government in 1858 gave certain rights and privileges to members of the medical profession, and it is the duty of the Government to see that the persons to whom they give those rights are qualified for them. To my mind, direct or indirect representation has nothing to do with it. I should be very sorry if direct representation superseded the indirect right we all have to be represented in our own bodies. The gentlemen sent by the direct representation would not be one whit worse or better than the gentlemen sent now.

Dr. STEWART: Then why not admit them?

Dr. QUAIN: It would disturb the profession, as we see in the present election to the Council of the College of Surgeons. Look at the canvassing, the heart-burning, the ill-feeling that is likely to arise. Look at the letters that appear from week to week in the journals, and just imagine what would be the state of things if you had six or eight representatives to be chosen, not by the Fellows of the College of Surgeons, but by the whole medical profession. And where you say it would not cost much, I say the expense would be enormous. The talking power of the Council might be a little increased, because of course a representative who was elected by votes at large—

Rev. Dr. HAUGHTON: Would give value for his money.

Dr. QUAIN: He would feel it necessary to keep his name before the profession, in order that he might be re-elected; but I do not believe it would in the slightest degree add to the advancement of the profession to have this direct representation. In Scotland, it is quite true that all the representatives of the colleges are opposed to the conjoint

scheme, because it might to some extent affect their interests, but the excellent man who represents the Crown in Scotland voted with the minority on that occasion. I was sorry to hear Dr. Stewart talk a good deal about the funds of the colleges and corporations. As far as our London corporations are concerned, I do not believe it makes a pin's point difference to us. I am sure he will agree with me that the College of Physicians has made no use of its funds but for the interests of the profession; and I believe the College of Surgeons is not now much behind its sister.

Dr. STEWART: I wish to explain that I said if a measure greatly affecting the public were brought forward, it might perhaps involve pecuniary ruin.

Dr. QUAIN: The remarks of Dr. Haughton about taxation and representation deserve notice; as Mr. Hardy said, midwives and dentists would claim the same right on the same ground. But I would rather view that so-called tax in a different light. The tax is not imposed by the Medical Council. When first the University of London was founded, the University received the fees, and paid out their expenditure, and they received the balance from the Treasury to complete what was required. But after a time, it was found more convenient to pay all the funds into the Treasury, and thence to obtain the funds for carrying on the business of the University. Now on the same principle, if the Government of that day had said, "Let there be a £5 stamp on every register that is issued by the Medical Council", the money would have gone to the Treasury, and the expenses of the Medical Council would have been paid out of the Treasury funds. It is Parliament that has taxed the profession with this £5, not the Medical Council; they are merely the receivers of a tax imposed by Parliament; therefore, I do not think that the principle that taxation and representation ought to go together applies at all. Dr. Haughton, myself, and others, are all represented in Parliament by those who impose that tax.

Dr. WATERS: It was members of Parliament in the House to-day who insisted upon using that term, when I rather wished to speak of it as a registration fee. They insisted upon it that we describe ourselves as taxed.

Mr. HARDY: Before the resolution is put, I should just like to say a word with regard to the constitution of the Committee of Council of the British Medical Association. The Committee of Council can only consist of persons first elected into it or the Council by the Branches, and readers of addresses and presidents of sections, who also were not elected by the general body. It is indirect representation of the members through delegates of the Branches.

Dr. STEWART: That is a change that has taken place during the last year or two.

Mr. HART: I would suggest that there is an universal agreement as to the first four resolutions. As regards the last, what occurs to me is that, as this is a very small meeting, and as we are told that a large meeting of the Lancashire Branch has already passed a directly opposite resolution, it might be advisable not to come to a decided vote upon it. The importance of this meeting lies rather in the value of the speeches that have been made, than in any strength that could be given to those speeches by a vote. In fact, this is a meeting which has dwindled down to about fourteen or fifteen, and I do not think a vote of fourteen would give any weight one way or the other. I do not know whether that meets the view of the gentlemen who have taken so much trouble about it, and who have drawn this resolution; but, as the Branch generally has shown so languid an interest in the matter, I think it might be desirable that you should pass the first four resolutions and agree not to put the fifth.

Dr. QUAIN: Really, as that notice has been circulated, and it was open to other members to come, and we have sat here for two hours and a half, I think we should come to some decision.

Dr. WATERS: It will only be a proof of the little interest that the Metropolitan Counties Branch takes in the proposed resolutions. The profession *en masse* in reply to the circular has responded infinitely better, and I hope that the reply of the profession will have due weight allotted to it.

Dr. QUAIN: The curious thing is that the interest seems to be dying out.

Mr. J. S. TURNER: Two speakers have said that the dentists would claim to have a representative on the Medical Council if this representative system were carried. If the dentist is to be held up as a "bogey" to frighten people from direct representation, I must say that it is a very poor one, because their position is not and may not be established. They have no idea of asserting such a claim; though if it be a right no doubt they might assert it.

Mr. HARDY: It was not intended to cast any slur upon the dentists. It was said that the midwives and the dentists would have the same claim to a vote as the medical profession would have.

The PRESIDENT put the resolutions one by one. Resolutions 1, 2, 3, and 4 were carried unanimously; resolution 5 was carried by 7 to 4. It was agreed on the motion of Dr. QUAIN, that the resolutions be sent to the Lord President by the President and Secretary.

After a vote of thanks to the Chairman for conducting the business, the meeting was adjourned.

THE MEDICAL ACT AMENDMENT BILL AND THE GOVERNMENT.

SEVERAL deputations have within the last few days waited on His Grace the Duke of Richmond, Lord President of the Privy Council, for the purpose of laying before him various views with regard to the amendment of the Medical Act. Subjoined are brief reports of the proceedings.

DEPUTATION FROM THE MEDICAL REFORM COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

Since the introduction of the Duke of Richmond and Gordon's Medical Act (1858) Amendment Bill into the House of Lords, the Medical Reform Committee of the Association not only laid the views of the Association before the General Medical Council on April 17th, as reported in the JOURNAL of April 20th, but has also been favoured with two interviews with His Grace the Duke of Richmond and Gordon at the Privy Council Office. On the first occasion, the Committee made strong representations, first, as to the necessity of modifying the composition of the General Medical Council by the infusion of direct representatives of the profession; and, secondly, as to the formation of compulsory boards of examination in each division of the kingdom, on the principle of equal fees and uniform examination.

On Saturday last, May 18th, the Committee waited by appointment on His Grace the Duke of Richmond, in order again to confer with his Grace upon the Medical Act Amendment Bill. The Committee was represented by Dr. Eason Wilkinson, President of the Association; Dr. Waters of Chester, Chairman of the Committee; Dr. Chadwick, ex-President of the Association; Dr. Carpenter of Croydon, Lecturer on State Medicine at St. Thomas's Hospital School of Medicine; Dr. A. P. Stewart; and Mr. Manby of Wolverhampton, member of the Committee of Council. Dr. Grimshaw of Dublin, Chairman of the Council of the Irish Medical Association, was also present. The object of the deputation was again to represent to his Grace the advisableness of granting direct representation of the profession in the General Medical Council, in order to balance the undue preponderance of the representatives of the universities and corporations upon it, which, it was believed, had proved itself one of the greatest barriers in the way of medical reform. The result of the canvass of the profession was referred to as indicating the opposition which the Bill was certain to encounter in the House of Commons, if this prayer of the profession were not conceded. It was stated that several of those who had answered the question relating to direct representation in the negative had since signed petitions in favour of it; that a former member of the General Medical Council had given in his adhesion to it; that the President of the Irish College of Surgeons had also done so; and that corporations in Scotland and in Ireland had petitioned for it when the Bill of the Marquis of Ripon was before Parliament. The necessity for altering the permissive character of the Bill, by making the formation of conjoint examining boards compulsory, was also insisted on. Dr. Chadwick adduced the decision of the large and very influential meeting in London when he was President of the Association, where, it might be said, both principles were unanimously affirmed, as there was only one dissident. Dr. A. P. Stewart referred to the past action of the Association in bringing the Medical Act of 1858 into existence, and dwelt on the injustice involved in the present exclusion from all privileges of those to whom the Act was due. Mr. Manby stated that, in his district, so few and far between were those who held a different opinion, that the profession might fairly be considered united on both points. Dr. Carpenter specially called attention to the composition of the Medical Council as constituting the chief obstacle in the way of all valid reform, and argued that the proposed change in the Council was of primary importance, for, once effected, the early enactment of all else would speedily follow.

Dr. GRIMSHAW, on behalf of the Irish Medical Association, addressed his Grace at considerable length in support of the memorial from that association, which he placed in his Grace's hands, and showed that the College of Physicians and the Irish Medical Association, as representing the feeling of the profession in Ireland, held similar views to those advocated by the British Association.

The DUKE OF RICHMOND said that he had given the representations made to him very careful consideration, and was prepared to make a concession as regarded the formation of conjoint boards, by making them compulsory in respect of the licensing corporations in Ireland and in Scotland; but insisted on leaving the universities free to give degrees as heretofore. Further than this, his Grace would not go. As to the question of direct representation, he did not express any decided opinion. On general grounds, it might be supported. It did not, however, form part of the Bill, and, if included in it, would at once be met by the opposition of the Marquis of Ripon.

The result of the canvass of the profession made by the Medical Reform Committee, as far as the returns had then been received, was placed in his Grace's hands. The result out of 5,227 replies was:

	AYE.	NO.
Direct representation	5,075	121
Conjoint scheme	4,910	264

His GRACE asked for a copy of the circular, which has been since forwarded.

DEPUTATION FROM THE UNIVERSITY OF LONDON.

A deputation from the University of London, consisting of Earl Granville, Sir John Lubbock, Dr. Storrar, Mr. J. Heywood, Sir P. Gray-Egerton, M.P., Dr. Sharpey, Dr. Quain, Sir William Gull, Dr. W. B. Carpenter, and others, also had an interview on Monday with the Duke of Richmond and Gordon.

Earl GRANVILLE explained the objects of the deputation, and said that they had not come to excite hostility against the Bill, but, on the contrary, to support it.

Dr. CARPENTER stated that their object was to secure uniform qualification in medicine and surgery for every one admitted to the practice of medicine. That had been the primary idea of the London University since its institution. They desired that there should be the highest qualification for a general practitioner. The conjoint scheme, while it would be better for the health and safety of the public, would render the condition of the general practitioner very much better and raise it also. There were many candidates who sought to enter the profession by the easiest access, and this they did by going to Edinburgh and Dublin. The deputation felt that the conjoint scheme could not be carried out in England, unless there were a similar test for degrees or stringency of examination for admission to the profession in Scotland and Ireland, and they hoped the Bill would be so framed as to make this necessary.

Earl GRANVILLE, Dr. STORRAR, and Dr. SHARPEY also spoke in favour of the conjoint scheme.

The Duke of RICHMOND and GORDON, in reply, said the Bill was for the benefit of the public generally. He was not before aware of the merits of a conjoint scheme, and if he had felt able to introduce it into the Bill in the first place, he did not consider it was possible to carry it through in that form. He had, however, proposed an amendment which would, he hoped, be the means of enabling England to avail itself of the conjoint scheme. He was aware that permissive legislation was always to be avoided if possible, and it might be objected that the legislation in his Bill was of a somewhat permissive character in regard to the universities. He did not think if there were a conjoint scheme for England comprising all the universities and corporations, that, therefore, many young men wishing to enter the medical profession, and not wishing to pass the examination of the conjoint board, would take refuge in Scotland, where they would pass a milder examination than would be admitted by the conjoint board; for so long as the Medical Council existed it had the power and the duty imposed on it of seeing that the examinations were of such a character as they thought they should be, and as would uphold the dignity and credit of the profession. The Bill made it necessary for each candidate to be qualified in medicine and surgery. He thought the state of things referred to could not exist after the Bill became law. He would consider all that had been stated.

DEPUTATION FROM THE ROYAL COLLEGE OF SURGEONS OF IRELAND.

A deputation from the Royal College of Surgeons of Ireland had an interview on Tuesday with the Duke of Richmond and Gordon (with whom was Mr. Peel) at the Privy Council Office.

Dr. ROBERT MACDONNELL, President of the College, and Mr. MACNAMARA, one of the Council, spoke, and proposed that, in order to make the Bill a really good one, there should be a double qualification, but that no medical authority should be able to give more qualifications than one—that was, either in medicine or surgery, but not in both; and that, if his Grace did not feel strong enough to carry such a measure, which would be made still more perfect if midwifery were

added as a distinct qualification, the deputation would approve a compulsory conjoint scheme embracing all the medical authorities in each of the three divisions of the United Kingdom rather than a partial conjoint scheme dealing with medical corporations only.

The Duke of RICHMOND and GORDON thought the suggestions made were most admirable; but, although he personally liked them very much, he was afraid they could not be embodied in the Bill with the hope of being successfully carried.

DEPUTATION FROM THE MEDICAL DEFENCE ASSOCIATION.

On Monday last, May 20th, a deputation of the Medical Defence Association had an interview with the Lord President at the Privy Council Office. Among those present were Dr. B. W. Richardson, F.R.S., Dr. C. J. White, Dr. H. M. Williams, Dr. W. B. Johnston, Mr. T. Cooke, Mr. W. Smith, Mr. J. W. Mason, Mr. F. H. Alderson, Mr. H. Adcock, Dr. J. G. Glover, Dr. Royston, Mr. G. Brown, Mr. Paramore, Mr. Bott, etc. The deputation was introduced by Dr. Richardson, who explained the objects of the Association, and presented a memorial which had been drawn up by the Council. Dr. Richardson said the Council was of opinion that, in any measure of medical reform, one of the first principles to be enforced was that no person should in future receive a licence to practise in the United Kingdom who had not satisfactorily passed a full and complete examination in medicine, surgery, and obstetrics. They suggested that diplomas and degrees should be regarded as honorary distinctions only, and should confer no right to practise unless the holder had also passed a State examination. The Council suggested that one-third of the members of the General Medical Council should be chosen by the Crown, one-third by the universities and corporations, and the remaining third by the members of the profession resident within the United Kingdom. They suggested that any assumption of a medical title by unregistered persons should be punishable, and where they practised medicine or surgery for gain without qualification, whether assuming titles or not. They proposed that fines, etc., recovered should, instead of being handed over, as at present, to metropolitan magistrates, be transferred to the Medical Council. They suggested also that dentistry and midwifery should be brought under a new Bill.

Mr. George Brown, Honorary Secretary to the Association, gave further explanations of the views of the deputation. He said that the interests of the medical corporations and of the profession were not identical, and that it was desired that the Government should, while avoiding injury to the corporations, adopt such measures as would be for the interest of the public and the profession. He called attention to the ease with which quacks evaded punishment, and advocated the establishment of a state examination, which everyone should be required to pass before being permitted to practise, the fee for which should be £10 or £15. He also called attention to the use of the names of qualified men by unqualified persons. He also pointed out that it was proposed in the Medical Acts Amendment Bill to admit unqualified foreigners to the Register. The deputation expressed their regret that women should be admitted to the medical profession in this country.

The DUKE OF RICHMOND and GORDON said that he thought the proposal for a State Board went rather against his Bill, and he would not hold out any hope that such a board would be formed. As regarded direct representation in the Medical Council, he could not undertake to alter the constitution of the Council in the present Bill, and he was afraid that, if such were proposed, it would have little chance of passing through Parliament. At the same time, he admitted that the matter was important. With regard to conjoint boards, he had given notice of an amendment, to the effect that the corporate bodies should, either alone or in conjunction with universities, frame conjoint schemes by the last day of December 1880 at latest.

After some remarks from Dr. GLOVER and Mr. FRIDHAM, the deputation thanked his Grace and retired.

DEPUTATION FROM THE MEDICAL ALLIANCE ASSOCIATION.

A deputation from the Medical Alliance Association waited upon the Duke of Richmond and Gordon on Tuesday, being introduced by Dr. Lush, M.P.

Mr. NELSON HARDY said that, on a former occasion, they came before the Lord President to urge the Government support to a Bill, which was brought in by Dr. Lush and Sir Trevor Lawrence, to remedy existing evils; and his Grace then stated that it was the intention of the Government to introduce a Bill of larger scope than the private Bill, and to take in all it proposed. The object the deputation now had in view was to point out the changes which they thought were required in the Government Bill, in order that the great bulk of the medical profession might be able to give the measure their cordial support. His Grace would have learned from the

various deputations that there were four principal points on which legislation was desired by the profession; namely, compulsory conjoint examining boards, amendment of the penal clause, registration of colonial and foreign degrees, and the representation of the profession on the General Medical Council. Of these, the three first mentioned were included in Lord Ripon's Bill in 1870, and it would be a great disappointment to the profession if any of the three were left unsettled by any Government Bill which passed into law. The first especially was desired by the profession at large, and the deputation trusted that his Grace would insert clauses to meet the points in Lord Ripon's Bill. As to the amendment of the penal clauses of the Act, and the registration of foreign and colonial degrees, dealt with in the Association's own Bill, his Grace had given reasons which had prevailed upon the Association waiting to see the Government Bill. The fourth point was one of much difficulty. It was evident that the Medical Council did not, in any proper sense, represent the profession, of which no better proof could be given than that, in their representations to the minister on the subjects requiring legislation, that body had actually omitted to refer to two out of these four points—the first and the last. As to the question in regard to the arrangement of the representation, whether by the votes of the whole profession for a certain number of representatives; whether the votes should be by ballot or taken by proxy; or whether, instead of as at present, the representatives of the different Colleges, being elected by the Council or other governing body, should be elected, as in the Universities, by the whole body of licentiates,—were all points open to discussion. With regard to midwives and dentists, who, under the Government Bill, were to be registered by the Medical Council, these might as well be dealt with in a separate Bill, as their presence would complicate the question of representation; and, seeing how difficult it was to pass a complete measure, the deputation asked the Government to support the smaller measure of the Association.

Dr. JOSEPH ROGERS expressed his dissatisfaction with the General Medical Council as at present constituted, and spoke of that body as doing nothing to raise the education and status of the profession. He introduced the subject of unqualified persons being brought in to attend upon the poor by the Poor-law medical officers, and urged that the Bill should provide against that great evil by making it an offence for an unqualified person to act in this manner.

Dr. R. H. S. CARPENTER dealt with the subject of "quack" doctors, who took upon themselves false titles and deceived the public by the display of diplomas never granted for medical knowledge, and some of these from pretended institutions which had no existence. He also asserted that certain of the British Colleges would grant degrees on a mere money payment; while the licensing bodies so played into each other's hands that the several degrees could be obtained on what were termed "modified examinations"—with the result that persons who were too ignorant to pass the "modified examination" at one place could get the diploma at another. He had known a person who had obtained a public appointment, and desired to have a degree as the necessary qualification, get the qualification, though told by one examining body that he ought not to be allowed to practise surgery and medicine. The speaker also showed his Grace specimens of certificates of death signed by unqualified persons, or signed by qualified persons who had never attended the deceased. This system, he urged, was fraught with evil.

The LORD PRESIDENT OF THE PRIVY COUNCIL thanked the deputation for the large amount of information they had laid before him, and promised to give his best attention to the subjects to which reference had been made.

DEPUTATION FROM THE MANCHESTER MEDICO-ETHICAL ASSOCIATION.

On Monday, May 20th, at the Privy Council Office, His Grace the Duke of Richmond and Gordon received a deputation of the Manchester Medico-Ethical Association, consisting of Dr. Royle, President, J. Broadbent, Esq., one of the Honorary Secretaries, and Dr. Tatham, the Chairman of the Parliamentary Committee of the Association, upon the Medical Acts Amendment Bill, and to present a petition to the House of Lords thereon. The deputation was accompanied by Sir Thomas Bazley, Bart., M.P., Hugh Birley, Esq., M.P., Jacob Bright, Esq., M.P., W. T. Charley, Esq., M.P., O. O. Walker, Esq., M.P., Edward Hardcastle, Esq., M.P., J. T. Hibbert, Esq., M.P. Dr. Glover was also present.

Mr. HUGH BIRLEY, who introduced the deputation, said that he was sure they had at heart, not only the interests of the profession, but also those of the general public. As the matter was of a technical and professional nature, he would leave it to the deputation to state their own case.

Dr. ROYLE, in presenting the petition for presentation, thanked his Grace for having brought in a Bill with the intention of putting medical legislation upon a more satisfactory footing; yet he was sorry to say that the Bill, as it now stood, would by no means remedy the evils or satisfy the profession. They had no wish to obstruct, but would do all in their power to obtain a satisfactory measure; and felt that, did they not come forward and express the sentiments of the profession, so far as they were concerned, they might be justly charged with neglect. No scheme of medical reform would satisfy the profession which did not secure direct representation of the profession upon the Medical Council, which now only represented the Crown, the universities, and the medical corporations; while all the fees which supported the Council were contributed by the profession as a body, who had no direct vote or direct influence over its proceedings. This direct representation of the profession might be easily secured, without increasing the present number of the Medical Council, by grouping together several of the medical corporations, and in place thereof giving six members, to be elected by voting-papers by the registered practitioners of the country. A certain number of proposers and seconders would be necessary for each nominated candidate; the nominations should be sent in by a certain date, and the list of the nominated should be sent to every registered practitioner, and the vote, properly attested, be returned by a certain day. The expense would be trifling, and if the profession had the power of voting and neglected to exercise it, it would be their own fault. There should be compulsory means for creating a uniform standard of the minimum of knowledge which would be required to qualify a person to practise medicine legally, and this would be effected by the formation of a conjoint board. The existing corporations should still grant their degrees, which would be of an honorary character. And it would be unwise to entrust the Medical Council with the power of conferring degrees upon foreigners, unless the said foreigners possess a recognised qualification in their own or some other country. With regard to the twenty-second, or penal clause, as now drawn, its evasion would be so easy as to be of little or no protection to the profession, since the penalties are inflicted not for practising medicine or surgery, but for taking or using the names descriptive of the qualified practitioners thereof. The petition was then handed in. [It was to the same effect as that of the Medical Reform Committee of the British Medical Association.]

His Grace the Duke of RICHMOND and GORDON, on receiving the petition, stated that what had passed should have his best consideration, as also any suggestion which might be made as to the penal clause; but with regard to the question as to direct representation, it could not possibly be introduced into this Bill; it would have to become the subject of a separate measure.

The deputation having thanked his Grace, withdrew.

DEATH WHILE UNDER THE INFLUENCE OF CHLOROFORM.

WE have to record a further death under this heading. For the particulars we are indebted to Mr. Martin Guisford.

Elizabeth P., thirty-four years of age, was admitted into the East Suffolk Hospital, under the care of Mr. Branford Edwards, on the 8th instant. She was suffering from fistula in ano, and was stated to have been of very intemperate habits. Two days after admission, she was brought into the theatre for the purpose of having the fistula operated upon. She was very nervous and greatly dreaded the operation, which she was strongly advised to undergo without anaesthesia; but this she positively refused to do. Accordingly, chloroform was administered, in quantities of half-a-drachm at a time, on a few folds of lint. Her pulse was rather feeble and quick, conditions which, in the absence of other symptoms, were attributed to her fear of the knife. The chloroform was slow in its effect; but, beyond considerable struggling and excitement at the end of the first stage, there were no unusual symptoms. As soon as anaesthesia was barely produced, not more than three drachms having been inhaled, the administration was discontinued. The character of the pulse had not materially altered, and the breathing, though somewhat rapid, was fair. The patient was now turned on her left side for the convenience of the operator, the fistula was examined, and a director inserted. Just as the division of the fistula was being performed, about two minutes after the withdrawal of the anaesthetic, the patient gave a sharp scream, the pupils dilated, urine was passed involuntarily, the face became pale, and, simultaneously, the heart's action and the pulse suddenly ceased, and, after a few moments, the breathing stopped also. Artificial respiration upon Howard's plan was immediately commenced, fresh air in abundance

was admitted into the room, interrupted shocks from a coil were applied over the heart, brandy was injected *per rectum*, and the right median basilic vein was opened. A few feeble respiratory movements occurred once or twice, but no heart-sounds could be detected. After more than an hour had elapsed, the attempt was abandoned as hopeless. At the *post mortem* examination, nineteen hours after death, the heart, as seen *in situ*, was firmly collapsed and very pale, and covered with a thick layer of fat. On removal, the organ weighed nine ounces and three-quarters, and its cavities were quite empty. The walls were remarkably thin and very pallid. Microscopical examination revealed well-marked fatty degeneration of the muscular fibres. There was a distinct patch, apparently atheromatous, on the mitral valve, and the base and transverse part of the arch of the aorta were atheromatous over a considerable extent. The other organs were very congested, but otherwise healthy. At the inquest, a verdict of "death from the action of chloroform on a diseased heart" was returned.

THE ASSOCIATION IN IRELAND.

A CORRESPONDENT writes:—Thanks to the energetic help of Dr. Duffey of Dublin, Dr. Macnaughton Jones of Cork, and Dr. Moore of Belfast, there exist now promising Branches of the Association, with all the requisite organisation for giving united effect to the opinions and interests of our medical brethren in the northern, eastern, and southern provinces of Ireland. On the occasion of the recent visit of Dr. Wilkinson and Mr. Ernest Hart to Dublin, on the invitation of the Dublin Branch, a preliminary effort was made, through the kind aid of Dr. Lombe Atthill, to set in action a movement for affording a similar organisation to our members and their professional brethren in Galway and the western provinces, of which that town is a convenient centre. We understand that there is some prospect of such a movement being satisfactorily set on foot by the aid of Dr. Kinkead of Galway, whose energy and excellent professional relations would afford no small earnest of success.

REPORT OF THE LUNACY LAW COMMITTEE.

WE referred lately to the report of the Select Committee appointed to inquire into the operation of the Lunacy Law. The following is a summary of its text.

The attention of the Committee, the report states, was mainly directed to three questions: 1. Whether a possibility exists of persons being unduly deprived of liberty by means of a false allegation of lunacy; 2. Whether persons properly detained are placed under restraint of a nature calculated to retard their cure and consequent discharge; 3. Whether undue obstacles are opposed to their release when restored to sanity. The report continues: "Upon all these points, the Committee received copious evidence, which led them to the conclusion that, although the present system was not free from risks which might be lessened, though not wholly removed, by amendments in the existing law and practice, yet, assuming that the strongest cases against the present system were brought before them, allegations of *mala fides* or of serious abuses were not substantiated. Much of the evidence, which extended to great length, amounted to little more than differences of opinion among medical men, questions of liberality or parsimony in the arrangements of asylums, suggestions with reference to the letters of patients and visits of friends, or complaints of hesitation among superintendents and relatives to believe in the perfect recovery of patients. Instances of the detention in asylums of persons who might be discharged were given, suggestive of wrong-doing, which subsequent investigation materially qualified. It was admitted that many of these persons were not sane, and that they could not safely be discharged unless they had friends who would be responsible for them. And with reference to the charge that paupers were frequently sent to asylums in cases of ordinary mental enfeeblement when they ought to have been retained in the wards of workhouses, the Committee are of opinion that such proceedings, though irregular, and liable to objections on the ground of expense, could hardly be called injurious to the patients themselves, except (if, indeed, this be an exception) by removing them farther from their homes and friends, if they have any, and were sometimes resorted to for the sake of other inmates who were annoyed by the habits of those who were imbecile. The Committee cannot avoid observing here, that the jealousy with which the treatment of lunatics is watched at the present day, and the comparatively trifling nature of the abuses alleged, present a remarkable contrast to the horrible cruelty with which asylums were too frequently conducted less than half a century ago; to the apathy with which the exposure of such

atrocities by successive Committees of this House was received, both by Parliament and the country; and to the difficulty with which remedial enactments were carried through the Legislature, while society viewed with indifference the probability of sane people being in many cases confined as lunatics, acquiesced in the treatment of lunatics as if they were outside the pale of humanity, and would have scarcely considered a proposal to substitute for chains and ill-usage the absence of restraint, the occupation and amusement which may be said to be the universal characteristics of the system in this country at the present day. Nevertheless, the anomalous state of the law, which undoubtedly permits forcible arrest and deportation by private individuals, and the fearful consequences of fraud or error, have induced the Committee carefully to inquire whether any additional safeguards may be devised." The report goes on to refer to several points in the evidence, and the Committee observe that they believe that the surest mode of guarding against unduly prolonged detention in asylums consists in frequent and careful visitation of all places in which any lunatic is confined, with full power placed in the hands of the Commissioners to order his discharge, and in the more general adoption of the system of probationary release. They think that the difficulty attending, in certain cases, especially in Scotland, the discharge of patients who cannot be certified as entirely sane, but still are no longer dangerous to themselves or others, and not likely to be benefited by further detention, may be obviated by such means. There appears, the Committee say, to be a general concurrence of opinion that the best security against the undue detention of patients consists in personal examination, such as that by the Chancery visitors. Every person discharged from confinement in a lunatic asylum should, with the consent of the Commissioners, have access to all documents connected with his detention therein. Some of the changes in the law recommended by the Committee may, they remark, be carried out by a mere change of practice, others would necessitate amendments in the statute law of the realm; under any circumstances, a consolidation of the Lunacy Acts would be most desirable. Any such changes as they have indicated would, they venture to think, "tend still further to improve the method already so immensely improved, of dealing with those unhappy persons who suffer under mental derangement, and would increase public confidence in a system which is not unnaturally, and perhaps not undesirably, regarded with a considerable amount of jealousy and distrust".

UNIVERSITY OF LONDON.

THE following is the list of candidates duly elected at the recent annual meeting of Convocation to serve on the Annual Committee for the coming year. *Faculties of Medicine and Science:* *Baines, M., M.D.; *Baxter, E. B., M.D.; *Beck, M., M.S., M.B.; Buchanan, G., M.D., B.A.; *Coupland, W. C., M.A., B.Sc.; *Curnow, J., M.D.; *Fagge, C. H., M.D.; Flight, W., D.Sc.; *Holman, W. H., M.B.; *Howse, H. G., M.S., M.B.; *Kisch, B., M.A., B.Sc.; *Magnus, Rev. P., B.A., B.Sc.; *Morris, H., M.A., M.B.; *Poore, G. V., M.D., B.S.; *Pye-Smith, P. H., M.D., B.A.; *Taylor, Frederick, M.D. *Faculties of Arts and of Laws:* *Austic, James, B.A.; *Aspland, L. M., LL.D., M.A.; *Bompas, H. M., M.A., LL.B., Q.C.; *Busk, E. H., M.A., LL.B.; *Charles, A., B.A., Q.C.; *Dunn, E. C., B.A.; *Ely, T., M.A.; *Foster, G. C., B.A.; *Greece, C. J., LL.D.; *Harrop, Robert, M.A.; *Hennell, John, B.A.; *McDowall, A., B.A., B.Sc.; *Murch, C. J., B.A.; *Payne, J. Horne, M.A.; *Shaen, W., M.A.; *Weymouth, R. F., D.Lit., M.A. An asterisk is prefixed to the name of every candidate who was a member of the Annual Committee during the past year.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Dieulafoy on Thoracentesis in Pleurisy.—Peter on the Temperature in Pleurisy.

SINCE the introduction by Trousseau of thoracentesis in ordinary practice, the operation seems to have been very generally adopted, in this country and elsewhere, as a remedial agent for the cure of pleurisy; but, judging from statements made at a recent meeting of the British Medical Association, and from a paper submitted to it by Dr. Wilson Fox, the results are anything but encouraging. Dr. Dieulafoy, however, one of the most brilliant pupils of Trousseau, and faithful to the teaching of his illustrious master, has, in a work just published, en-

deavoured to show that the non-success of the operation is often due to its too indiscriminate employment in all cases of pleuritic effusions, to the defective mode of operating, and to the kind of instrument employed. In the work just alluded to, and which is entitled *La Thoracentèse par Aspiration dans la Pleurésie Aiguë*, Dr. Dieulafoy states that the abuse of the operation in question arises from the facility with which it is practised with the "aspirator". After passing in review the various instruments employed in the operation, from Trousseau to the present time, Dr. Dieulafoy, of course, prefers that which bears his name. Many objections have been made against his own instrument; but these he removes without much difficulty. For instance, it has been objected that thoracentesis might convert simple serous pleurisy into the purulent form; but, although Dr. Dieulafoy does not deny the possibility of such a result, he asserts that it cannot be attributed to this cause alone, as there are hundreds of cases where the chest had not been opened, and yet pus was formed in the pleural cavity; the transformation, he adds, is the natural process in a certain form of serous pleurisy, in which, whether thoracentesis be practised or not, suppuration is the inevitable result, unless, indeed, resolution or the reabsorption of the fluid had already taken place. The mechanism of this form is very ingeniously explained by the author, for a description of which I must refer your readers to the work itself. Other accidents have also been ascribed to thoracentesis: oedema and congestion of the lungs, albuminous expectoration, asphyxia, cardiac and pulmonary thrombosis, and embolism—all of which he disposes of with great talent, if not with great success. Among the different methods employed in the practice of thoracentesis, the aspiratory method has been condemned in some quarters as being more likely than the other methods to produce the above and other unfavourable results. This objection becomes more personal, as it is well known that the name of Dieulafoy is most intimately connected with the aspiratory method of thoracentesis; and, so far back as 1869, he introduced this method, or rather the instrument that bears his name, a full description of which is given in his work, published in English by Smith, Elder, and Co., and which is entitled *Pneumatic Aspiration*. In the brochure under notice, Dr. Dieulafoy gives some useful hints and rules as to indications for thoracentesis and the mode of employing his aspirator-needle. The most urgent indication is founded on the quantity of pleuritic effusion, which the author fixes to from 1,800 to 2,000 grammes, or from 3 to 3½ pints, as the maximum with which the operation can with any degree of safety be put off; and, even when then this quantity is reached, the operation should be performed at once, as in this case, perhaps more than in any other, delays are dangerous. The author gives some signs by which the existence of the above quantity in the pleural cavity may be ascertained, and recommends that, when the quantity is attained, the operation should be performed without delay, whether the patient be still in the febrile stage or not, or even if the dyspnoea do not appear urgent. This applies to simple acute pleuritis; but, if it be complicated with other morbid conditions, the physician or surgeon must be guided by individual circumstances. When thoracentesis is decided upon, no more than 1,000 grammes of the pleuritic fluid should be drawn off at a time; the operation may be repeated as often as is necessary, and this precept applies more particularly to old and complicated cases of pleurisy, in order to prevent congestion of the lungs and other accidents referred to above, which may be induced by the sudden removal of the pressure to which the lungs had been subjected by the pleuritic fluid; and in this way even the lobes on the sound side may become similarly affected. For the same reason, the withdrawal of the fluid should be performed gradually and slowly; and this is better effected with No. 2 of Dieulafoy's needles, of which there are four sizes, than with any other instrument. The concluding chapter of the brochure describes the manner of operating with the aspirator-needle; and it, according to the author, the rules he there laid down be strictly observed, thoracentesis may be performed with greater safety than with any other trocar or instrument.

A propos of pleurisy, I may notice that Professor Peter, another of Trousseau's most distinguished pupils, lately read a very interesting paper, before the Academy of Medicine, on the comparative thermometry between the healthy and diseased sides of the chest in this affection. According to Dr. Peter, the temperature of the side affected with pleurisy is always greater than that of the sound side; and this increase of temperature continues in proportion to the effusion, and may even reach 2.5 and 3 deg. C. above the normal standard. It then falls when the secretion stops; but, nearly always, it continues by 0.5 to 1.5 of a degree in excess of the temperature of the healthy side. This hyperthermy persists even after the reabsorption of the effused liquid, and it is this persistence that explains the possibility of relapses. In cases of dry pleurisy, or pleurisy without effusion, the local hyperthermy is less elevated than in pleurisy without effusion, and the return to the normal

temperature takes place more rapidly. The above applies to pleurisy left intact or unrelieved by thoracentesis; but, when the operation is performed, the local hyperthermy is the consequence of hyperæmia *a vacuo*, as takes place in ascites. In cases of pleurisy, this hyperæmia, which is altogether local, is necessarily added to the previously existing pblegmatic hyperæmia, against which the operation was without curative action. Thus we have two hyperæmiæ instead of one, with all their consequences—such as augmentation of tension in the blood-vessels of the inflamed pleura, purulent transformation of the effused liquid, syncope, pulmonary congestion, consecutive albuminous expectoration, pain, dyspnoea sometimes amounting to suffocation. The conclusions arrived at by Dr. Peter rather tend to show that thoracentesis is not, after all, so inoffensive an operation as it is made out to be by some enthusiasts; and it behoves every practitioner to pause and consider well before he would thrust an instrument into a patient's chest.

ASSOCIATION INTELLIGENCE.

EAST YORK AND NORTH LINCOLN BRANCH.

THE annual meeting of this Branch will take place at the Infirmary, Hull, on Wednesday, May 29th, at 2 P.M.

Gentlemen intending to bring forward any communications, or to propose resolutions, are requested to inform the Secretary without delay.

Dinner at the Vittoria Hotel at 5.30 P.M.

E. P. HARDEY, *Honorary Secretary*.

Hull, May 20th, 1878.

BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the Session will be held at the Museum and Library, at the top of Park Street, Bristol, on Wednesday evening, May 29th, at half past Seven o'clock; H. MARSHALL, M.D., President.

The evening will be devoted to a discussion on Alcohol in Health and Disease, which will be introduced by Dr. E. L. Fox.

E. C. BOARD, } *Honorary Secretaries*.
R. S. FOWLER, }

7, Caledonian Place, Clifton, May 14th, 1878.

SOUTH EASTERN BRANCH: WEST SUSSEX DISTRICT MEETINGS.

THE next meeting of this District will take place at the Marine Hotel, Worthing, on Thursday, May 30th, at 3.15 P.M.; A. H. COLLET, Esq., in the Chair.

The dinner will be served at 5.30 P.M.

Notice of intended communications is requested by the Honorary Secretary on or before Tuesday, the 21st instant, for insertion in the circular convening the meeting.

WM. J. HARRIS, *Honorary Secretary*.

13, Marine Parade, Worthing, May 11th, 1878.

BORDER COUNTIES BRANCH.

THE spring meeting of this Branch will be held at the Keswick Hotel, Keswick, on Friday, June 7th: President—Dr. LOCKIE; President-elect—Dr. GILCHRIST.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to the Secretaries.

R. MACLAREN, M.D., Carlisle, } *Honorary Secretaries*.
JOHN SMITH, M.D., Dumfries, }

Carlisle, May 11th, 1878.

THAMES VALLEY BRANCH.

THE next general meeting will be held on June 13th, at the Greyhound Hotel, Richmond, at Six o'clock.

Papers will be read by—

1. Mr. Balmanno Squire: The Use of Chrysophanic Acid.

2. Dr. Trouncer:

3. Dr. Atkinson: Vaccination and Revaccination.

Dinner at the above hotel at Seven o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Kingston-on-Thames, May 13th, 1878.

STAFFORDSHIRE BRANCH.

THE third ordinary meeting of the Session will be held at the Mines' Drainage Office, 22, Darlington Street, Wolverhampton, on Thursday, May 30th, at 3 o'clock P.M.

VINCENT JACKSON, } *Honorary Secretaries.*
J. G. U. WEST, }

Wolverhampton, May 5th, 1878.

EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held at Peterborough, on Friday, June 21st, at 11.30 A.M., in conjunction with the Cambridge and Huntingdon and South Midland Branches: THOMAS J. WALKER, M.D., President elect, in the Chair.

After Branch preliminary business at 11.30, there will be a general meeting about 12.15, when the President-elect will read an address; at the conclusion of which, he kindly invites members to luncheon at his house before the next general meeting at 2.15 P.M., for papers, discussions, etc.

Gentlemen wishing to read papers, or to dine, are requested to communicate as early as possible with one of the Honorary Secretaries.

WM. A. ELLISTON, M.D., Ipswich. } *Honorary Secretaries.*
J. B. PITT, M.D., Norwich. }

Norwich, May 14th, 1878.

MIDLAND BRANCH.

THE annual meeting of this Branch will be held at Lincoln, on Thursday, June 27th: President—C. H. MARRIOTT, M.D.; President-elect, A. MERCER ADAM, M.D.

Members desirous of reading papers are requested to communicate with C. HARRISON, M.D., *Honorary Secretary.*

Lincoln, May 14th, 1878.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 14TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

CONTRIBUTION TO THE PATHOLOGY OF HÆMOPHILIA.

BY P. KIDD, B.A.

IN this paper, a description was given of a case of hæmophilia in a child six years old, in which fatal hæmorrhage occurred from the mucous membrane of the mouth. A short clinical history of the case was given, with an account of the *post mortem* examination. The blood was examined, and was found to be very watery, and to contain a large excess of colourless corpuscles. A microscopical examination was made of the aorta and vena cava, and of that part of the mucous membrane of the mouth from which the fatal bleeding took place. This examination revealed an extensive affection of the small vessels, arteries, veins, and capillaries, especially the smallest veins. This affection, which mainly consisted in a great proliferation of the epithelioid cells lining the vessels, was seen in the small vasa vasorum of the aorta and vena cava, as well as in the vessels of the submucous tissue of the mouth. The coats of the aorta and vena cava themselves were healthy. Drawings were given of the affected vessels and also of a portion of the surface-epithelium of the mouth, which had undergone a peculiar change, described in the paper. A certain number of small arteries of the oval mucous membrane had undergone a further change in addition to the epithelioid proliferation. This consisted in a degeneration of their muscular coat, which was seen to contain only a very small proportion of its normal structural elements. The conclusion was drawn that in this case there was a general disease of the small vessels. But, as the blood was also affected, there still remained the question whether this was primarily a disease of the blood or of the blood-vessels.

ON THE PATHOLOGICAL TRACES OF PULMONARY HÆMORRHAGE.

BY REGINALD E. THOMPSON, M.D.

THE traces of pulmonary hæmorrhage most frequently found in the lungs after death were stated to be small rounded or ovoid masses which varied in size from a pin's head to a filbert, and varied in colour according to their age from a blood-red to an ivory white. They were smooth, firm, and tough in texture, and were found to consist of blood-corpuscles and fibrin, packed closely in the alveoli. Their position was peculiar, and the special localities which they haunted indicated

that the force of inspiration was the active power by which the blood was impacted in the alveoli. Hence these traces indicated hæmorrhage transferred from some other distant part in the lungs. Their future condition appeared to depend upon the absence or presence of other pulmonary disease. There were other traces which indicated extravasation of blood *in situ*; in these cases, which were more rarely met with, there was considerable pigmentation of the neighbouring tissue, and occasionally laceration. In either case, whether the blood were transferred from a distance or deposited *in situ*, softening and elimination might occur, so that a cavity might be the result; but it was very difficult to form an opinion with reference to the relation of these hæmorrhagic deposits and tubercle.

Dr. E. SYMES THOMPSON said that the paper now read was of great value, as representing the pathological aspect of the subject. It tended to show that not only might there be secondary hæmorrhagic changes in a lung already affected, but that in an otherwise healthy lung hæmorrhage might occur, and be followed by a series of changes such as were described in the paper.—Dr. THEODORE WILLIAMS said that there was too great a tendency to call the masses found in the lungs, in cases of phthisis, caseous, or tubercular, or something of the kind, without sufficient examination. Dr. Thompson's paper was hence valuable; but he did not think he had made out that the putty-like masses were due to blood.—Dr. DOUGLAS POWELL expressed a doubt whether the force of inspiration was greater in one part of the lung than in another, as Dr. Thompson supposed. It was difficult to imagine how the changed blood could remain recognisable at the end of many months.—Dr. R. THOMPSON had in many cases found hæmoglobin in the masses. He thought that all portions of the lungs did not expand equally.

THE BRAIN IN CONGENITAL ABSENCE OF ONE HAND.

BY W. R. GOWERS, M.D.

THE subject was a man in middle life. The left hand was absent from birth in front of the carpus, the carpal bones being imperfectly developed and united. They were covered with a fibrous capsule, into which most of the muscles of the forearm were inserted. None of them were absent except the extensor minimi digiti. The ganglia at the base of the brain were equal in size. The convolutions of the frontal lobes were equal in size, including the ascending frontal convolution. The middle third of the ascending parietal convolution on the right side was only half the size of the corresponding part of that on the left. The upper and lower extremities of this convolution were equal on the two sides. Microscopical examination showed no alteration in the structure of the affected part; the smaller convolution having layers of grey substance of the same thickness, and presenting cells as numerous and as conspicuous as the other. The only difference was in the extent of the convolution. The other convolutions of the parietal and occipital lobes were equal in size. It was pointed out that the smaller area was precisely that, stimulation of which, in the experiments of Ferrier on monkeys, caused movements in the hand, which was in this case wanting. The absence of any change in the structure of the convolution might be due to the persistence of all the muscles of the forearm, or to representation and localisation in the brain being not exclusive, merely preponderant.

ABSCESS WITHIN THE THORAX, ACCOMPANIED BY PULSATION.

BY JOHN TOPHAM, M.D.

THE enlargement, which was consequent upon a blow from a mangle received by a laundress aged 21 in March 1871, was not noticed till nine months afterwards, having been preceded by pain in the part injured six months from the accident. There was a hemispherical enlargement at the left margin of the sternum, between the third and fourth ribs, pulsating synchronously with the heart. Both heart-sounds were audible through the swelling. The conclusion arrived at by the author was that the case was one of abscess; but, it being supposed to be aneurism, the patient was confined to bed in an infirmary during three years, the enlargement increasing gradually. At the end of six months, both sounds of the heart became audible in the back. Pressure did not change the size of the swelling, but the skin became inflamed over the prominent part. In June 1876, ulceration having set in, there was a discharge of thick pus, followed by a quantity of cheesy-looking substance, consisting under the microscope of large round corpuscles resembling white blood-corpuscles, or those of pus, which were undergoing fatty degeneration. Both sounds of the heart were audible in the back. The pulse at the wrists was irregular (between 50 and 60 a minute). Systolic murmurs were heard at the heart's apex, none at the base; there was a loud "*bruit du diable*" in the neck at the lower outer edge of the sterno-mastoid; "loud *bruit* with the first sound, but louder and of higher pitch, on the left". The

patient left the infirmary; and in March 1876 the heart was in the natural position and the sounds natural, but the pulsations were irregular. In November 1877 there was still occasional discharge from the aperture; but the patient, now a domestic servant, was able to labour at her employment.

AN ANATOMICAL REMEDY AGAINST RESPIRATORY OBSTRUCTION FROM THE TONGUE, EPIGLOTTIS, AND VELUM PALATI IN THREATENED APNŒA FROM ANÆSTHETICS OR OTHER CAUSES.

BY BENJAMIN HOWARD, M.D.

The object of the paper was to give the results of various and repeated investigations and experiments. The facts to be presented confirmed the alleged respiratory obstruction from the tongue, epiglottis, and velum palati in apparent death in the ordinary supine position, and showed how such obstruction was promoted by the customary elevation and flexion of the head and neck. Traction upon the tongue, however firm, might open the pharynx, which its retreat had closed, but nothing more; the epiglottis remained unlifted. Other facts were then presented, proving how, by simple position, all these obstructions were instantly and simultaneously removed. The position consisted in elevation of the thorax and complete extension backward of the head and neck. By this means, the line of gravitation of the tongue was shifted from the back of the pharynx to the hard palate at or about its junction with the soft palate. The entire posterior wall of the pharynx was shifted backward; its anterior wall was shifted forward; thus, its antero-posterior diameter, as much as was possible, was throughout increased; while, by the shifting upward and backward of the nares, their entrance was brought more directly over and in a line with the course of the pharynx. The larynx being pulled downward and forward by the sterno-thyroidei muscles and fixed there, the extensive motion upward and backward of the lower jaw put upon the stretch the genio-hyoidei, mylo-hyoidei, and anterior bellies of the digastric muscles, causing the hyoid bone, and, by means of the hyo-epiglottic ligament, the epiglottis, to share together the motion of the jaw. Thus, the epiglottis was instantly made vertical. The thyroid insertion of the palato-pharyngei muscles being brought downward and forward by the sterno-thyroidei and fixed; the palato-pharyngei muscles were put upon the stretch their whole length by the extensive movement upward and backward of the head; and thus the posterior pillars of the fauces, the arches of the palate, and the velum palati, into which latter membrane these muscles were inserted, were all pulled downward and forward; they were thus made tense and kept so. The velum being thus stretched some distance in front of the back of the pharynx, a post-oral air-way was secured, from which the tongue was doubly excluded. Hitherto, in the treatment of apnœa and asphyxia, the tongue had been withdrawn only in those exceptional cases where a surgeon with forceps had been present. The means of complete elevation of the epiglottis in cases of apnœa had been hitherto unknown. The position described removed both those obstructions without assistant or instrument. The author, from the facts given and from other experience, urged that always in the induction and condition of anæsthesia the head should rest rather lower than the shoulders. He also stated that complete extension backwards of the head and neck should be the first and instant measure in threatened or actual apnœa, both as a remedy and as the first step towards success in artificial respiration. The withdrawal of the tongue when practicable, the author considered highly advantageous, though not necessary; but it should incur as little lowering of the inferior maxilla as convenient. Finally, the author claimed to have demonstrated that, contrary to the general belief, traction upon the tongue, however firm, cannot materially elevate the epiglottis; that he had discovered a simple way by which (1) the tongue is excluded from the pharynx without manipulation; (2) the epiglottis is elevated vertically at will; (3) an unobstructed post-oral air-way is secured from the glottis to the nares—all of which is effected simultaneously by position alone. These facts had received corroboration from recent observations upon anæsthetised patients; and the author was glad to believe that, in averting apnœa, in restoring from apnœa, and in enabling various means of artificial respiration to be used more effectively, the simple position above directed will be a frequent means of saving human life.*

* These facts have been demonstrated at King's College Hospital, at the Royal College of Surgeons of England, at Guy's Hospital, etc. After the earlier demonstrations, in view of the novelty and importance of the facts shown, statements that they had been satisfactorily seen were written by Dr. Gerald F. Yeo, Professor of Physiology, Mr. E. H. Howlett, House-Surgeon; and several others of King's College. At a later date, the following statement was made.

* Guy's Hospital, *Post Mortem* Theatre, April 24th, 1878.—We have to-day witnessed a demonstration by Dr. B. Howard, which showed—1. That traction upon the tongue did not elevate the epiglottis (stirred it only, and pulled it slightly for-

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 26TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Ovariectomy in a Child aged Twelve Years.—Dr. T. BARLOW read notes of this case, which had been under the care of himself and Mr. Howard Marsh at the Children's Hospital, Great Ormond Street. The enlargement was on the right side of the child's abdomen, and consisted on the extreme right of a hard mass, internal to which, and attached to it, was a tight cyst. The whole tumour was slightly movable and painless, and had been eighteen months growing. The child had scarcely any symptoms; she suffered only from a little constipation. Her temperature was normal. Chloroform having been given, a hypodermic syringe was introduced into the cyst two inches below the umbilicus, and one drachm of clear straw-coloured fluid was withdrawn. Next day, the temperature had risen to 99.4 deg. Four days subsequently, the tumour was considerably collapsed, the abdominal surface was flattened, and the hard part of the tumour was now quite definite. It evidently contained some material as hard as bone. The cyst had become quite soft and flabby, and gave no evidence of fluid. After about six days, the cyst refilled. Fifteen days subsequently, it was completely aspirated, and six pints of fluid were removed. The cysts, however, again filled. Ovariectomy was then performed by Mr. Marsh. There were no adhesions between the tumour and its surrounding parts. When it had been thoroughly exposed by the incision into the abdomen, it was tapped, and eighty ounces of light brownish green fluid were drawn off. The remaining solid portion of tumour was still too large to be drawn through the opening, which was three inches long, it was consequently extended nearly to the pubes. The thick and fleshy pedicle was clamped by Mr. Spencer Wells's method and divided. Bleeding points in the omentum were secured with catgut; and the wound was closed with deep silver sutures. No subsequent bad symptoms occurred. Pain in the abdomen was treated with morphia suppositories. After the eighth day, several sutures were removed; the bowels acted spontaneously on the twelfth day; and the clamp dropped off the pedicle on the thirteenth day. For some weeks, the stump of the pedicle remained protruded and covered with florid granulations. It at length became completely retracted, and the child was discharged well about eleven weeks after the operation. The tumour weighed two pounds eleven ounces; it measured six inches across, and seven inches from above down, and was nearly spherical in shape. The lower half was composed of a thin-walled cyst, capable of holding a large cocoa-nut; it had projecting into its cavity several smaller cysts. The hard part contained a plate of bone measuring two inches by four inches, and other smaller pieces of bone. There were cysts at the upper and outer part of the growth, with gelatinous and solid contents; many of which contained sebaceous matter, with collections of dark short hairs. There were also fibroid bands and irregular spicula of bone interposed between some of the cysts.

The PRESIDENT, upon inquiry, was informed that the child had not menstruated.—Mr. MARSH remarked that such operations in children were by no means unique. Mr. Spencer Wells had operated successfully upon a child eight years old; and in the *American Journal of the Medical Sciences*, there was a record of successful operation where the child was only seven years old. At Bonn, a child aged two years had been operated upon and perfectly recovered. In all the cases, he believed the cysts were dermoid.—Mr. MAUNDER said one important feature in connection with cystic tumours of the abdomen was the question of a preliminary tapping. He had known and doubtless others present were acquainted with instances in which the simple tapping of an ovarian cyst had led to fatal peritonitis. He was, therefore, strongly of opinion that this should not be done, except in obscure cases and as an aid to diagnosis. The case under consideration indicated a leakage into the peritoneal cavity, notwithstanding the small instrument that had been used; but, fortunately, no serious result followed. Assuming the radical operation justifiable in a given case, it is very undesirable to submit the patient to additional risk without corresponding advantage.—Dr. WILTSHIRE remarked that in dermoid cysts the fluid was made up of decomposed skin-products, etc., which, oozing into the peritoneum through the puncture made with the cannula, was very apt to set up peritonitis. In a patient with such a cyst, he had seen a severe

ward; 2. That extension of the cervical spine upon itself, and extension of the head upon the neck, with elevation of the lower jaw, caused complete elevation to a vertical position of the epiglottis; tension of the velum palati preventing falling of the dorsum of the tongue upon the back of the pharynx, and ensured an unobstructed passage from the glottis to the nares.—(Signed) Thomas Bryant, Surgeon and Lecturer on Surgery; C. Hilton Fagge, M.D., Lecturer and Demonstrator of Pathology, etc.; F. A. Mahomed, M.D., Medical Registrar; C. J. Symonds, Demonstrator of Anatomy."

attack of peritonitis supervene upon tapping. After her recovery, a second cyst filled; this had been opened, and still remained open. In most children, cysts of the ovary were demoid.—Dr. COUPLAND stated that the fluid drawn off in this case was thin and pellucid, and came up through a hypodermic syringe; consequently, this cyst was not demoid.—The PRESIDENT said that as the fatal results which might ensue from these tapplings were well known, it seemed desirable to draw off a large quantity of fluid, that the cyst might collapse and no further fluid exude. When only a small quantity was drawn off, the tension of the cyst wall was scarcely diminished.—Dr. BARLOW said that at Great Ormond Street, in very many cases of use of the hypodermic syringe, no harm had resulted. In regard to hydatids also, even if (after tapping) the remaining fluid exuded into the peritoneal cavity, no harm seemed to come of it. If surgeons would use a hypodermic syringe more frequently, they would learn the advantages of it. Dr. Wilson Fox had taught that, after puncture in pleuritic effusions, the serum might be transformed into a purulent liquid. Dr. Barlow, however, had seen oftentimes the removal of a small quantity of pleuritic fluid seem to be the first point in the absorption of the rest of the fluid itself.

Operation for Strangulated Femoral Hernia, in which an Anomalous Obturator Artery was Divided.—Mr. BARKER read notes of this case. The patient, a woman aged 36, was operated on in the usual way on February 7th. Most of the constricting fibres were easily divided; but, on severing some which remained, embracing the neck closely, blood welled out of the wound. The latter was enlarged and the vessel sought. As it could not be found, and the bleeding soon ceased to be severe, it was deemed advisable to apply pads over the wound, and compress with bandages. On the 8th, the patient was better; and on the 9th better still. Early on the morning of the 10th, however, she took a turn for the worse (indicating peritonitis), and died at 5 P.M. on the same day. A *post mortem* examination revealed acute peritonitis with serous effusion. Near the wound, about three or four ounces of blood were found effused underneath the peritoneum in the pelvis above and to the right side of the bladder. This blood came from an anomalous obturator artery passing down on the inside of the neck of the sac. It sprang from the epigastric about half an inch from its origin, and was completely severed at about three-fifths of an inch from its commencement. Its vein lay to the outside of the sac. The proximal end was plugged; the distal had furnished the bleeding. Mr. Barker remarked that his object in bringing the case before the Society was not only that it was a rare one, but that he hoped to elicit an expression of opinion from the members as to the best mode of dealing with cases where this rare accident had occurred. Was the artery to be sought at all costs, and ligatured; or was it, in certain cases, as in this, to be left to itself controlled by pads? He had, with a good deal of trouble and search through English and Foreign literature, succeeded in collecting only twelve cases where this accident had occurred: excluding doubtful cases where no correct record had been given. Out of these, he said it was remarkable that in six the vessel was secured with ligature or hook, and in six it was left to itself. Of the first six, two died; and of the second six, one (the present case) died of peritonitis. Without desiring to make too much of these facts, he thought that the one line of practice was at all events justified as well as the other, although in some books very positive statements were made as to the urgent necessity of seeking the artery and placing a ligature upon it.

The PRESIDENT said that he personally had only once seen such a case, and that was one of those mentioned by Mr. Barker, which had been under the care of Mr. Stanley. The artery in that instance was tied, and the patient did well. He had encountered hæmorrhage in some of his operations for femoral hernia, but had always stopped it by local pressure. When the cases recovered, it was difficult to say whether the blood came from a wounded obturator artery or from a vein. In the six cases of wounded obturator artery which were ligatured, Mr. Barker, who had collected them, had said there were two deaths; that proportion of fatal cases was not much greater than the deaths after ordinary operations for strangulated hernia. He thought each case should stand on its own merits. In some, pressure would suffice; in others, the subcutaneous fat, &c., being pushed aside, the artery might be tied. In some cases, however, it would be very difficult to find it.—Mr. HUTCHINSON thought also that each case should stand on its own merits. In the present case, did Mr. Barker think there was any secondary hæmorrhage? If not, the cause of death was evidently peritonitis. What was the method adopted for applying pressure? He advocated the plugging of the wound by a sponge with a silk thread tied around it, dipped in alcohol, and then thrust deeply into the wound, as generally the best method of arresting the hæmorrhage. He had had no case of wound of the obturator artery. Pos-

sibly, if the patient were thin, the artery might be tied; in other cases, pressure should be applied.—Mr. MAUNDER said he was personally grateful to the author for the valuable information conveyed in his paper. Hunting up statistics was always more or less irksome and distasteful; but Mr. Barker had done this very efficiently, and had clearly indicated the line of treatment to be adopted. Doubtless, an individual case must be treated on its own merits, and, in an instance of severe hæmorrhage, the bleeding vessel might be sought for. Failing to find this, compression must be resorted to, and, in order that it might be effectual, the compressing body should be applied through the wound and upon the actual source of the bleeding. In the author's case, the patient being stout, and the mode of compression being indirect, all the soft parts of the region intervening, pressure had probably very little to do with the arrest of bleeding; nature proved equal to the emergency.—Mr. BARKER, in reply, said that he had purposely excluded in his statistics all cases in which there was any doubt as to the source of the hæmorrhage. In some books, it was emphatically stated that the artery should be ligatured; so said Mr. Hey, Mr. Lawrence, etc. In his own case, at the necropsy, there appeared to have been only a small amount of secondary hæmorrhage. The pressure was applied externally, and the wound was not plugged, as the external pressure seemed to be enough.

CORRESPONDENCE.

IS ALCOHOL FOOD?

SIR,—Dr. A. Carpenter, in his address on Alcoholic Drinks in your last number, says: "Every medical man must have seen cases, which now and then have fallen to my lot to witness, in which life has been prolonged for many months without any other nourishment than that which was contained in the spirituous liquors or wines which the patient would alone consume." If this statement be true, the question which has so long exercised the scientific—viz., Is alcohol food?—needs no further debating; it is manifestly settled, and "drink" certainly scores a most valid argument in its favour. But, as a doubter, would you allow me to ask Dr. A. Carpenter to show his proofs of this important assertion? Before such proofs, I should say it is contrary to all experience and knowledge. So far from cases of the kind being known to all medical men in large practice, I should rather believe, until the contrary is shown, that no medical man can produce such a case. By proof I mean evidence which justifies scientific belief. On the face of it, most rigorous and difficult proof is required to substantiate the statement. A man who can swallow alcoholic drinks can swallow liquid foods, at all events; and how is a medical man to vouch that for months together nothing but alcoholic drinks, sweetened perhaps with a little sugar, have passed down his patient's throat? If the patient be the authority, what, one may fairly ask, is the value of an assertion made by his muddled or drunken wits? What account would Falstaff, after drinking "this intolerable deal of sack" (two gallons) have taken of the halfpennyworth of bread charged in his reckoning? And where, I would ask, are the medical men and attendants who would allow their patient to be supplied for months together with alcoholic drinks unmixed with nourishing food? and what would be the sense of it? I am sure Dr. A. Carpenter has no wish to encourage drinking; but most assuredly the exaltation of alcohol into a food (for what else can it be, if it sustain life "for many months together?") will not fail to be used as an apology by those who resort to it in excess.—Yours obediently, W. O. MARKHAM.

London, May 18th, 1878.

FACILITIES FOR CLINICAL SURGERY AT OXFORD.

SIR,—In the article on University Education, which appeared in the BRITISH MEDICAL JOURNAL, it is stated that, at the time of the visit of your representative, there were only seven cases of accident and operation in this Infirmary. Would you kindly give the date of the visit of your representative? for I feel sure he could not have been correctly informed. He never asked either of the surgeons or myself for any information; we should have been very pleased to have afforded him every facility for carrying out his investigations. I should think he probably mistook the number in one ward for the total number of operations in the Infirmary.

Should you care to have information as to the number and nature of the surgical cases in the Infirmary, I shall be very pleased to send you a list of them.—I remain, your sincerely,

W. LEWIS MORGAN, House-Surgeon.

Radcliffe Infirmary, Oxford, May 21st, 1878.

DR. FOSTER ON MEDICAL EDUCATION AT CAMBRIDGE.

SIR,—Dr. Foster proposes that the M.D. degree at Cambridge should not be a natural sequence of the M.B., but a title of distinction (such as the F.R.C.S.).

To make such a distinction between the M.D. and M.B. as exists between the F.R.C.S. and M.R.C.S. would be impossible without lowering the M.B. to the level of the M.R.C.S.; for the M.B. degree not only indicates that the graduate has had a university training, but that he has practically appreciated the advantages thus offered, and is a better educated practitioner than he probably would have been had he studied at an ordinary school and contented himself with a mere licence to practise. A general practitioner who merely wants to show that he has been at Cambridge can very well do so by taking the ordinary B.A. degree, and obtaining his licence to practise from one of the metropolitan boards.

It may be well to point out, however, that there is a test distinction between the M.D. and M.B. degrees at Cambridge. The Bachelor of Medicine, in addition to having to wait three years for the doctor's degree, is required to (1) read a thesis; (2) write an *extempore* essay on some subject in Medicine, Pathology, Physiology, or State Medicine; (3) pass an examination in Pathology, Practice of Medicine, and State Medicine.

I always thought that Cambridge could compare favourably with other universities as regards the success of her medical graduates; but Dr. Foster speaks of the comparative professional failure of Cambridge men.

It would be interesting to know whether from the list of failures Dr. Foster makes exceptions of such men as Sir Thomas Watson, Sir George Burrows, Drs. Arthur Farre, Guy, Handfield Jones, Howship Dickinson, Pitman, Herbert Davies, Barclay, Hare, C. A. L. Robertson, Dalby, Galabin, Liveing, Sturges, L. S. Forbes Winslow, G. H. Philipson, W. Ogle, A. Ransome, Clifford Allbutt, and the staff of Addenbrooke's Hospital.—I am, Sir, yours, etc.,

GLYNN WHITTLE, M.A. Cai. Coll. Cantab., M.D. Trin. Coll. Dub.

Parliament Terrace, Liverpool, May 13th, 1878.

*** We are glad to see that Dr. Foster's proposals are likely to be adequately discussed; but we must hasten to add that the parallel between the proposed M.D. Cantab. and the F.R.C.S. Lond. was our own. The parallel may not have been a very happy one; at any rate, we will give Dr. Foster's own words on the subject without comment or addition:—"The M.B. (as distinguished from the M.D.) might profitably be used to denote, not men of unusual medical ability, but men who, being qualified to practise medicine, had enjoyed the advantages, and presumably manifested the benefits, of an university career." (Page 29.) . . . "In order to afford a wholesome stimulus during one, two, or more years of foreign study, *i.e.*, of study away from Cambridge, the M.D. examination should be made a real and indeed a difficult one, so that the man who wasted this precious time would have to be contented with the lower title of M.B. The M.D. examination might be either general or special, according to the tendencies of the candidates, but should in all cases be thorough, searching, and, above all things, practical. The thesis which at present forms part of this examination might profitably be retained if the useless disputation in the schools were omitted. The title of M.D. should, in fact, be not a natural sequence of the M.B., but one of real distinction only to be gained by men who have devoted themselves with vigour to the study of the profession." (Page 30.)

OBITUARY.

HENRY JEPHSON, M.D.

OUR obituary list last week contained the name of one of the most remarkable physicians whom this century has seen. We allude to Henry Jephson, M.D., of Leamington, who died at his residence, Beech Lawn, on May 14th. During the past week, the local as well as the general press has been full of interesting notices of his life, so that our duty might almost be fulfilled if we reproduced some of these; but it will probably interest our readers more if we give a short account of that part of his career more generally interesting to the profession.

Henry Jephson was born on October 4th, 1798, near Mansfield, in Nottinghamshire. As a youth, he showed much interest in scientific studies; and, while experimenting with fulminating silver, he blew off the first and second fingers of the right hand. He has often told friends that much of his subsequent success in life depended upon his know-

ledge of chemistry: a subject not then very much studied or valued by the profession. In after-life, when his marvellous success in practice left him hardly a minute which he might call his own, he had a laboratory in which he occasionally snatched a few hours of relaxation. When quite a youth, he became a pupil of Mr. Alcock, and was entered at St. George's Hospital. Here he made the acquaintance of Mr. Brodie, afterwards Sir Benjamin Brodie, who was house-surgeon there, and the friendship between them continued till Sir Benjamin's death. Mr. Chambers, a retired surgeon of the navy, was then in practice in Leamington, which was a small place of about two thousand inhabitants, but with a rising reputation as a health-resort, on account of its saline springs, which were even then coming into much use. Mr. Chambers required an assistant, and, on applying to Mr. Alcock, young Jephson was strongly recommended by the latter to Mr. Chambers. In 1818, Jephson came to Leamington, and, from that time until his death, he never left it, except temporarily. Very soon after his arrival, the assistant made himself so useful and so necessary, that he was taken into partnership by the principal, and, a few years afterwards, Chambers retired from practice, leaving the whole of it to his partner. The success of the young surgeon now became remarkable, and, seeing his way from the reputation he had already acquired beyond the place he lived in, he determined to fit himself for the highest success attainable. In 1827, he left Leamington, and with his wife (for he had by this time made a prosperous and happy marriage), went to Glasgow, where, after the usual residence, he proceeded to the degree of M.D. at the university of that city.

In 1828, he came back from Glasgow and went to Cheltenham, where it was his intention to reside and practise; but a deputation of his old friends and patients waited on him, requesting him to return to Leamington. This he did, and, upon his return, he most honourably repaid to the gentleman to whom he had sold his former practice the whole of the purchase-money.

From this time forward until 1848, exactly twenty years, he had what probably was, and possibly still is, the most extraordinary success ever achieved by any physician. Patients from all parts of the kingdom, from the colonies, and from the continent of Europe, thronged to Leamington. His time was occupied almost night and day. He received summonses, rare in those days, to all parts of the country for consultations, and he had a specially contrived travelling carriage made for these journeys. The income he made is almost fabulous, and we have reason to know that for several years together it exceeded £20,000, and that it once reached £24,000 in one year. As the result of these labours, his health began to fail in 1846, while, in 1847, he first began to perceive that failure of vision which, in 1848, resulted, in spite of the best of advice from Dalrymple and Sichel, in total blindness. It was attributed to what was then called gouty amaurosis; but it was probably not unconnected with failure of nerve-power, the result of overwork.

Since 1848, he has lived in quiet retirement in the house which he built for himself during his great success. The circumstances which led to the extraordinary success of Dr. Jephson are not likely to recur. The art medical is happily becoming in public estimation less of the art magic which it was fifty years ago. But Jephson was a great man and a great physician. His method with most of his patients showed that he knew what he was about, while his absolute demeanour commanded and enforced an obedience that others failed to obtain. He believed that most of our ailments sprang from bad habits of eating and drinking, so that in almost all cases he insisted upon a rigidly plain diet and abstinence from stimulants. In this he was manifestly before his time, and, had his example been more followed, we should have heard less of homœopathy. He made a very general use of the Leamington waters, both internally and externally, and in this respect it would be well if his example were more generally followed; for the saline springs of Leamington are as efficacious now as they were in his day, and are quite as capable of miraculous cures now as then. He had not much time for reading, but he always tried new remedies as soon as they appeared. Some of his prescriptions came almost into general use, and are even now in much repute. We allude particularly to sulphate of magnesia in small doses, with dilute sulphuric acid, and also to the purgative draught known as "the Broom", which, in Leamington at any rate, is still in common use. To his patients he was intensely autocratic and self-dependent, and many amusing anecdotes are told of him.

No man ever made more true or warm friends, and he made them in shoals. To his friends he was ever kind, sympathetic, and generous. No man in our profession, in provincial practice at least, ever had such honour accorded to him while living. A splendid statue of him was erected thirty years ago, the public gardens were called by his name, and two portraits of him were painted for public use. In person, he

was of middle height, and of very intelligent and pleasing countenance. He had a very large head, and, though this did not appear disproportionate, the size of his hat would astonish anyone who saw it. He was most generous with his wealth, and Leamington has good reason, in her public institutions of all kinds, to remember him with deep gratitude. He was for many years a county magistrate, and in Warwickshire was, apart from his profession, most deservedly admired and esteemed. About a month ago, his increasing weakness, arising from failure of nervous power, probably dependent upon degeneration of the nerve-structure, alarmed his friends. Dr. Quain of Harley Street, Dr. Heslop of Birmingham, and Mr. Kimball of Knowle, Warwickshire, gave every assistance to his local medical friend Dr. Thurstfield of Leamington; but, in spite of all their efforts, he gradually and surely declined, and peacefully entered into his well earned rest on May 14th. Though he has so long lived in retirement, he will be greatly missed, especially by his poorer brethren, to whom his heart and purse were to the last open. His career was singular, almost improbable, and now almost impossible. Had he died thirty years ago, his biography would have appeared in every newspaper in England, and books innumerable would have been written about him. *Sic transit gloria mundi*: better as it is; those of us who knew him in later life saw more of his goodness and generosity, and of the patience with which he bore his awful affliction, than others could previously have seen; and, though he might have had more of the plaudits of the world, he could not have had more of the affection of friends.

He married, in 1826, Anne Eliza, daughter of the Rev. Dr. Geldart, Rector of Kirk Deighton, in Yorkshire, who died in 1874. One child, who died in infancy, was the issue of this marriage. Dr. Jephson was buried quite privately beside his wife in the rural churchyard of Old Milverton, near Leamington, on May 17th, 1878.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners, on May 16th; and, when eligible, will be admitted to the pass-examination.

Messrs. Challoner Clay, M. D'Oyley Gilkes, Augustus P. Hills, Frederick M. G. Smith, Percy H. Gardner, James Anderson, John M. Owen, and J. Winthrop Woodruff (students of Guy's Hospital); Francis H. M. Barton, Arthur Willis, Arthur E. Root, J. Sidney Hunt, and T. Underwood Gray (St. Bartholomew's); Thomas J. Evans, Eugene A. Laurent, and William C. Adams (University College); John A. Webster and Thomas R. C. Edwards (St. Mary's); Robert E. Kygate and David J. Kygate (London); Robert Taylor (St. Thomas's); and David G. Edwards (Liverpool School).

Fourteen candidates were rejected.

The following gentlemen passed on May 17th.

Messrs. Edgar E. A. Philp, Henry G. Terry, Lestock W. Cockburn, John M. Nicholl, Thomas P. Taylor, and John A. Gray (St. Bartholomew's); Harold D. Davenport, John Rigley, Frederic W. Pilkington, and Benjamin H. Lane (Guy's); Joseph L. Bousignac (St. Mary's); Josiah Eddow (University College); and Frank Newcombe (Middlesex).

Nine candidates were referred.

The following gentlemen, having undergone the necessary examinations, were admitted members of the College at a meeting of the Court of Examiners, on May 21st.

Barnard, John H., Fulham (Guy's Hospital)
Biden, William P., Peckham (Charing Cross)
Bilacker, Ernest, Bath (Bristol School)
Clements, William G., Rochester (Middlesex)
Corbyn, Frederick H., Cheltenham (King's College)
Davis, George, Blackheath (Guy's)
Dowley, David H., Clinton, Canada West (St. Thomas's)
Drought, Eugene N., Wicheore Hill (St. Bartholomew's)
Faulkner, Alexander S., Liverpool (Liverpool School)
Groomer, William W., Monk-Sohani, Suffolk (St. Thomas's)
Hough, Charles H., Cambridge (St. Thomas's)
Jackson, George H., Liverpool (St. Thomas's)
Jones, Robert D., Conway (King's College)
Macdonald, George A., Hull (St. Thomas's)
McKeough, George T., Chatham, Canada (Toronto School)
Morton, Augustus E., Aylsham (Guy's)
Parke, Thomas H., Sheffield (Manchester School)
Pettigier, John H., Manchester (Manchester School)
Porter, William S., Sheffield, Leeds School
Russell, James W. L., Sheffield (Sheffield School)
Stein, Charles G., Cape Town (University College)
Suart, Henry O., Woolwich (Guy's)
Webb, Henry L., Cheadle (St. Mary's)
Williams, Dawson, York (University College)

Four candidates were rejected.

The following gentlemen passed on May 22nd.

Ambler, Horace F., Hemel Hempstead (Middlesex)
Bibby, John, Preston (St. Thomas's)
Biggs, John M., Dallington, Sussex (University College)

Bousfield, Edward C., Bedford (St. Bartholomew's)
Cepley, William H., Melton Mowbray (University College)
Cowan, Frederick S., Bath (Guy's)
Davies, Hugh E., Llandulas, Denbighshire (University College)
Flower, George J. W., Stafford (Guy's)
French, Francis N., Over, Cheshire
Fuller, Leedham H., Bath (King's College)
Gover, Henry J., Clapham (St. Thomas's)
Haslam, William F., Reading (St. Thomas's)
Jackman, George F., Southampton (St. Bartholomew's)
Jackman, William T., Stoke Newington Road (St. Bartholomew's)
Kidd, Percy, Blackheath (St. Bartholomew's)
Newman, Arthur J., Wotton, Herts (Middlesex)
Walter, William H., Sydenham (St. Bartholomew's)

Six candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 9th, 1878.

Blackwell, Frederick William, Birmingham
Good, William Ernest, Dorchester
Mayne, Walter Furlong, Honiton, Devon
Mellor, Thomas, Bury, Lancashire
Mistri, Karasji Hormasji, Bombay
Thomas, William Frederic, Madras

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 16th, 1878.

Dámá, Edalgi Manekji, Gower Place, W.C.
Hawkins, Walter Robert Thomas, Bristol
Nicol, Louis Charles Napoleon, Oxford Road, Ealing

MEDICAL VACANCIES.

The following vacancies are announced:—

GLOUCESTER GENERAL INFIRMARY—Surgeon and Assistant-Surgeon. Applications to be made on or before the 30th instant.

HAILSHAM UNION—Medical Officer and Public Vaccinator for the First District. Salary, £58 per annum, and fees. Applications to be made on or before the 27th instant.

KENT AND CANTERBURY HOSPITAL—Physician. Applications to be made on or before June 28th.

LONDON FEVER HOSPITAL—Resident Medical Officer. Salary, £200 per annum, with residence, coals, gas, and attendance.

METROPOLITAN FREE HOSPITAL, Commercial Street, E.—Two House-Surgeons.

NORTHAMPTON COUNTY LUNATIC ASYLUM—Medical Superintendent. Salary, £500 per annum, with residence, free of rates and taxes, and £30 for coals. Applications to be made on or before the 29th instant.

QUEEN'S HOSPITAL, Birmingham—Resident Surgeon. Salary, £50 per annum, with board and residence. Applications to be made on or before the 31st inst.

ROYAL HANTS COUNTY HOSPITAL, Winchester—House-Surgeon and Secretary. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 27th instant.

SCARBOROUGH DISPENSARY AND ACCIDENT HOSPITAL—House-Surgeon and Secretary. Salary, £120 per annum. Applications to be made on or before the 30th instant.

SOMERSET COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum, with board, residence, and washing.

WESTMINSTER HOSPITAL—Resident Obstetric Assistant. Applications to be made on or before the 31st instant.

YORK FRIENDLY SOCIETIES' MEDICAL ASSOCIATION—Assistant Medical Officer, from 25 to 35 years of age. Salary, £150 per annum, with fees. Applications to be made on or before June 4th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

***BATTERBURY**, Richard Legg, M.B., appointed Visiting Medical Officer to King's College Convalescent Home, Hemel Hempstead, Herts.

GLANVILLE, F. F., M.R.C.S. Eng., appointed House-Surgeon to the Belgrave Hospital for Children.

MORGAN, John H., M.A., M.R.C.S., appointed Assistant-Surgeon to the Hospital for Sick Children, Great Ormond Street, *vice* J. W. Haward, F.R.C.S., resigned.

MORGAN, John H., M.A., F.R.C.S., appointed Assistant-Surgeon to the Hospital for Hip-Disease in Childhood, *vice* H. P. Butlin, L.R.C.P., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

R. WLAND.—On May 17th, at Gloucester House, Malvern Wells, the wife of *H. Mortimer Rowland, M.D., of a son.

MARRIAGES.

FRY—GASKIN.—On the 16th instant, at the Parish Church, Oystermouth, by the Rev. S. C. Morgan, Vicar of Swansea, R.D., John Farrant Fry, fourth son of the late William Fry, Esq., of Portfield, Somersetshire, to Constance Mary, eldest daughter of John Gaskin, Esq., of Longfield, Oystermouth, Glamorganshire.

SHAPLEY—OVERELL.—On May 16th, at the Parish Church, Leamington, by the Rev. —Richardson, M.A., of St. John's, Leamington, Harry Thomas Shapley, M.B., M.R.C.S., to Eugénie Eliza, youngest daughter of William Overell, Solicitor, Leamington.—No cards.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Sequel to Mr. Barwell's Case of Aneurism of the Aorta, etc., treated by Double Distal Ligature; Dr. Vandyke Carter, "On the Spirillum Fever of Bombay, 1877"; and, if time—Dr. H. Jones and Mr. H. Page, "Cases of Intussusception"; Dr. Semon, "Case of Thyrotoxy"; Dr. Stephen Mackenzie, "Fatal Purpura following a Single Dose of Iodide of Potassium"; etc.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MR. S. A. MORGAN.—Looking to recent decisions, we should think that there was very little chance of success in any criminal proceeding; but a civil action for damages on the case stated might succeed, if the facts could be judicially proved.

THE BUYING OF A PRACTICE.

SIR,—I should be very glad to know from those experienced in such matters, if it be generally considered a safe investment to buy a practice?—I am, etc.
May 17th, 1878.

DOUBTFUL.

INQUIRY IN CASES OF SUDDEN DEATH.

SIR,—Will you favour me with your opinion in the following case? A man aged 66 died quite suddenly, in the presence of several persons. At the inquest, the coroner asked me what was the cause of death. I answered, a sudden arrest of the heart's action, the result of natural causes. The coroner was dissatisfied with my answer, and requested me to say what the sudden arrest was caused by. As there was no *post mortem* examination, I stated it might have resulted from various causes, such as fatty degeneration, embolism, etc., but that no definite cause could be ascertained without an actual inspection of the diseased structure. In your opinion, was my answer correct under the circumstances stated above?—Your obedient servant,
A COUNTRY SURGEON.

* * We doubt even whether the first answer was not in excess of the available knowledge in the absence of the accurate information which an inspection of the organs could alone impart.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions on Anatomy and Physiology submitted at the written examination to the one hundred and thirty candidates for the diploma of membership of the Royal College of Surgeons on the 10th instant, when they were required to answer at least four, including one of the first two, out of the six questions. 1. Describe the structure of the bronchial tubes. What purposes are served by the several tissues which are found in them? 2. What is meant by the vaso-motor centre? Give the evidence of its existence. 3. Describe the articulations and ligaments of the seventh rib, and the attachments of muscles to it. 4. Give the dissection required to expose the gluteal and sciatic arteries outside the pelvis. 5. Describe the course and distribution of the ulnar nerve in the palm, and the dissection necessary to expose it. 6. Describe the entire lacrymal apparatus.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

THE SPECIAL SERVICE AT ST. PAUL'S CATHEDRAL.

SIR,—Will you kindly allow me to direct the attention of your readers to an advertisement which appeared in the last issue of the *BRITISH MEDICAL JOURNAL*, announcing that by the kind permission of the Dean a special service for the medical profession will be held in St. Paul's Cathedral on Friday evening, the 31st instant, at 8 P.M., when a sermon will be preached by the Rev. George Body? The choral arrangements have been kindly undertaken by the London Gregorian Choral Association, and the choir will number about four hundred men and boys. A special service-book has been published, containing the special hymns, psalms, and lessons which have been selected as most fitting to be used on this occasion. As perhaps the question may be asked why such a service has been organised, let me add that I think there is a special fitness in such a public expression of our opinion of the need which exists for, and the advantages which may result from, a religious service of the kind we hope this will be. What that need is, and what those advantages are, I feel I may safely and wisely leave to the heart and conscience of each of your readers to answer for himself.—Your obedient servant,
George Street, Hanover Square, May 1878. ALFRED MEADOWS, M.D.

ERRATUM.—In the note on a case of poisoning by carbolic acid, published in the *JOURNAL* of the 11th inst. p. 689, instead of "Homerton Small-Pox Hospital", read "Hampstead Small-Pox Hospital".

NOTICES OF MOTION.

SIR,—Will you kindly inform me what steps are necessary to bring before the annual meeting of the Association any motion a member may desire to submit in reference to the time of notice, etc.?—I am, dear sir, yours faithfully,
May 21st, 1878.

BENJAMIN BARROW.

* * We have referred this letter to the General Secretary, who informs us that, in the case of the proposed formation or alteration of a by-law, notice in writing must be given to the Committee of Council at least two months previous to the annual meeting (the annual meeting will be held on August 6th next). If the proposed motion do not involve the alteration or formation of a by-law, notice should be given in writing to the Committee of Council on or before the 25th June next.

A METROPOLITAN TEACHER.—It is many years since the College of Surgeons required all teachers to undergo an examination as to their capability for imparting instruction. The regulation, however, was soon rescinded. We believe only two gentlemen were examined and approved—viz., Mr. Erasmus Wilson, F.R.S., and Sir Rutherford Alcock.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—There are many friends of Mr. William Adams who would be glad to vote for him at the Fellows' annual meeting at the College on the 4th July next, and he has been urged to offer himself as a candidate; but as Mr. Gay is a friend and colleague, and as Mr. Adams is afraid that his candidature would imperil the chance of Mr. Gay, Mr. Adams has very generously declined to be nominated, and he hopes that Mr. Gay may be elected to a seat in the Council, for which he is so well qualified.—I am, your obedient servant,
Redruth, May 21st, 1878. HENRY HARRIES.

THE DUKE OF RICHMOND'S MEDICAL BILL.

SIR,—Having read the leader in the *Times* of the 8th instant on the above Bill, allow me to state, as my determined resolution, that, having several sons, some of whom I am bringing up by a high training for the medical profession, I shall remove them from the schools at which they are if women-students be introduced into those schools, and shall require of any other school or schools to which I may send them an undertaking that no female students shall at any time be admitted, or if so, that the fees paid by me shall be remitted. My resolution is formed in the interest of my sons; and I, as a parent, having to bear the brunt of heavy expense and anxiety, have as just a right to dictate the terms of their association as any clique in or out of Parliament; therefore I would say to the heads of the medical schools—Beware.—Yours, etc.,
PATERFAMILIAS.

PROFESSIONAL ETHICS.

SIR,—Would you kindly express your opinion of the following case? A medical gentleman died some time ago, and his widow conducted the practice, with the aid of an assistant, till a suitable successor was found. A stranger came to the place, and began practice on his own account. After working for a week, he called on the widow, saying that, as he was established, he was prepared to treat with her for the practice "on equal terms", and he accordingly made an offer that was tantamount to an insult. The practice was transferred to myself; and, on my arrival, I found my opponent canvassing the members of the clubs and works which belonged to the original practice, bribing those who were to be bribed with liquor to get them to support him. Not content with this, he also goes about offering to attend midwifery cases for nearly a third less than has been the usual fee here.

These are the plain unvarnished facts of the case, and I am prepared to substantiate them. I ask whether such conduct is professional or gentlemanly, and I also ask whether we are bound tamely to submit to it?—I am, sir, faithfully yours,
May 1878. M.D.

FOREIGN DIPLOMAS.

SIR,—Under the heading "The Brussels Degree", there is an answer given by your correspondent "Rhys", which is calculated to mislead. The M.D. degree of Brussels or any foreign university would only be registrable under the Medical Act Amendment Bill if the holder were a foreigner or had practised outside the United Kingdom for ten years, just what many of those who take it have not done, and which is evidently not the case your correspondent alludes to, since he speaks of men going to Brussels to get their degree, and also of their being already on the Register in consequence of having British qualifications. Personally, I think it a hardship that Englishmen are thus to be placed in a worse position than foreigners as regards these degrees, and would like to see a provision for giving the title of Doctor to all who passed the conjoint examination, but fear the profession are hardly prepared for that yet. It is worth noticing that of twelve Fellows admitted to the College of Physicians on May 9th, three had German degrees and three Scotch.—Sincerely yours,
H.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

COMPULSORY VACCINATION.

SIR,—The *BRITISH MEDICAL JOURNAL* being recognised as the organ of an association of seven thousand medical men, your offensive comment on Mr. Bright's views on compulsory vaccination cannot be otherwise than distasteful to all men of liberal minds, and is ill calculated to raise our Association in the opinion of the public. You must be aware that what you term "an indulgence to propagate small-pox" is sold daily by the government, with the sanction of the medical profession, but fixed at a price which only the rich can afford, who are allowed to evade vaccination as long as they choose to pay their pound from time to time. Why not cut the matter short by giving the magistrate power to take the child from the mother's arms and have it carried away by the police to be vaccinated? This would be logical, and would be really compulsory, and there would be no sham about it. This is what Mr. Bright recommends, if the government and the doctors can get over the difficulty which this invasion of the sanctity of domestic life would involve. However, even the *BRITISH MEDICAL JOURNAL* will scarcely be strong enough to sneer away the reputation of the great orator and statesman who will long live in history as the great tribune of the people.—Your obedient servant,

EWING WHITTLE, M.D., M.R.I.A.

Parliament Terrace, Liverpool, May 21st, 1878.

* We are somewhat at a loss to understand what our correspondent means; but we believe that Mr. Bright's view on the subject, of allowing vaccination to be evaded by a single payment of a small fine, is a very dangerous view, and that our objection to it is shared very generally by the profession.

THE EXAMINATION OF LADY-DOCTORS.

SIR,—May I inquire of the men into whose hands Providence—no doubt for some wise purpose, probably for the punishment of our sins—has delivered the future of the medical profession in Britain, why women are to be subjected to a different examination from that which men must undergo? Surely if these "lady-doctors" of the future are to be entrusted with the care of our wives and daughters, and even of our male children's health, it is the duty of the State to see that they know as much at least as the most ignorant male student who manages to "screw through" his examinations. The indelicacy of subjecting women to some of the questions which men are expected both to know and answer is, I suppose, the ostensible excuse for the clause in the Government Bill which enacts this wise decree. Now, I submit that delicacy of mind is all very well in a lady so long as she does not step out of her own domain; but when the issues of health and disease, of life and death, are the things with which she deals, such delicacy is misplaced. An examiner may excuse her from an indelicate question; but will disease, the great examiner of us all, be complaisant? The young man, with bodily and mental health ruined, the prey of evil habits, will curse the law which delivered him in his early childhood into the care of a woman who was too delicate-minded to know the evils of phimosia, and the easy method of its cure. How, indeed, can the diseases of the childish genital organs be appreciated by one who knows scantily, or not at all, their physiological purport in the future? And then, no doubt, it would be considered indelicate for an examiner to go thoroughly into and test the knowledge of the candidate in the diseases of the female genital organs. Surely under the present Bill the male examiner would be precluded from shocking the sensibilities of the blushing young surgeon before him by questioning her on Baker Brown's theory of the cause of epilepsy in females, or on the cause of sterility, or on the effects of prostitution, or on many other of those most important subjects the knowledge of which on the part of the candidate would, no doubt, shock her delicate mind, but her ignorance of which will doom a vast number of women to a life of pain, and will wreck the happiness of unnumbered households.

I might carry my argument further, and point out the impossibility of a woman being examined in medical jurisprudence or other important subjects; but I have said enough. I do protest against women being admitted, if admitted they must be, into our profession through a different portal from that through which their male competitors are forced to struggle. Surely it is a burning shame that at the time when examinations are becoming every day more difficult, a flood of ignorant persons should be poured into our body, whose less efficient, and therefore less extensive, education enables them to offer their advice at a cheaper rate than the heavily handicapped male practitioner.

I do trust that our Association will raise its voice against this terrible injustice. I for one protest against the whole Government Bill, as a weak attempt to settle a great question. But against the particular clause to which I would call the attention of the Association I especially object: no body representing the feeling of the profession could have let this clause pass through their hands, modified or unmodified, as the Medical Council have done. Representing as it does, not the sense of our profession, but the crochets of a few court surgeons and physicians, it is indeed time it was reformed, or, still better, entirely swept away.—Yours faithfully,

WILLIAM SYKES.

April 20th, 1878.

THE TREATMENT OF NEURALGIA BY TETRACHLORIDE OF CARBON.

SIR,—In your report of the spring meeting of the South Wales and Monmouthshire Branch a slight error occurs, which I am desirous of correcting. I am reported to have read, "Hints on the treatment of neuralgia, mentioning more particularly the hypodermic injection of morphia and the use of the tetrachloride of carbon." Now, although in the course of my paper I referred to the value of the hypodermic method, my object "more particularly" was to draw attention to the local treatment of neuralgia by the application of ether spray and by the tetrachloride of carbon. I should hope that the treatment of neuralgia by morphia hypodermically is too well known to require any "hints" for its use from me; but cases do occasionally occur in which even this sheet-anchor fails, and in such cases I suggested that freezing by ether, or the local application of the tetrachloride of carbon (the latter originally recommended by the late Dr. Kenyon of Harrogate), might be found of service, and referred to a few cases in which one or other of these agents had given relief after the failure even of morphia. I would take this opportunity of describing the method I adopt of applying the tetrachloride of carbon. A piece of lint, or, better still, some spongio-piline, is sprinkled with some twenty or thirty drops of the tetrachloride, and applied lightly over the seat of pain; in a little while, tingling is felt and a sensation of warmth in the part, when the pain is generally relieved.—I am, sir, your obedient servant,

J. HANCOCKE-WATHEN.

Fishguard, May 21st, 1878.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the *BRITISH MEDICAL JOURNAL*, should arrive at the Office not later than 10 A.M. on Thursday.

FIAT EXPERIMENTUM.

MR. HENRY BERGH, an active member of the Society for the Prevention of Cruelty to Animals at New York, a short time ago publicly declared his disbelief in the existence of hydrophobia. With the view of testing the question, a physician of that city, in a letter signed "Rabies," which appeared in the *New York Herald*, offered to deposit the sum of one thousand dollars with the *Herald*, to go to Mr. Bergh's society, if that gentleman would allow himself to be inoculated with the saliva of a rabid dog, and escaped hydrophobia within six months after such inoculation. Mr. Bergh, however, contrary to public expectation, showed no inclination to accept this benevolent offer, and remained silent, not deigning even to answer the challenge. In order, therefore, "to allay popular anxiety on the subject," he was interviewed by a *Herald* reporter, to whom he stated that "he regarded the offer as a mere joke." On being assured that the proposal was made in perfect seriousness, and emanated from "one of the most prominent physicians of New York," Mr. Bergh replied with dignity, "Well, if that be the case, I must say that it was in very bad taste, for he could not have thought that for one thousand dollars I would allow myself to be inoculated with the saliva of a rabid dog. We are not," he added, smiling, "so hard up for money as that." As nothing satisfactory was to be got out of Mr. Bergh, the reporter proceeded to the house of the "eminent physician," whom he found seated in his library, fully bent on inoculating Mr. Bergh, and terribly in earnest on the subject. "You may assure him," said the physician, "that I will perform on him a painless operation, which will give him no bodily suffering. I will put him under ether, or, if he prefer, even under nitrous oxide gas, which destroys all sensibility whatever." On being asked, "Why not operate on a dog?" the eminent physician replied, "Because Mr. Bergh is violently opposed to vivisection, and because I would not do such violence to his feelings as to experiment upon an animal incapable of giving his assent to the operation." He further offered, in the event of Mr. Bergh thinking the amount too small, to increase it considerably if this would induce him to be inoculated. Here, says the *Pall Mall Gazette*, the matter rests for the present.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelson Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. Greenhalgh, London; Dr. Lombe Athill, Dublin; Dr. George Johnson, London; Mr. Christopher Heath, London; Dr. J. B. Bradbury, Cambridge; Dr. Gowers, London; Surgeon-General Francis, Sutton; Mr. R. L. Bayley, Stourbridge; Messrs. C. J. Hewlett and Son, London; Mr. G. M. Williams, Rhyl; Mr. E. P. Hardey, Hull; A Birmingham Consultant; Mr. F. F. Glanville, London; Dr. Clifford Allbutt, Leeds; Dr. Fairlie Clarke, Southborough; Mr. Richard Barwell, London; Dr. Martin Gaisford, Ipswich; Mr. Richard Davy, London; W.; Dr. David Drummond, Newcastle-upon-Tyne; Mr. H. T. Shapley, Leamington; Dr. Louis Henry, London; Messrs. J. C. and J. Field, London; Dr. James Sawyer, Birmingham; Dr. Goldie, Leeds; Dr. R. S. Archer, Liverpool; Mr. Arthur H. Benson, Dublin; Mr. Hamilton Craigie, London; Dr. Dumontpallier, Paris; Dr. Bantock, London; Dr. T. H. Spencer, Trinidad; An Associate; Dr. Joseph Rogers, London; Mr. Wm. Fry, Swansea; Dr. Grigg, London; Dr. Gosweiler, Philadelphia; Dr. Bell, Glasgow; Anti-Humbag; The Secretary of the Medical Society of London; Mr. Nelson Hardy, London; Mr. Arthur Watson, Loughborough; Dr. W. O. Markham, London; The Secretary of Apothecaries' Hall; Dr. Tripe, Hackney; Mr. McGill, Leeds; The Registrar-General of England; Dr. J. Milner Fothergill, London; Mr. G. Eastes, London; The Registrar-General of Ireland; Dr. Quain, London; Dr. A. P. Stewart, London; Dr. Rowland, Malvern Wells; The Secretary of the Royal Medical and Chirurgical Society; Dr. Alfred Meadows, London; Our Edinburgh Correspondent; Mr. Trevor Fowler, Epping; Mr. T. Spencer Wells, London; Dr. E. Waters, Chester; Our Dublin Correspondent; Mr. N. A. Humphreys, London; Mr. Henry Barrow, Ryde; Dr. Ewing Whittle, Liverpool; Mr. K. L. Morgan, Oxford; F.R.S., Worcester; Dr. Henry Harris, Redruth; C.L.B., Cheltenham; Mr. P. Le Neve Foster, London; Justice; Dr. de Pietra Santa, Paris; Dr. T. K. Chambers, London; Dr. R. A. Ross, Chichester; Mr. Garland, Yeovil; Mr. G. E. East, Goole; Dr. D. Christie, Carrigart; Mr. R. Jones, Leamington; Dr. Royle, Manchester; An Old Member; Dr. E. Blackwell, London; Mr. W. F. Teevan, London; Dr. Thursfield, Leamington; Mr. Gould, Hatherleigh; Public Medicine, London; Dr. George Bland, Macclesfield; Mr. J. Palmer, London; Mr. W. G. Cresswell, Gattley; Dr. Farquharson, London; Dr. George A. Hutton, Dr. J. M. Howie, Liverpool; Dr. Beddoe, Clifton; Mr. Richard Colthurst, Dr. Douglas Powell, London; Dr. A. Davies, Swansea; Dr. Levinge, Bristol; Dr. Warner, London; Dr. J. F. Plumley, Maidstone; Dr. A. E. Aust. Lawrence, Bristol; etc.

BOOKS, ETC., RECEIVED.

The Antidotal Treatment of Disease. By John Parkin, M.D. London: Hurdwicke and Bogue. 1878.

CLINICAL LECTURE ON THE TREATMENT OF CHRONIC ENDOMETRITIS.

By LOMBE ATTHILL, M.D.,
Master of the Rotunda Hospitals, Dublin.

I PROPOSE to call your attention to-day, gentlemen, to the subject of chronic endometritis, a disease of very frequent occurrence. It is quite common in married women who are sterile, and is far from being rare even in virgins. It also occurs frequently as a result of imperfect involution of the uterus; and in aggravated cases may terminate in complete disorganisation of the intra-uterine mucous membrane. Such extreme cases are, however, rare.

All cases of chronic endometritis naturally divide themselves into two classes; namely, those which occur in women who have borne children, and those who have never been pregnant. The course, symptoms, and treatment of these two classes are essentially different. I shall first briefly allude to the affection as it occurs in those who have borne children.

In the great majority of such cases, the patient's attention will be attracted to her condition by the occurrence of derangement of the menstrual function, which generally, in the first instance at least, becomes profuse, and often painful; leucorrhœa, too, is generally present. On proceeding to examine the patient, the cervix will be found to be thickened, the os patulous, the lips perhaps everted, and possibly in a state of granular erosion, while a copious discharge, thick, opaque, and tenacious, issues from it; the cervical canal also is patulous, and the sound will pass with ease through the relaxed os internum. Nevertheless, its introduction often causes pain, either at the os internum or when its point reaches the fundus. If the sound cause pain as it passes through the os internum, menstruation is, I believe, always painful; but if the extreme sensitiveness be confined to the fundus, this may not be so. Dr. Routh is of opinion that in some instances that portion of the endometrium situated between the openings of the Fallopian tubes may alone be diseased, and he terms this "fundal endometritis". I much doubt, however, if the affection be ever limited to so circumscribed an area. As the disease progresses, the mucous membrane lining the body of the uterus becomes disorganised. This is manifested, as already pointed out, by derangement of the menstrual function, which becomes painful, or profuse, or both, and it is not till this stage is reached that, as a rule, the patient seeks medical aid; true, she will in general complain of pain in the back, of a feeling of weight in the pelvis, and perhaps of a bearing-down sensation; but when contrasted with the disease as it occurs in the unmarried or sterile woman, endometritis in the woman who has borne children produces comparatively little discomfort, and, except when the patient is run down by profuse or constantly recurring hæmorrhages, comparatively little constitutional disturbance.

Here is a typical case. Mrs. —, aged 25, gave birth to her first and only child three years ago. She nursed but a few months, and then, menstruation recurring normally, she weaned the child. Shortly afterwards, her husband became ill, and for many months she tended him by day and night; notwithstanding which, her general health continued tolerably good, and it was not till after the lapse of quite a year that the occurrence of repeated attacks of profuse menstruation, latterly accompanied by acute pain, compelled her to seek relief. In her case, the os uteri was very patulous, and the cervical canal blocked up by a mass of thick semipurulent mucus. When the point of the sound reached the os internum, she complained of sharp pain. I treated this patient by the application of carbolic acid to the fundus, applying it twice a week for about two months. The first menstrual period after the commencement of this treatment was perfectly painless, but was very profuse, and lasted for seven days; the next was equally painless, and was over in four days. Since then, the function has been perfectly normal, and the uterine catarrh has disappeared.

The treatment just mentioned will often prove efficacious, provided the case be of recent origin; but if it be of long standing, and if copious uterine catarrh or menorrhagia be present, more active treatment is called for, that which I usually adopt being, as you are all aware, the application of nitric acid to the whole of the cavity of the uterus.

In all cases where much tenderness on pressure exists, local blood-letting should first be practised; this is a rule from which I make few

exceptions. Local blood-letting relieves the pain to a considerable degree, and certainly favours the action of other treatment, whether that consist of medicines administered by the mouth or applications made directly to the diseased surface.

Endometritis occurring in virgins, or in women who have never been pregnant, runs a very different course. In the great majority of cases, these will seek medical aid either for the cure of sterility, or, more generally, with the view of procuring relief from the sufferings which they experience at each menstrual period. I will first trace a case as it occurs in a married woman. On being questioned, she will, as a rule, tell you that prior to marriage menstruation had been normal, or at least attended with but little suffering; that, after marriage, the function gradually became more painful, and that this increased in intensity till she was compelled to seek relief. On making a vaginal examination, you will find the cervix uteri to be elongated, probably swollen and congested; frequently too, indeed I think in the majority of cases, antelexion of the fundus will be found to exist, the os uteri is small and annular, and frequently we shall be able to see a clear and slightly viscid discharge to exude from it.

Now, the pathology and causation of these cases is, I think, this. They always occur in women in whom either the cervical canal is contracted and the cervix conical, or in whom some congenital flexion of the uterus exists; the canal, narrow though it be, sufficed before marriage to permit without difficulty the exit of the menstrual discharge, but under the influence of the excitement caused by sexual intercourse, a greater quantity of blood flows towards the uterus and ovaries; the mucous membrane lining the cavity and cervix becomes unduly swollen and vascular, and, as a result, an increased amount of blood is, at the menstrual period, poured out into the cavity of the uterus; the swollen condition of the mucous membrane at the os internum and in the cervical canal renders the originally narrow passage almost impermeable, the menstrual flow is retarded, and, as a result, the blood coagulates in the distended cavity, and thus becomes virtually a foreign body. It excites the uterus to contract; and after much suffering, it is expelled; relief then for a time is obtained, but the same process recurs over and over again, and in time, permanent irritation of the intra-uterine mucous membrane is excited. And now the patient's sufferings are not confined to the menstrual period alone; for, in consequence of the unhealthy condition of the intra-uterine mucous membrane, its secretion is increased in quantity and altered in character; it becomes viscid, and exudes slowly from the uterus. Often its exit is impeded to such a degree that it distends the cavity, inducing permanent dilatation, and often hypertrophy, of the whole organ, aggravating the previously existing irritation of the lining membrane, and causing great distress and pain to the patient.

If these cases be neglected, the whole system suffers; the ovaries are specially liable to be implicated; the irritation set up in the uterus seems to be propagated to them; they become enlarged, painful to the touch, and the source of great suffering; the bladder often sympathises, and the patient suffers from irritability of that viscus; then reflex irritations manifest themselves; the breasts become painful, the appetite fails, and often there is nausea and even vomiting; in a word, chronic endometritis in a nulliparous woman is a most serious affection, causing great suffering and undermining health, not rapidly indeed, but surely, while sterility is an invariable result. Unfortunately, too, it is a most obstinate affection. If the case be of old standing, the hope of doing much for the patient is but small; if, however, it have not gone on too long, the prospect of effecting a cure is good; but to do this, it is essential to bear in mind the pathology of the disease, the basis of which is that the conical cervix and contracted canal, coupled with antelexion when it exists, prevent the menstrual discharges and viscid secretions of the diseased lining membrane from obtaining easy exit. The first step, then, towards effecting a cure is to ensure the free escape of the contents of the uterus. There is but one means of effecting this—the cervical canal must be divided. I lay this down as an axiom from which there are few exceptions, that it is almost impossible to cure chronic endometritis in the nulliparous female in whom a conical cervix and contracted cervical exists, unless the cervix be divided. I have tried every other possible method, including the free use of nitric acid after dilatation of the cervical canal, to find my patient, after the lapse of a few months, in no way improved. The following affords a striking example of this. It is interesting, too, from the fact of its being the first case in which I divided the cervix for the cure of endometritis, my previous operations having always been for the relief of painful menstruation.

Mrs. —, aged 36, married ten years, came under my care four years ago. She stated that, previously to marriage, she had always enjoyed good health, but that, some months subsequently, she suffered from a severe attack of pain in the region of the uterus. This after a

time subsided; but from that date she never was perfectly free from suffering, till of late, though naturally of very active habits, she had been compelled to give up taking exercise nearly altogether; for years, too, she had been off and on under medical treatment, without even obtaining permanent benefit. She suffered from constant headaches (these occasionally were very severe), from indigestion, flatulence, and constipation. She was unable to walk; for, on attempting to do so, she was always seized with pain, referred to a point corresponding to the fundus of the uterus. This pain lasted for some time, then she would obtain relief; and immediately after, invariably perceived a copious viscid discharge to exude from the vagina. These attacks of pain and subsequent leucorrhoeal discharge occurred even when she remained quiet; though then the intervals between them were considerable. Walking, however, always brought them on. I subsequently satisfied myself that these attacks of pain were due to the efforts of the uterus to expel the copious secretion which collected in it.

On making a vaginal examination, I found that the cervix was conical, and the os so small that I could not introduce an ordinary sound, but had to use a fine probe; the fundus was large and heavy, and slightly painful to the touch; there was no abrasion; but, though pressure with the fingers on the fundus caused but little pain, sexual intercourse was always productive of suffering.

I decided on treating this case by applying nitric acid to the fundus, but as this was impossible in the contracted state of the cervical canal, I introduced a length of No. 3 sea-tangle bougie into uterus, and after the lapse of twenty-four hours was, on withdrawing it, enabled to introduce a platinum cannula, and through it apply the fuming nitric acid. The result was for the time very satisfactory. She improved wonderfully, and lost most of her distressing symptoms, and I saw no more of her for four months, when she again consulted me, saying that she was as bad as ever; and, on making a vaginal examination, I found that she had relapsed into her former condition—the os uteri was as small and the catarrh as copious as ever. On considering this case, I became convinced that till I gave free exit to the pent-up viscid discharge no permanent benefit would follow; and believing that division of the cervix would alone effect this, proposed the operation to her. She at once agreed to submit to it, and I accordingly performed it, dividing the cervix bilaterally, in the manner described in a previous lecture. The result has been most satisfactory. She recovered without any drawback, has ever since steadily improved, and now, after the lapse of several years, is quite free from suffering, is able to take long walks, and leads a most active life.

After the divided surfaces have healed, and that no danger of exciting inflammation exists, it is generally necessary to apply carbolic acid, or some other caustic, up to the fundus; in fact, I always keep the patient under observation for some weeks subsequent to the operation. The length of time during which it is necessary subsequently to continue intra-uterine medication must depend on the previous duration of the disease, as well as on the severity of the symptoms. In the case just related, I applied carbolic acid several times to the fundus subsequent to the operation.

In this case, the patient has remained sterile; indeed, I had no hope that conception would follow in her on the cure of the endometritis; the disease was of too long standing. As a rule, I object to perform the operation of dividing the cervix, simply with the view of removing sterility; conception doubtless sometimes does occur after the operation, not because the cervix is rendered patulous, but because the membrane lining the interior of the uterus being rendered healthy, conception becomes possible. The following case is an example of this.

Mrs. K., aged 26, had resided in India, and ever since her marriage, five years ago, has never become pregnant. Menstruation was normal and nearly painless. She suffers, however, constantly from backache and much discomfort in the left ovarian region; is quite unable to take exercise, as walking brings on pain. She was specially anxious to have a family, and returned from India, and sought advice, more with the view of having sterility removed than for the relief of her sufferings. On examining her, I found the cervix to be conical, and the fundus acutely anteverted; there was also a good deal of uterine catarrh. The probe passed to the depth of nearly three inches. As this case was by no means a severe one, and evidently not of long standing, I decided on endeavouring to avoid dividing the cervix, and accordingly introduced an anteversion pessary, punctured the cervix, applied carbolic acid to the fundus, gave bromide of potassium in full dose, and found the patient's condition steadily to improve. All her symptoms subsided; the flexion, however, remained unaltered. After a time, I sent her to Ems, where she remained for some weeks, and returned in a very satisfactory state. Her husband, who during this time had remained in India, now joined her, and they travelled about for a couple of months. On returning to Dublin, just a month before they were to start for India,

she called on me and said she had again of late begun to suffer as much as ever, and on examining her I found her to be in exactly the same condition as when I had first seen her five months before. I at once told her that all she had done had been useless, and that there was no chance of a cure except she submitted to have the cervix divided. She readily consented. I divided the posterior wall of the cervix only, this being the operation I always perform in cases of anteversion. She sailed for India in four weeks from the date of the operation, soon after became pregnant, went to the full term of utero-gestation, and gave birth to a healthy child.

I have given these two cases in detail, because they show how useless any attempt to cure endometritis in sterile women is, unless, as a preliminary step, free exit be afforded to the discharge which invariably collects to a greater or less extent in the cavity of the uterus. And if I have succeeded in impressing this fact on your minds, your failures in your future practice will be lessened very considerably.

ON THE CURE OF DYSMENORRHOEA, STERILITY, AND CERTAIN AFFECTIONS OF THE UTERUS, BY A NEW FORM OF ELASTIC INTRA-UTERINE STEM.

BY ROBERT GREENHALGH, M.D.,

Formerly Physician-Accoucheur to, and Lecturer on the Diseases of Women and Children at, St. Bartholomew's Hospital; Consulting Physician to the City of London Lying-in and Samaritan Hospitals; etc.

THERE is great difference of opinion among gynecologists as to the utility and safety of intra-uterine stems—a difference made manifest in a recent discussion at the Obstetrical Society. Notwithstanding the very adverse opinions as to the use of these stems expressed at this discussion, I am convinced that there is an increasing tendency to employ them, as exemplified in the many modifications which have been made in their construction since the year 1844, when they were first introduced to the notice of the profession by Sir James Simpson, and by the large number of these instruments sold by the instrument-makers to practitioners specially engaged in the treatment of the diseases of women. For my own part, being at a loss to imagine how certain mechanical affections of the uterus can be otherwise satisfactorily treated, I am constrained to assume the necessity of some such contrivance.

Before I describe my thoroughly efficient intra-uterine stem, the outcome of many failures and partial successes, it may be interesting to many little conversant with this subject to take a cursory glance at some of the steps which led to the adoption of intra-uterine stems. It is recorded that Aëtius recognised a contracted os uteri as a cause of sterility, and he is supposed to have treated this strictured condition with sponge-tents; but, passing over the dim records of ancient surgery, we come in recent times to the late Dr. Mackintosh of Edinburgh. This acute observer, in the second volume of his work on the *Practice of Medicine*, gives a graphic account of the sufferings wrought by persistent dysmenorrhoea, sets forth the insufficiency of all methods hitherto devised for its cure, and then makes the remarkable suggestion that many cases of painful menstruation might be due to some obstruction, for which condition "mechanical dilatation appeared to be the only remedy". For some years he hesitated to carry this conception into execution. At length, in the year 1826, he put his idea to the test, with such success that he was emboldened to repeat the experiment in numerous cases. In the year 1836, he thus records his experience: "In twenty-seven women, twenty-four cures have taken place, and of these eleven have since had children": an amount of success never since exceeded, if equalled. "The instruments employed to produce the dilatation were the common metallic bougies, of different sizes, from that of the ordinary small silver probe to No. 14." During the year 1844, Sir James Simpson published in the *Edinburgh Medical Journal* (page 734) an account of his permanent metallic stems of various sizes, which, he stated, "gave much less pain to the patients, and less trouble to the practitioner; were more certain and expeditious in their effect". He further stated "that he found the stricture occasionally at the os internum or opening between the cavities of the cervix and body, and not at the os tincæ": a statement the correctness of which I, in common with other observers, have since fully verified. In fact, the obstruction in the majority of cases is situated nearer the os internum. In cases where the external os uteri is small, particularly where the neck is conical and elongated, with a canal scarcely admitting the introduction of an ordinary sound, the menstrual flow scanty and of short duration, mostly indicative of

faulty development, leading to dysmenorrhœa or sterility, little or no good is to be expected either from purely mechanical treatment or from incision. The use of the jointed galvanic stem is indicated in cases like this, and in many instances it has proved most useful.

For some time I used Sir James Simpson's stems with considerable success; but, finding they were apt to become corroded and to slip out and to impede the escape of the secretions from the interior of the uterus, I devised, about the year 1862, stems made of vulcanite with numerous perforations. These stems, lighter and less liable to be misplaced, less liable to corrosion, permitted a readier escape of the secretions. I further modified them by reducing the size of the bulb, substituting for it a flat oblong shield. Finding, however, that these forms of stem are liable every now and then to become misplaced, I contrived a metallic expanding stem, which I ultimately discarded for one of vulcanite. A figure of this vulcanite stem, which now I use only after the division of the cervix uteri by the metrotome, will be found at page 404 of Dr. Marion Sims's *Clinical Notes on Uterine Surgery*. The advantages I claim for this form of stem are, ease of introduction; by its expanding limbs, pressure is made upon the cut surfaces, whereby bleeding is prevented; being perforated through the centre, a ready exit of the secretions is permitted; it is not liable to be misplaced; it can be retained until the healing process is complete; by it, all exposure and frequent painful and irritating dressings of the parts are avoided; and, lastly, being made of unabsorbent material, little or no risk from septicæmia is incurred.

In the year 1844, Sir James Simpson described the operation of division by a "lithotome caché" of any fibres that may be causing contraction of the internal orifice; "the incision commencing at the union of the cervix with the body of the uterus, and passing gradually more and more into the substance of the cervix. As it descends, the blade is brought out at the outer and lower edge of the cervix at the point of reflexion of the mucous membrane upon the wall of the vagina. The instrument is then turned, and a similar cut made on the other side." A short experience of this instrument, although used with the greatest care, convinced me of the uncertainty of its action.

In 1862, Messrs. Weiss and Son, at my suggestion, made at first a curved, and subsequently a straight, double-bladed metrotome, which can be used without the speculum, can be regulated with the nicest accuracy, and by which both incisions can be completed simultaneously. This instrument has been objected to by a recent critic on account of its "automatic machinery"; and he erroneously remarks that the blades spring out one on each side and make their incisions whilst the instrument is being withdrawn; whereas the blades are



Fig. 1.—Metrotome.

made gradually to protrude by gentle traction on the handle, gradually cutting through to a small extent the internal os; the cuts increasing in depth through the cervix and external os uteri nearly up to the junction of the neck with the vaginal walls. The blades are retained *in situ* by the sheath while regulating the position of the uterus and the directions of the incisions until the completion of the operation. The extent of the incisions can be regulated with the greatest precision by the adjustment of the blades, which are quite independent of each other. Those who have had experience in its use can testify to the accuracy of this description of my metrotome. (Fig. 1.)

In addition to these advantages, this instrument secures rapidity of action, and avoids exposure by the speculum and injury to the parts: important points these, especially where the operation is needed on an unmarried woman.

To the fear expressed by the same critic that hæmorrhage and septicæmia are likely to result from this operation, I have to answer that, among a large number of operations, although no plugging was had recourse to, in four cases only did hæmorrhage occur, which was speedily arrested by tannin and the plug; that not a single case of septicæmia resulted; and only one death ensued, in the case of extreme ante-flexion in my early experience of the metrotome, in a patient who succumbed to tubercular peritonitis, from which she had previously suffered. This case I reported in an early volume of the *Obstetrical Transactions*. All the patients were greatly benefited, the large majority cured; and many, who for several years had been sterile, have since borne children. This form of metrotome I still occasionally use.

Dilators of various kinds, resembling the sound, and capable of

expansion after introduction within the canal of the cervix, have been used by many practitioners to stretch the canal at any part of its course, though the instruments I have seen seem adequate to dilate only the two distal thirds of the canal. Dr. Priestley's dilator, described in the *Medical Times and Gazette* for March 1864, is perhaps the best; but a fair trial of it has convinced me that such contrivances have little or no advantages over the metallic bougies recommended by Dr. Mackintosh. The sponge and sea-tangle tents, perforated throughout and shortened, have not answered my expectations, since they frequently occasion much pain during the process of swelling, and have every now and then produced so much irritation as to lead occasionally to metritis and pelvic inflammation and abscess. There can be no doubt, however, that each method, when cautiously used in well-selected cases, has sometimes proved effective, though not to an extent to justify us in placing a large amount of confidence in its results.

Often disappointed by all the aids just referred to, and by the modifications of stem recommended by others, and, as experience extended, becoming more and more impressed with the necessity for mechanical treatment, I devised in the year 1872 an India-rubber stem, at first solid and subsequently tubular, armed near the end with two wings, between which was an oval opening in the long axis similar to the end of Mr. B. Holt's catheter. This form of stem I used over a considerable period in numerous cases, and found it a great improvement upon the other forms. Being of softer material, it adapted itself better to the canal, was less liable to slip out or to inflict injury, and could be used without interfering with the marital relation. Finding, however, that the wings added to its size and to the difficulty of introduction, and that when *in situ* they failed to expand in the body of the uterus as I had anticipated, that they occasionally became detached, and that the opening frequently got blocked by the secretions, I sought to overcome these disadvantages. Two years ago, I succeeded in designing a stem with manifest advantages over every other pattern. The stem consists of pure India-rubber tubing, No. 13 catheter gauge, easily admitting the introduction of a large Simpson's sound, two inches and one-eighth in length, tapering at its upper or uterine end, and armed with an oblong shield measuring one inch and three-quarters from side to side and one inch and a quarter from back to front. In this shield are ten perforations to facilitate cleanliness. Three-sixteenths of an inch from its upper extremity is a bulb two inches in circumference, with four diamond-shaped slits, which collapse when stretched on a dilator to facilitate introduction. When the stem is inserted and its retention is secured, and the dilator removed, this bulb at once expands in the body of the womb, while permitting a ready escape of the uterine

secretion. The whole being cast in one piece, there is no chance of the separation of any part of it. (Fig. 2.)

There are two points in connection with the use of the India-rubber stem to which I am particularly anxious to direct attention, in addition to the advantages already referred to. Firstly, although soft, elastic, and easily bent while out of the uterus, it becomes sufficiently firm

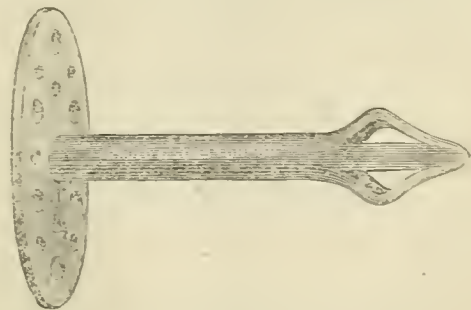


Fig. 2.—Stem.

when pressed equally on all sides by the canal of the cervix to gradually overcome all flexions, except in cases where the uterus is bound down to the surrounding parts. Secondly, its action is not purely mechanical. It has been observed by myself and others that, in many cases where the stem has been worn for some time, the enlarged and

firm uterus has become greatly reduced in size, and so soft as closely to resemble that organ in the early stage of subinvolution: effects probably due to the freer exit of the secretions and the mucous discharge, which usually persists during the retention of the stem.

Having described the form of stem, I shall now briefly allude to the cases in which I have found it most useful; premising, however, that mechanical treatment should never be undertaken till the removal of all indications of active disease, and the uterus is reduced to a minimum of sensitiveness by the use of rest, local depletion, hot vaginal injections, soothing suppositories, and other measures; and, further, until the sound has been passed once or oftener to ascertain how far the uterus is tolerant of local interference. Moreover, at the commencement of treatment, I usually enjoin one or more days' rest in bed. After this preliminary treatment, I first introduce a small silver stem; and in two or three days, if loose, I substitute one of larger size, when the canal is usually sufficiently dilated to admit the introduction of the India-rubber stem. By this gradual dilatation, which occupies usually about a week, the largest stem can be more easily introduced, and far less irritation is likely to follow than when the introduction is more speedily effected—an operation frequently not easy and occasionally impossible.

Should the stem have a tendency to slip out, which is sometimes the case, it can be easily retained *in situ* by pressing upon the shield a plug of cotton-wool, saturated with glycerine, tied crosswise with fine twine to facilitate removal.

I may here remark that early experience taught me never to use sponge or sea-tangle tents, nor dilators, with a view to more rapid dilatation, by which considerable pain is occasioned, and irritation, and sometimes inflammation, is set up, thereby rendering the case temporarily unfit for the stem-treatment.

The most fitting time to introduce the stem is shortly after a menstrual period, its retention being determined by the peculiarities of each individual case, the effects produced, and the end to be obtained. In my cases, the time varied from fourteen days to eleven months. The best time for removal is about a week before the next expected period. When retained for a considerable time, the discharges are apt to become offensive, notwithstanding the daily use of the vaginal douche. Still I have never known any evil result beyond this temporary annoyance to the patient.

I have now used the India-rubber stem for more than four years in a large number of private and hospital cases, and in two cases only—cases of chronic metritis with retroflexion, in which a spring vaginal pessary was worn—have I had to withdraw it on account of the onset of irritation. Both patients were highly sensitive women, and had undergone but little previous treatment. I have found these stems most useful in the following cases:

1. Dysmenorrhœa;
2. Flexions—ante- and retro-flexion of the uterus;
3. Strictures of the orifices and canal of the cervix;
4. Sterility, congenital and induced;
5. Certain cases of subinvolution;
6. Certain cases of interstitial fibroid of the uterus.

The following cases, sketched in outline, may serve as illustrations of stem-treatment.

CASE I. Congenital Dysmenorrhœa: Sterility: Cure.—Mrs. A., about thirty years of age, married about five years, always suffered more or less severely from paroxysmal pain a day or two before and during the menstrual flow, which was scanty and clotted. Her sufferings of late had become greatly aggravated, so as materially to affect her general health, and lead her medical attendants to fear the development of phthisis, to which she was strongly predisposed. The uterus was found slightly prolapsed and anteverted, congested and very sensitive, with a copious muco-purulent discharge. In spite of protracted general and local treatment, the dysmenorrhœa still persisted. The sound passed easily with but little discomfort three inches and a quarter into an enlarged cavity, doubtless due to distension by coagula, the expulsion of which gave rise to the pain and kept up local irritation. The stem-treatment was now adopted with marked improvement to both general and local symptoms. At the end of three months, Dr. Hobart of Cork removed the India-rubber stem, and soon afterwards she became pregnant, went to the full period, and was delivered, after a somewhat protracted labour, of a fine child. About a year after, she gave birth to a second child, and when last I saw her she was about two months advanced in her third pregnancy, and was enjoying very fair health.

CASE II. Congenital Dysmenorrhœa: Extreme Antelexion: Cure.—I was requested by Dr. Baldock to visit Mrs. P., aged 22, married six weeks, for severe dysmenorrhœa, which had caused her more or less

suffering since the commencement of menstruation, seven years before. Of late, her sufferings had become so agonising as to require, in addition to other means, the frequent use of hypodermic injections of morphia. Her general health had become greatly impaired, and she was almost constantly confined to bed. The uterus was considerably enlarged, was much congested, exquisitely tender to the touch, and acutely antelexed, the fundus being somewhat beneath the level of the cervix uteri, which was directed downwards and forwards. The sound was passed, with much difficulty and pain, three inches and a quarter into an enlarged uterine cavity, when it was found the womb could be straightened. Its withdrawal was followed by a copious discharge of pent-up blood and mucus. In spite of absolute rest, careful dieting, good nursing, hot hip-baths, vaginal injections and suppositories, depletions from the uterus, and other means, carefully carried on for many weeks, her symptoms, general and local, became more and more aggravated, when my advice was again sought. Notwithstanding the unfavourable nature of the case for mechanical treatment, it was resolved to put it to the test. A small silver stem was introduced, then a larger and a larger, and ultimately the India-rubber stem was passed. Dr. Baldock wrote to me some weeks afterwards: "There was first a good deal of pain and discharge, which gradually subsided, and a good period followed." He adds: "The uterus is not quite in a normal position, but very considerably different to what it was. The case may certainly be given in support of the use of stems in uterine flexion."

CASE III. Congenital Dysmenorrhœa: Menorrhagia: Extreme Antelexion: Cure.—Miss —, about twenty years of age, had always suffered more or less pain, with a somewhat free loss at her menstrual periods, which commenced about six years ago. These symptoms had much increased of late, together with pains more or less constant in and about her hips, at times extending down the thighs, which had prevented her taking exercise, and led to great impairment of her general health. She was much troubled with leucorrhœa. As a local examination was strongly objected to, she was requested to rest almost constantly upon a tilted couch, to remain in bed during her periods, to use a hot vaginal douche night and morning, and to adopt such means and take such remedies as were calculated to alleviate her pain, moderate the losses, keep the bowels and secretions in order, and improve her general powers. After many months of such treatment, she appeared greatly improved in every respect; but as soon as she began again to move about all her symptoms returned. An examination was now permitted, when the uterus was found considerably enlarged and firm, thrown far back in the pelvis, and acutely antelexed. With some difficulty and pain, the sound, considerably bent, was passed three inches and a quarter into the enlarged body, when it was ascertained that the organ could be replaced. The graduated stems, and subsequently the India-rubber stem, were introduced and worn for some months. Five months after all treatment had been discontinued, I received a most grateful note from my patient, in which she stated: "I have been presented. I have also been to several balls, at one of which I danced fourteen times; and in spite of all this I am perfectly well—better than I have been for more than six years."

CASE IV. Congenital Dysmenorrhœa: Extreme Antelexion: Sterility: Cure.—Mrs. B., aged 39, married eleven years, had always suffered from pain at her menstrual periods, and now of late it had become "agonising", usually coming on some hours before the flow, which had varied much from scanty to profuse, so as seriously to impair her health. The uterus was low, congested, tender, and acutely antelexed, the fundus being below the level of the cervix. After some preliminary general and local treatment, the sound was passed with extreme difficulty three inches and a half into an enlarged cavity. Its introduction was followed by vomiting, fainting, and severe pain, which, however, gradually subsided when a small silver stem was introduced, followed in a few days by one of larger size, and subsequently by the India-rubber stem. This stem was worn three months, and when withdrawn the uterus was found healthy and in its normal position. After some months, she became pregnant. Mr. Bateman of Richmond delivered her of her first child in her forty-first year. She has since enjoyed good health.

CASE V. Induced Dysmenorrhœa: Retroflexion: Cure.—Mrs. C., aged 32, since her marriage two years ago had suffered severely at her periods, which had always been slight, and had now become "intolerable", occasioning great functional derangement of her digestive and nervous systems. "I am", she wrote "a martyr to neuralgia at those times; cannot sleep, and vomit everything I take." The uterus was highly congested, exquisitely tender, and retroflexed. Her health was much improved by general and local treatment, when my spring-pessary was introduced without effecting any material improvement in the position of the organ, and with no relief to her sufferings. The stem-treatment was now resorted to, and carried out over a period of

five months, with the ultimate cure of her local affection and restoration to health.

CASE VI. Stricture of Internal Os Uteri: Sterility: Cure.—Mrs. D., one of eleven children, aged 28, had been married five years. Her husband, aged 32, was one of seven children. She enjoyed good health; menstruated every three weeks and three days, the flow lasting four days, moderate in quantity, bright without coagula; it was accompanied by slight local discomfort. There was no constitutional disturbance. The uterus was normal in position and texture; the external os was round and of average size. The sound passed with ease up to the internal os, where it was arrested. Failing on two occasions to overcome the obstacle, I advised the use of the hot vaginal douche, and belladonna suppositories night and morning. After this treatment, I succeeded in passing a small whalebone sound two inches and a half, for which, on withdrawal, I substituted a very small silver stem, soon to be followed by a larger one, which she wore several days. Then the India-rubber stem was introduced and retained for about five months, with little discomfort but great increase to the menstrual flow. Scarcely six months had passed, when she became pregnant, went to the full period, and was safely delivered of a fine child. She has since had excellent health.

CASE VII. Congenital Sterility: Cure.—Mrs. E., aged 28, one of six children, married six years, was well developed. Her husband, aged 29, was one of four children. She enjoyed good health, menstruated normally, and had no detectable disease of the uterus or of the ovaries. The uterus appeared somewhat small and flaccid; but a sound passed two inches and a half easily without pain. She wore for two months an India-rubber stem with slight discomfort and with increase to the menstrual flow, after which the uterus was found somewhat larger and firmer. Two months after the removal of the stem, she became pregnant, and passed satisfactorily through a normal labour at term.

CASE VIII. Induced Sterility: Cure.—Mrs. D., aged 36, had two children within two years of marriage, the last eight years ago. She had good labours and recoveries. The uterus was somewhat congested and low in the pelvis. Cured by ordinary treatment. Not becoming pregnant during the succeeding eighteen months, she again applied for advice on the score of sterility. No disease being detected, the stem treatment was adopted. At the end of three weeks, the stem was forced out during a period, which was shortly followed by pregnancy, terminating normally at term in the birth of twins.

CASE IX. Subinvolution: Sterility: Cure.—Mrs. T., aged 38, had one child twelve years ago, a year after marriage, severe labour, fair recovery; but since then menstruation had been irregular, usually deferred and scanty, with slight discomfort. General health good. The uterus was enlarged and indurated, low in the pelvis; the os was transverse and patulous, exuding tenacious mucus; the cervix was abraded. The sound passed three inches in the normal direction with some difficulty and pain through the strictured internal os. Under the influence of rest, local puncturing, iodised cotton and glycerine, and the hot vaginal douche, the uterus was brought into a normal state. More than a year having passed without pregnancy resulting, she again applied for advice, when a succession of stems were introduced, and worn for a period of four months with great increase in the menstrual secretion. She became pregnant immediately on the removal of the stem, went to the full period, and was favourably delivered of a fine child. A period of nearly three years elapsed, when she again sought my advice, was similarly treated, and with like successful results, giving birth to her third child in her forty-second year.

CASE X. Fibroid in Anterior Wall of Uterus: Dysmenorrhœa: Sterility: Cure.—Mrs. G., aged 31, married upwards of five years, had suffered for many months from profuse and protracted menstruation with intense dysmenorrhœa, producing serious derangement of her health. The uterus was enlarged and firm, much anteflexed. A fibroid tumour, about the size of a small walnut, could be detected at the junction of the neck with the body of the uterus. The sound passed three inches and a half with great difficulty and pain through the internal os uteri. As little or no improvement took place in her general or local conditions after many months of treatment, I commenced the use of the stems, which shortly lessened and ultimately removed all pain and greatly moderated the hæmorrhages. She wore the India-rubber stem for seven months. About eight months after its withdrawal, she became pregnant. During her pregnancy, the tumour could scarcely be detected. She went to the full period, and was delivered, after a somewhat protracted labour, by Mr. Pocklington, with the forceps, of a living child. She has since, I am informed, made a perfect recovery.

CASE XI. Fibroid of Uterus: Dysmenorrhœa: Menorrhagia: Cure.

—Miss H., aged 36, had enjoyed good health till eighteen months ago, when she began to suffer from more profuse, prolonged, and oft-repeated losses of clotted blood, accompanied with severe periodic pains, symptoms which had of late greatly increased and made "sad inroads" on her general health. The uterus was much enlarged, very dense, with nodular deposits about the lower segment of the body. The sound passed with some difficulty and slight pain through the internal os four inches and a quarter into an enlarged cavity. As all remedies, both general and local, had failed to do more than temporarily ameliorate her symptoms, the stem-treatment was adopted with speedy good results. After wearing the stem five months, it was removed, and shortly after her former symptoms began to recur. Again the stem was introduced, and worn for eleven months, since which, upwards of two years, she has menstruated normally. She is now in excellent health, and no trace of the former mischief can be detected.

In two cases, the anteflexion was so extreme that, although the India-rubber stems were worn for many months, still they were found bent. In one, the patient was free from dysmenorrhœa at the end of many months, and may still so remain for aught I know.* As to the other, a hospital patient, from whom Dr. Godson removed the stem, I have no particulars. I have reason to believe, from a subsequent examination, that in one of these cases the uterus was bound down by adhesions to the surrounding parts. In a few cases, where there had been a tendency to a free loss during menstruation, the flow was much increased and the period prolonged, but never to the extent of inducing me to suspend treatment. In nearly all the cases, while the stem was in position, there was a more or less free secretion of mucus, in a few occasionally tinged with blood, which ceased on removal of the stem. I could have largely added to the number of cases treated during a period of nearly five years; but I have deemed it more useful and instructive to restrict myself to the narration of a few typical cases.

A friend, after having read through this paper, remarked that it would be as well to record one or more unsuccessful cases; but, as not one case of failure has at present come to my knowledge in which the stem-treatment has been carried out, I am, happily, unable to comply with his suggestion.

ON HEMI-ANÆSTHESIA OF SPECIAL AND GENERAL SENSATION.

By W. ALLEN STURGE, M.D.,

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Now that attention has been frequently and strongly called to the anæsthetic phenomena of hysteria, it may be of some service to examine into the question of hemi-anæsthesia from whatever cause, and to compare other varieties of this condition with that due to hysteria.

I think it unnecessary to occupy time with arguments to prove the authenticity of the phenomena in question, and to show that they are not the result of "expectant attention or duplicity". It is only surprising that any prominent member of the profession should still be found to maintain such a position in public speaking and in print. I leave all such to settle their account with Professor Charcot, than whom no calmer or more dispassionate observer could be found, and I would refer them to the first volume of his published *Lectures on the Diseases of the Nervous System*.

Besides hysterical anæsthesia, a loss of sensation of the same order has been described in two conditions: 1. Chronic alcoholism; 2. Organic brain-disease. To these I would add a third condition—viz., lead-poisoning; and I will begin by narrating a case of this description which came under my own observation in Paris. The hemi-anæsthesia from alcohol and from lead-poisoning appears to be closely allied to the analogous condition in hysteria; because it is not apparently due to any gross lesion of the brain, and may therefore be classed with the so-called functional modifications of sensation; and because, in many cases of the alcoholic form at least, the recovery was rapid and complete.

CASE I.—P. L., male, aged 52, was admitted into l'Hôpital Temporaire, under the care of M. Lépine, on May 15th, 1877. From twenty to thirty-four years of age he had been a soldier. He denied syphilis. After leaving the army, he worked as a jeweller, and had nothing to do with lead; but, about six months ago, he began to work in some white lead works. At the end of seven weeks, he had a severe attack of

* I have recently heard that this lady became pregnant, went the full period, and was safely delivered of a living female child about two years ago.

colic, for which he went to a hospital and was an in-patient for three weeks, when he went out cured. He returned to his work, and three or four days afterwards perceived that he was a little weak in the left arm and leg. He suffered at the same time from headache, and he himself noticed that the sensibility of the left half of the body was diminished, and he complained of itching and tingling of the hand and foot of that side. For a short time before this, while he was in hospital with colic, he experienced a sensation like flashes of lightning in his left eye, more especially towards the left side, and the sight of that eye began to diminish. This impairment of sight has increased since that time.

On examining him, I found the grasp of the left hand to be considerably less than that of the right; but, though the force with which he could use that hand and arm was diminished, he retained every kind of movement—could open and shut his hand freely, raise his arm over his head, dress and feed himself without the least difficulty, and, in fact, there was none of that stiffness and awkwardness of movement which are seen in most cases of a slight degree of ordinary hemiplegia. In the same way, he did not walk at all lame or drag the left leg, but this leg became much more easily tired than the right; and when his power of resistance to forcible flexion and extension of the different joints was tested, it was found to be markedly less in the left leg than in the right. There was no facial paralysis, and he protruded his tongue straight. General sensation was very much dulled on the left side. In the face and tongue it was very much diminished, but not absolutely gone. In the arm he could scarcely feel the hardest pinch or prick at any part, and there was a similar obtuseness in the skin of the left side of the chest and abdomen. There was scarcely any sensation at the upper part of the thigh, but over the lower part of the leg and the foot there was only very slight diminution in the sensibility. He was unable to smell at all with the left nostril, the right being normal. He was unable to read a single word with the left eye, but with the right he could read a newspaper easily. He could only hear a watch when placed in actual contact with the left ear, but with the right he could hear it at a distance of a foot or eighteen inches. Taste was quite abolished at the front of the tongue on the left side; and, though not quite abolished at the back, it was very much less acute on the left than on the right side.

Metallic applications were tried in this case, but without any sensible result. The patient remained in hospital for several weeks, but without material change in his symptoms.

The anæsthesia which occurs in chronic alcoholism has been specially described by M. Magnan in his book *De l'Alcoolisme*. M. Magnan says that, in such cases, "whether after a sudden apoplectic attack with loss of consciousness, or little by little without other morbid phenomena than headache, dizziness, numbness, or formication on one side, the patients complain of muscular weakness, they drag the leg, let things slip from the hand, and sometimes even the speech is affected, or there may be slight facial paralysis. The paralysed side is anæsthetic—not only the skin, but the mucous membranes and the deep structures. When the anæsthesia is complete, the different varieties of sensation are abolished; neither touch, tickling, pricking, heat and cold, nor the constant or induced currents are felt. The muscular sense is diminished, and sometimes entirely abolished. The anæsthetic members are habitually colder than the healthy ones. Sometimes the difference of temperature between the two hands may attain to between two and three degrees centigrade. The special senses offer modifications no less remarkable. There may be merely a slight enfeebling, or there may be complete abolition of function. There is amblyopia, and also a loss of perception of colour. The hearing is dull; the sense of smell is diminished, and sometimes entirely abolished. The taste is diminished or lost on the anæsthetic side. In such cases, the motor symptoms sometimes rapidly pass off, whilst the sensory remain; at other times, the two sets of symptoms pass off *pari passu*; whilst in other cases, again, the motor and sensory symptoms grow progressively worse."

I will add a *résumé* of one of the cases reported by M. Magnan, that of a man who had been a drinker from the age of nineteen years. He had drunk much absinthe, and had had one epileptic attack. For two years he had suffered from paresis of the right side, with trembling of the limbs, which was more marked in the right than the left side. He was admitted into the *hospice* of St. Anne with alcoholic delirium. On admission, he was suffering from muscular weakness and anæsthesia of the right side. When the arms were extended, the right arm became much sooner tired than the left, and the trembling became much more marked; when the right leg was raised from the bed, it became much sooner fatigued than the left. The grasp of the hand was notably less on the right side than on the left, and the patient had difficulty in standing on the right leg, but could spring with ease on the left foot. Pin-pricks which were felt less than in the normal condition on the

left side were not felt at all on the right, there being complete anæsthesia of that side. There was amblyopia of the right eye. Odours were not perceived in the right nostril; hearing was feeble in the right ear; and the sense of taste was very much dulled on the right side of the tongue. The hemianæsthesia persisted for ten days without change, but after that it began to improve; and, five weeks after admission, the sight appeared equally good on the two sides, the hearing was much improved, but remained a little obtuse in the right ear, taste was improved, and he could smell equally well with the two nostrils. The general sensibility, though improved, continued to be dull on the right side. The trembling ceased on both sides. The treatment consisted in the administration of iodide of potassium in doses of fifteen grains *per diem*, with a bitter tonic.

M. Magnan gives details of several other cases of the same order which have occurred in his practice, in some of which there was a more or less complete recovery, and in others a progressive increase in the severity of the symptoms. In one case, there was a return of the hemianæsthesia with each attack of alcoholism; in another, sensation, general and special, returned, with the exception of the sense of smell.

In a case of alcoholism which came under my own notice at the Hôtel-Dieu at Paris—that of a man of middle age, under the care of Professor Germain Sée—there was complete hemianæsthesia, both general and special. In this case, the metallic applications were tried, and sensation was completely restored, as in the case of the hysterical patients. I regret that I cannot give the observation in detail, as I unfortunately took no notes myself, and I have been unable to obtain any from the *interne* of the ward.

I will now pass on to the hemianæsthesia, general and special, which exists in rare cases of organic disease of the brain. Attention was first called to these cases by Ludwig Türck* in the year 1859, when he described four cases of hemiplegia with hemianæsthesia in which necropsies were made; but in two only of these cases was there special as well as general anæsthesia. One of these patients was a young woman aged 22, who died six months after an apoplectic attack, which had deprived her of power and of sensation, general and special, on the right side. The power returned almost entirely, but the anæsthesia remained. A patch of softening was found lying outside the optic thalamus, and involving the outer two-thirds of the foot of the corona radiata. The optic thalamus itself was not injured. The other case was that of an old woman, who had been the subject of right hemiplegia for several years, accompanied by complete hemianæsthesia special and general. At the necropsy, an old apoplectic cicatrix was found lying along the outer side of the left optic thalamus, affecting a considerable extent of the posterior portion of the expansion of the corona radiata, part of the internal capsule, and perhaps also a portion of the lenticular nucleus.

The only other cases of the same nature of which I have been able to find a record are two cases which occurred in the practice of M. Charcot at the Salpêtrière, and which were reported by M. Pitres (*Progrès Médical*, 1876, p. 522). The first of these was a woman fifty-eight years old, who had been hemiplegic for four years, and in whom both general and special sensation were lost. At the necropsy, a patch of softening was found in the posterior half of the optic thalamus, which extended outwards so as to destroy the caudate nucleus involving the back part of the internal capsule. The second case was that of a woman who had been hemiplegic for twenty years, the leg being more affected than the arm. Sensibility to ordinary touch was very little affected, but the power of appreciation of pain was almost completely abolished. Sight was fairly good in both eyes, but the field of vision on the affected side was concentrically contracted in a very marked degree. The senses of hearing, smell, and taste were very much dulled on the hemiplegic side.

Two cases in which hemiplegia was accompanied by loss of sight in the eye of the affected side have been reported by Dr. Bernhardt (*Berliner Klinische Wochenschrift*, September 6th, 1875); but in these cases no note has been made of the condition of the other special senses, so that they are useless for my present purpose.

I met with a case of this rare form of hemiplegia, in one of the hospitals in Paris, which presented all the characters above described, with the exception that the loss of sight was on the opposite side to that which was paralysed. I subjoin the notes which I took of the case.

CASE.—L. M. F., male, aged 32, employed on a railway, was admitted into the Hôpital Temporaire, under the care of M. Lepine, on May 30th, 1877.

* Ueber die Beziehung gewissen Krankheitsherde des grossen Gehirnes zur Anæsthesie. Aus dem xxxvi Band, S. 191, des Jahrganges 1859, des Sitzungsberichte der mathem.-naturw. Classe der kais. Akademie der Wissenschaften.

History.—His previous health seems to have been fairly good. He had an attack of acute articular rheumatism three or four years ago. He never worked in lead. He denied syphilis. He had never had sore-throat. About a year ago, he had an eruption on the chest, for which he was ordered baths, but no medicine; and it disappeared after a fortnight's treatment. He was in good health until six weeks or two months before admission, when he began to suffer from very severe frontal headache, which was worse at night, and was sufficiently severe to keep him awake. At the beginning of May, he had an attack one evening, with loss of consciousness. On coming to himself next morning, he found that he was paralysed on the left side. He could not stand for four days, and it was still longer before he could hold anything in his hand. There was some difficulty in speaking; he did not forget his words, but could not pronounce them properly. He had gradually grown stronger; and, on admission, could walk about the ward, dragging the left leg a little. The grasp of the left hand was considerably less than that of the right, and he had difficulty in raising the arm over his head. When he was looking at an object in front of him, there was from time to time a little irregular movement in the eyes—a slight involuntary roll. If, however, either eye were shut, the other eye became the subject of very marked nystagmus—mainly horizontal, and coarse in quality. If he were looking with both eyes in such a way as to put the muscles on the strain, the nystagmus again came on, but to a less extent. The pupils were equal, and acted well to light. There was distinctly deficient action on the left side of the face; the left corner of the mouth was less retracted than the right when he showed his teeth; and he had been unable to whistle since his attack, which he could do easily before. There was almost absolute loss of general sensation over the whole of the left side of the body; he could only just feel the hardest pinch in the head, face, arm, trunk, or leg; he did not feel a touch on the left conjunctiva or left side of the tongue. The special senses, moreover, were affected; he was unable to smell with the left nostril; he was barely able to hear my watch placed in close apposition to the left ear, though he heard it at a considerable distance with the right. Taste was nearly or quite absent on the left side of the tongue. When his sight was examined, however, it was the right eye which was deficient, and he had great difficulty in reading with that eye what he read with ease with his left. This partial blindness of that eye, he believed, had come on since his illness, as he had good sight before. The field of vision, tested roughly with the fingers, appeared normal.

I may mention that Professor Charcot has found that there is a frequent connection between posthemiplegic chorea and this particular form of hemianæsthesia, and his observations have been confirmed by other observers so far as the sense of sight is concerned. Thus, in the two cases reported by Bernhardt (*loc. cit.*), loss of sight in the eye of the hemiplegic side was associated with choreic movements in the limbs of that side. In one of Professor Charcot's cases at the Salpêtrière that I had the opportunity of seeing, an elderly woman, who had suffered from hemiplegia for several years following an apoplectic stroke, had general and special anæsthesia, associated with choreic movements. Metallic applications were tried, and were followed by very marked improvement in the sensibility. M. Charcot has mentioned another case of the same kind which occurred in his practice (*Progress Medical*, Jan. 20th and 27th, 1877).

To sum up, then, we find that an affection of sensation, general and special, of every order, may be met with in a considerable variety of conditions besides hysteria, and that which is due to hysteria differs in no way from that which results from other causes, gross organic lesions not excepted. We find as a rule the whole realm of sensation involved, but in the hysteria, as well as in the other conditions, we may find one special sense, or certain districts of skin unaffected; thus, in the case of lead-poisoning, the sensation of the foot was nearly normal, whilst everywhere else the patient was anæsthetic.

The affection of sight, again, is in all quite different from that seen in most cases of organic hemiplegia where the optic centres are involved, for in these we find hemipia—*i. e.*, blindness of that half of the field of vision in each eye which corresponds with the paralysed side. In the cases of which I am treating, however, we find affection of the eye on the paralysed side only, the other eye being intact, and the affection consists of concentric diminution of the field of vision in all directions, which may, in some cases, amount to complete blindness. The exceptional case I have myself reported of organic hemianæsthesia, in which it was the opposite eye that was nearly blind, I leave, as this was an anomaly for which I am unable to account.

Another feature which the hysterical cases have in common with those due to other causes, is the transitory nature of the symptoms. In several of Dr. Magnan's alcoholic patients, the sensibility returned within a few days or weeks after they came under treatment;

and, in at least two cases in which the hemianæsthesia appeared to be due to an organic lesion, sensation returned after the metallic applications.

I shall not attempt in the present paper to enter upon the difficult question as to the mechanism of this singular condition, whether in hysteria or in other maladies; still less shall I enter into the much vexed question as to the explanation of the efficacy in certain cases of metallic applications. My object has been to show that hysteria is by no means the only condition in which special and general hemianæsthesia is met with; that it is found not only in certain diseases—such as lead or alcoholic poisoning—in which we may suppose it belongs to the so-called functional symptoms; but also that it may be due to a distinct and localised organic lesion which can be accurately defined by necropsy. Instead of allowing ourselves to be dominated by blind scepticism when our attention is called to hitherto unnoted phenomena, let us bear in mind how very imperfect is our knowledge of the functions of the brain, and endeavour to apply our new knowledge to the elucidation of its problems.

LIFE-ASSURANCE AND RESIDENCE IN HOT CLIMATES.

By C. R. FRANCIS, M.B. Lond.,

Surgeon-General in Her Majesty's Indian Army (Retired).

WITH reference to the extent to which residence in hot climates reduces, if at all, the eligibility of European life for assurance, I venture to offer the following remarks. Having been Staff Assistant-Surgeon to the dépôt at Warley at a time when recruits for the army in India were examined and admitted in large numbers, and having served for many years with European as well as native troops in various parts of that country, besides holding appointments in which the examination of lives for assurance formed part of the ordinary duties, I may perhaps be allowed to claim a fair share of experience on the subject. My only object being to invite attention, for the benefit of both assurance companies and of medical officers attached to them, to a subject which, so far as I am aware, is not discussed in any special English treatise, I hope I may be pardoned for thus noticing it; which I do in the hope that, if necessary, some abler pen will pursue it.

An impression—in a great measure erroneous—prevails with many assurance companies and medical practitioners that tropical residence is opposed to longevity. For the investigation of tropical lives—so to designate them—no general rule can, of course, be laid down. Each life must be dealt with separately on its own merits. But, unless the medical officer who examines it has been specially educated for the purpose, or has had special experience, his position, always responsible, as “one of the chief guardians of social morality and civilisation,”* becomes, in such cases, exceptionally so, and in some very embarrassing. The primary object of a life-assurance company is, naturally, to do business. At the same time, its desire is to obtain as many young and healthy lives as possible. Given ancestral longevity and freedom from evil hereditary influences, individual youth, health, and regular habits, with an occupation free from danger—such a life is obviously very desirable. This amount of unmixed good in a single individual is, however, rare. One or more disturbing elements frequently exist, and are provided for; but I am inclined to think, from a perusal of the examination-papers in use with various assurance offices, that, in the case of tropical residence as one of these elements, the inquiries might be so framed as to enable the medical examiner to arrive at the true value of the examinee's life with greater exactness than the present system in those offices admits. Some offices look so seriously upon tropical or Indian residence, that they occasionally double the premium: in others, lives in India are assured at home-rates. *In medio tutissimus ibis* is an axiom that may well be applied here. That the risk of life in India is, *ceteris paribus*, greater than it is in Europe must be admitted, because cholera and insolation—diseases which, in their season, destroy or damage life to a vast extent—cannot be eliminated from the calculation. Since the days when an undertaker in Calcutta offered 20,000 rupees for the business and goodwill of a brother undertaker for a single month (September) up to the present time, the value of European life in India has steadily increased. Improved systems of drainage, a better water-supply, facilities for rapid escape from noxious influences and for recruiting injured health, added to more rational modes of treatment and recognition of hygienic laws, have combined to reduce the mortality in later years from 40 per 1,000 during the three years ending 1813 to

* *The Medical Adviser in Life Assurance.* By E. H. Sieveking.

less than half that number in the decade ending 1870.† Still, the mortality generally is higher than in the United Kingdom. We learn from the *Army Medical Report for 1875* that, during the ten years ending 1874, the death-rate from all diseases amongst non-commissioned officers and men was—in Bengal, Madras, and Bombay—double that in Great Britain and Ireland. It is true, that these latter classes suffer more than officers. Nevertheless, the broad fact of a general higher death-rate, and of a certain amount, therefore, of Indian risk, remains. What that amount may be, it is not very easy to determine. The Directors of the Standard Life Assurance Company—a company that probably assures more tropical lives than any other in the United Kingdom—whilst admitting that their rates will bear a certain reduction at the younger ages, believe that, at those which are older, they must, in the new policies, be increased. From a statistical point of view, these calculations may be correct enough; but, notwithstanding, it by no means follows that individuals may not live as long in India, or after returning home, as if they had never left England.

This brings me to the object of the present communication—viz., that each tropical life must be dealt with on its own merits; and that the rates for such a life should, in each case, be special. Much must depend upon circumstances. The military and the civil life differ broadly from each other and in themselves. The officer with his regiment, for example, may (harring the element of danger from his vocation) lead a healthier life, if he please, than many civilians, or officers in civil employ. The station where his regiment is quartered is changed in the annual relief once in two or three years; and the march with it (a good deal abridged in the present day, owing to railways), extending often over several weeks, is usually most invigorating. Then he may annually take sixty days' privilege leave to the hills; and his occupation, generally, secures for him a fair amount of air and exercise. The civilian, on the other hand, and the merchant, pass several hours daily in a more or less unwholesome atmosphere—the former in *cuteherry* (judicial court), the latter in his office. The planter, again, with his early rising, long rides over his estates, and regular habits, often attains a good old age in India, enjoying far better health (and showing it in his face and *physique*) than very many in England.

The part of India, moreover, makes a vast difference. One man may pass the greater part of his service in the hills—in an English climate, in fact. Another may have sojourned under malarious influences in what are known as the penal settlements in the plains. The liver and spleen (if the former may be as free from all trace of disease as when the proprietor left England, whilst those of the latter may be seriously injured. Then the aggregate length of residence is not the same as consecutive length. Facilities of communication, and less stringent leave-rules throughout the services, make it easy for all to come home more frequently, and thus renew their strength. In former days, when men identified themselves more with the country, and remained there thirty or forty years continuously, doubtless, for them, a return to England, at an advanced period of life moreover, might be hazardous. But this is now all changed. Men go to India to fill their coffers, and return as rapidly as possible. Obviously, in such cases, the climate *per se* would tell less than upon the long resident. Something must, of course, be said for acclimatisation. Many men become inured to the climate. Dr. P. Monat reminds us, in the pamphlet above referred to, that Sir James Annesley, in his *Sketches of the most Prevalent Diseases of India*, divided the 115 European gentlemen who died in the Madras Presidency in the years 1813, 1814, and 1815, out of 1,366, into three classes: the first class who had resided twelve years and under in the Peninsula, with a death rate of 42½ per cent. *per annum*; the second, residents above twelve and not exceeding eighteen years, whose mortality was something less than 3½ per cent.; and the third class, whose residence amounted to eighteen years and over, who lost only 2½ per cent. of their number. For the thoroughly acclimatised in India, a return to Europe would naturally be somewhat hazardous. The power of adaptation to climate and other circumstances inherent in the human constitution is marvellous; but this power must naturally diminish with advancing years. In examining a tropical life, habits should be carefully inquired into. Those of a prejudicial tendency are too easily acquired in the East. Hence the advisability of referring a tropical life to two friends—one who knew the assuree before he went abroad, and who had renewed his acquaintance with him since his return; another who knew him well in India. The fact of a man having risen in his profession would be in his favour, although the opposite fact must not be accepted too readily as adverse. A singular apparent inconsistency is sometimes seen. A man comes home sick.

Soon, the *res angusta domi* of England brings on an attack of impetuosity; and he applies to an assurance office for a loan, ready to assure his life to cover it. The inconsistency is, however, more apparent than real. Men are very properly often sent home for ailments that would become aggravated by continued tropical residence, whereas they shake them off rapidly in England, and are frequently well before even leaving the vessel. Such lives may, in truth, be perfectly sound. Some lives are improved by residence in India—the strumous, for example. I am acquainted with a retired (Native) Infantry Colonel, now in his fifty-fifth year, whose mother died early in life, after giving birth to this, her only child. He was a sickly little fellow. Struma displayed itself in a marked and exaggerated degree. His neck was scarred from glandular abscesses, and one of his elbow-joints became ankylosed after chronic ulceration; whilst his voice, from a similar condition in the larynx, lost the masculine, and acquired a feminine, tone. Now he passed for the Indian military service I am not prepared to say. He did pass into it, however; and he rapidly began to improve in health. The climate suited him, and his constitution soon underwent a wonderful change for the better. He came home from time to time on furlough; and now, having served the State well as a regimental officer in India for more than thirty years, has retired in the full enjoyment of life, and likely, humbly speaking, to live for many years. His male ancestors were healthy and long-lived. Had he remained in England, phthisis would probably have carried him off before he had completed his fifth lustum. It must be remembered that in a hot climate the lungs are not, as in a cold one, actively employed. Their ordinary office of eliminating carbon from the system is undertaken, for the most part in India, by the liver, which is, therefore, more likely to become deranged, or even diseased. I believe that the greater tendency to fatty deposit in tropical climates arises from the decreased activity of the lungs and the not always corresponding activity of the liver. It is well for the individual if obesity be the only result. Too frequently, where habits of life are favourable, fatty degeneration of tissue follows. Some years ago, I pointed out, from actual experiment, that, where Europeans had resided for a few years in the plains of India, there was apparently a positive diminution of weight in the lungs. Dr. Parkes, when alluding to this in his *Practical Hygiene*, mentioned that he had held the same opinion, though he had not enjoyed sufficiently frequent opportunities for testing it. This fact (comparative quiescence of the lungs in India), whilst it points to the expediency of locating European troops as much as possible in the hills, shows also that, after long residence in India, the lungs are less likely than other organs to be the seat of disease, whatever the proclivity of ancestors, or nearer relatives, to phthisis. This leads me to speak of what kind of life is suited for India, or likely to do well there; in what way different lives are liable to be affected; and what derangements or diseases we may expect to find in tropical lives generally.

But, before going further, I should like to say a word or two on the examination of a "life". An intending assuree is very different from a recruit for the army. The latter not being always full grown, allowance must be made for that, and, in some cases (it may be), for previous starvation, and consequently for future filling in. The difference between the raw recruit of twenty and the smart soldier two or three years later on is often very striking. The assuree, on the other hand, is usually developed. Under a "short service" system, where, moreover, a proportion of the troops may be told off for garrison-work, a recruit may get through his allotted period of active servitude without difficulty, even though he may break down and die later in life. But the assuree must live as long as he can. Every allowance should be made for the circumstances of the moment. A nervous examinee may wish to fortify him self beforehand. Alcohol will at first diminish, but afterwards accelerate, the pulse. A cup of coffee, taken at a neighbouring luncheon-bar, will quicken it in a marked degree. A meal of animal food will raise the pulse from five to ten beats per minute. Prolonged fasting, on the other hand, will reduce it by from twelve to fourteen beats per minute. Constitutional nervousness and various other points must be considered. Has the examinee waked rapidly to the place of rendezvous? Or has he come quietly in a conveyance? With reference to possible abnormal distribution, etc., the pulse should be felt in both wrists, alternately together, whilst the assuree stands and lies down. An interval, more or less long, according to circumstances, should be allowed to elapse between the assuree's arrival and his examination. Doubtless, the respiration in all cases requires special attention; but, for reasons just stated, disease need not be expected there, notwithstanding the existence of phthisis in the family. Stress is sometimes laid upon the extent to which the apices fill: but general breathing capacity is required; and the direction in which this exists is not always the same.

* *Journal of Tropical Medicine and Hygiene*, from 1861 to 18 inclusive. By F. J. Mouat, M.D., F.R.C.S. 1875.

The relation of height to size and weight will, of course, be carefully considered. With regard to the lives that should go to India, it is understood that those in the services are picked lives: though, even with these, some points are omitted in the medical examinations which are deserving of inquiry. At present, if an individual have been vaccinated or had the small-pox; if he show no tendency to insanity, or epilepsy, or hernia, etc., he is, *ceteris paribus*, considered eligible, and passed; and yet he may not be so fit as appearances indicate. The dyspeptic, for example, especially if he be liable to low spirits, should not make India the land of his adoption. The swarthy and the fair* complexioned should alike avoid it; the former being likely to suffer from "liver", the latter from "sun". Those who have "weak bowels" should not risk it. The practice of sending the consumptive (under all circumstances) to India is, happily, diminishing, as it is becoming generally understood that certain parts of that country—the low damp climate of Bengal, for instance—are quite inimical to such cases. In the higher and drier stations, improvement may be expected. The hill-station of Ootacamund, in the Madras Presidency, is particularly suitable. Notwithstanding the risks from climate that have been here referred to, the *res angusta domi* is too often all-powerful in determining the future career of a youth. Interest, too, may influence, and the prospect of prizes not attainable at home. Under any circumstances, the man who has decided upon India should, whenever possible, consult a physician experienced in tropical disorders as to his proclivities and the best mode of obviating them.

In examining a tropical "life", attention would naturally be drawn to the complexion. This may be natural, or it may be the result of permanent destruction of the secreting portions of the liver. Even in the latter case, there is no cause for special consideration, as, if the assured have left India for good, there may yet be quite liver enough for health. The general bearing is very important. Indications of disordered nervous system should be carefully sought for. Shattered nerves are frequently the result of a prolonged residence in India. The liver and spleen will obviously require especially careful examination. However disagreeable the duty, if there be the least suspicion, be the intending assured married or single, the medical officer should look for signs of blood-poisoning from syphilis. The dissemination of this poison, and its effects, in India are much greater than is commonly supposed. The kidneys will be seldom found to be the seat of disease.

With regard to the question—Has the assured, one of a long-lived family, who has lived in India for thirty years (including half-a-dozen spent in furloughs of two years at a time), as fair a chance of living to a good old age as other members of the family who have never left England?—the answer must obviously depend upon circumstances. Here is an example. A. B., who was recently examined at an assurance office, did not go to India till he was twenty-three. He had led a careful life in England, and his habits were regular. He had not (when he presented himself for assurance, at fifty-seven) suffered at any time from serious illness. He had risen rapidly in his profession, and, at fifty-five, retired from the Indian service in good health. His ancestors, on the male side especially, were remarkable for longevity, their several ages at death varying from eighty to ninety-five. His father, naturally a hale active little man, died at sixty, in India, having imprudently played at cricket, of which he was particularly fond, in a damp misty month (February), at one of the dampest stations in Bengal. The induced catarrh became a fatal bronchitis. Beyond occasional attacks of dyspepsia, he had never, during a service of nearly forty years, been ill; and, humanly speaking, had he not, for the sake of promotion, returned to India at so advanced a period of life, he might have been living now. Considerable stress was, however, laid upon the fact of the death at a comparatively early age by the medical officer of the company, whilst no questions were asked as to the longevity of A. B.'s family. A. B.'s mother's family were also long-lived; but his mother had died of cancer of the breast at fifty-five, and a sister of phthisis at forty-four, years of age. These facts, taken separately and without inquiry, would obviously be very important. But investigation would have elicited that the former, of excellent *physique*, had never complained of even a headache till she was fifty. Then, with a change in the uterine functions, a scirrhus tumour appeared in the right breast. It was completely removed by an eminent London surgeon, and she continued for four years to enjoy her usual good health; when she became a widow, and then, the tumour having reappeared, and life no longer having any charms for her, she abandoned herself to her fate. The tumour became an open sore, and death soon followed. The sister, who died of phthisis, had gone with her

parents to India when eighteen years of age, and married and became a mother shortly afterwards. Frequent pregnancies and continued lactation undermined her strength (European mothers, as a rule, are less able to suckle their offspring in India than they would be in England); and, at twenty-eight, tubercles were detected in the left lung. For sixteen years she battled with the disease; and, from time to time, regained very much of her former good health. But her condition was not treated with the serious attention it deserved; and, at forty-four, the poor sufferer finally succumbed. Four of A. B.'s brothers and sisters had died in infancy. Much, too, was made of this point. But what were the facts about which no questions were asked? Three of the children had died half a century ago in India from the effects of teething (a period more trying to European children in a tropical country than in a cold one), when the diseases of childhood, moreover, were less understood, and when, owing to difficulties of transport, change of air—so important a factor in aiding recovery—could not readily be obtained. The fourth infant died in England from unchecked hæmorrhage after leech-bites—a melancholy instance of neglect. When A. B. left India, he was advised not to do so, as he had evidently, it was urged, twenty years more work in him even in that country! The result of A. B.'s medical examination was, that three years were added to his life in the policy. Too great importance was attached: *a.* To the idea of blood-poisoning (cancer) in the mother, and to its hereditary nature; but, as Dr. Sieveking observes, "the female organs of reproduction are specially liable to the disease, and...the female sex has an infinitely greater proclivity to cancer than the male sex; and the taint, if any, would scarcely affect the assured; *b.* To the death of the sister from phthisis; for although, as the same author has observed, "where both (cancer and tubercle) occur in the same family, any member of it must be regarded as bearing a double risk", the circumstances of the case were such as would not affect A. B. himself, whose lungs had for so many years been under tropical influences; *c.* To the deaths of so many members of the family, as to the circumstances attending which, however, no inquiries were made; *d.* To the death of A. B.'s father from a chest-affection. And yet, whilst stress was laid upon these points, leading to an increased rate of premium, no inquiries were made about the longevity of A. B.'s ancestors, male or female, and no careful investigation was made of those organs and parts of the constitution which would be liable to derangement after so long a residence in India. The satisfactory result of inquiries in these directions should quite have neutralised any unfavourable opinion formed upon a consideration of the four adverse (?) facts above referred to. A. B., who has a sister five years younger than himself—also a tropical life, enjoying excellent health—might, with her, be considered a "selected life".

COMPLETE INVERSION OF THE UTERUS: REDUCTION ON THE FIFTEENTH DAY.

By ALEXANDER FORD, L.R.C.P.Ed., Harrogate.

INVERSION of the uterus is so rare an accident that the following case may not be without interest.

On February 20th, Mrs. B., aged 22, primipara, was delivered of a healthy child. During the later months of pregnancy, she suffered from a fixed pain on the left side; but her general health was good. Labour was normal as regards the first and second stages. After the expulsion of the child, I waited about ten minutes and made traction on the cord, maintaining pressure on the uterus with my left hand. The cord snapped off. I then introduced my hand into the uterus and grasped the placenta, which was partially adherent. I removed all but a small piece. Presently my patient lost a large quantity of blood. She said she "could not see", and felt as though she should "sink through the bed". Her countenance became deadly pale, and her pulse so weak and fluttering that I could not count it. I administered stimulants freely and she rallied. I left her at 11 A.M. I saw her again in the evening and found her very weak.

On the following day, the patient complained of having severe after-pains and cramps down the thighs. The bladder had not acted. I drew off her urine, introducing my finger into the vagina to serve as a guide to the orifice of the urethra. There was no change when I saw her in the evening. I passed the catheter, and administered an opiate.

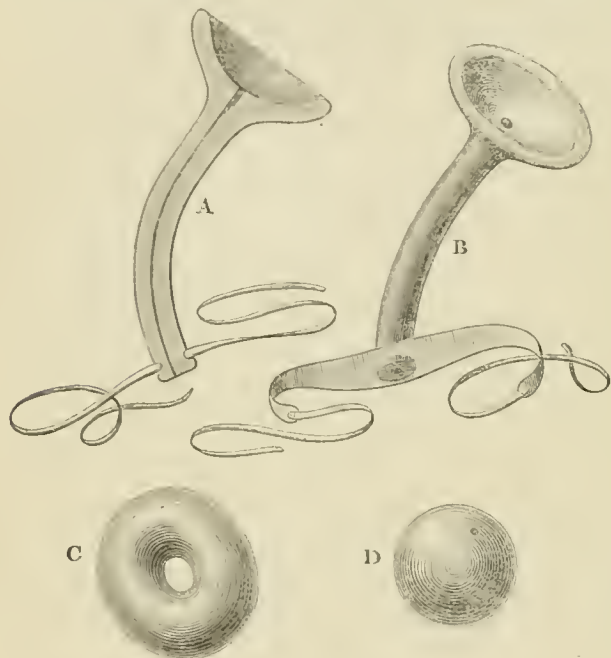
On February 22nd, my patient's condition had altered in that the cramps had subsided; the bladder had not acted. On introducing my finger into the vagina, I came upon a globular body filling up that canal, and this body was the inverted uterus. I made an attempt—a poor one, I must admit—to reinvert the fundus, and failed.

On February 23rd, Dr. Myrtle saw the patient with me, and rightly

* The fair scrofulous, for whom the warm and dry parts of India are usually well adapted, are not, of course, included in this category.

judged that reduction would be difficult. Acting on his advice, I consulted Dr. James Braithwaite of Leeds.

On February 25th, the patient was seen by Dr. Braithwaite. His attempts at reduction were unsuccessful. He was, however, of opinion that the end might be attained by tiring out the os uteri, and suggested the exertion of steady pressure on the fundus. The apparatus used for this purpose is depicted in the accompanying diagram. *c* represents an India-rubber pad, which was fitted to the cup-shaped depression at the extremity of the vulcanite pessary *B*, and maintained in position by a string which was knotted inside the India-rubber ball *D*, and had its other end passed through the annular pad *C*, and through the stem of the pessary *A*. The apparatus was kept *in situ* by two straps, attached behind and in front to a belt passed round the abdomen. The diameter of the cup-shaped end of the pessary was two inches.



I began this plan of treatment on February 26th, and for the first three days I removed the instrument every morning and renewed my attempts at reduction daily. It then occurred to me to keep the apparatus in constantly, and merely undo the straps in order to draw off the urine and syringe out the vagina. I was led to believe this the better mode of procedure, because the daily removal and reintroduction of the instrument caused the patient much pain, and because the attempts at reduction excited strong expulsive efforts.

March 1st. The pessary was not withdrawn. I contented myself with emptying the bladder and washing out the vagina. I kept up steady pressure on the fundus until the evening of March 6th.

On March 6th, Dr. Braithwaite again saw Mrs. B., and reinverted the uterus while the patient was under the influence of chloroform.

I believe that in Mrs. B.'s case the inversion was not complete until the third day after delivery. The extraction of the placenta caused, I have no doubt, a depression of the fundus, and this depression terminated in the extraordinary accident which is the subject of these remarks. The process of inversion was going on during the day following her confinement; and the cramps were due to the circumstance that four layers of uterine wall occupied the vagina. It was not yet complete; for my finger did not come upon the fundus when emptying the bladder. It was not until about 2 A.M. of February 22nd, that the patient felt a sense of relief from the cessation of the cramps, and on the morning of that day my finger encountered a globular body occupying the vaginal canal. The removal of the placenta was unattended with any difficulty; it did not require as much manipulation as some others which I have had occasion to remove.

Were the symptoms which immediately followed the removal of the after-birth such as to have led me to infer what was the real nature of the case? If so, I did not interpret them aright. They were alarming enough, but not conclusive. Very similar symptoms occur without there being inversion. On January 18th, I attended Mrs. M., aged

34, primipara. Beyond a protracted first stage, there was nothing in the least abnormal in her labour. There was not a single accidental complication, and yet her condition bore a striking resemblance to that of Mrs. B.

CLINICAL MEMORANDA.

DIPHThERIA: CROUP: TRACHEOTOMY.

IN a short communication on the above subject by Dr. Bowles in the last number of the JOURNAL, there occurs the following statement. "Lastly, Dr. George Johnson in a contemporary so far changed his front as to state that bad drains (*strains* is evidently a misprint for *drains*) as well as diphtheria are responsible for false membranes."* And Dr. Bowles goes on to predict the triumphant results of this assumed "change of front".

I believe that the paper to which Dr. Bowles refers is one published in the *Lancet* of February 16th, in which I state, as the result of my own investigations, that, "in the absence of direct contagion, the occurrence of membranous pharyngitis or laryngitis affords conclusive evidence of infection by sewage-poison conveyed through either air or water". By this, of course I meant to say that the membranous exudation which characterises diphtheria, when not the result of direct contagion from a previous sufferer, is caused by a drain-poison. That so plain a statement should have been mis-understood by so intelligent a physician as Dr. Bowles, makes one almost despair of the possibility of escaping misconstruction. Does he maintain that a false membrane which has resulted from infection by a drain-poison cannot be diphtheria? To state that "bad drains as well as diphtheria are responsible for false membranes" would seem to me to be as absurd and unmeaning as to affirm that bad drains as well as typhoid fever are "responsible" for ulceration and sloughing of Peyer's patches. In the paper to which reference is made, I simply maintain the doctrine which is very generally accepted, that the diphtheritic poison, like the typhoid poison, often escapes from a defective drain; and I further insist upon the practical importance of tracing the infection to its source, and not erroneously attributing a membranous exudation to exposure to cold or heat or other non-specific agencies.

GEORGE JOHNSON, M.D., F.R.S.

SURGICAL MEMORANDA.

ROTATION OF THE SPINE.

MR. CHRISTOPHER HEATH, in a clinical lecture delivered at the University College Hospital on the subject of lateral curvature of the spine, which is reported in the JOURNAL of May 25th, supported the theory advanced by Dr. Sayre, that the rotation of the vertebrae which is present in this deformity arises from the unbalanced action of the serratus magnus muscle. Dr. Sayre's theory is as follows. The scapula becomes a fixed point by contraction of the rhomboidal muscles; the serratus magnus acting from this fixed point draws upon the ribs, and converts them into levers of the first class; the power being at the attachment of the serratus magnus, the fulcrum at the transverse process, and the weight at the body of the vertebra. The serratus magnus, by its contraction, acts on the long arm of the lever and rotates the vertebra. The fallacy of this theory is evident. The scapula becomes a fixed point by contraction of the rhomboidei muscles; therefore the spinous processes from which these muscles take origin must also be fixed points; that is to say, the vertebra is at one and the same time a rotating body and a fixed point, which is absurd.

FREDERICK R. FISHER, F.R.C.S., Surgeon to the National Orthopaedic Hospital, etc.

CASE OF EXTRACTION OF A BULLET FROM THE SHEATH OF A TENDON AFTER FIVE MONTHS' LODGMENT.

ON April 30th, I was consulted by a young woman with reference to a very prominent tumour on the back of her hand. It was perfectly painless; and her only reasons for seeking advice were the obvious disfigurement and a slight difficulty attending piano practice. Its situation was between the metacarpal bones of the middle and ring fingers, its centre being rather less than an inch from the metacarpophalangeal articulation. It was hard, inelastic, and slightly irregular

* Dr. Bowles has sent us a note stating that the word "*strains*" should have been "*drains*"; and that the commencing word "*lastly*" should have been "*lately*".—ED.

in outline, and admitted of no movement except a very little on flexion of the ring finger. No tenderness on pressure was present. There was also a small scar on the latero-posterior aspect of the ring-finger, at about the junction of the upper and middle thirds of the first phalanx. This, the patient stated, was caused by a wound from a catapult received early in the preceding December, simultaneously with which the tumour became apparent. Such a history, combined with the physical characters, at once determined me to extract what was evidently a foreign body. After division of the skin and subcutaneous structures, the tumour was seen to be of a darkish colour, and to be within the sheath of the extensor tendon, on section of which a leaden bullet was found. This was five-eighths of an inch long, with a diameter of five-sixteenths of an inch, and was obliquely inclined to the surface of the hand. In four days, the wound was healed, no suppuration having taken place, and the patient can now use the hand as well as ever. Antiseptic precautions and treatment were not adopted.

The chief points of interest seem to me to be, first, that the bullet should have travelled so far up the sheath and remained there so long without setting up any inflammatory mischief. Indeed, we may fairly suppose that it might have remained there indefinitely without harm. And secondly, operative interference involving the sheath, and that not antiseptically conducted, was in the same respect equally happy in its results. I may, perhaps, mention that while the original wound was still bleeding, two surgeons, who separately saw it, failed to diagnose the nature of the tumour, one ordering poultices, and the other saying it was "congealed blood" and painting it for some days with iodine.

W. GEO. CRESWELL, L.R.C.S. Edin.

REVIEWS AND NOTICES.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM, delivered at Guy's Hospital. By SAMUEL WILKS, M.D., F.R.S. London: J. and A. Churchill. 1878.

DISEASES OF THE NERVOUS SYSTEM, THEIR PREVALENCE AND PATHOLOGY. By JULIUS ALTHAUS, M.D., M.R.C.P. London: Smith, Elder, and Co. 1877.

THESE two works on Diseases of the Nervous System, which we owe to Drs. WILKS and ALTHAUS, may be grouped together with more justification than is afforded by mere community of subject. They are, to some extent, complementary. Dr. Wilks gives us the experience of a long period of acute observation, careful thought, but not very wide reading. Dr. Althaus' work contains a brief but clear account of the work of the chief European labourers in the same field; and the author has added some interesting facts obtained by careful study of the Registrar-General's tables.

The lectures of Dr. Wilks are a reprint of those which were published some ten years ago by a contemporary, with additions, many of which have appeared from time to time in the *Guy's Hospital Reports*. The lectures apparently formed part of a course on systematic medicine. They constitute a survey of the whole field of nervous disease; and, although systematic in intention, are illustrated by the narration of a large number of cases. In generalities they are excellent, in details somewhat inadequate. The more important points, both of general principle and special disease, are singularly well discussed; such, for example, as the phenomena of aphasia, epilepsy, and hysteria. Every one who knows the careful philosophical thought and power of varied illustration from general literature which the author brings to bear upon every subject, will be prepared to find such points treated in a manner interesting and instructive, and he will not be disappointed. The absence of some of the elements which may by many readers be missed in the book is explained in the preface, in which the author admits the absence of "precise scientific material" of a "scientific method", and of proper references to the labourers whose works have been embodied in it.

The form of a lecture, we are told, does not admit reference to the sources of information from which the lecturer draws. This is true; but the transfer to the printed page of the conditions of the oral lecture is not altogether justifiable. At the same time, few of the readers of these lectures, who care more for what is said than whence it comes, will be inclined to regret omissions which increase the ease of perusal.

Throughout the work, the descriptions of disease and pathology are accurate and trustworthy, the account of symptoms is clear, and the remarks on treatment, as far as they go, are careful and wise. The work is divided into four sections, comprehending respectively diseases of the brain, of the spinal cord, functional and general diseases, and

diseases of the nerves. The first two are prefaced by an account of the anatomy and physiology of the centres. The best parts of the work are unquestionably the description of the diseases with which the author's daily work has made him thoroughly familiar, and has compelled him to constant and reflecting study. In order to convey an idea of the manner in which the subjects are treated, we cannot do better than quote the following passage from the account of the causes of hysteria (page 373).

"It sometimes surprises me that medical men declare their utter helplessness when standing by the bedside of an hysterical patient. They will confess that all means have been tried in vain, that there is no real disease to cure, that it is an imaginary or nervous disorder, where nothing can be done, when all the while it is their own presence in the case which constitutes the very root and foundation of the malady. Let us take the case of a girl who keeps to her bed with an ideal paralysis of the legs or some similar disorder. She is the interesting invalid, and receives, in consequence, the sympathies of inquiring friends, the consolation of the clergyman, and, above all, the daily visit of the medical practitioner, who prescribes appropriate physic. The medical man declares that he has tried every means and failed. Should he not see that the whole affair is a drama of the patient's own creation, and she the central figure of the piece? Is he not aware that to cure her he must break into the charmed circle, and to spoil the play he must get rid of some of the performers? And cannot he perceive that, even if he have no influence over others, he might withdraw himself? Here is a young lady who says, 'I will be ill, and have a doctor to attend me'. How can she accomplish this if the latter decline to obey her behests; or, if he accept the post, how can he, in the name of common sense, say he cannot break her of her fancy, while he is a party to it? If he see clearly the truth of what I have been saying, his duty is, as professional adviser to the family of the patient, to retire, and use his influence to prevent the calling in of another medical man."

There is no doubt of the correctness of the view that hysteria is, in many cases, a "medical disease" in a very literal sense. But we cannot concur in the practical rule of conduct which Dr. Wilks deduces. It is certainly true that many medical men conduce to the maintenance of hysteria, sometimes from fear of giving offence and losing a patient if they adopted a wiser course. But we believe that it never need be so, and that it is simply fear or ignorance of the proper mode of treatment of such cases that leads to the want of success. Such cases recover in hospitals, not in spite of the medical attention they get there, but usually in consequence of it; and medical attention, not always pharmaceutical, if judicious, should, and we believe does, help recovery in private also.

A careful and impartial summary of the facts known about chorea leads Dr. Wilks to the conclusion that it is impossible to accept the embolic, or any other theory which ignores the important facts that it is the result of fright and a disease of childhood. The latter is a far more prominent fact than the connection with heart-disease, although the latter is fully corroborated by his own experience. He has made many *post mortem* examinations in chorea, and has never failed to find evidence of endocarditis, whether a murmur had been present during life or no. The account of epilepsy and its symptoms and theories is very good. Dr. Wilks is one of the many who claim to have been the first to give bromide systematically in the disease. Next to bromide, he attaches the greatest value to zinc.

Other sections worthy of special commendation are those on the coarse organic diseases of the cord, and on cerebral tumour. The style of the work is lucid, and the method in which it is written excites an interest in the subjects discussed which is well sustained. It is probably the most "readable" work on the subject that we have.

Dr. Althaus' book is of a different scope. He professes to deal only with the prevalence and pathology of nervous diseases; but the latter word is probably used rather in its wide continental than narrow English sense, for as much clinical as pathological description is included in the several sections. The opening chapter and most original part of the work consists of an analysis of the Registrar-General's reports, in order to ascertain the actual prevalence and fatality of nervous diseases in this country. It is found that the rate of mortality from this cause is steady, and subject to a definite law to which there are not any, or only apparent, exceptions. The rate does not vary perceptibly from time to time, and amounts to about twelve per cent. of the entire mortality from all causes. Diseases of the nervous system occupy the fourth rank among the several classes of diseases as destructive of life, being only surpassed in mortality by the zymotic, tubercular, and respiratory diseases. They are not, as is often asserted, more frequent, but less frequent in large towns than in the country districts, and it is probable that their occurrence is largely influenced

by race. Sex has also a powerful influence on their production; for although in this country the number of females living exceeds that of males, the deaths of males from nervous affections preponderate constantly over those of females; the male death-rate being 12.94, and the female death-rate 11.62 per cent. Age has an influence still more powerful, for these maladies attain an immense maximum during the first year of life, owing to the great prevalence of infantile convulsions. They are much less frequent during youth and middle age, and attain "a second maximum" in old age, after seventy, owing to the prevalence of apoplexy and paralysis; but this second maximum amounts to only one-tenth of the first maximum attained during infant life.

The question next discussed is the system of classification of nervous diseases, and after describing one or two systems, the author states that which he employs. The general principles of this are pathological and good, but some of its details present considerable anomalies. For instance, locomotor ataxy and progressive muscular atrophy are placed almost at the opposite extremities of the list, the former being placed among diseases of the spinal cord, and the latter among vaso-motor diseases; although, in his description of the diseases, far her on in the book, it is clearly stated that it is a primary disease of the cord.

A carefully written summary of the physiology of the nerve-centres precedes the account of the symptoms and the pathology of the several diseases, which occupies the greater part of the volume; beginning with convulsions, and going on to apoplexy and its various causes, paralysis, encephalitis, epilepsy, hysteria and catalepsy, insanity, delirium tremens, tetanus, chorea, and structural diseases of the nerve-centres, including tumour of the brain, and syphilitic affections of the nervous system.

Not only has Dr. Althaus tabulated the general facts of the mortality from nervous disease, but he has also worked out, and arranged in charts, the chief facts regarding the mortality from each disease. Many new and valuable facts are thus brought out. As an illustration, we may take the tables of the mortality from delirium tremens. A table is given showing the numbers of deaths in six periods of five years each, from 1838 to 1871. A diagram shows the influence of age. There is a blank until after fifteen years, at twenty the curve begins to rise, advances more at twenty-five, and reaches its maximum at thirty-five; a fall then takes place, which becomes rapid after fifty-five. This is compared with the tables of the Calcutta Hospitals.

The influence of sex is then examined, and, from a total of about 11,000 cases, is found to be as one woman to eight men in England and Wales, a proportion which contrasts unfavourably with the continent where, it is said, in several countries, not to occur in women. A curious chart gives the death-rate from this disease in the eleven registration districts of England and Wales. London heads the list, and if the death-rate there be taken as 100, it is found that the South-Eastern counties follow with 62, the North-Western with 57, the South-Midland with 55, the Northern with 54, Yorkshire with 42, the Eastern division with 41, the West-Midland with 40, the South-Western with 39, the North-Midland with 36, and last comes Wales with 27. It is a curious fact that, although the mortality in London from delirium tremens is so high, that from nervous diseases in general is low.

This example will show the valuable and instructive character of the conclusions Dr. Althaus has obtained by statistical investigation, and these constitute an extremely valuable part of the work. The several diseases are, however, very accurately described, and the account of their pathology is, in the main, a fair representation of the knowledge of the present day.

NOTES ON BOOKS.

Mason on Bare-Lip and Cleft Palate. London: J. and A. Churchill. Mr. Mason has here collected reports previously published, in which he has stated his considerable experience in his own private and hospital practice and as an assistant of Sir W. Ferguson. He is, of course, in favour of early operation for bare-lip. In acquired cleft palate, he approves rather of cauterisation or of the use of obstrutors than of constructing. He prefers to operate for congenital cleft palate at about six years of age, and recommends staphyloplasty as the later rather than the earlier stage of operation. The whole of the operative procedure is reviewed from the light of clinical experience. It is to be known that the chief difficulty of even successful operations lies in the formation of a good and imperfect pronunciation, arising from the inability to obtain which does duty as the soft palate. To lessen this defect, Mr. Mason has a specially devised operation. The monograph is very practical and interesting, and is frankly written.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

EXOPHTHALMIC GOITRE CURED BY GALVANISATION OF THE SYMPATHETIC.—Dr. Ancona (*Giornale Veneto delle Scienze Mediche*) relates the case of a young girl aged 19, of habitually bad health, who suffered from exophthalmos and goitre. She was emaciated, weak, suffered from diarrhoea and frequent flushings of the face; was irritable and capricious, and unceasingly dyspeptic. Dr. Ancona proposed galvanisation of the first cervical ganglia of the sympathetic. The poles of a Stöhrer's battery were applied on each side of the neck, behind the angle of the jaw, pressing backwards the sterno-mastoid muscles. A current of ten elements was passed for a time varying from three to five minutes. After a few days, the circuit was frequently interrupted. The physiological effects observed were the following: dilatation of the pupil each time the current was closed, more marked on the side of the negative pole; slight contractions of the sterno-mastoid; scallorrhoea, with a taste of copper in the mouth; sometimes giddiness. At the end of five months, a hundred electrifications had been applied and very well borne. Arsenical treatment was added. From the beginning of the application of electricity, there was notable amelioration, and at the end of five months the state of the patient was very satisfactory. Her weight had increased by 30 lbs. Her face and mucous membrane resumed their normal colour; her eyelids regained their mobility; the thyroid gland diminished in volume; the arterial pulsation ceased to be visible; the impulse of the heart became regular; the pulse fell; menstruation became regular; digestion was restored; and strength returned.

GLYCERINE IN INTERNAL HÆMORRHOIDS.—Dr. David Young of Florence reports (in the *Practitioner*) five cases in which marked and permanent benefit followed the internal administration of glycerine in doses of from two to three drachms, in water, night and morning. He says that the cases seem to show that we may be able to add glycerine to our list of palliatives for this troublesome malady. There are many patients who will not submit to surgical interference, and others—as, for example, consumptives in advanced stages of their disease—to whom one would scarcely recommend it, so that we are glad to welcome any means which would alleviate such a distressing condition. Not the least recommendation of this plan is, that it is both easy and pleasant, and probably also, especially in the case of phthical patients, beneficial in some other respects. None of the patients to whom he has given it have experienced any difficulty in taking it; and, when the sweet taste is an objection, he usually orders a little lemon-juice to be added to each dose.

ERGOT IN CYSTITIS.—Dr. Satterthwaite of New York (*New York Medical Journal*, April 1878) warmly recommends the use of fluid extract of ergot, in doses of one drachm three times a day, in cystitis with stricture or enlarged prostate.

BROMIDE AND CHLORIDE OF POTASSIUM.—It having been suggested by Dr. Binz of Bonn that the sedative effects of bromide of potassium are largely due to the potassium, and that possibly chloride of potassium might show similar therapeutic effects, Dr. Seguin has made a comparative trial of the chloride in the treatment of epilepsy alongside of the bromide. The results were conclusive as to the value of the bromide, which reduced the attacks by seventy per cent.; while, in a number of patients treated consecutively by the bromide and chloride, it was found that the latter increased the number of attacks by eighty per cent. The chloride contains a larger amount of potassium than the bromide.

TREATMENT OF BOILS BY ARNICA.—Dr. N. Planat has adopted (*Journal de Thérapeutique*) the use of arnica in all cases of superficial acute inflammation, as boils, angina, erysipelas, etc. He states that arnica cuts short all furuncular eruptions, except those accompanied by diabetes, with remarkable promptness. For external use, he employs a mixture of extract of fresh arnica flowers, ten parts; honey, twenty parts. If this be too liquid, he adds lycopodium. The mixture is applied to the inflamed part and covered with oiled silk. Equally good results will be obtained in the same cases by the internal administration of tincture of arnica in doses of twenty-five to thirty drops every two hours. M. Planat adds that the extinction of the furuncular eruption is so rapid that it seems impossible to deny a specific elective action.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 1ST, 1878.

UNIVERSITY INFLUENCE ON METROPOLITAN
MEDICAL TEACHING.

THE Report which was presented by the Annual Committee to the recent meeting of Convocation of the University of London, and the resolutions which were then carried, though, we believe, of great value to the University in all its faculties, are of peculiar interest to our readers from their important bearing on medical education.

It is, perhaps, not surprising that this should be the first serious proposal for uniting the various medical schools of London by something like co-operation and mutual support, when we remember that our present schools of medicine are scarcely fifty years old. The education of the "general practitioner" up to very recent times was not for a profession, but for a trade. He was apprenticed to a member of the craft, who taught him how to prepare and mix medicines, and to treat ailments much as a modern druggist treats them over the counter on Saturday evenings. The more ambitious apothecary and the "surgeon", after finishing their apprenticeship, came to London to "walk the hospitals" and learn a little anatomy, much as our present graduates spend a year or more in Paris or Vienna before settling to practice. Physicians could only carry on the higher medical studies at Edinburgh, as they had in a previous generation at Pavia or Leyden.

In the vast improvement of the last thirty or forty years, the University of London has borne a large and honourable, perhaps the largest, part. Not only have older universities been stimulated to comparative activity, but the standard of examinations at the Colleges of Surgeons and of Physicians has been raised by the example of Burlington House, or by the introduction into the examining boards of men who had themselves taken London degrees.

Examinations, however, after all, are chiefly valuable for their influence on education. Even as a bare safeguard to the public, as the mint-stamp, a diploma is really worth what it testifies to a man's knowledge and capacity in his practice, and not to what he happened to know on the day he was examined. Hence the obvious importance of proper training and practical familiarity with medicine; indeed, evidence of this, in the shape of dissection and of attendance in the wards, is required by every licensing body whose diploma deserves respect.

To meet the demands of the higher examinations, and especially of the University, the teaching in our London schools has been revolutionised during the last twenty years. The tutorial system of Oxford and Cambridge has become firmly established, laboratories have been opened, and practical classes of all kinds have been instituted. The great medical schools of London are not mere hospitals for clinical instruction, but scientific workshops for the study of anatomy, histology, toxicology, physiology, and pathology. Their museums and laboratories (maintained solely by students' fees) supply original work which may compare in quality, though not in amount, with that of the State-supported universities of Germany and the richly endowed colleges of Oxford and Cambridge. That voluntary medical associations, left entirely to their own management and their own resources, should

have taken so liberal and broad a view of the needs of medical education, and attained such a measure of scientific efficiency, is most honourable to the profession. We may well be proud of the unendowed researches which are associated with the names of Sandersen, Rainey, Beale, Pavy, A. S. Taylor, Russell, Brunton, and a score of younger histologists, physiologists, and chemists.

But, while so much has been done, the scientific position of the medical schools of London is far from what it should be. In the minor schools, the appliances for the study of even the more important subjects above mentioned are naturally inferior to those of larger and richer institutions. Even in the best, there is no physiological laboratory which can compare with those of the Collège de France, of Leipzig, or Berlin, or Bonn, or Cambridge; scarcely any with those of Edinburgh, Glasgow, or Manchester, or with those of the second rank in Germany. And the sciences of less immediate and paramount importance to medicine—physics and chemistry, zoology and botany—are confessedly taught in an imperfect and, so to speak, provisional fashion.

A German critic once said that every English physician began by teaching botany; and it is true that in every medical school we find several of the younger members of the staff compelled to lecture (often without payment) on subjects of which they have moderate knowledge, to a small class, and with naturally only moderate success. How much better it would be for subsidiary subjects like botany and comparative anatomy, hygiene and forensic medicine, or even pathology or physiology, to be taught by some mutual arrangement which would give large classes, and enable men to undertake the subjects for a lengthened period and with far greater interest and success!

The chief cause why, in most London schools, botany is not taught as in Edinburgh, and comparative anatomy as at the College of Surgeons, and chemistry as at Manchester, is that there is no attempt at co-operation and no central body to take up neglected subjects. London could well support half a dozen anatomical schools of the first class, three or four physiological laboratories, and a single chair of zoology; but cannot efficiently support eleven of each with the necessary laboratories and museums and libraries.

Even in purely professional subjects, the London student's education is too narrow. A man may pass his four or five years of diligent work, and yet have never heard a lecture by Paget, or gone round the wards with Hilton, or seen Fergusson operate, or known Jenner and Lister and Murchison and Wilks better than he knows Trousseau and Billroth and Virchow.

The body which can from its position best foster this desirable organisation of medical education in London is the London University. It might arrange to receive certificates from joint-lecturers when classes are small, and might itself undertake the teaching of others. Every London student of medicine would then, beside the peculiar advantages his own school would offer, have the privilege of sharing in the lectures, the libraries, museums, and laboratories, which would be common property. That some such reform is needed has long been felt, and, if wisely and cautiously begun, would find more support than jealousy from the several schools. The Report to which we have referred quotes the following apposite passage from a letter by Mr. Savory, which appeared in these columns.

"I think all must admit that the usual mode of teaching anatomy, physiology, chemistry, and botany in our medical schools is very far from being satisfactory. With the exception of two or three of our largest schools, the classes are too small to afford the least encouragement to any teacher. If, instead of having the classes on these subjects split up among a number of small schools, the natural sciences were all taught at one place" (or "at some one or two central colleges") "it is not difficult to foresee that the gain to our students would be immense. The classes would be so large that the services of the best men could be secured for teaching, and the appointments would be so valuable that they would be earnestly sought for their own sake."

We hope shortly to direct attention to the second and not less important part of the Report to Convocation, which deals with the more advanced studies in medicine (and science generally), and the relation of the University to these.

MEDICAL REFORM.

THANKS, less to the representations of the General Medical Council than to the independent efforts of the profession and of the British Medical Association, aided specially by the English medical authorities, by Trinity College, Dublin, by the Irish College of Physicians, and by the Irish Medical Association, the Lord President has at length yielded to the arguments in favour of the compulsory establishment of a conjoint board of examination in each division of the kingdom, by which an examination in the three great branches of the profession—medicine, surgery, and obstetrics,—will be imposed on every one who seeks to be placed on the *Medical Register* as a regularly qualified practitioner.

In the Bill of the Lord President as first introduced, there was no provision for the introduction of direct representatives of the profession in the General Medical Council, nor for the compulsory establishment of the conjoint scheme—two principles to which the Association was thoroughly pledged. The Bill was ordered to be printed on March 19th, 1878. On Monday, April 1st, immediately before the Easter recess, some members of the Medical Reform Committee were granted an interview with the Lord President, who listened with the most patient attention to their representations. They expressed their deep regret at the omission of all notice of the profession in the composition of the Medical Council, and stated how general was the demand on the part of the profession for some voice in its proceedings by the addition to it of representatives elected by the profession, who would have no private or corporate interests to watch over, and would, therefore, be free to balance the present overwhelming numbers of university and corporation representatives, whose clashing interests had for twenty years successfully obstructed medical reform. It was mentioned that such representatives would give the profession more confidence in the Council than at present, and smooth down any differences that might exist or arise between the Council and the profession, while adding to the knowledge of the Council in respect of the needs of the profession in sanitary requirements, medical education, medical jurisprudence, and Poor-law medical relief. The almost unanimous demand of the profession for direct representation, persisted in ever since the first agitation for medical reform, was also referred to as one great motor in the withdrawal of the Bill of the Marquis of Ripon in 1870, and the belief was expressed that the opinion of the profession in this respect was in no degree changed. The correctness of this avowment has been strikingly corroborated by the fact that the canvass of the profession has yielded only 121 replies in the negative, against 5,075 replies in the affirmative, to the question of direct representation.

With regard to the permissive character of the Bill, as it then stood, the deputation also made the strongest representations, and deplored the fact that so strong a Government should commit itself to such half measures, when there was really a general concordance of opinion in the profession, as distinct from the corporations, in favour of a compulsory conjoint scheme to be made equally operative and binding in each division of the kingdom.

The Lord President, in introducing his Bill before the Easter recess, solicited communications from all who might be interested in the subject, and received numerous deputations. In this manner, his Grace was led to make certain concessions, which it was hoped might prove an acceptable compromise. It was suggested, in lieu of the permissive character, that it should be made compulsory on all the medical corporations of each division of the kingdom to form a conjoint scheme, leaving it to the universities to come in if they thought fit; in fact, leaving the Scotch and Irish universities free. This suggestion was carefully considered by the Medical Reform Committee of the Association, and was condemned as unsatisfactory, inasmuch as it would be a tempta-

tion to some of the universities to undersell the combined corporations. The English universities and various corporations and societies also objected; and, on May 24th, the Lord President, on the motion for going into committee on the Medical Act (1858) Amendment Bill, announced "that he must ask their lordships to allow him to amend it so as to make a conjoint board for each of the three portions of the United Kingdom compulsory". This great result has been brought about in the face of the most uncompromising opposition on the part of the universities and corporations in Scotland and of the representatives of the College of Surgeons and Queen's University in Ireland. Thus another of the four great principles for which the Association has unswervingly contended is likely to be established, leaving only one remaining principle—the representation of the profession in the General Medical Council—to be struggled for.

Under the present Medical Bill, the Council will be granted greater and more important powers than it has hitherto possessed. The whole future of medical education and of the profession is to be confided to it, and will remain in its hands, if its anomalous and vicious composition be not modified while the Association and the profession, to whose efforts the country is mainly indebted for the abolition of the discreditable competition which has hitherto existed in the bestowal of licences to imperfectly qualified men to practise that profession on which, above all others, the lives and welfare of the community hang—that Association and that profession to which this great work is mainly due are alone to be excluded from any part, any voice in the Council which is to rule their destinies, and which they virtually called into existence.

The promise of representation in the Council was distinctly made to the Medical Reform Committee of the British Medical Association before the passing of the Medical Act of 1858. The demand for it by the Association on the part of the profession, and by the profession, has been for several years and repeatedly placed before the General Medical Council and before different Governments.

The demand has been endorsed by numerous members of the legislature, by several of the medical corporations, and meets with general acceptance from the outside public. Under these circumstances, it is truly unfortunate that the propriety even of the demand has not been deemed worthy of serious discussion in the General Medical Council. The Council may not deem its own constitution matter for its own consideration, but to many it seems incomprehensible, to all it must appear strange, how members of that Council can maintain that they represent the profession, when they thus turn a deaf ear to this oft-urged demand, and, in doing so, place themselves in direct antagonism to the general body of the profession which they profess to represent.

As in every body of men, so doubtless, in the General Medical Council, the members vary in mental power, in attainments, in administrative capacity, in soundness of judgment, and in breadth of view. Men vary in receptivity; some even are loath to change an opinion to which they have once been committed, though even they may doubt its soundness, and with such able controversy intensifies obstinacy; with such, the nominee of the Crown on the General Medical Council, generally the nomination of one man, may be set down as a representative of the profession; but the profession do not so regard him; he may possibly, in one sense, be a representative man, but he is in no sense a representative of the profession.

The body in favour of direct representation in the General Medical Council is not a small and compact body; it will yet be proved to embrace the great majority of the profession, whose claims cannot be disregarded when medical reform is at issue.

ARMY MEDICAL NOMADS.

THE sailor is supposed to rejoice that his home is on the wave, and to feel a wild satisfaction when "the rover is free". The military service has, however, always been supposed to have the opposite desires; and the medical branch of it has certainly more staid and homely tastes.

Indubitably the removals from station to station, and from one duty to another, to which the junior medical officers in the military service are subjected, are more than sufficiently frequent, if the personal experience that has been forwarded to us by one army surgeon is to be taken as a sample of what generally happens in this respect. The inconvenience and expense with which changes of the kind mentioned are attended of course become increased when the medical officer is married, as appears to have been the case all along with the surgeon who has sent us a diary of the moves he has had to make since his entry into the army; and when, in addition, serious illness is contracted through the fatigue which the officer endures, or through the unhealthiness of a station to which he is sent, and he is placed on half-pay in consequence, it may readily be understood that his disappointment and vexation will become greatly intensified. As the writer desires that neither his name nor his position should be published, we are precluded from quoting his numerous marches and changes of station, and the various charges he has held both in England and in foreign stations during his comparatively brief career of four years in the medical service of the army. On reading the account of them, however, it seems difficult to say how moves of the kind indicated are to be avoided. Marches of troops and of relatively small detachments of them from place to place are of almost daily occurrence as part of the military arrangements, and of course medical officers must accompany them; while the temporary vacancies which frequently occur in local medical charges, from the illness, or absence on private affairs or from other causes, of the medical officers holding them, must be filled up by despatching other surgeons to the stations where the gaps have happened to take place. All that seems practicable to be done in the way of lessening the inconveniences which such moves may entail, is for proper steps to be taken to ensure that no one medical officer shall have an undue share of these duties thrust upon him; that each available surgeon shall fairly take his turn in performing them. That this fairness is carried out in practice, must depend upon the administrative officers who have to direct the medical arrangements of the districts or foreign stations in which the needs arise. Perhaps the most marked difference between military and civil practice is the fact of the one being local and stationary, while the other is essentially movable. To some men in the early years of life, frequent changes of scene become sources of pleasurable excitement, and equally the performance of routine duty in the same station a source of *ennui* and irksomeness from its monotony. When family ties exist, however, so many circumstances causing trouble and expense attend each change of place and sphere of duty, that it is easy to understand how far more desirable a settled position becomes to the medical officers who are subjected to them. The question, then, arises, whether a military commission, involving as it does an essentially wandering life, is a suitable one to be held by a married surgeon, or, at any rate, by a surgeon who is married at the time of entering the army or during the early years of service, while he still remains in the junior ranks. It is to be feared that however much the objectionable circumstances, if they be regarded as such, arising from the unsettled nature of military life, may be lessened by judicious and impartial administration, that there must always remain to the married army surgeon in the junior ranks a considerable amount of inconvenience both to himself and his family from the unavoidably movable character of the service in which his professional functions have to be discharged.

It will have been noticed that His Royal Highness the Prince of Wales was absent through indisposition from the Queen's Parade on Saturday morning last. We are happy in being able to state that the cause was a bad cold, from which he has now recovered.

M. AUGUSTE OLLIVIER read a paper at the Academy of Medicine on May 14th, entitled a Contribution to the History of Spinal Gout. He had observed a case in which there was an infiltration of urate of soda on the external surface of the spinal dura mater.

THE House of Commons, on May 23rd, approved the motion of Sir J. McGarel Hogg to discharge the order for the second reading of the Metropolis Waterworks (Purchase) Bill.

THE appointment of Dr. Francis Reid, Chief Medical Officer of the island of Mauritius, to the Order of St. Michael and St. George of the Third Class or Companion, was announced on Monday last.

WE are glad to learn that, on the application of Dr. Rogers, the proprietors of the *Graphic* have sent a large supply of drawings to be hung round the walls of the Westminster Union Schools on Wandsworth Common.

A VERY sad case of death from hydrophobia has occurred at Crewe. A little boy aged about five years, son of the Baptist minister at Crewe (the Rev. F. J. Greening), was, it appears, bitten by a rabid dog in the neighbourhood of his own home three months ago. After suffering for three days, the poor little fellow expired in great agony.

A NEW public recreation ground at Sydenham has been purchased and opened. The land devoted to this purpose is seventeen acres and a half in extent, and cost £8,500.—A new park, acquired by the Bradford Corporation as a recreation ground for the districts of Great Horton and Little Horton, was opened on Saturday by the mayor (Mr. B. Priestley). The park, which is about forty acres in extent, is the third public recreation ground in the borough.

THE London and Provincial Supply Company (Limited) was recently fined, at the Bloomsbury County Court, at the instance of the Pharmaceutical Society, £5 for selling poisons without a legal qualification to do so. The defence set up was that the Company employed a properly qualified chemist to dispense the drugs.

THE Crown Princess of Germany visited the Institution for Nurses for the Sick Poor, Bloomsbury Square, on Thursday, May 23rd, and was received by the lady superintendent Miss Florence Lees, and her sister Miss Henrietta M. Lees. All the ladies, both the nurses and the probationers, were personally presented to the Princess, who expressed herself as much impressed with the usefulness of the institution, as creating a new and kindly link between the two great classes of society.

At the meeting of the Royal Medical and Chirurgical Society this week, Dr. Gowers showed a new form of sphygmograph, designed for use either as a cardiograph or a sphygmograph. The special feature is, that the increase of pressure is obtained by sliding a second spring down over the first, and the extent to which this second spring is moved at once regulates and indicates the pressure. The position of the end of the spring indicates the pressure in ounces. The spring is moved by means of a rack and pinion, and can be adjusted from either side of the instrument. Tracings, both sphygmographic and cardiographic, were shown; and amongst the latter was a tracing from the pulmonary artery and the left auricle.

IN counselling the Nottingham Committee, who have undertaken to defend the rights of the profession and the public, and to suppress irregular and unqualified medical practice, by carrying on the case of the Apothecaries' Company v. Shepperley through the higher courts, we advised that, in addition to the publication of the appeal to which we had the pleasure of giving publicity, an application should be made for a grant to the Committee of Council of the British Medical Association and to the Branches. It will be seen with satisfaction that the Committee of Council have granted the sum of £25; and other grants have also, we believe, been made from the funds of the Branch Councils. The case is one of considerable importance as a test case, and will need to be well argued. It is understood that the prescribing chemists feel that this is the last stronghold of their position, and will spare no expenditure of trouble or funds to endeavour to defeat or reverse the effect of the decision already given against them.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ALL those Fellows of the Royal College of Surgeons whose addresses in the United Kingdom are known to the Secretary have received notice that the annual meeting of Fellows will take place on July 4th, at two o'clock, for the election of three members of Council of the College.

THE CONVICT CHANTRELLE.

A DEPUTATION from Edinburgh waited recently upon the Home Secretary to present a memorial signed by Dr. Sutherland and Mr. Edgar Wetton, praying for the reprieve of E. M. Chantrelle, who is lying under sentence of death for the murder of his wife by poison. The Home Secretary has replied that he can see no reason for interfering with the ordinary course of the law.

HOSPITAL REFORM.

SIR SIDNEY WATERLOW informed the Committee of the Hospital Sunday Fund last Wednesday that a committee of the treasurers and trustees of the various hospitals had been formed, and that a meeting is to take place at St. Bartholomew's Hospital in a few days to discuss the question of the abuse of the out-patients' departments of hospitals. He trusted that the result would be to lessen the evil, which is now acknowledged to have grown to the most iniquitous proportions.

THE SURGICAL AID SOCIETY.

WE are informed that the Surgical Aid Society, through its recognised officers, has had an interview with the Distribution Committee of the Hospital Sunday Fund, and expressed its inability to alter the present most objectionable rule of the society, which compels all poor applicants for relief to beg all over London for letters to cover the cost of their instruments and appliances. For inability, we are fain to read unwillingness.

MORTALITY OF IMBECILE CHILDREN.

WITH reference to our annotation on this subject, in our last issue, we have been favoured by Dr. Beach with a return, both of the ages of the inmates of the Clapton Asylum on 31st December last, and of the ages of the decedents during 1877, classified in similar groups of ages. If similar facts were to find place in the annual reports of all kindred institutions, a valuable contribution would thus be made to our knowledge of the effect of congenital idiocy upon rates of mortality, and it would be possible to compare the rates of mortality in different institutions, and the results of different modes of treatment. It appears that, of the 350 inmates of the Clapton Asylum at the end of last year, 5 were aged under five years, 92 between five and ten years, 171 between ten and fifteen, 72 between fifteen and twenty years, and 10 were aged upwards of twenty years. The age distribution of this population would, at the English life-table rates of mortality, give a normal annual rate of mortality equal to 7.6 per 1,000; this normal rate affords the true standard of comparison for ascertaining the excess-rate of mortality among the inmates of the institution, due to their imbecility, and abnormal physical and mental condition. The numbers in this asylum are too small for the results of a single year to afford trustworthy rates of mortality at the several groups of ages; it may be noted, however, that the rate was equal to 65.2 per 1,000 among the inmates aged between five and ten years, and 46.8 between ten and fifteen; while the life-table rates are 9.6 and 5.2 per 1,000 at the same ages. The proportional excess of mortality was greater between ten and fifteen years than either at the earlier or subsequent groups of ages.

VACCINATION.

SIR THOMAS CHAMBERS presided this week at a public discussion between two gentlemen on the subject, "Is vaccination worthy of national support?" There can, of course, be no disadvantage, but, on the contrary, much advantage to the public from the discussion of this question, provided care is taken that the persons who discuss it are adequately representative of the fullest knowledge of the question, and

are themselves recognised authorities. In the present instance, the discussion appears to have been very imperfectly conducted; and Sir Thomas Chambers, in his introductory remarks, seemed to be totally unaware of the official reports already laid before Parliament on the subject, since he said that vaccination had not been before the House of Commons in a serious form, and even went to the extent of adding that it was for the benefit of both sides that the whole facts should be known. There is no serious objection to members of Parliament uttering platitudes of the sort; but, when a person in the position of Sir Thomas Chambers takes the chair at a discussion of a question on which the public mind has been much agitated, it is his duty, if he make any observations at all, to make himself fairly acquainted with the existing state of knowledge, otherwise he has no claim to the position of chairman, and lends his authority to a proceeding which is dangerously fallacious. In this case, it is perfectly clear that he has done more harm than good by not mastering something of the facts upon which he professed to make a speech. As the representative of a borough containing, perhaps, a larger number of educated medical men than any other, we think he can scarcely be said to have shown an intelligent perception of his public duty or of his just relation to his educated constituents.

VACCINATION AND INFANT-MORTALITY FROM SMALL-POX.

MR. WILLIAM HUME-ROTHERY, the President of the "National Anti-compulsory Vaccination League", has recently been afforded the opportunity of publishing, in a comparatively new weekly publication entitled *Social Notes*, an article in which he summarises the grounds on which he bases his strenuous opposition to vaccination in general, and to compulsory vaccination in particular. The article in question is a fair sample of anti-vaccination literature; it abounds with reckless assertions and unsound deductions, which are used as arguments to justify denunciation, in the most uncompromisingly strong language, of the "worthless and pernicious practice" which threatens "the utter ruin of the physical health of the nation". Mr. Hume-Rothery's assertions may be divided into two classes: he asserts that vaccination is injuring the physical health of England, and indeed of the civilised world; and he also asserts that vaccination has not reduced either the prevalence or the fatality of small-pox. With regard to the after-effect of the vaccine disease upon the human being, assertions may be easily made, as they can neither be proved or disproved in a scientifically satisfactory manner; it can, however, be proved that the national death-rate, both at all ages and among infants, has declined since compulsory vaccination was ordained, from which it may be inferred that the effect of vaccination upon health cannot, at any rate, be very disastrous. Mr. Hume-Rothery's article is full of deductions which are as shallow as they are utterly misleading to those who have not the opportunity and capacity for estimating them at their proper value. We propose, on the present occasion, to notice one of his assertions, which he afterwards uses as an argument against vaccination. Alluding to the fact that, in 1875, only nine hundred and fifty deaths from small-pox were registered in the whole of England and Wales, he adds: "Yet one hundred and forty-two of these were of infants under one year of age, most of whom must have been vaccinated and have died—of small-pox, be it remembered—within nine months after their vaccination." If this were not so serious a subject, the boldness of this "must have been vaccinated" would be amusing; it is difficult, however, to denounce in language too strong the attempt that is thus made to throw dust in the eyes of the ill-informed as to vaccination and small-pox statistics. The Local Government Board Reports show that more than forty thousand children born in England and Wales in 1875 escaped vaccination, without counting those that died before attaining the vaccination age, among whom doubtless some died from small-pox. Let us look a little more closely into the ages of those one hundred and forty-two infants who died in 1875 from small-pox under one year of age. We find that sixty-five died under three months of age, thirty-four between the ages of three months and six months, and forty-three were aged

six months and less than one year. Putting on one side our moral conviction that not one of these one hundred and forty-two infants had been successfully vaccinated, we should like to hear Mr. Hume-Rothery's explanation of the fact that, of the one hundred and forty-two, ninety-nine were aged under six months, and only forty-three between six months and one year. Our explanation would be that the proportion of unvaccinated among the infants aged under six months is much larger than among those aged between six months and one year; hence the far greater mortality from small-pox. If it were possible to ascertain the number of small-pox deaths in each of the first twelve months of life, we should probably find the number steadily decline from the first month, when practically all infants are unvaccinated, to the twelfth month, at the end of which only five per cent. would be found unvaccinated, if we may rely upon the Reports of the Local Government Board. As at least eighty thousand infants *per annum* either escape vaccination or die before they reach the compulsory vaccination age, the assertion that most of the one hundred and forty-two infants who died from small-pox under one year of age in 1875 "must have been vaccinated" is not only unfounded, but inexcusable. The figures for 1876 are still more remarkable. During that year, two hundred and eighty-seven deaths from small-pox, of infants under one year of age, were registered, including two hundred and twenty-nine aged between birth and three months, and only sixty-three aged between six months and one year. We can suggest no probable explanation of the far greater fatality of small-pox in the first than in the second half-year of life than the larger proportion of the unvaccinated among the younger infants. We know, indeed, no stronger argument in support of the protective influence of vaccination than the rapid decline in the mortality from small-pox among infants after they attain the age when vaccination becomes general. It is true, as Mr. Hume-Rothery states, that large numbers of children aged under five years have died from small-pox in England and Wales since vaccination became compulsory. This fact, however, instead of proving "beyond a doubt that vaccination is worthless", as Mr. Rothery recklessly asserts, only really proves that a certain proportion of the forty thousand children *per annum* who escape successful vaccination fall victims to small-pox through the ignorance or neglect of their parents, fostered by the blind and mistaken zeal of this and other anti-vaccinationists.

THE ARMY MEDICAL DEPARTMENT.

A CORRESPONDENT of the *Times* writes: "Were you to propose that each regiment should have one medical officer, a surgeon-major, attached to it permanently, and on its being raised to a war footing that the commanding officer should obtain the second medical officer (or third and fourth, if you please), the difficulty of providing recruits for the medical service of the army would be at an end." The proposal, so far as it goes, is not a bad one; but neither it nor any other proposal will be of the slightest avail so long as the medical officers are not treated with kindly and gentlemanly consideration—at least with simple justice. The scheme for which any hope of success can be entertained, can only be one which has for its object the raising of the army medical officer to the honourable position he has a right to occupy in the public service.

VENTILATION.

THE Subcommittee appointed at Leamington to test the relative performances of ventilating cowls, which have heretofore been recommended for ventilation by exhaustion, have reported the result of their investigation to be as follows. The Committee consisted of Captain Douglas Galton, C.B., F.R.S., Mr. Rogers Field, and Mr. William Eassie.

"The Subcommittee appointed at Leamington to test the ventilating exhaust cowls beg to report that they have given the matter their most careful attention, and carried out at the Royal Observatory, Kew, an elaborate series of about one hundred experiments on seven different days, at different times of the day, and under different conditions of wind and temperature. After comparing the cowls very carefully with

each other, and all of them with a plain open pipe as the simplest and, in fact, only available standard, the Subcommittee find that none of the exhaust cowls cause a more rapid current of air than prevails in an open pipe under similar conditions, but without any cowl fitted on it. The only use of the cowls, therefore, appears to be to exclude rain from the ventilating pipes; and, as this can be done equally, if not more efficiently, in other and simpler ways, without diminishing the rapidity of the current in the open pipe, the Subcommittee are unable to recommend the grant of the medal of the Sanitary Institute of Great Britain to any of the exhaust cowls submitted to them for trial."

The several cowls experimented upon will be on view at the Royal Observatory, Kew, from June 3rd to 5th inclusive, between the hours of one and three P.M.

ARSENICATED VIOLET POWDER.

ON Friday, May 24th, at the Epping Petty Sessions, Henry George King, wholesale chemist, of Abbott Street, Kingsland Green, was charged with having, on February 18th, at Loughton, in Essex, feloniously killed one Eliza Sear. A second summons charged him with having, on January 1st, 1877, and divers other days, unlawfully, falsely, fraudulently, and deceitfully sold and delivered, and caused and procured to be sold and delivered, to divers persons residing in the said parish, quantities of violet powder, consisting of large quantities of white arsenic and other ingredients; and that he caused and procured the said poisonous powder to be so applied to Florence and Sarah Martin, William Ernest Mead, Eliza Sear, Alfred Harrington, and other children; and that he, well knowing the said violet powder to be poisonous and to contain large quantities of white arsenic, caused it to be applied, whereby their bodies became distempered and their health injured and endangered. Mr. Poland, instructed by the Treasury, conducted the prosecution. Mr. Poland, in his opening statement, said he appeared to prosecute the defendant for manslaughter, and also for the common law misdemeanour of selling quantities of violet powder containing poisonous substances and intended to be used on the bodies of children of tender years. The defendant in his circulars described himself as a "wholesale druggist, dyer, and general packer", and in the list of articles sold by him there was, under the heading of "powders", a description of penny packets of violet powder, the wholesale price of which was stated as being 6s. and 7s. per gross. In the same circular, he mentioned the fact that he was the manufacturer and packer of insect powders. The violet powder was described on the wrappers as "H. G. King's Superfine Violet Powder, warranted free from grit. For the nursery". The defendant had been for some time past in the habit of supplying Miss Grout, who keeps a grocer's shop at Loughton, with these violet powders. She had in her possession a stock of the violet powder, and in February 1877 Mr. Nottage, a grocer in the same village, purchased from her three dozen of the powders, which he sold to persons applying for them. By the evidence, it would be shown that the packets purchased at these two shops had most injurious effects when applied to the bodies of children. The attention of the medical men in the district was attracted to what appeared to be an epidemic among the children, and it would be shown that, in twenty-eight cases where these powders were used, twelve or thirteen deaths had resulted. A Mr. Deacon purchased one of the powders, and, seeing the effect it had on his child, he came to the conclusion that it must have contained matter of an injurious nature; consequently, he directed his servant to purchase another packet, which, on being subjected to analysis, was found to contain 25 per cent. of arsenic. He made a second purchase, and, when that was analysed, it was found to contain 28 per cent. of the poison. Mr. Deacon communicated with the Home Office; but in the meantime information had been forwarded to the Local Government Board, and a gentleman was sent down by them to investigate the matter. From consultations which he had with Drs. Fowler, Roberts, and other medical gentlemen residing in the neighbourhood, he came to the conclusion that the injuries to these children, and the deaths of others, were due to the application of these violet powders containing such large quantities of poison. In most cases, the powder had unfortunately been thrown away; but in five

cases the remaining portion had been preserved. The learned counsel then went on to state the nature of the evidence which would be adduced and which will be found appended, and stated that, as soon as the authorities of the Treasury had obtained an analysis of the powders, the following letter was sent to the defendant.

"Treasury, April 23rd, 1878.

"Sir,—I have received from the Secretary of State directions to take proceedings against you for manufacturing and selling 'superfine violet powder', which is supposed by its use to have caused the deaths of some infants and the serious illness of others. This powder has been found upon analysis to contain a considerable quantity of white arsenic, the percentage of such arsenic being in three cases 50.34, 51.40, 48.94. I think it right at once to instantly warn you against selling any violet powder containing arsenic or other poisonous ingredients, and also without delay I require you to give notice to all persons to whom you have sold this powder that they are at once to stop the sale, and where they have parted with any of it to give notice to the purchasers and prevent its use. The powder which has been analysed was purchased since early in March 1877, at two grocers' shops situate one in the High Road, Loughton, and the other at Baldwin's Hill, Loughton. You have probably heard of the serious result of the use of the powder in the neighbourhood of Loughton and Epping; but I think it right to give you this notice, in order to prevent further mischief arising from the sale.—I am, etc.,

"W. H. HODGSON."

"Mr. H. G. King, superfine violet powder manufacturer,
14, Abbott Street, Kingsland Green, London."

The defendant took no notice of the letter until he had been served with the summons in the present case, and then he sent the following letter to the Treasury.

"14, Abbott Street, May 21st, 1878.

"Sir,—On receipt of your letter, I immediately called on all parties I was in the habit of supplying with violet powder, and took away the stock they had in hand and destroyed it. I only ended my unceasing search yesterday. I have to express my great regret at the occurrence, as I have never dealt in arsenic, and had no knowledge of such being on my premises.—Yours, most respectfully,

"H. G. KING.

"W. H. Hodgson, Esq., solicitor, the Treasury."

The learned counsel then went on to explain that arsenic, when purchased in large quantities, was cheaper than pure starch, from which violet powder was usually manufactured. Evidence was adduced to bear out the opening statement of counsel, and the case was adjourned for a week.

MR. GLADSTONE AT THE EAST LONDON HOSPITAL FOR CHILDREN.

THE anniversary dinner of this charity was held last week in a tent erected in the grounds of the Hospital at Shadwell. The desire of the Committee was to bring people to see their hospital, and not merely to subscribe towards it. A visit to the well-ordered wards, and a sight of the little patients in their cots, is no doubt a sure way of enlisting that peculiar expression of sympathy on which the material and moral success of an unendowed charity like this mainly depend. Mr. Gladstone, who was accompanied by Mrs. Gladstone, kindly presided at the dinner, and between two and three hundred visitors, ladies and gentlemen, assembled to meet them. Mr. and Mrs. Gladstone, after visiting the wards, which now accommodate ninety patients, and minutely inspecting the arrangements, expressed themselves as eminently satisfied; and we are glad to congratulate the Committee of Management on the efficiency and economy of their administration. A very satisfactory report was presented; for it appears that a large number of patients have been treated, and the applications, both of in-patients and out-patients, are continually increasing; from these, the most urgent and deserving cases are admitted under treatment. The financial report shows that the average cost per bed is only about £50; this, for a children's hospital, is exceedingly low, when we consider the much greater attendance and care which sick children require, as compared with an equal number of sick adults. We were much pleased with the wards; each is presided over by a "sister" or superintendent, and there are three or four nurses, according to circumstances, to look after the thirty beds, with which each ward is provided; and a lady superintendent of nursing regulates the whole. It seems a distinct

feature, and a very noteworthy one, that young infants are admitted; we saw some babies only a few days old. We are glad the East London Hospital had the courage to supply what has long been felt as a great want in this direction, and has thus given the medical staff the opportunity of the careful clinical observation of infants. Mr. Gladstone made an eloquent speech on behalf of the hospital, and drew attention to the opportunity thus afforded of bringing the upper classes of society into personal contact with their poor neighbours. Mr. Gladstone specially pleaded for children's hospitals, referring to the importance of a healthy childhood if we would have a healthy adult population.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

MR. ROYES BELL writes to us:—Will you permit me to call your attention to an inaccuracy in the order of seniority of the candidates for election into the Council of the College in your number for May 18th? I find, on referring to the College Calendar, that in the Chronological List, the names are placed as under. Membership: Mr. E. Lund, 1847; Mr. J. Wood, F.R.S., 1849; Sir H. Thompson, 1850; Mr. H. Power, 1851; Mr. J. Lister, F.R.S., 1852. Fellowship: Mr. Lister, 1852; Sir H. Thompson, 1853; Mr. Wood, May 1854; Mr. Power, December 1854; Mr. Lund, 1863.

HEALTH AND SEWAGE OF TOWNS.

ON Friday, May 24th, the Right Honourable J. Stansfeld, M.P., presided at the resumed conference on this subject at the rooms of the Society of Arts. The subject first dealt with was "the discharge of sewage into the sea". Sir Henry Robinson, who opened the subject, pointed out that the difficulties attending the discharge of sewage into the sea would be diminished were it not that it had a higher temperature and a less specific gravity than sea or river water, which caused it to rise to the surface; and if it were not carried seaward at once, part of the suspended solid impurities were deposited on the coast wherever there was still water and no tidal current, whilst the rest of the suspended, together with the dissolved, impurities float on the surface, and are carried backwards and forwards by every tide, decomposing and liberating gases (sulphuretted hydrogen being one of the most offensive) injurious to health and polluting the air. There had hitherto been much prejudice against chemical treatment, but it had been abundantly proved that sewage could thereby be deprived of its offensive properties by simple and inexpensive means. He suggested that this matter should be also recommended to the Local Government Board for further investigation. Mr. Alcock of Sunderland moved a resolution to the effect that, in the opinion of the Conference, the benefit to large towns of a well-devised and effective system of sewers was very often neutralised by the careless and improper way in which the house-draining in connection with such sewers were laid and connected with the soil and waste pipes of the house; that all drains intended to be connected with the sewers of the sanitary authority ought to be made by such authority; that powers as extensive as those contained in 11 and 12 Vict., c. 112—the Commissioners of Sewers Act—with corresponding duties, should be conferred and imposed upon all local sanitary authorities, including those in the metropolis. After a long discussion, the motion was carried. The President, in summing up, spoke in favour of enlarging the area of the Local Government Board, by which they would ennoble the work, and so attract the best men. Referring to the Local Government Board itself, he said that, like other departments of the State, it was admirably served. The question to his mind was not the fitness of the men, but the organisation of the department. There seemed a tendency in all the Government departments to become merely secretarial departments, and they were full of mistrust of what was called "administration". The permanent head of the Local Government Board ought to be an organiser, not a secretary. A resolution was then passed recording the opinion of the Conference that further legislation was needed, especially with regard to the constitution of county boards, with a view to strengthening the

Local Government Administration, and authorising the president, in conjunction with the Council of the Society, to be the exponent of its views on the subject, etc. A vote of thanks to the President closed the Conference.

UNREPORTED SMALL-POX.

AT the last meeting of the Walthamstow Local Board, Mr. Wragg called attention to the fact that during the last few weeks, there had been no fewer than twenty-two cases of small-pox at St. Mary's Roman Catholic Orphanage, while only one or two cases had been reported to the Board. Mr. Horner also remarked upon the fact that he had never been acquainted with the fact of there having been so many cases. The chairman suggested that a committee should be formed to consider as to the advisability of erecting some place in the parish as a disinfecting-room, considering that there were so many cases of small-pox in the neighbouring parish of West Ham, and that there was no accommodation of the kind to be obtained at the hands of the guardians. After some discussion, it was agreed to allow the matter to stand over till the next meeting.

COUNTER-PRESCRIBING.

THE Medical Defence Association has added to its many claims to the gratitude of the public and the profession by the recent prosecution, in which it has once more struck a blow at the dangerous practice carried on by chemists of doctoring the ailments of the poor. We refer to the case of the Society of Apothecaries *v.* Wiggins, heard last week before Mr. Justice Field. The action was brought to recover four penalties of £5 each, which were claimed under the twentieth section of the Apothecaries' Act, 1815, from the defendant, who is a chemist at Bermondsey, for having, as was alleged, practised as an apothecary without an apothecary's licence. The defendant is duly registered as a chemist and druggist under the Act which requires such registration. The cases in which the defendant was said to have acted as an apothecary were those of four children. In two of the cases, the children were brought to him to his shop, and he felt the children's pulses, made some inquiries as to their state, and gave a bottle of medicine, for which he charged 7d. In the two other cases, the mothers of the children called and described the symptoms to the defendant, who gave some medicine and directions. In some of the cases, the defendant advised that if the children did not get better, a medical man should be called in. In the result, it turned out that these four children were suffering respectively from bronchitis, pneumonia, scarlet fever, and convulsions. A medical man was called in in three of the cases, but the children ultimately died. It was not suggested that the treatment of the defendant was in any way improper from a medical point of view, or that he was doing anything which he had any reason to believe was wrong. The jury found, in answer to questions put to them by his lordship, that the defendant, in doing what was complained of, was acting or practising as an apothecary, and that the complaints under which the children were suffering were not such complaints as a chemist would have prescribed for before the passing of the Act. Upon these findings, judgment was entered for the plaintiffs. It is necessary to remember how dangerous are the consequences of this kind of irregular practice, how largely it is carried on, and how utterly incomplete are the guarantees which it affords for the safety of the patient or the competence of the practitioner. Chemists are secured in large privileges by Act of Parliament, and they are bound not to exceed those limits. The fact that they have to deal largely with drugs, and are supposed to possess some knowledge of their properties, invests them in the minds of the ignorant and uneducated classes with a certain mysterious semi-medical character with which is mixed up the idea that they must know what is good for all sorts of diseases; and it is for that reason that they are bound specially not to infringe upon the privileges of the medical profession, with which they have close relations, but to which they do not belong, and of which it is dangerous that they should ape the charac-

ter or assume the functions. Chemists have, however, largely assumed medical functions throughout the country; and the Medical Defence Associations started by Mr. R. H. S. Carpenter, Mr. Nelson Hardy, and Mr. G. Brown, are rendering a service to the profession and the public, which can hardly be overestimated in vindicating the dormant powers of the law by prosecuting chemists who infringe it in this respect. We suggested more than once last year that the British Medical Association should organise local committees in connection with its branches for managing such prosecutions in an uniform manner; and we are still inclined to think that such local committees would be of much public and professional advantage. Systematically conducted and guided from a centre with due discretion, very few such prosecutions would then become necessary; for were the law once adequately vindicated at different parts of the country simultaneously or nearly so, and were it well understood that a central body, having adequate local organisation, would aid by local committees to protect the public and the profession from the encroachment of these unqualified persons, the result would be that very few prosecutions would be called for. The deterrent influence of such an organisation would very soon make itself felt; and nothing could be more desirable in the interests of public health and morality. Meanwhile, we congratulate the Medical Defence Association, that with small funds and without the countenance of persons of high influence or position, they have, by independent action, vindicated the law and maintained the interests and rights of their own profession and of the public at large.

SCOTLAND.

THE death-rate in Edinburgh last week was 21 per 1,000. While the general zymotic mortality is low, it was observed for the first time for many months that no deaths from infectious disease was recorded in the New Town.

A YOUNG man has died in Aberdeen Infirmary from the effects of a piece of wood, five inches in length, supposed to be part of a rocket, having penetrated his skull, about an inch above the right ear.

A MELANCHOLY case of drowning occurred in the river Almond, Perthshire, last week. Dr. Duncan Whyte, a young medical man, residing with his father at Millhaugh, Methven, left home for the purpose of fishing in the Almond. As he did not return, a search was instituted next day, when his rod was found floating in the river; and, on the stream being searched, the body was discovered in a part only about eighteen inches deep. It is supposed that the deceased had fallen from a steep bank and been stunned.

CHARGE AGAINST A DISPENSARY MANAGER.

THE manager of the City Parochial Board Dispensary, Glasgow, who has been in that position for five years, has been sentenced to one month's imprisonment, on a charge of stealing or embezzling a quantity of liquor and medicine belonging to the institution. The accused and two young women were found in the Dispensary in a state of intoxication, though several witnesses were called to prove that he had previously borne an excellent character.

INSPECTION OF DAIRIES IN GLASGOW.

THE inspector reports that during the last fortnight 103 dairies had been inspected, the whole of which were fairly clean and in good order. In 40, only milk was sold; in 63, other articles besides. In 23 of the total number, the families had separate dwelling-houses; while in 80 cases they occupied apartments communicating with the shop.

DEATH FROM CHLOROFORM.

A CASE of death under chloroform is reported to have occurred last week in the Edinburgh Royal Infirmary, in the wards of Mr. Annandale. The patient had been chloroformed in one of the wards, and, when brought into the theatre for operation, was found to be suffering

from the chloroform. He never rallied, and died before the operation, amputation of the leg, could be begun. Another fatal case, we are told, occurred not long since in the same institution, but in the wards of another surgeon, under somewhat similar circumstances.

THE EDINBURGH ROYAL INFIRMARY.

At a recent meeting of the managers of the Edinburgh Royal Infirmary, it was resolved that the services of medical and surgical officers who have long and faithfully served the institution should be recognised by honorary appointments: and, in accordance with this resolution, Dr. D. Rutherford Haldane was appointed a consulting physician, and Dr. A. Keiller consulting physician for diseases of women. Mr. John Bishop has also been appointed assistant-surgeon to the institution. This appointment was not in connection with any vacancy, but because it was thought desirable that there should be three instead of two assistant-surgeons.

IRELAND.

At a meeting of the Governors of Waterford Lunatic Asylum held last week, Dr. W. Conolly was elected Visiting Physician, at a salary of £100 *per annum*.

IMMEDIATE application will be made by the Commissioners of Bray for a loan of £7,808 for the carrying out of sanitary works in that township.

THE ROYAL IRISH ACADEMY.

At a general meeting of the Academy held on Monday last, the President, Sir Robert Kane, F.R.S., himself a member of the medical profession, presented the Cunningham Gold Medal to two distinguished medical men: Dr. Aquilla Smith, King's Professor of Materia Medica in the School of Physic, and representative of the King and Queen's College of Physicians on the General Medical Council; and Dr. Allman, F.R.S., the well known natural historian. The Cunningham Medal is the highest honorary reward by which, in Ireland, intellectual distinction is recognised, and is conferred from time to time on men selected on account of their eminent literary, scientific, or archaeological merits. Sir William Wilde was the last recipient of this honour. On the present occasion, the medal was awarded to Dr. Smith for his inquiries into Irish numismatics, by his investigations and writings on which subject he has supplied important materials for the elucidation of many obscure points in Irish mediæval history. His splendid collection of Irish coins now also enriches the Academy. Dr. Allman's claims to the honour rest upon his researches into the natural history of the hydruzoa, and will be endorsed by every naturalist. Two other gentlemen received the Cunningham Medal on the same occasion; viz., Dr. Carey, for his important mathematical discoveries; and Professor Dowden, for his literary writings.

OBSTETRIC STATISTICS.

DR. MACNAUGHTON JONES has published his obstetrical report of the Cork Maternity Hospital for the five years ending December 1877. This dates from its foundation, five years ago; since which time, 1,611 women have been delivered. Of the labours, 1,267 were natural. The remaining 344 difficult cases are made up as follows: Difficult, 108 (including 6 breech-presentations); preterm, 74; complex, 117; abortions and miscarriages, 45. The preterm labours consisted of 11 arm-presentations and 60 breech and footling cases. The complex cases are made up of: twins, 34; triplets, 1; placenta prævia, 5; *post partum* hæmorrhage and retained placenta, 35; accidental hæmorrhage, 5; prolapsed funis, 16; convulsion, 5; ruptured uterus, 3; adherent placenta, 12; hydriads, 1. The forceps was applied 93 times; version was performed 17 times; craniotomy 3 times, excision twice, and hysterectomy twice. The total number of still born children at full time, from various causes, is 64. Twelve children died after instrumental delivery. The maternal deaths number 14. The forceps used

was Simpson's. Of the 93 forceps cases, one mother died from subsequent peritonitis, and seven deaths of the children resulted, though Dr. Jones is unable to say how many of these were dead before its application. Dr. Macnaughton Jones does not consider it necessary to wait for complete dilatation of the os uteri before applying the forceps. In the only instance in which the perchloride of iron was injected into the uterus, to restrain *post partum* hæmorrhage, it was attended with a successful result. Hitherto Dr. Jones has not resorted to the plan, recommended by Dr. Lombe Atthill, of injecting water at 112 deg. Fahr. into the uterus in *post partum* hæmorrhage. Such reports as this are of great value; and we are pleased to see the excellent example of Dr. George Johnston, the late Master of the Rotunda Hospital, so well followed by Dr. Jones, who took, we believe, a large part in the foundation of this useful institution.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE thirty-fifth annual report of the Council has just been issued to the Fellows of the College. During the year ending April 5th, 1878, five candidates were admitted to the Fellowship of the College, and ninety-nine gentlemen received letters testimonial; eight licentiates obtained the diploma in midwifery; fifty-six candidates for the junior class examination were rejected; and thirty-two candidates for the final examination were rejected. Two hundred and sixty-four candidates presented themselves for the preliminary examination; of these, thirty-three received first class certificates; seventy-one received second class certificates; sixty-six received pass certificates only; and ninety-four were rejected. The entire number on the lists of the College amounts to 402 Fellows and 2,914 licentiates. The Council congratulate the College on the rapid progress towards completion of the new library and museum. It would appear, however, that the financial condition of the College is not so favourable as might be wished. A large sum of money has doubtless been expended on the new buildings; but we understand that, for some time past, the annual expenditure has exceeded the College income. The income of the College from fees, dividends, and interest for the year, amounted to £3,828 18s. 6d., and the expenditure, including that on the new buildings, to £7,108 0s. 5d. Stock, to the amount of £2,663 6s., was sold out to meet this deficiency. The balance sheet shows a credit of only £170.

THE SMALL-POX EPIDEMIC IN DUBLIN.

THE Public Health Committee of the Corporation have supplied the following return, showing the progress of the epidemic. On March 22nd, the number of cases in all the hospitals in the city was 136, consisting of 93 acute and 43 convalescent cases. On April 22nd, the number had increased to 218, consisting of 151 acute and 67 convalescent. On May 22nd, after the lapse of a few months, the number had increased to 315, consisting of 208 acute and 107 convalescent, and there has been a further increase since that day. This shows the epidemic has been steadily on the increase, and that at no time since the outbreak had the number reached the figures returned on May 22nd. The number of cases of small-pox under treatment in the Dublin hospitals (including the temporary hospitals in connection with the two union workhouses) on Saturday last was 267, against 270 on the preceding Saturday; 94 cases were admitted during the week, being 12 less than in the previous week; 82 patients were discharged as cured, and 15 died.

NEW CONVALESCENT HOSPITAL FOR DUBLIN.

THE late Michael Bernard Mullins, Esq., J.P., of Dublin, who died in July 1871, left large bequests to several charities, and out of the residue of his property a sum of money for the erection and support of a convalescent hospital near Dublin, to be connected with his name. The intentions of the testator have been carried out by his trustees by an arrangement with the existing St. Vincent's Convalescent Hospital at Stillorgan, co. Dublin, by which accommodation for not fewer than fifteen patients will be provided for out of the funds at the disposal of the trustees. A large suitable building has been erected on the ground adjoining

ing the St. Vincent's Convalescent Hospital, which is under the charge of the Sisters of Charity; and these ladies have also undertaken the management of this important addition to the numerous medical charities of Dublin. Each of the wards is distinguished by a tablet, indicating that its endowment and support are owing to the charitable bequest of Mr. Mullins. The medical officers of eight of the Dublin hospitals are empowered to recommend adult patients, in course of recovery under medical or surgical treatment, for admission to the Mullins's Convalescent Hospital, without any distinction by reason of religious denomination of the person recommended. Persons recovering from contagions or infectious diseases, so long as there is any danger of contagion or infection; epileptics; and persons suffering from diseases attended with copious or offensive discharges, or such as require constant medical attendance or constant nursing, are inadmissible. The building is now completed and open for the reception of convalescents.

LIMERICK WORKHOUSE.

As was expected, the Local Government Board have sent a sealed order to the Board of Guardians of this Union, removing Mr. Meehan from the post of medical officer, to which he was recently appointed, and to which we referred last week. The Board subsequently considered the report of a committee recommending certain changes in the medical staff of the workhouse, which, after some discussion, was adopted. It has been decided that another resident medical officer shall be appointed at a salary of £200 *per annum*, a resident apothecary at £100, and that Dr. Barry shall be continued as the visiting physician at a salary of £75 a-year. These additional officers were necessary, as the workhouse contains a larger number of inmates than the present staff could properly attend to. The appointment of an apothecary or pharmaceutical chemist was much needed, as the Committee, recently selected to report on the condition of the surgery, stated that it was very much neglected; and described it as in an untidy neglectful state, without a tincture-press, percolator, pill-machine, etc., articles which in every well regulated pharmacy are indispensable.

BELFAST ROYAL HOSPITAL.

THE quarterly meeting of the General Committee of this institution was held last week, when it was reported that the Board of Management had received a further donation of £200 from the Rev. Arthur Pakenham, in memory of his late brother Lieutenant-Colonel Pakenham, towards the building of the Convalescent Home, which has reduced the debt on that building to about £800. It has been determined to set apart a ward in the Home to record this and previous donations to the funds of the charity, and to carry out the wishes of the donor in remembrance of his deceased brother. The total amount received by the treasurer from the Hospital Sunday collections was £555, being a slight increase over that of the previous year, but very far from what it ought to be in a wealthy town like Belfast. The senior resident surgeon Dr. Jefferson, having resigned, has been succeeded by Dr. O'Neill, the junior house-surgeon, whilst Dr. Clarke has been appointed in the vacancy caused by Dr. O'Neill's promotion. The untimely death of Mr. Charles Graham, resident medical officer of the Convalescent Home, was referred to in feeling terms, and a vote of condolence with his family was recorded. Mr. Graham was a young gentleman of considerable promise, and contracted the disease, of which he unfortunately died, in the discharge of his professional duties.

PROMPT BURIAL OF SMALL-POX PATIENTS.

THE Guardians of Rathdrum Union last week, having received a letter from the Local Government Board, recommending the prompt burial of the bodies of persons who had died of small-pox in the workhouse, it was resolved that burial in such cases should take place eight hours after the friends had received information of a death; also that, immediately on death, the remains should be placed in a coffin and fastened down till interment. These precautions are very necessary, owing to the highly contagious nature of the disease.

ARMY MEDICAL SERVICE.

THE following reply has been sent by King and Queen's College of Physicians in Ireland to the Secretary of State for War's extraordinary request for information as to the average earnings of civil medical practitioners:

"Sir,—I have the honour to inform you, in reply to your letter of the 27th April, which was fully considered by the President and Fellows of the King and Queen's College of Physicians in Ireland, that the College regret it is not in their power to afford any 'trustworthy estimate of the average earnings, under ordinary circumstances, of medical practitioners in civil life'. They believe, however, that, although the income of junior members of the profession derived from practice and appointments does not always exceed the pay of junior army surgeons, yet that the emoluments of those of (say) five years' standing and upwards are greatly in favour of the civil practitioner, whilst the professional prospects of the latter are incomparably superior to those of officers of the Army Medical Department. The College, however, believe that the well-founded discontent which has prevailed for some time amongst the medical officers of the army, and which has deterred candidates from offering themselves for the Service, though partly due to dissatisfaction with the rate of pay under the Warrant of 1858, is mainly to be attributed to the several causes pointed out in the memorial of the College to the Right Honourable Gathorne Hardy, dated 14th April, 1877, and the letter of the College, dated 5th April, 1878.—I have the honour to be, sir, your obedient servant,

"J. MAGEE FINNY, M.D., Fellow and Registrar.

"Ralph Thompson, Esq., C.B., Assistant Under Secretary for War."

The Faculty of Medicine of the Catholic University have also sent an able reply. They observe that the information sought for by the War Office is to be applied, so far as it can be at all approximately obtained, to a comparison of the position and emoluments of the army medical officers selected after severe competition, not with those of the average civil practitioner, but with those of the smaller and more select body of men, who, after the closest study of their profession, aim at achieving high places in it by the exercise of unwearied zeal and more than ordinary abilities. It is consistent with what is personally known to members of the Faculty individually, that of the select class of young medical practitioners thus defined, a considerable number achieve very early success, and are, within the first quinquennial period of their career, often placed in the receipt of incomes of at least £500 a-year. In the second quinquennial period, incomes ranging from £500 to £1,000 a-year, and even upwards, have been realised by able men as civil practitioners, in favourable circumstances and in good localities. It is further to be observed that, in the case of young men of conspicuous ability who enter on the career of teaching, large incomes and high distinction are often very early secured. Irrespective of the advantages of a fixed, comfortable, and healthy abode for himself and his family, the position of an energetic and successful civil practitioner in his tenth year, and thence onwards, is incomparably superior to that of the army medical officer at the same period of his career, exposed to all the risks of foreign service, in which his wife and children are involved, and in connection with which very heavy expenses are entailed upon him, for which the service provides no adequate compensation. At the more advanced periods of life comprised in the inquiry, it will be found that no comparison is fairly sustainable between the army medical officer's position on his retirement upon a guinea a-day, which dies with him, and that which a selected man of the same ability would in all probability have acquired for himself and his family, with the fruits of his labours well invested as a permanent provision for himself and those to come after him. The Faculty further observe that, if it ever be deemed advisable by the State to secure for the army the very highest class of medical ability, it will be necessary for the War Office to raise the status, including therein both rank and pay, of the army medical officer through all grades, from the Director General down to the most junior surgeon, to a degree far beyond that which now obtains.

The Council of the Royal College of Surgeons of Ireland give in their reply the average income of the Poor law medical officers, which is, of course, independent of the earnings from other appointments and private practice. As to estimating the average amount of the latter, they have no authentic data to go upon; and would decline, with commendable dignity, making any inquisitorial inquiries.

ASSOCIATION INTELLIGENCE.

YORKSHIRE BRANCH.

THE annual meeting of this Branch will be held at the Medical School, Leeds, on Wednesday, June 5th, at 2.15 P.M.

The members will dine together at the Great Northern Hotel, at 5 P.M. Tickets, 6s. 6d. each.

Gentlemen intending to bring forward communications, or to join the dinner, are requested to communicate with the Secretary.

W. PROCTER, M.D., *Honorary Secretary*.

York, May 28th, 1878.

BORDER COUNTIES BRANCH.

THE spring meeting of this Branch will be held at the Keswick Hotel, Keswick, on Friday, June 7th: President—Dr. LOCKIE; President-elect—Dr. GILCHRIST.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to the Secretaries.

R. MACLAREN, M.D., Carlisle, } *Honorary Secretaries*.
JOHN SMITH, M.D., Dumfries, }

Carlisle, May 11th, 1878.

THAMES VALLEY BRANCH.

THE next general meeting will be held on June 13th, at the Greyhound Hotel, Richmond, at Six o'clock.

Papers will be read by—

1. Mr. Balmanno Squire: The Use of Chrysophanic Acid.

2. Dr. Trouncer:

3. Dr. Atkinson: Vaccination and Revaccination.

Dinner at the above hotel at Seven o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Kingston-on-Thames, May 13th, 1878.

EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held in the Infirmary, Peterborough, on Friday, June 21st, at 11.30 A.M., in conjunction with the Cambridge and Huntingdon and South Midland Branches: THOMAS J. WALKER, M.D., President elect, in the Chair.

After Branch preliminary business at 11.30, there will be a general meeting about 12.15, when the President-elect will read an address; at the conclusion of which, he kindly invites members to luncheon at his house before the next general meeting at 2.15 P.M., for papers, discussions, etc.

Gentlemen wishing to read papers, or to dine, are requested to communicate as early as possible with one of the Honorary Secretaries.

WM. A. ELLISTON, M.D., Ipswich, } *Honorary Secretaries*.
J. B. PITT, M.D., Norwich, }

Norwich, May 14th, 1878.

MIDLAND BRANCH.

THE annual meeting of this Branch will be held at Lincoln, on Thursday, June 27th: President—C. H. MARRIOTT, M.D.; President-elect, A. MERCER ADAM, M.D.

Members desirous of reading papers are requested to communicate with C. HARRISON, M.D., *Honorary Secretary*.

Lincoln, May 14th, 1878.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE annual meeting was held in the Library of the County Hospital, Canterbury, on May 16th, at 1.30 P.M.: present, P. B. HALLOWES, Esq. (Canterbury), in the Chair, and twenty-one members.

The minutes of the last annual and quarterly meetings were read and confirmed. The annual accounts were audited and passed.

Secretary.—Mr. W. Knight Treves, the Honorary Secretary, was re-elected for the ensuing year.

The Chairman.—It was proposed and carried unanimously, "That the custom hitherto holding, that the President of the East Kent and Canterbury Medical Society be the Chairman of the Canterbury meetings, be for the future waived".

Ethical Committee.—The members of the Ethical Committee were unanimously re-elected.

The Dental Practitioners' Bill.—It was decided that a petition against the Dental Practitioners' Bill should be laid on the table, to be signed by those members who had not already done so.

The Places of Meeting for the ensuing year were fixed for: Hythe, September; Canterbury, November 1878 and May 1879; Ashford, March 1879. Mr. John Hackney was elected Chairman of the Hythe meeting.

The members after the meeting paid a visit to the County Asylum at Chatham, and were much pleased with the extent and completeness of the asylum and the general arrangements for the comfort and welfare of the inmates.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 10TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Ringworm complicated by Chloasma.—Mr. MALCOLM MORRIS showed this case, which he considered to be unique. The patient was a young woman employed in a laundry, who perspired freely while at work. She had never worn flannel next to her skin. Eighteen months previously, she was nursing a child suffering from ringworm, and at that time noticed a small red spot on the back of the neck, which gradually spread from the edge, leaving healthy skin in the centre. After this, several other spots of similar character appeared, and spread in the same way. Last January, she observed on her chest a brown spot, which also spread. Her skin exhibited well-marked rings of tinea circinata situated on the neck and shoulders, also on the arms. On the chest and back were large patches of tinea versicolor. These patches not only occupied the greater part of these regions, but had spread within the circles of the ringworm; so that, as the ringworm fungus retired, the chloasma advanced. At the time of the meeting, the patient had been for some days using a strong lotion of hyposulphite of soda, but there was still a considerable quantity of the chloasma to be seen. Under the microscopes on the table, were specimens of the two varieties of fungus, kindly mounted for Mr. Morris by Dr. Sangster. It was well-known that both favus and ringworm could exist on the same skin, or, at all events, that one could produce the other. Mr. Hutchinson had also stated that ringworm in a child could produce chloasma in an adult. The chief point of interest in this case was the fact that the parasite of pityriasis versicolor could grow where the trichophyton could not exist.

A Case of Yellow Fever.—Mr. LEGGATT read notes of this case. The patient, a gentleman aged 52, single, before 1865 had been some years in India (Bengal) without any serious illness. He had always lived well, drinking a bottle of wine daily, and for the last four winters had gone to a warm climate on account of hæmoptysis and a delicate lung; returned from a sanitary voyage to and from Buenos Ayres, on March 17th, and arrived in London on the 18th. He had felt "seedy and bilious" twice on the voyage home, and after landing. He appeared well on the 19th, when he was seen by Mr. Leggatt. His appetite was not so good as usual; urine (night and morning) 1003, acid, almost colourless, no albumen. On the night of March 21st, he was seized with shivering and frequent vomiting after a good dinner. On the 22nd, he was languid and had headache, pain in the back, and loathing of food. He was hot. His pulse was over 100; the tongue white; bowels not moved. He took effervescent citrate of potash and soda, and his usual "amar" at bedtime; and had milk and soda-water and tea. On the second day (22nd), he was freely purged, and had frequent vomiting, six ounces of black coffee-ground vomit. Pulse 108; temperature at noon 101.3 deg. Fahr. He was very depressed and languid, and asked if he had yellow fever. There were frequent motions during the day of pale whey-like liquid, with shreddy mucus. Evening temperature 100 deg. Fahr.; pulse 94; tongue moist, coated in the centre with a light drab fur, red at edges and tip. On the third day (24th), he passed a sleepless night. There were frequent motions of the same character. He vomited once, and was very depressed and weak. The face and conjunctivæ were yellow. No urine was passed, or possibly a little with the motions. Pulse only 48, weak and irregular; temperature 98.6 deg. Fahr. Great tenderness and pain existed in the epigastrium and right hypogastrium. At night, the pulse was 60, more regular. Frequent motions were passed. A grain of calomel was given at noon; eight minims of laudanum in an enema at bedtime; a teaspoonful of brandy every three hours during the day. Fourth day (25th). The patient slept a good deal. Two drab pultaceous foetid motions and about three drachms of urine were passed. The latter was of sulphur-

yellow colour, clear, neutral, and contained one-third of albumen. The yellowness of the skin had spread to the trunk and limbs and was deeper. The abdominal pain was increased. There was no sickness in the night. The pulse was 60, of fair power; temperature 98.3 deg. Fahr. Dr. Hawksley also saw the patient. Two grains of calomel and one grain of opium were given at 3 P.M., a water compress was applied to the abdomen, and a wide belt of impermeable piline around the trunk. Six hours after the opium, the patient was bright and free from pain. He took but little nourishment and no stimulants. In the evening, the temperature was 98.2 deg. Fahr.; two pale fetid motions had passed. Fifth day (26th). There had been a sleepless night, with frequent vomiting of clearish liquid, with flakes like beef-tea grounds; one darker vomit contained blood. He was very weak and torpid, but irritable. The abdominal pain and tenderness were much relieved. There were distressing attacks of hiccough for three-quarters of an hour together. Two grains of calomel were given at 3 P.M. and half a minim of creosote at 4 P.M. Dr. Murchison also saw the patient in the evening. His manner was altered, and he was jocose. He still vomited frequently; once, dark flakes of blood. The lower lip was livid and swollen. The tongue remained as before, moist, and without sordes. Temperature 99 deg. Fahr. (axilla). There was still some tenderness. The area of liver dulness was rather smaller, if anything, than natural. No urine had passed for sixty hours, and there was no sign of any in the bladder. There was no motion. Five grains of calomel were given. The trunk was enveloped in piline, wet with infusion of digitalis, four times the official strength. Sixth day (27th). The patient had a convulsion at midnight, followed by twenty minutes of unconsciousness, and four convulsions subsequently during the night. He vomited frequently. There had been saved eight ounces of clear liquid and four ounces of black coffee-ground vomit. The lower lip was black and swollen (ecchymosis?). The tongue was dry and brownish. There was the mercurial foetor. The pulse was 63, feeble, small; temperature 98 deg. Fahr. He had taken a little milk and barley-water. A drop of croton-oil was given at 2 P.M., and was followed by strong convulsion, in which the pulse was almost imperceptible. Dr. Murchison and Dr. Hawksley again saw the patient at 3.30 P.M. He was semicomatose, and did not recognise any one. A few purpuric spots were visible on the right instep and front of the right leg. The yellowness of the skin was darker. There had been no vomiting since the early morning, no motion, and no urine for seventy-nine hours. The digitalis was continued. A drop of croton-oil was given in the hope of relieving the uræmia by vomiting and purging. At 8.30, a severe convulsion left the patient comatose, and he died at 9.30. In this case, the temperature subsided on the third day from 101.3 deg. of the previous morning to the natural standard, above which it never again rose. There was great prostration on the morning of the third day, which passed away under very small doses of brandy (one ounce), and the pulse rallied from 48 to 60, and never afterwards fell below or rose above that frequency. The tongue continued moist to the end of the fifth day, and was free from sordes. On the sixth, it was brownish and dry. The mind was unaffected till the fifth day, when the patient became excited and a little unmanageable, but not at all violent. Blood was vomited on the second day, but not again till the fifth. There was never any blood in the motions. Death was evidently caused by uræmic poisoning, and it was not surprising that suppression of urine should occur in kidneys such as those described in the *post mortem* notes. The results of the necropsy, taken together with the symptoms above described and the fact of exposure to infection, satisfied all present that the illness was one of specific yellow fever. An epidemic of this disease existed at Rio de Janeiro when the steamer touched there on her outward and homeward voyages. First, on January 30th, three days after leaving, an officer of the vessel, assistant-purser, who had been ashore at Rio for one hour only, failed with the fever, and died at Buenos Ayres on February 12th. The vessel was in quarantine during her stay there. On the 14th, she left for Rio, and arrived on the 21st. During her stay, it was popularly stated that one hundred deaths a week were taking place from the epidemic. She left Rio on the 24th, and, two days afterwards, two more of the crew failed with the fever. One recovered; the other (the fifth engineer) died on March 5th, in latitude 8 deg. 13 min. N.; longitude 27 deg. 42 min. W. Neither of these patients had been ashore during the whole voyage out and home. The sick were isolated and disinfectants freely used, and no one in attendance on the sick took the disease, nor did any other case occur on board. The subject of this paper landed on both occasions at Rio, and it appeared probable that in his case, as well as in the other three, the infection was contracted at Rio. If so, a period of incubation of twenty-five days resulted. It was possible, however, that, before reaching a temperature in which the poison was supposed to be inoperative (say, below 60 deg. Fahr., which would probably be in about

latitude 34 deg. 21 min. N., longitude 13 deg. 44 min. W., the position of the ship on March 12th, and which is about four degrees north of the isothermal line, which has a mean winter temperature of 58 deg. Fahr.), the infection might have been taken from the ship in which the three cases of fever had occurred. This would give an incubation of nine days. The ordinary term was said to be from one to fifteen days. But cases were on record which gave seventeen or eighteen days. The infective poison was generally supposed to be innocuous below a temperature of 60 deg. Fahr. But the experience of physicians in the Peruvian Andes showed that the fever could become epidemic and propagate itself at an elevation of fourteen thousand feet, and in a daily mean temperature of 48 deg. Fahr.; and it had been asserted by an American physician that the poison was not absolutely destroyed, but only rendered dormant, at any temperature above 32 deg. Fahr. If these facts were established, it would behoove us in England to use great caution when any infected vessel reached an English port. It had happened already at Swansea, in 1855, that such a vessel did, in September, with a mean temperature for the month of 65 deg. Fahr. in the dock of that town, import the disease, which infected twenty-two persons and caused fifteen deaths amongst its population. In March last, the mean (maximum and minimum) temperature for the last eleven days was 38 deg. only. There were severe frosts at night, and north-west winds and some snow; one severe storm. This cold was preceded by warmer weather from the 18th to the 20th, when the thermometer was at 55 deg. or 53 deg. each day, and these days were preceded by colder weather, during which this patient entered the Channel and arrived at Southampton.

Dr. GREENFIELD read an account of the *post mortem* and microscopic examination of the case. The necropsy was made forty-three hours after death, the weather being very cold. The rigor mortis was well marked; yet there were signs of decomposition on the abdomen, the blood was fluid and contained gas-bubbles, and there was deep staining of the tissues around the veins. There was general intense icterus of somewhat brownish colour; ecchymosis in the lower lip. The liver—slightly enlarged, deeply jaundiced, and of light yellow colour—showed on section well-defined lobules, which were greenish in the centre; the surface of the organ was smooth, the capsule even, the gall-bladder and bile-ducts patent and healthy. The stomach contained much black fluid, resembling altered blood; its coats and those of the intestines were healthy. The spleen, free from disease, was small and firm. The kidneys, generally stained and somewhat decomposed, presented slight swelling of the cortex. The lungs contained numerous scattered hæmorrhages in the lower lobes, and subpleural ecchymoses. The pericardium was free from ecchymosis; the heart-wall was soft and greasy. Microscopic examination of the liver showed an interstitial exudation, part of which appeared to be old, part recent, and of acute origin; the liver-cells were swollen, containing much pigment at the centre and periphery of the lobules, and some fat also at the periphery. Together with this were tracts of liver-tissue, in which the cells were swollen and split up into fragments, some containing nuclei, others bile-pigment or oil, and others apparently deliquescent; and between the cells were many nuclei. The kidneys showed changes exactly similar to those seen in the earlier stages of acute parenchymatous nephritis, and some older fibroid changes. The spleen was quite healthy. Dr. Greenfield remarked that the morbid appearances resembled in most respects those which had been described by many observers in the tropics; but that the changes in the liver, which were analogous in kind to, though less in degree than, those seen in acute yellow atrophy, established the existence of a true parenchymatous hepatitis in yellow fever—a condition which had been denied by some authorities. The alteration in the liver was, in fact, similar to that in the kidneys.

Dr. CAYLEY thought the symptoms of the case differed much from those of ordinary cases of yellow fever as given in text-books. The temperature was almost always normal. The symptoms were more like those of acute yellow atrophy; the patient had sickness and liver symptoms, and died comatose.—Surgeon-Major HUTTON considered the poison of yellow fever quite distinct from that of malarial fever; the former was not a disease of swamps, but of towns. Parkes had thought the disease due to a fecal and not a malarial poison. It was consequently possible in these days of rapid intercommunication by steamboats that cases might be introduced to some seaport in Britain, whence, unless proper precautions were taken, the disease might spread far and wide.—Dr. GREENFIELD said that the fact that it might be a case of acute yellow atrophy was present to the minds of those engaged in the case. But was not the spleen usually enlarged in acute yellow atrophy? and were the changes in the heart and kidneys usual in that disease?—Dr. CAYLEY thought there were in the case some indications of previous disease of the heart and kidneys; then, again, the temperature almost

all the time was at or below the normal, which was not an usual circumstance in yellow fever.—Dr. GLOVER asked what were the previous habits of the patient.—Mr. LEGGATT, in reply, said that the temperature on the second day was 101.3 deg. at noon; the evening temperature being 100 deg.; and that it afterwards fell to normal, as was the case with yellow fever. Before death, Dr. Murchison had considered it to be a genuine case of yellow fever. The patient had formerly lived freely; lately, he had taken greater care of himself, and had travelled for his health's sake.

Impus Exadens treated by the Ferrible and Deep Application of Lunar Cautery, together with Internal Remedies.—Mr. SPENCER WATSON read notes of two cases. The disease in the first case—that of a policeman aged 28—attacked the eyebrow, eyelids, and root of the nose, and was attributed to the face having been injured by a kick. The treatment was at first by the internal administration of arsenic, and the local application of lunar caustic. Subsequently, iodide of iron, cod-liver oil, and iodide of potassium were given, and the caustic was repeated. Complete cicatrization resulted, but after a prolonged course of treatment. There was no history of syphilis in this case. In the second case the cheek and ala of the nose were the parts attacked, the patient being a weakly man with a phthisical family taint and no history of syphilis. He, also, was at first treated by the internal administration of arsenic, but conjoined with iron and cod-liver oil. No improvement following, the lunar caustic was freely and deeply applied, and a dose of iron, cod-liver oil, and small doses of opium were given internally. Under this plan, a very rapid improvement took place, partly attributed by the author to an antiseptic dressing applied to the ulcerating surface.

The PRESIDENT thought the author was to be congratulated on the successful result of the treatment adopted in the case.

Perfect Right Hemiplegia, with Double Optic Neuritis, and Obliteration of the Right Brachial Artery.—Dr. BUZZARD related this case, which occurred in a girl aged 18, who was admitted into the National Hospital for the Paralyzed and Epileptic in December last. So slight were the symptoms of hemiplegia, and the girl's manner was so strange and confused, that at the first glance the case was thought to be one of hysteria; but the ophthalmoscope revealed both optic discs much swollen, with the veins very tortuous, and partly concealed by effusion. She was at once admitted; and, on further examination, it was found that pulsation in the right brachial artery ceased at the middle of the arm, the radial and ulnar arteries being both indistinguishable. It appeared that before admission she had had a fit, on recovery from which she had complained of loss of power in the arm and cutaneous anæsthesia of the forearm. The anæsthesia, which was marked on admission, disappeared in three days without treatment. She was then ordered iodide of potassium, and was subsequently injected hypodermically every day for twenty-nine days with Dr. Hamberg's solution of peptone of mercury. She rapidly recovered the use of the arm, the optic neuritis gradually cleared away, and at the end of February she left the hospital. It was not until the patient had been six weeks under treatment that a sphygmographic tracing of the right radial pulse could be taken. This, which was shown to the Society, contrasted strongly with one obtained from the left radial artery on the same occasion. Subsequent tracings (which were also exhibited) showed the gradual return of circulation through the vessel. At the latter end of February, the girl had been examined by several members at a meeting of this Society, and the state of the radial pulse, which was still very imperfect, confirmed. In his remarks, Dr. Buzzard pointed out that, although the case was obscured to a certain extent by some hysterical symptoms, the existence of optic neuritis must be looked upon, under the circumstances, as practically conclusive of the existence of coarse in racral lesion, probably gummatous inflammation of the dura mater giving rise to the hemiplegia. The girl's history made it likely that the disease was of syphilitic origin. He mentioned the temporary obliteration of the brachial artery to chronic endarteritis of syphilitic origin, of the kind which has been minutely described by Heubner as occurring in the arteries of the brain, and of which specimens were shown by the author and others at the late discussion of the Pathological Society upon visceral syphilis. If this were so, the case was, so far as he knew, the first one of thrombosis consequent upon this arterial change which had been noted during life in a vessel not belonging to the cerebral system. He had at first thought that when the girl fell in a fit the artery might have been injured and thrombosis thereby induced, but an investigation of the position and circumstances of her fall had, he thought, practically excluded this explanation.

The PRESIDENT, upon inquiry, learned from Dr. Buzzard that the heart was healthy.—Mr. BRIDENELL CARTER thought that at present one could not generalise concerning optic neuritis. Recently, he had

seen at St. George's Hospital a girl, also a prostitute, suffering from total loss of sight of the left eye, who was pallid and weak, but quite rational, and which he had pronounced to be a case of optic neuritis. He had treated her with a combination of iodide of potassium and bi-chloride of mercury, and in less than three weeks vision had quite cleared up, and the patient could read well. Her right eye had never been affected. Two days previous to that meeting, he had seen a surgeon who, four days before that, had suddenly lost vision of the right eye. He could only see large type with the concentric portion of the retina. The disc was then swollen, the vessels of the fundus obscured, and the ordinary appearances of optic neuritis were coming into view. The patient otherwise remained quite well. The artery at first was certainly not plugged; though the explanation of the symptoms was probably due to some arterial mischief. If the symptoms in Dr. Buzzard's case were due to syphilis, some other symptoms would probably arise.—Mr. G. BROWN inquired if the condition of the right radial artery in Dr. Buzzard's case had been noticed before the pulsation in it had ceased. Usually with plugging of an artery there were other signs, such as swelling, pain, and constitutional disturbance, which were here wanting. If it were a case of plugging, too, the improvement when it began would have gone on more rapidly. He thought it was possibly a case of abnormal distribution of arteries in the right forearm.—Dr. BUZZARD said that no pulsation could be detected in either the right radial or ulnar artery at the time of the patient's admission to the hospital; and a month afterwards he had failed to obtain a tracing. A week later, one was procured, whilst the second and third tracings subsequently drawn were so different as to show conclusively that there was no congenital malformation. There were no other symptoms than those of simple absence of the arterial pulsation when the patient had been examined at that Society on February 27th of this year. There were two reasons why the ocular symptoms were not due to embolic plugging. Firstly, he had never seen double optic neuritis so produced; and, even if that objection failed, the fact that it quite cleared up in two weeks showed conclusively that it was not due to embolism of the middle cerebral or other artery of the brain. Replying to the President, Dr. Buzzard said that the radial and ulnar arteries did not feel hard or cord-like.

CORRESPONDENCE.

THE MEDICAL ACT AMENDMENT BILL.

SIR,—Dr. Quain, in his speech to the Metropolitan Counties Branch, advises the profession to accept the amended Bill, on the ground that, as he expresses it, "half a loaf is better than no bread". The *Times*, in a leader, seconds this advice. I do not propose just now to discuss the wisdom of following such a course. But the speech and the leader proceed to enforce this concurrent view by a line of argument singularly fallacious.

Our proposition is, shortly: taxation and representation ought to go together. The Medical Council taxes us, and therefore we ought to be directly represented upon that body. The first part of this proposition is, in England, so unanswerable, that Dr. Quain and the *Times* are forced to dispute the second.

You are, say they, mistaken; the Council does not tax you; it is Parliament which has done so, and in Parliament you are directly represented. Parliament, we answer, has conceded to the Council the power to levy any tax it pleases up to £5. It has also imposed upon the Council certain obligations which it cannot fulfil without an expenditure of money. Suppose that these obligations require for their discharge a tax of £2 10s., the exaction of the other £2 10s. is discretionary with the Council; and, as they have always exacted £2 10s., to that extent the tax is directly imposed by them. Further than this, taxation implies two things: firstly, the power to raise money; secondly, the power to spend the money so raised. Now, there is no doubt that, whoever raises the tax, the Council spends it. In anticipation of this answer, we are told by the *Times* that, with regard to the money raised, "its expenditure is for purposes so obviously necessary, that the Council have scarcely any room for discretion in the matter". A great part of the amount raised is spent in paying the members of the Council for their attendance thereat, and I do not say that they are extravagantly rewarded. But this consideration affords really a still stronger plea for the reconstitution of the Council, than even the constitutional truism of taxation and representation.

Sir Dominic Corrigan candidly told the deputation of the Association Medical Reform Committee which interviewed the Medical Council that he himself represented, not the general interests of the profession, but those of the body which returned him. Ten members of the

Council voted the other day against the compulsory conjoint scheme; fourteen voted in favour of it. How does this proportion agree with general professional feeling? Four thousand nine hundred and ten medical men voted for it, and two hundred and sixty-four only against it. So we are paying ten gentlemen to oppose and obstruct a scheme which has such a preponderance of professional opinion in its favour. To my mind, this is even a stronger argument in favour of a reformed council than the taxation one. I should prefer a council appointed entirely by the Crown to one which, in my humble judgment, represents chiefly the trade interests of the corporations. Probably the worst that can be said against the Crown appointments is that, whereas we had originally two representatives of extra-metropolitan practitioners, we have now only one, and to-morrow may have none at all.

I still entertain the hope that so sagacious a minister as the Lord President may yet show himself wiser than some of his advisers, and may ensure the hearty and earnest co-operation of the great mass of the profession, and of our Association in particular, by granting us an instalment, if only a small one, of what we feel and assert to be our just rights. The principle of amalgamating corporations, and making one member represent two corporations, was established in 1858. Why not extend its operation, and so make room for a few direct representatives of the profession?—I am, sir, yours obediently,

Birmingham, May 28th, 1878.

W. F. WADE, F.R.C.P.

THE REGIUS PROFESSOR'S WORK IN OXFORD.

SIR,—“Fine words butter no parsnips”; and if your editorial contributor, who “trusts that under Dr. Acland’s guidance the medical school of Oxford may make some progress in its own special work”, can point to any progress achieved in the medical school, it would be more to the point. You and your correspondents have shown that, under his guidance, the medical school of Oxford has been crushed out of existence; that there exists nothing which can by any force of imagination be called a medical school at Oxford; that the funds left by former benefactors for medical teaching have been perverted to other uses; that Dr. Acland combines in himself a number of paid medical offices, which he has converted into sinecures; and that he not only does not fulfil the functions of his offices according to the intentions of the founders, but deliberately obstructs and prevents medical teaching, and has prevented the teaching of the essential branches of medical instruction.

Personal regard for the individual, however highly justified by his personal qualities and convictions, does not, in my opinion, justify the expression of any hope that public acts of this kind can be coupled with anticipations that the same official will promote in the future that which he has destroyed in the past, without since showing any evidence that he has repented.—I am, sir, yours,

May 28th, 1878.

SPECTATOR.

THE RADCLIFFE INFIRMARY AS A CLINICAL SCHOOL.

SIR,—With the view of correcting the erroneous impression which must necessarily have arisen from the statements of your representative, as to the character and amount of work which is done in the surgical wards of the Radcliffe Infirmary, and to prevent the damaging effect which such a statement must have upon the support given to the institution by the public, I enclose a list of the operations, accidents, and other surgical cases now undergoing treatment in the Infirmary.

Operations for—1. Strangulated inguinal hernia; 2. Amputation of forearm; 3. Removal of epithelioma of lip; 4. Amputation of arm above elbow; 5. Amputation of leg below knee; 6. Partial amputation of foot; 7. Excision of eyeball; 8. Extraction of cataract; 9. Removal of large tumour from buttock; 10. Two fingers removed; 11. Tenotomy (talipes equinus); 12. Fistula in ano.

The accidents are—Fractured tibia and fibula (5); Fractured femur (4); Fractured fibula (1); Gunshot-wound of leg, from which a large piece of metal was removed; Wound of eyeball; Fracture of clavicle and concussion.

Other cases are—Tetanus following upon an injury to thumb; disease of elbow (for excision); phagedænic ulceration of penis and lip; one case of lumbar, and two of iliac, abscess; paracentesis thoracis; several cases of strumous ophthalmia and diseases of eye.

The other cases consist of the usual hospital cases of hip-disease, stricture, and cutaneous diseases, making in all sixty-seven surgical cases.

From the above list, which is by no means an unusual one, and which has about the usual percentage of operations, it will be seen

that the Radcliffe Infirmary can compare favourably with other hospitals containing the same number of beds in the amount of its surgical practice, and that the statement of your representative must have been made without due inquiry into the condition of the wards.—I remain, yours faithfully,

W. LEWIS MORGAN, L.R.C.P. Lond.,
Radcliffe Infirmary, Oxford, May 28th, 1878.

House-Surgeon.

CONSULTANTS AND ETIQUETTE.

SIR,—The experience of “A Consultant”, as given in his letter of the 11th, is what I have frequently to complain of. I started practice as a *pure* consultant, with every desire to consider the interests of the general practitioners with whom I am brought into contact. But they will not allow me to do so in many instances, nor at a cost which means an absolute sacrifice of my own interests. A patient comes to me, and I find, on inquiry, that he is attended by Mr. A. I write to Mr. A., and do not even get an acknowledgment of my letter, and the next thing I hear of the patient is that Mr. A. has sent him to Mr. B. in London.

A case in point has just occurred where the discourtesy has been even more marked. I wrote about the patient, and received no reply. I wrote again, asking if my first letter had been received; still no reply. What can we do with men who act in this way, but ignore them altogether? The patient is not the personal property of anybody whatever, and has a perfect right to consult whom he chooses. The consultant ought to regard the interests of the general practitioner who has been selected by the patient; but the general practitioner should equally regard the interests of the consultant who has been equally selected by the patient. There is a mutual distrust in this matter, which is much to be regretted, both in the interest of the profession and of the public; and, as long as it exists, *pure* consultants, as you understand them in your article on the subject, are quite impossible.—I am, etc.,

A BIRMINGHAM CONSULTANT.

SIR,—No doubt both opinions and experiences will differ as to the conduct of London consultants towards their medical brethren, more especially those in provincial practice. There are, undoubtedly, some consultants whose honour and courtesy are unquestionable; there are others (I write from experience) who will not scruple to annex a patient, even when sent specially to them by the usual medical attendant, and who will ignore, or contemptuously cast aside, the letter the patient takes to them. Complaints against some London consultants are more common, and do them more harm than they imagine; and provincial men often fight shy of sending patients to town, partly because of previous slights, but also because the conviction is gaining ground that, except in the case of a very few specialities practised by special men, the advantage is a very doubtful one, and that scientific medical education and experience are to be found in provincial towns in as high a degree as in the metropolis.—I remain, sir, yours faithfully,

A PROVINCIAL PRACTITIONER.

ISOLATION OF SMALL-POX CASES ON BOARD-SHIP.

SIR,—As every instance in which the scourge small-pox has been successfully grappled with by prompt and efficient isolation has some medical interest, I beg to put you in possession of the following facts. The ship *Hermione* left Calcutta on the 20th of December last, with four hundred and fifteen Coolie emigrants on board, for this island, and, when five days out, one of the emigrants presented himself to the medical superintendent with unmistakable symptoms of small-pox. Dr. St. Romaine at once conferred with Captain Roberts, the master of the ship, who proposed to turn one of the boats which was lashed to skids above the deck into a hospital, roof it with matting, and cover it with a tarpaulin. This was promptly done; and the patient was removed, and the whole ship fumigated and disinfected. Within the next few days, four other cases appeared, which were all removed to the boat, which was kept thoroughly fumigated and disinfected daily. No other cases appeared; these five all did well, and the last convalescent was discharged cured on January 14th. On March 16th, the *Hermione* landed here one of the finest and healthiest batches of emigrants that were ever brought to the West Indies. The infection was brought from the Coolie depot at Lucknow, where one of the women stated that her child had died of small-pox, ten or twelve days before she was sent away. Here we have in juxtaposition the results of carelessness and carelessness in dealing with such an enemy as small-pox; and, as we often read of the ravages of this disease among the Coolies on board-ship, the above simple means, which are always available, may prove of benefit in other instances similarly situated. I think it only due both

to Dr. St. Romaine and to Captain Roberts, that the success of their practical common sense should be placed on record.—I remain, sir, your obedient servant,
A DISTRICT MEDICAL OFFICER.
Grenada, West Indies, April.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE ROYSTON RURAL SANITARY AUTHORITY AND MR. BALDING.

We have had the opportunity of seeing a copy of a correspondence that has taken place between Mr. Balding, the medical officer of the Royston Union, the Guardians of that Union, acting as the Rural Sanitary Authority, and the Local Government Board, to which we consider it desirable to direct attention.

It would appear that some months ago the Guardians, in their sanitary capacity, had a temporary building erected within the area of their workhouse grounds, but completely isolated from the workhouse itself, for the purpose of receiving cases of contagious disease occurring in persons above the pauper class. On the 26th of October last, one such case, that of a Miss Griffiths, was admitted, and Mr. Balding was requested to attend her and did so until the 21st of November last, when she was discharged. On her discharge, the Guardians preferred a claim of £4.0.5 against her for her maintenance; subsequently, this charge was reduced to £2.0.0, Miss Griffiths having shown that she was unable to pay a larger sum. "No charge was made, on this account, for medical attendance."

On the 2nd of January last, being the end of the quarter, Mr. Balding sent in an account for his professional attendance, medicines, etc., on this case, but the Board of Guardians repudiated his claim; whereupon, he applied to the Local Government Board to intervene in the matter. The latter body contented itself with forwarding his letter to the Royston Guardians, and asking for information. The Guardians, in their reply, admit the accuracy of Mr. Balding's complaint, but excuse themselves by stating that, "had the account been sent before the account with Miss Griffiths had been made out, a charge for medical attendance might have been included; but, inasmuch as Mr. Balding's claim was sent in subsequent to the settlement, the Authority felt that, while they had no power to pay it, they could not call on Miss Griffiths to pay the amount, having already given her a receipt in full for the account for her maintenance in hospital."

Anything more unfair than this proceeding of the Royston Board of Guardians can hardly be imagined. It was no part of Mr. Balding's duty, as workhouse medical officer, to attend a person admitted into a contagious hospital of the non-pauper class. That the Guardians considered that she was in a position to pay, was shown by their original demand of about £1 a week for her maintenance. Clearly, they had no right to ignore the attendance of Mr. Balding; and, although the Local Government Board has not expressed any opinion on the subject, there is no question, in our mind, that Mr. Balding could recover in the County Court from the Royston Board of Guardians a fair amount for his attendance on this case. At the same time, we would advise all rural medical officers, who may be likely to be called on in similar cases, to ascertain beforehand who is going to pay them for these extra services.

THE YEovil BOARD OF GUARDIANS AND MR. GARLAND.

We have seldom had occasion to draw attention to a more flagrant act of injustice than that which has been recently perpetrated by the Yeovil Board of Guardians, as reported in the *Western Press*.

It would appear that, in December last, a pauper named Cooper made application to Mr. Garland, District Medical Officer, for his advice. Mr. Garland examined him, and pronounced the opinion that he was incurable, as he was suffering from cancer of the lip, which had been operated on but had returned. Mr. Garland offered to send him to one of the London hospitals, but Cooper stated that he could not pay the fare. This Mr. Garland very generously offered to pay out of his own pocket, if the man could not raise the money in his native village. A few days afterwards, the man again called, and stated that he had got the money, whereupon Mr. Garland wrote to a friend in St. George's Hospital and obtained an order for his admission, and Cooper went to London. Nothing was directly heard from this man or from his family from that date; the only information Mr. Garland had was from a

former pupil, who wrote to state that the man's case was declared incurable. Subsequently, it would appear, he was discharged from the hospital, returned home, and some time afterwards died. After the man's death, the wife went to the police-station and asked where she could obtain a certificate; whilst there, she told the story above related, at the same time expressing her opinion that the going to London was the cause of his death, as he was unable to bear the fatigue of the journey. To the inquiry of the sergeant if Mr. Garland knew that deceased had returned from London, she said "I do not know; I suppose he must know of it." The sergeant said that he would see Mr. Garland; whereupon Mrs. Cooper rejoined, "He cannot give a certificate, as he has not seen my husband." The sergeant saw Mr. Garland, who promised to give a certificate, which he withdrew as soon as he had learnt that the woman was making complaint against him. Subsequently, the matter was brought before the Yeovil Board, and Mr. Garland was asked for an explanation. He attended the Board meeting on the 12th ult. together with Sergeant Holmes, and, having given their account of the case, the statement was considered satisfactory, and a minute to that effect was entered in the book; but at a subsequent meeting of the Board, the subject was again brought forward by the woman attending and making a direct complaint of neglect against Mr. Garland. Mr. Garland was again written to, and asked to attend their next meeting. This he very properly declined to do, alleging as his reason that he had attended once and had tendered his statement, and that it had been unanimously accepted as satisfactory; and that, if it were thought necessary to reopen the question, the matter should be inquired into by the Local Government Board. Thereupon, a long discussion ensued, some members objecting to a further review of the case, others insisting on it; ultimately, the woman was called in, when she asserted that Mr. Garland knew of her husband's return, and called a witness to depose to that effect; although, when at the police-office, she voluntarily stated that she did not know whether he had heard of her husband's return or not. Ultimately, the Board, by a majority of eleven to eight, many not voting, passed a censure on Mr. Garland for neglect of duty.

We are at a loss to determine in what respect Mr. Garland failed in his duty. Surely, if the woman wished for his attendance after her husband's return, it was incumbent on her to make a direct application, either through a fresh order or by a personal request. This, it is evident, she did not trouble herself to do.

We have gone into this case in some detail, as we feel that it is one that might happen to any district medical officer whose misfortune it might be to have eager antagonists on a board of guardians. We would advise Mr. Garland to make a direct application to the Local Government Board for an inquiry; thereby he will secure, not only an impartial investigation, but probably will be able to bring to light any influences which may have been brought into operation against him.

DIPHTHERIA IN DENBIGH.

IN consequence of an outbreak of this disease, which attacked twenty-five persons and caused six deaths, Dr. Thorne Thorne was directed by the Local Government Board to investigate the conditions under which it occurred. He states that there can be no question as to the disease, as even the mild cases showed typical symptoms, including, in some instances, the limited paralysis characteristic of diphtheria. Dr. Thorne reported that the water-supply, except that from the water-works, was very bad; that the means of sewerage and drainage are defective in the extreme, as, except for a few street-lengths, the sewers are mainly old stone rubble drains, which allow stagnation and leakage of the sewage; and that many of the private drains are no better. It also appears that, although Dr. Lloyd Roberts, the late medical officer of health (who had resigned), had made himself acquainted with the sanitary condition of the district and reported to the Council, yet but little has been done to remedy the nuisances complained of. Reference is also made in the report to the fact that the results of a house-to-house inspection, made some time since, have not been entered in a book, so that the Council are ignorant of the sanitary condition of the district. As regards the inspector, it may be said as an excuse that he was only paid £15 a-year, which is quite insufficient for the requisite work. The medical officer of health is remunerated with what perhaps is considered the handsome yearly payment of £25, so that it is evident, as Dr. Lloyd Roberts made numerous inspections and compiled the requisite sanitary statistics for his district, he has not been overpaid for his work. The ideas of the Council as to payment is shown by a resolution adopted on Dr. Thorne's report, viz., that the inspector should devote his whole time to the work and be adequately remunerated, whereon it was agreed that the salary be £20 a-year, and an amendment, that it be £25, was rejected. This parsimony speaks ill for the proper carrying out of an

efficient system of drainage which has been proposed, or for the removal of the nuisances which caused this outbreak, as well as previous outbreaks of typhoid fever. The Council also agreed to arrange, if possible, with the Infirmary Committee to take their cases of infectious diseases, and postponed the consideration of the erection of a mortuary to the next meeting. It is to be hoped that the Local Government Board will not be satisfied with an apparent, but will require a substantial, compliance with the recommendations contained in Dr. Thorne's report.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS—Friday, May 24th, 1878.

Medical Act (1858) Amendment Bill.—The Duke of RICHMOND and GORDON said that, in consequence of the amendments he found himself compelled to insert in this Bill, he should not ask their lordships to go into committee on the Bill that night, but to allow him to commit the Bill *pro forma*, that all his amendments might be reprinted, so as to enable their lordships to discuss them with greater convenience. When he introduced the Bill, he gave a considerable period of time between the second reading and going into committee, in order that, the Bill affecting as it did the public and the medical profession in a great degree, they might have ample time to consider its provisions, and that he might have the advantage of ascertaining the opinions of those interested in the subject, which might enable him to put the Bill in as satisfactory a state as possible. The medical profession readily responded to his request. He had received various deputations on the subject, and he had letters from medical men in all parts of the country. When asking for leave to bring in the Bill, he expressed his own opinion that there ought to be an uniform *minimum* standard of examination for those who sought to enter the medical profession: and he expressed his concurrence in the opinion that a conjoint examining board for each part of the United Kingdom was desirable. But there was a difficulty in the way of a conjoint scheme, which difficulty was raised chiefly by the Scotch Universities; and, consequently, at the time he did not see his way to introducing a clause rendering a conjoint board compulsory. But the representations which from time to time had been made to him, both before and after the second reading, made it clear that a conjoint scheme would be very advisable; and, in an endeavour to promote it, he ventured on what he thought might be an acceptable compromise. He suggested that it should be made compulsory on all the medical corporations of the country to form a conjoint scheme, leaving it to the various universities to come in if they thought fit. He had had his proposed compromise circulated through the country, and in answer to it he had had representations from various bodies. The medical corporations in England condemned his proposal, on the ground that nothing short of a conjoint board, to include the universities, would be satisfactory. The English Universities took the same view; the representations from Ireland were to the same effect; and from various medical societies in the metropolis, who treated the question in a very impartial manner, he had received representations in the same direction. He was bound to say that the opinion of those various bodies and societies was opposed to this compromise, and he would not be dealing honestly with the House if he did not say that he could not resist the arguments they had brought under his consideration. Desiring to put the Bill into a shape in which it would be of real advantage to the medical profession and satisfactory to the whole country, he had come to the conclusion that he must ask their lordships to allow him to amend it, so as to make a conjoint board for each of the three portions of the United Kingdom compulsory. The chief opposition to such a proposal came from the Universities of Scotland, but he hoped that his endeavours in the way of compromise would show that he had, as far as possible, deferred to their views. He hoped the Universities of Scotland would appreciate his motives, and see that he was doing what he believed would be best for the medical profession and the public generally. With this explanation, he would ask their lordships to go into committee *pro forma*. He proposed that the discussion in committee should not be taken till the week after Whitsuntide week.—Viscount POWERSCOURT begged to congratulate the noble duke on his proposal to make a conjoint scheme compulsory.—The Marquis of RIXON believed that the course proposed by his noble friend was most desirable in the interest of the public; and he hoped that the Universities of Scotland would, in the interest of the public, withdraw their opposition to it. But, however that might be, he felt convinced that his noble friend had adopted the right course.—Earl GRANVILLE also congratulated the Lord President. Having accompanied a deputation from the University of London, he could bear testimony to the patient

attention with which the noble duke listened to the representations made to him by that deputation. He believed that change proposed in the Bill would prove of great advantage to the public and the medical profession.—The Bill then passed through committee *pro forma*.

HOUSE OF COMMONS.—Wednesday, May 22nd, 1878.

Contagious Diseases Act Repeal Bill.—Sir H. JOHNSTONE moved the second reading of the Bill, submitting that the returns which had been laid before Parliament afforded a convincing proof that the continuance of the Act was not justified by the circumstances of the case. The hon. member was entering into a variety of details in illustration of his argument, when Mr. MOORE moved that the ladies' gallery be cleared. This was put to the House and lost.—Sir H. JOHNSTONE resumed his speech, remarking that, on the part of many of the towns of this kingdom, which protested against these Acts, he was bound to say that the very construction of them was a direct interference with the powers and privileges of municipal authorities. The idea of making policemen the special guardians of public morality was in itself so absurd, that he would not waste time in dwelling on that topic. If there were one woman who made great personal sacrifices for the good of the soldiers of England, that woman was Florence Nightingale, and she had been the first to sign the petition he had presented that day, feeling sure that a system of Government regulation and examination was contrary, not only to the rights of women, but to the general liberty of the state. He was convinced that year after year would bring conviction to the minds of those still undecided, that it was impossible to maintain these Acts in the face of the public feeling of the country, which, whether rightly or wrongly, was persuaded that they had not done any great amount of good, while they had outraged the public feeling of this country to a most terrible extent.—Mr. W. H. SMITH expressed his great regret that the hon. baronet should have thought it necessary to bring this most painful question before the House. He was very far from calling in question the motives of the hon. baronet, and of those who took an interest in the subject, but he could not help feeling that they took but a very partial view of it, and one which it was not unnatural men should take who were not able themselves carefully and thoroughly to study it. From experience and examination, he had come to the conclusion that these Acts were beneficial to the public morality, to the persons who were principally affected by them, and to the state.—It was now a quarter to six o'clock, and the debate, in accordance with the standing order of the House, was adjourned.

Friday, May 24th.

The Rev. Mr. Dodwell.—Dr. KENEALY asked the Secretary for the Home Department whether he would explain to the House the grounds on which he refused to release the Rev. Mr. Dodwell, who had been reported to him, on high medical authority, as being of perfectly sound mind.—Mr. CROSS said Mr. Dodwell, after the verdict given in his case, had been sent in the ordinary course to Broadmoor. Some time ago, letters were received at the Home Office from Dr. Winn and Dr. Forbes Winslow as to his state. Those letters were sent on April 15th to the authorities of Broadmoor, with an intimation that when they were able to report that it would be consistent with the safety, both of the public and the prisoner himself, that he should be either absolutely or conditionally discharged, his case would be considered, and not till then. No report had yet been received.

Monday, May 27th, 1878.

Post Mortem Examinations on Lunatics.—Mr. P. TAYLOR asked the Secretary of State for the Home Department whether he would take into consideration the expediency of issuing some authoritative memorandum indicating the conditions upon which examinations upon the bodies of persons dying in lunatic asylums should be permitted or enforced.—Mr. CROSS said he had been in communication with the Lunatic Commissioners on the subject, and they had informed him that their opinion with respect to it was very strongly expressed in a report which they had presented in 1870, and also in evidence which had been given last year. If, after looking at that report and the evidence, the honourable gentleman wished to put any further questions, he should be happy to make additional inquiries.

VOLUNTEER SURGEONS.—The following Volunteer Surgeons, having undergone the requisite examination, have been granted certificates of proficiency, entitling their respective corps to an additional government grant:—Surgeon George Bland, 5th Battalion Cheshire Rifle Volunteers; and Acting Surgeons Thomas Shaw, 27th Cheshire R.V., W. R. Davies, 16th Cheshire R.V., and John Somerville, 8th Cheshire R.V.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 23rd.

Andrews, William S., Dover (University College)
Apthorp, Frederick W., Lee, Kent (Guy's Hospital)
Bislee, Alfred J., Hulton, Somersetshire (St. Mary's Hospital)
Buckle, John, Catton, Norwich (St. Bartholomew's Hospital)
Bulter, George W., Appleton, Abingdon (Guy's Hospital)
Candler, William J., Harleston, Norfolk (St. Bartholomew's Hospital)
Clark, James R. A., Cavendish Square (University College)
Clitherow, Robert E., Horncastle, Lincolnshire (King's College)
Crouch, Edward T., Devonport (Guy's Hospital)
Edwardes, William W., Llanasaatfrid, Montgomeryshire (St. Mary's Hospital)
Fulton, James, St. Thomas's, Canada (St. Thomas's Hospital)
Good, Frederick T., Highbury Hill (St. Bartholomew's Hospital)
Hawkins, Howard, Lee, Kent (Guy's Hospital)
Jackson, Thomas, Great Torrington, Devon (Middlesex Hospital)
Ling, Maurice E., Saxmundham, Suffolk (London Hospital)
Shaw, George, Blackheath Park (Westminster Hospital)
Smith, Kenneth R., Stamford Hill (University College)
Snowden, George H., Ramsgate (St. Mary's Hospital)

Five candidates were rejected.

The following members, having undergone the primary examination for the Fellowship at the half-yearly meeting of the Board of Examiners on May 27th, will be admitted to the pass examination when qualified.

Messrs. Edward Forster Brockman, L.R.C.P.Lond., diploma of Membership dated November 14th, 1865, of St. George's Hospital; Charles Henry Newby, January 22nd, 1873, of St. Thomas's Hospital; Robert William Greenish, May 27th, 1875, and Samuel Herbert Burton, January 28th, 1876, both of University College; George Andrew, January 21st, 1877, of St. Bartholomew's Hospital; Richard Shalders Miller, August 1st, 1877, of University College; and Albert William Denis Leahy (not a Member), of the Charing Cross Hospital.

Thirteen candidates were rejected.

The following gentlemen passed on May 28th.

Messrs. William R. Williams, diploma of Membership dated April 24th, 1877, of University College and Middlesex Hospital; Charles Atkin, Sheffield and Guy's Hospital; Robert J. Williamson, St. Thomas's Hospital; Cecil L. S. Branson, St. George's Hospital; John Whitehouse, Birmingham; Denis M. Donnell, King's College; Richard Bordin, Liverpool School; Thomas D. Savill, St. Thomas's Hospital; Anthony A. Bowly, St. Bartholomew's Hospital; Reginald Pratt, University College; Frederick C. Fisher, St. George's Hospital; Henry T. Bassett, Guy's and Birmingham; William J. Penny, King's College; David A. King, St. Bartholomew's Hospital; John Phillips, King's College and Cambridge; Thomas Kirsopp, St. Bartholomew's Hospital; and John F. W. Silk, King's College.

Eight candidates were rejected.

The following gentlemen passed on May 29th.

Messrs. Percy E. Shearman, Charles J. Bond, Victor A. H. Horsley, of University College; Francis Howe and John R. Dodd, St. Bartholomew's Hospital; James T. Brett, Guy's Hospital; Henry E. Garrett, Charing Cross Hospital; and Edwin H. Greves, of the Edinburgh School.

Thirty-six candidates out of the sixty-eight examined, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for six months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 23rd, 1878.

Hare, Evan Herring, Putney
Jacob, Henry Garrard, Southsea
Moorhouse, Edward Dobson, Manchester

MEDICAL VACANCIES.

THE following vacancies are announced:—

HUDDERSFIELD INFIRMARY.—House-Surgeon. Salary, £200 for first year, with board and residence. —Junior House-Surgeon. Salary, £40 per annum, with board and residence. Applications to be made on or before the 5th instant.

KENT AND CANTERBURY HOSPITAL.—Physician. Applications to be made on or before the 20th instant.

LIMERICK UNION.—Resident Medical Officer, at a salary of £200 a year, without rations. —One Resident Apothecary, a Pharmaceutical Chemist, at £100 yearly, without rations. Furnished apartments in both cases. Applications to the 5th instant.

LONDON FLIVER HOSPITAL.—Resident Medical Officer. Salary, £200 per annum, with residence, coals, gas, and attendance.

SOMERSET COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £120 per annum, with board, residence, and washing.

TRALEE UNION.—Bona Dispensary District. Medical Officer for No. 1 Division of the District. Salary, £50 per annum, £10 as Sanitary Officer, with the usual Registration and Vaccination Fees. Personal attendance of candidates necessary on the day of election; viz., the 5th instant.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Salary, £ per annum, with board, residence, and washing. Applications to be made or before the 25th instant.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House-Physician. Salary, £100 per annum, with board, washing, and apartments. —House-Surgeon. Salary, £100 per annum, with board, washing, and apartments. Applications to be made on or before the 24th instant.

YORK FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Assistant Medical Officer, from 25 to 35 years of age. Salary, £150 per annum, with fees. Applications to be made on or before June 4th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HOGGAN, George, M.D., elected Medical Officer of St. John's Hospital for Diseases of the Skin.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

DUFFEY.—On May 23rd, at 30, Fitzwilliam Place, Dublin, the wife of George F. Duffey, M.D., of a daughter.

MARRIAGE.

SMITH—FREER.—On May 23rd, at Oldswinford Church, Stourbridge, by the Rev. R. H. Streeten and the Rev. H. Sherrard, Henry Hammond Smith, late Madras Medical Service, youngest son of the late C. J. Smith, Inspector-General of Hospitals, Madras, to Ethel, youngest daughter of R. L. Freer, Esq., Stourbridge.

BEQUESTS, ETC.—Miss Pringle has bequeathed £300 to the Hospital for Incurables, Donnybrook; £300 to the Deaf and Dumb Institution, Claremont; and £300 to the Cripples' Home, Bray.—"In Memoriam" has given £50 to the Hospital for Incurables, near Dublin.

DR. GEORGE BENNETT, F.R.S., to whom the honorary gold medal of the Royal College of Surgeons was awarded in 1834, was, on a recent visit to Rome, elected an Honorary Member of the Italian Geographical Society.

ROYAL COLLEGE OF SURGEONS: PASS EXAMINATIONS.—The following analysis of the last examination for the diploma of membership of the Royal College of Surgeons may, perhaps, be interesting. There were eighty-three candidates examined. Those already in possession of recognised medical licences, and therefore not examined in medicine, are represented as follows: "L.S.A.", twenty-two; "L.R.C.P.Ed.", three; "L.R.C.P.Lond.", one; "L.R.C.P.Edin. and L.S.A.", one; "L.K. & Q.C.P.I.", one; "M.D. Queen's Coll., Canada", one; "M.D. Toronto and L.R.C.P.Ed.", one; "M.D. Toronto", one; and "M.D. New York", one. Of the eighty-three candidates, fifty-four received their diplomas; thirteen were approved in surgery, and, when qualified in medicine, will be admitted members of the College; eight were rejected in medicine, and five were approved; five were referred in surgery, and ten altogether rejected.

ILLEGAL EXPOSURE OF A SMALL-POX PATIENT.—Mary Whelan, of Queen Street, East Greenwich, appeared at the Greenwich Police-court on Wednesday to a summons, at the instance of the Greenwich District Board of Works, charged with exposing her daughter, suffering from small-pox, in a public thoroughfare. Mr. Spencer attended in support of the prosecution; and Thomas Conden, an inspector in the service of the Board, gave evidence showing that the defendant, on the 25th of March last, took her daughter, a servant to a family residing in Tollington Road, Islington, and rode with her in an omnibus to London Bridge, and thence in a railway-carriage to Greenwich; they then walked along a distance of a quarter of a mile to the defendant's home. A fine of ten shillings was imposed, and two shillings cost of summons.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The eighth and last meeting of the twenty-second session was held at the Royal Kent Dispensary, Greenwich Road, on Friday, May 3rd: W. Johnson Smith (President) in the chair. Drs. Gooding and Moon, and Mr. Lockhart, were appointed auditors of the treasurer's account. Dr. John Curnow of King's College was unanimously elected an honorary member. The following members brought forward cases for discussion: Dr. R. Gooding, Cases of Pregnancy complicated with Small-Pox; Dr. Creed, A Case of Intracardiac Thrombosis (Recovery); Mr. C. P. Creed, A Case of Compound Comminuted Fracture of the Skull in a Boy aged 9, followed by a very large Hernia Cerebri (recovery; boy shown in good health). The annual dinner is fixed for Tuesday, June 25th, at the "Ship", Greenwich, at 6 for 6.30 P.M. precisely. Tickets 15s., inclusive of wine and coffee.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens: Extra-uterine Fœtation, by Dr. Hayes; Hand-behind-Head Presentation, by Dr. Bryden; Drawings of a living Double Monster, by Dr. Wiltshire. Papers: Dr. Aveling, "The Curves of the Forceps: their Origin and Use"; Dr. Matthews Duncan, "The Revolutions of the Fœtal Head in passing through a Brim contracted in the Conjugate Diameter";—Royal Microscopical Society, 8 P.M. Mr. F. A. Badwell, "On the Framework of the Mustax of *Melicerta Ringens*"; The Rev. W. H. Dollinger, "On the Measurement of the Diameter of the Flagella of Bacterium Termo".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

ERRATUM.—In the *JOURNAL* for May 18th, page 724, column ii, third line from bottom, for 1824 read 1835.

VACCINATION.

SIR.—With your permission, I desire to lay the following facts before your readers. Every one in the profession knows more or less of the difficulties that are to be contended with in reference to vaccination; and without at all despising the very fine feelings displayed by the mothers of the rising generation, where every one considers her own child purer and brighter than her neighbour's, I think that that feeling is very much abused amongst a certain class of people who do not understand logic, and into whose heads logic cannot be driven. Within the last two or three years, my attention has been called to the subject of vaccination by its being in a few cases followed by a rash or erysipelas; and in many of these cases I have known the parents to be syphilitic, and when vaccinating their children have expected the result that in many cases followed the operation. The following case will put the subject prominently before your readers.

About four years ago, I attended a gentleman for syphilis, who was lately married. When his young wife found herself in that condition which foretold her that she should require the service of some one, I, being her mother's family attendant, was engaged to attend her, although not without some objection on the part of the husband. The child, on being born, had no appearance of syphilis, or any disease whatever, and continued in perfect health up till the time of vaccination; but my suspicions being aroused, I was most particular in subjecting the child to that operation, and selected a very healthy child, to whom I particularly called the mother's attention. I vaccinated three from the one arm, two of which did extremely well, the arms healing in the ordinary course, without the least trouble; the other, as I suspected, came out all over with what appeared to be a syphilitic rash, which got me into not a little trouble; and it was only by my sending for the husband and using to him pretty strong antisyphilitic logic, that it did not become a very fine case for the antivaccinators. I shall be glad to hear of any similar case.—Yours truly,

DAVID ALEXANDER.

Clydesdale House, Hull, May 25th, 1878.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions on Surgical Anatomy, and the Principles and Practice of Surgery, submitted to the candidates at the pass-examination on May 17th, when they were required to answer at least four, including one of the first two, out of the six questions. 1. Describe the origin, course, and relations of the internal pudic artery; and state in what accidents or operations this vessel or its branches may be wounded. 2. Describe "Chopart's amputation" through the foot; and name the structures in their relative positions which are divided in performing that operation. 3. Under what circumstances may iritis occur? Describe the characteristics of this disease in the acute form, and its appropriate treatment. 4. How do you distinguish between an adenoma and a scirrhous of the female breast, before and after removal by operation? 5. Describe the operations which may be adopted for paracentesis thoracis: what are the precautions to be taken in performing them? 6. Describe the signs of a dislocation of both bones of the forearm backwards at the elbow-joint. For what injuries may this accident be mistaken? and how would you reduce and subsequently treat this dislocation?

On the following day, May 18th, those candidates who had not undergone any previous examination in medicine, or did not possess of a recognised medical licence, were required to write answers to the following questions on the Principles and Practice of Medicine. 1. Discuss the pathology, symptoms, treatment, and condition of the urine in hæmaturia, omitting the subject of hæmorrhage from surgical injuries. 2. Describe the morbid anatomy, symptoms, and results of enteric fever. 3. What medicinal plants belong to the order Euphorbiaceæ? Give their medicinal properties and uses, and the names and doses of their several pharmacopœial preparations. Write an unabbreviated prescription in Latin, with directions for use, for a case of acute bronchitis.

The following questions on Anatomy and Physiology were submitted to the candidates at the primary examination for the Fellowship on May 24th, when they were required to answer all of them. 1. State the velocity of the blood in the several parts of its course, and describe the methods by which this has been ascertained. 2. What are the essential structures of a secreting organ? Describe the several types of secreting glands. Give evidence of the direct influence of the nervous system upon secretion. Describe the poison-apparatus in ophidia. 3. Describe the course and relations of the profunda cervicis artery, and the dissection required to expose it. 4. Describe the dissection required to expose the course and distribution of the obturator nerve.

MEDICAL USES OF THE TELEPHONE.

SIR.—As you have mentioned the experiments in progress in America, and as I believe I am the first to have suggested and experimented on the application of the electric telephone to auscultation in this country (my observations having commenced on the 1st of January), I thought it might interest some of your readers and open the way to further suggestions, if I brought before them the actual results up to the present time, and the difficulties in the way of their further development. The telephone I have generally used is one which I put together myself, and which I have proved to be very accurate in conveying the sounds of the voice, reading, speaking, whistling, singing, and blowing; a tune played on a violin at the opposite corner of a small room could also be heard through it, the hearing telephone being in a distant part of the house. I subsequently made a further improvement on this by removing the wood mouth piece, and screwing on in its place a deal stethoscope. The result of my observations in my own practice, in my family, and on some patients I examined at the Brompton Hospital for Consumption, through the kindness of Dr. Tatham, is as follows.

1. On applying the telephone to the chest of a healthy person, no sounds, whether of breathing, voice, or cough, are communicated. The same is the case with regard to the normal sounds of the heart.

2. When the telephone is applied to a very loud cardiac murmur, a sound may sometimes be heard, not continuous, but intermittent, and not distinct enough to be accurately defined.

3. When applied to the trachea of a healthy subject, the voice-sounds may be heard, and also the breathing, when made preternaturally loud by voluntary effort. In a person recovering from catarrh, the voice may be heard distinctly in this manner (*i.e.*, from the trachea), and also the cough, following which may be recognised a large rhonchus.

4. A cough directed into the telephone could of course be heard distinctly: it is divested of all extraneous sounds, and heard merely as a sharp metallic click. The gentlest breath directed into my telephone may also be heard perfectly.

At present, it is difficult to see that much advantage can be derived from the application of the telephone to diagnosis, owing to the fact that apparently no sound can be heard through it which is not heard equally well, or better, with the stethoscope. It is, however, possible that some sounds that interfere with diagnosis may be separated from those that are material to it. I am speaking now of the telephone in the present state of its development. I believe an improvement in its constitution is now being carried out, by which all sound is conveyed by it will be greatly intensified. If this be the case, it may almost supersede the stethoscope.—Yours truly,

J. FOSTER PALMER.

120, King's Road, S.W., May 20th, 1878.

UNQUALIFIED ASSISTANTS.

SIR.—I am sure many unqualified assistants will thank "Undergraduate" for his letter detailing his uphill work for a diploma, and you for your kindness in giving space to it in your valuable *JOURNAL*. In speaking and writing so bitterly of unqualified assistants, few people look at the dark side of our life, or think of the struggles we have to maintain to enable us to pass the portals dividing us from our more fortunate qualified brethren. I am afraid the case of "Undergraduate" is a far from uncommon one. My own career up to the present has been somewhat similar. I, too, was articled to a surgeon for four years, and ere I left him to commence my career as an unqualified assistant, he had done his share towards initiating me into the mysteries of general practice. My own savings, backed by other help, enabled me to enter hospital; but I was compelled to continue my assistantcy, and I have been, and am, giving nine hours daily to my principal; nine hours more are taken up with lectures, study, and meals; the remaining six I devote to rest. When preparing for an examination, I cannot allow myself more than four or five hours for repose; but I hope in a few months to be placed among those who have won their laurels, and are in the magic circle of qualified men.

In speaking of unqualified assistants, I think the fact is lost sight of that many

men undertake the duties as the means to an end. Without the aid afforded to them by this means, they would be debarred from entering the medical profession, and many good men would be lost to it. Some may say, if your course be so hard, why do you not choose a less arduous one? Why should such impecunious individuals attempt to enter the profession? Is the goal worth striving after? May you not pay too dearly for your qualification? To these questions we can only answer, that we love the profession; we think it an honour to belong to it, and to become members of it we are content to suffer; we are willing to pay dearly. But while some of us attain the goal of our hopes, how many are there of whom the world knows nought, who, after years of struggling leave the battle to the strong and the race to the swift, and commence a new path in life, too often, alas! irretrievably ruined in health? or some, again, which for them is perhaps better, die in harness as unqualified assistants; while others live only to grasp the prize, which they enjoy for a brief moment, when it is snatched from them for ever, and their footsteps in the sands of time are obliterated by those crowding after them.

If the struggles some of us have to maintain were known, we should see less often the harsh remarks made on us, and those who now cry "Away with them!" would hold out to us the right hand of fellowship, and lighten our daily struggle by the kind voice of encouragement and sympathy.

I must apologise for trespassing so much on your valuable space; but I know from you we shall receive that which so few accord us—viz., JUSTICE.

UTERINE HÆMORRHAGE.

SIR,—At the Glasgow Medico-Chirurgical Society's meeting of March 1st, 1878, I showed an instrument by which I could instantly arrest uterine hæmorrhage. The members at first thought (like Dr. Jay) that the invention was old; but before I had finished describing it, they were convinced of its originality and utility. There are two ways by which medical men endeavour to arrest uterine hæmorrhage. One is by trying to excite uterine contractions. For this purpose, some will give ergot, others turpentine; or one will inject hot water into the uterus, another cold. Mr. Sawyer's instrument (to which Dr. Jay referred) is a bag of India-rubber, with two tubes attached to it: cold water is poured in by one tube and escapes by the other before it has time to become heated; in other words, it is an ingenious and simple way of injecting cold water into the uterus in order to make it contract. I think it requires no argument on my part to prove that any of these modes of treatment can only succeed where the hæmorrhage depends on inertia of the uterus, and that none of them can be relied on as an infallible remedy even for that. In cases of adherent placenta, it is impossible for them to have any beneficial effect. Another way is by the use of styptics, as recommended by Dr. Barnes; but I would ask, is this not going back to the barbarous times, when after amputation boiling pitch or strong acids were employed to stop the hæmorrhage?

I will now endeavour to describe the instrument I have adopted, and what induced me to try it. In Churchill's *Midwifery*, the last sentence in the chapter on "Flooding" contains the following words: "Mr. Slyman proposes an elastic bag introduced into the uterus and filled with cold water or air, so as to make pressure." Nothing more is said about it, and probably there the matter ended. I thought the idea of arresting uterine hæmorrhage by pressure a good one, but in this case very imperfectly carried out. It was not stated how much pressure was required, nor was there any provision made for permitting the uterus to contract. In the *Encyclopædia Britannica*, I discovered that if a tube were inserted into an artery the action of the heart would raise the blood in it seven feet and a half: from this I knew that if a tube of that length were attached to an elastic bag in the uterus, and bag and tube filled with water, the uterus would then sustain a pressure equal to that which the heart is capable of exerting, and hæmorrhage would be impossible. If the uterus contracted, the water would be expelled through the tube; but after contracting, if it relaxed (which it always does), the water would sink in the tube, and for every foot it sank there would be about one pound less pressure per inch on the uterus; and if the pressure in the bag were less than in the blood-vessels, hæmorrhage would set in again. Letting the end of the tube dip into a glass measure remedied this defect. I cover the bag well with glycerine: it will prevent septicaemia, and hasten the separation of any dead portion of placenta. After the bag has been introduced, I use whatever pressure is necessary to arrest the hæmorrhage by injecting tepid water; then I separate the pump from the tube, and put the end of it (the tube) into the receiving vessel at the proper height (it can be suspended from the ceiling, or anything else convenient). Nature does all the rest.

I have now given the history of my invention, and believe no man can find fault with it, except through ignorance or prejudice.—I am, etc.,

DAVID CHRISTIE, L.F.P.S. Glasg., L.R.C.P. Edin.

Carriage by Letterkenny, co. Donegal, May 2nd, 1878.

THE following communications have been handed to the General Manager:—Mr. B. Brooks, Hull; Mr. W. R. Davies, Sandbach; Mr. W. Ganderton, West Bromwich; Mr. G. H. MacSwiney, Liverpool; Messrs. Corby, Stacey, and Co., London.

INSURANCE OFFICES AND MEDICAL FEES.

SIR,—I forward to you a correspondence, which I hope you will think deserving of publication. The great majority of insurance offices deal fairly with the profession, and it is well that we should all know which of them do not so.—Yours truly,

Mortimer House, Clifton, May 15th, 1878.

(Copy.)

"Mortimer House, Clifton, May 4th, 1878.

"Sir, I have received from your office a request for a report on the health of Mr. X. Y. This request is not accompanied by the fee, or promise of a fee, which a physician expects from an insurance office. I should be glad to know whether the omission was accidental.—I am, &c., yours obediently, JOHN BEDDIE, M.D., etc. The Secretary London Life Association."

(Copy.)

"London Life Association, 11, King William Street, London, L.C., May 6th, 1878.

"Dear Sir,—This being a mutual insurance society, and not a trading corporation, it requires every person desiring to be admitted to its advantages to furnish evidence that he is in good health, without expense to the society. If he cannot do this, he cannot be admitted. Mr. X. Y., therefore, and not this society, made application to you for a report, and the form in which that might conveniently be given was supplied to him to save trouble. Your application for a fee should therefore be made to him.—I am, dear sir, your obedient servant, EDW. DUCKER, Secretary.—Dr. Beddie, Mortimer House, Clifton."

(Copy.)

"Mortimer House, Clifton, May 7th, 1878.

"Dear Sir,—The statement that the application was made to me by my patient, and not by your office, appears to me to be a subterfuge unworthy of the directors

* The application was on a printed form, and came from the office.

of a respectable corporation. The information is obviously required by, and for the advantage of, the association, to guard against the possible entrance of bad lives, and it is found in honour to defray the expense of obtaining such information, instead of endeavouring to wheedle it out of physicians without payment. It is nothing to me that my patient, who is an honourable man, would certainly repay me: I proceed on the ground of principle. Your rule being what it is, I must decline further correspondence, and remain, yours faithfully, JOHN BEDDIE.—The Secretary London Life Association."

SIR,—Having examined a medical man for life-assurance, am I supposed to hand over the fee to him, or retain it myself?—I am, etc., J. E.

* The fee being paid by the office, may evidently be retained by J. E. His service is to the office, which has no claim upon him for gratuitous work.

ENQUIRER.—It is not a duty of the clerks to guardians to send the names of successful candidates for appointments; nor are they sent by the Local Government Board. For the information on this subject which is communicated to our readers, we are indebted to the courtesy of the clerks to the boards of guardians and to other correspondents.

SUPERINTENDENTS OF ASYLUMS.

F.R.S.—The appointments of medical superintendents of the county and borough asylums of Great Britain rest with the Committees of Visitors, and are almost invariably filled from those who have had experience in lunacy practice as assistant medical officers; but those in Ireland are made by the Government. The duties, besides medical, are a general control and supervision under, combined with responsibility to, the Visiting Committee, with whom it is optional to grant a retiring pension, not exceeding two-thirds of the salary and allowances, on account of age, ill health, or long service; provided always such is sanctioned by the Court of Quarter Sessions or by the Town Council, the grant in the latter case being paid out of the local rate fund. For further information on this latter head, see Lunacy Acts, 15 and 17 Vict., c. 27, s. 57.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifeshire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Marion Sims, Paris; Dr. H. Macnaughton Jones, Cork; Dr. E. Waters, Chester; Mr. Eastwood, Huddersfield; Mr. Howard Marsh, London; Dr. Ellis, London; Medicus; Dr. David Foulis, Glasgow; Dr. Parsons, Dover; Dr. J. B. Bradbury, Cambridge; Dr. Cochrane, Edinburgh; Mr. Frederick Scott, Manchester; Enquirer; Dr. Page, Plymouth; A Constant Reader; Dr. Edward C. Seaton, London; Dr. Greene, Birmingham; Dr. Bertheraud, Angers; Dr. Lees, Market Drayton; Dr. Levinge, Stapleton, Bristol; Dr. Ruata, Padua; Mr. J. E. Pitt, Norwich; Dr. Fletcher Beach, Clapton; Dr. George Johnson, London; Dr. Leslie Atchill, Dublin; Dr. Edward Houghton, Norwold; Mr. W. Story, Leighton Buzzard; Medical Officer of Health, Torquay; Dr. R. L. Bowles, Fossebrook; Mr. D. Alexander, Hull; Dr. Haddon, Manchester; Mr. Royes Bell, London; Dr. Hitchcock, Lewisham; Mr. J. T. Browne-Mason, Exeter; Dr. Brushfield, Br. Jews; The Secretary of the Obstetrical Society; Mr. G. Eastes, London; The Secretary of Apothecaries' Hall; Mr. T. M. Stone, London; Dr. J. Milner Fothergill, London; The Registrar-General of England; Dr. Sandby, Birmingham; Mr. W. Mac Cormac, London; Mr. Richard Barwell, London; The Registrar-General of Ireland; Dr. J. W. Moore, Dublin; The Secretary of the Royal Microscopical Society; Messrs. Corby, Stacey, and Co., London; Mr. John Evans, Swansea; Dr. W. Whalley, Bradford; Dr. Arthur Ransome, Manchester; Mr. A. H. Benson, Dublin; Surgeon-Major Cay, London; Mr. J. R. Fisher, London; Not a Fool; Mr. W. W. Reeves, London; An Associate; Dr. Tripe, Hackney; X.; Dr. Williams, London; Mr. Jabez Hogg, London; Dr. Gowers, London; Dr. W. Procter, York; Mr. H. Greenway, Plymouth; Dr. Crichton Browne, London; R. N.; Mr. N. A. Humphreys, London; Mr. Walter Whitehead, Manchester; Mr. Alban Doran, London; Mr. W. Daxon, Ennis; Dr. P. P. Langford, London; Our Dublin Correspondent; Mr. E. Garland, Yeovil; Dr. J. Northcote Vinen, London; Mr. W. K. Treves, Margate; Mr. W. Lewis Morgan, Oxford; L.R.C.P. London; Fides; Messrs. Salt and Son, Birmingham; Dr. W. F. Wade, Birmingham; Dr. P. H. Pye-Smith, London; Dr. W. M. Ord, London; Our Edinburgh Correspondent; Dr. F. Warner, London; Dr. John Little, London; Mr. J. G. Langley, London; Mr. George Browne, London; Mr. R. B. Wilkins, London; Mr. S. V. Mercer, London; Mr. George Price, Wolverhampton; Mr. P. Q. Karkeek, Torquay; Mr. W. Ganderton, West Bromwich; Mr. R. Richardson, Portsmouth; Mr. J. W. Hubbard, Maidstone; Mr. G. H. MacSwiney, Liverpool; Mr. J. R. Salter, Bournemouth; etc.

BOOKS, ETC., RECEIVED.

Sul Renatismo Articolare a corso rapido. Studi Clinico-Anatomici, di Concato Luigi. Con 5 Tavole in Cromo-litografia e 3 Tabelle. Roma, Torino, Firenze: 1876.
An Elementary Course of Botany. By Arthur Henfrey, F.R.S. London: Van Voorst, 1878.
Lectures on Surgical Anatomy. By John Chiene, M.D., F.R.C.S. Edinburgh: David Douglas. 1878.

A LECTURE ON THE USE OF THE MICROPHONE IN SOUNDING FOR STONE.

*Delivered in University College Hospital, London,
Tuesday, June 4th, 1878.*

By SIR HENRY THOMPSON, F.R.C.S., M.B.,

Surgeon-Extraordinary to His Majesty the King of the Belgians; Consulting Surgeon to the Hospital.

GENTLEMEN,—My object to-day is to show, as far as I can, how the microphone, a very recent invention of Professor Hughes, may be applied to the operation of sounding for stone. But, in order to make myself perfectly clear to you, it will be necessary at the outset to define one single term, otherwise there is a chance of what I say being misunderstood. I mean the word "sound". This word, as we know, has a technical sense, and signifies the instrument lying before me, the sound; and the verb that arises from it is "to sound"—to sound in the bladder. But the word is also used to represent an acoustical phenomenon, that is the note produced by striking the sound against another body. If I strike this table, I am said to make a sound; but that is precisely the term that I will not use; because, to get into such a sentence as this, "I am going to use that sound to sound a patient, and please listen to that sound", might lead to confusion. Instead, therefore, of speaking of sound, I shall use the word "note" as being the best substitute I can get. If I use the term sound at all, I shall mean this instrument or the manner of using it; when I want to speak of the effect produced, I shall ask you to listen to the note.

Having made that preliminary remark, I have a word or two to say about sounding for stone, independently of the apparatus that is before us. Let me ask you to go back some fifty years—which none of you, however, can do, but which down here some of us are able to do. Forty-five or fifty years ago, sounding for stone was a totally different operation from that which it is to-day; and in my opinion that fact is not half enough appreciated by the profession either here or anywhere else. We have traditional notions of sounding for stone; and if we sound at all with the same intention or in the same manner as our forefathers did, and if we adapt their mode to the exigencies of the present day, we shall meet with nothing but failure. I go further still, and say this, that you might as well compare the famous old Brown Bess with the rifle of precision of the present day, as compare the sounding of 1828 with that of the year 1878.

You will remember that at the time of which I speak there was but one operation for stone. Whether the stone was large or small, there was but one mode in which it could be removed from the human body, and that was cutting—lithotomy as it is generally termed. It mattered little what the size of the stone was, within certain limits. The size of the incision would not vary greatly. A certain incision—dangerous at certain ages, without doubt—had to be made; and whether that were a quarter of an inch or half-an-inch bigger one way or another was not a matter of very great importance. Hence, it was not then a matter of high import that you should discover the stone when it was small. Indeed, it was a common thing in those days for the stone not to be thought of when it was small, and it only came under surgical cognisance when it was large. No one liked to do a great operation to remove a thing about as big as an apple- or orange-pip; and it was common for the surgeon to say (more, however, on the Continent than here), "You have symptoms of stone it is true, but I think it is not ripe for an operation; go away, and come again in a year or two". Patients were thus absolutely put off from month to month, and sometimes from year to year, until the stone should be sufficiently "ripe" for the operation. No one liked to perform an operation unless the stone was nearly of the size of a chestnut. The problem of to-day is an entirely different one. We now have two modes of operating: one of them, as you know, by crushing, in addition to the older one by cutting. The element of success in the operation of crushing is that you should get the stone early, that you should find it small, and then you may make almost absolutely certain of a successful and safe operation. The large stone, as before, will be remitted to the cutting operation, but one may have a much more successful operation in crushing, provided the stone is small. The end of all our endeavours ought to be find the stone as small as possible and remove it in that condition. But that is not the whole problem.

Were it only so, you would see that a much more delicate operation of sounding is required than heretofore; but, inasmuch as the operation of crushing, however small the stone, means making it into fragments smaller still, you will see that it is necessary not only to be able to recognise the small stone by sounding, but also to recognise small fragments of the stone. It is alleged against lithotripsy that, if you leave a small fragment behind after the operation is over, or presumed to be over, that small fragment may become the nucleus of a larger stone hereafter, and you are not only not benefiting your patient, but you have laid a train for more serious mischief. Thus it is that I have all along said that, if lithotripsy be not equal to removing the least fragment which otherwise might be a trouble, it is not an operation to be admitted into the domain of surgery. I would rather cut every case that came to me—I mean with a view to success—than cut only some, and do lithotripsy badly for the others.

There is no perfect lithotripsy, there is no lithotripsy worth your notice or mine, unless it can make absolutely sure of removing every fragment from the bladder. Now, you may say, in view of this which I have before me: "Is it not the case that lithotripsy is equal to that at the present moment? If it be not, why is it that it has stood so high as an operation?" Well, I say, it is equal to it. What I have to show you here is something which will supplement our present power; but, I say it with the greatest confidence, the result of our present power with regard to lithotripsy is, that we are able to remove to the last fragment with unerring certainty, provided the hands in which the case is are fairly (and only fairly) practised. I have demonstrated over and over again, both here and in hospitals abroad, the power of our present instruments to remove the smallest possible fragment. I have, over and over again, obtained an audible note from a piece no larger than a split pea, removing it afterwards to show the truth of the affirmation. You may say: "What more can you want than that?" Well, I think, not much; but let me confess that that is not at present an universally received opinion. There are many persons who still bring allegations against lithotripsy, saying: "It is all very well; you may happen to do this, but it does not lie within the usual practice of surgery to be so certain about that." It is still thought that it is a very easy thing to leave a piece behind. At all events, we will grant this, and we will grant still more, that if we can get anything which will make our task more easy, more simple or certain, it is our duty to add it to our present powers; and I think you will find that we have that in the apparatus before us.

But before showing you what the power of the apparatus is, I wish it to be most distinctly understood that this is not an instrument which is invariably to be used—no, not in more than one case out of twenty. Please understand that the stone is to be found by the ordinary method; and this is, I certainly will not say a surgical or scientific toy, a resource which we have in reserve for exceptional and difficult cases, or for those who may find it perhaps more useful than their unassisted hands and ears. It may be compared to a very high power in the microscope. I need not tell you what great discoveries have been made with the microscope, in every direction throughout nature, with very low object glasses—glasses not to be mentioned in comparison with the high powers which we now use. It is a question how much those extremely high powers have done. They have really done very little. We have at present our fourth, our fifth, and our eighth, within the reach of ordinarily good microscopists; but, when you come to the twelfth and the sixteenth, they can only be used by highly skilled persons, and only here and there can such extremely high powers be required.

Now, the analogy between the microscope and the microphone is very strong. There are many things which we have been in the habit of regarding as without sound, as not producing a note. Nobody, for example, has ever heard a fly walking upon a window-pane. Most persons would say it was noiseless; but it is not so. It simply produces a noise which our unaided ears cannot appreciate. We cut our finger, and we see a little blood. The ordinary eye sees nothing but a little red fluid; nine persons out of ten would be astonished at seeing, under the microscope, what a composite fluid it is—the corpuscles, the liquor, and so on. Just so there are many notes in nature of which we have not the slightest appreciation, but by Professor Hughes's admirable invention we can hear and measure them.

With these observations, and wishing you to understand clearly the place in which I should put this relatively to our surgical armamentarium, I will show you what the microphone is. Here is a battery, with the smallest section employed. If we had used a large section, it would have interfered with the success of the experiment. The current goes up to a telephone, then comes back here, and then goes on to another telephone. It is to be united with the sound, then with this wire, which goes to the other pole of the battery. It does not matter whether you begin with the positive or the negative.

I have here an ordinary sound for sounding a bladder and a microphone upon it. You see a little piece of gas-carbon balanced with a spring, and another piece lying transversely to it. Now, by striking anything with the point of the sound, an acoustic wave goes through the particles of the steel sound and comes up to this piece of carbon. This movable piece receives the impulse, and this now comes into circuit. But it is no longer an acoustic wave; it is transmuted into an electric wave. It suffices to touch a pin; the wave goes up; molecular changes take place which are acoustic in that piece of carbon, and there it ceases; they are then transmuted into electrical waves and are made audible by means of the telephone. Here is the secret of the matter: that, however tiny an acoustic wave is, it may be magnified the instant it becomes an electric wave. I connect these two poles, and, if I rub the two ends of the pieces of wire together, you can distinctly hear the sound by means of the telephone. (Experiment.) The circuit is now complete. I have here an extemporised bladder (a basin lined with wash-leather), and I put in it a small calculus. We will suppose that there is some suspicion that a portion of a stone is in the bladder, or a small fragment left in it. You may push it perhaps, but you cannot feel anything; but, with this instrument, if you touch with your sound a fragment, however small, your telephone will at once speak. I have used the instrument in the bladder, but, unfortunately, I have not a patient here to-day. If I touch but the point of a pin or a finger-nail, the sound is distinctly heard. Some trouble is required in order to get the microphone right for our purpose. In this respect, it is like the aneroid. If you want to measure certain heights with an aneroid—if you want to measure from the sea-level up to five thousand feet—you have one instrument for that purpose, and then for a second five thousand feet you require another instrument. One aneroid will not suffice for the whole range in the case of Mont Blanc, for instance, which is fifteen thousand feet; there you would require a mercurial barometer. The aneroid has only a certain limit within which it is correct. So it is with the microphone. I could put a microphone on this circuit which would be utterly useless. The microphone I have shown you would not enable you to hear the march of a fly. Professor Hughes says that he could make the march of a fly across a piece of net sound like the tramp of an elephant. I have heard a fly walk across a piece of net, with a very audible note. In a public exhibition of the instrument, with an audience, say, of one thousand or one thousand two hundred persons, a large telephone is used—a round trumpet-shaped thing that conducts the notes to the audience. Now, all that is very well in an ordinary lecture, but it is of no use in operating for stone. What I want to show you here is the way in which the instrument may be used in the chamber or hospital-ward. But, as I have said, this instrument is not delicate enough to make the march of a fly audible. If it were, when you put it into the bladder, you would have such a noise from friction from the urethra and bladder that you would not hear the little bit of stone. This is an illustration of the difficulty that often attends the use of delicate scientific things when you come to actual practice. This seems very simple when it is all arranged before you, but it has required some hours' trouble to get it right.

I have an instrument here which is fine enough and delicate enough to hear the sound of a fly; but, if the point of the sound were merely struck against the bladder, it would give a metallic note, just as if it had struck against a stone, so very sensitive is it. It must be borne in mind that you do not get a different note from the different bodies struck. The electric wave merely multiplies or magnifies the wave in the steel instrument; but it does not matter whether you have struck a blanket or a flint, or the mucous membrane of a bladder or a stone; the sound is precisely the same. (Experiment.) Here, if you have too powerful a battery, the friction-sounds would be augmented, and you will not succeed in your effort. Even the echoes of the room may interfere with your operation. I will now put the sound in the extemporised bladder, and, as I touch the little fragment of stone, you will hear a sharp click. It is in dirty thick water, and I cannot tell myself when I strike it; but those of you who listen through the telephone will perceive it.

In a few words, then, the demonstration is this: that you can make absolutely logically certain the existence of small fragments in the bladder, for the detection of which you have hitherto depended upon your unassisted ear and hand. I want particularly to say that the unassisted ear and hand will suffice for almost all cases. There may be one in twenty cases in which it may be necessary or desirable to use this instrument. It is something like the case of the endoscope in regard to the urethra. When it was first introduced, a good deal was said about its being applicable to all disorders of the urethra and the bladder; but it was found in practice that, however well it looked upon paper, there was only a case here and there that might be benefited

by its use. What has mainly actuated me in bringing this subject before you is this. It is obvious that this new invention, which increases the sound of a foreign body, is equally applicable to a bullet or a shot, or any foreign body at the bottom of a wound or a piece of diseased bone. I thought it was desirable that this power should be examined carefully by one who was in the habit of doing something in this way, and it occurred to me that it would be agreeable to yourselves, and certainly gratifying to my own feeling, that the utilisation of the powers of this new invention should be first shown, not at Paris, not at Vienna, but in London, and, best of all, at our own Alma Mater.

I am indebted to Professor Hughes's kindness and courtesy for the microphones which I have exhibited, and for his aid and counsel in the matter.

OBSTETRIC MEMORANDA.

CASE OF TWINS AND SPONTANEOUS EVOLUTION.

I was requested to attend Mrs. S., aged 24, during her confinement. This was her fifth pregnancy. On arrival, I was informed that the pains were frequent and of a bearing down character, and, on examination *per vaginam*, I found the head presenting in what is known as the fourth position; that is, the long diameter of the head occupies the left oblique diameter of the pelvis; here the forehead is close to the right foramen ovale, while the occiput is directed to the left sacro-iliac synchondrosis; the anterior fontanelle is directed to the former, the posterior to the latter. As the case progressed, the occiput turned into the hollow of the sacrum, and the forehead was directed to the symphysis pubis, and eventually it emerged under the pubic arch, followed by the eyes, nose, mouth, and chin. On the birth of the head, the cord was found coiled once round the neck; while I was drawing it down and hooking it over the head, the uterus acted strongly, and the child was born. After tying the cord and waiting for a few seconds, I made a vaginal examination, and found the placenta in the vagina, and by its side the left arm of a second child. The uterus was acting so strongly and continuously that the membranes were ruptured, the placenta, which appeared to have a vascular connection with each other, were expelled, and the child was jammed down into the pelvis, so that it became impossible to turn. The pelvis being roomy, and believing the child to be small, and seeing that the thorax was well down in the hollow of the sacrum and the axilla, almost on a level with the lower edge of the pubes, the pains being strong, I thought it best to leave the case to nature, and was not disappointed; for the thorax became lower at each pain, followed by the side of the abdomen, and, lastly, the pelvis and lower extremities, the arm and shoulder remaining fixed all the time. On slight traction being made with the fingers hooked over the shoulders, the head soon followed, and the second child was born just thirty minutes after the birth of the first. Both were girls; the first lived, but the second, I need hardly say, was dead. This was, no doubt, due to the separation and extrusion of the placenta prior to the birth. The principal points in this case were, first, the rather unusual presentation of the head of the first child, and its being born with the face towards the pubes; secondly, the rapid expulsion of both placenta prior to the birth of the second child; and, lastly, the very rare position of the second child, which might be placed in the list of cases under the name of spontaneous evolution.

DAVID S. BRADLEY, M.D., Chesterfield.

PLACENTA RETAINED ONE HUNDRED AND TWENTY-THREE DAYS AFTER MISCARRIAGE.

MRS. P. miscarried on December 3rd, 1867, when a three months' fetus was expelled. The placenta could not be removed. There was a continual, thin, sometimes pale, often very red discharge, with occasional little clots of blood. On April 2nd, 1868, I found a globular mass presenting at the os uteri; the os dilated to the size of a florin. I could not grasp the presenting body, but managed to rotate it with the finger. This seemed to loosen it. I gave ergot in fifteen-grain doses of the powder. After taking the ergot for twenty-eight hours, the placenta came away. It weighed about three ounces; its fetal surface was folded on itself. The mass was a pointed oval; the maternal surface pale straw-colour; the substance more dense than the ordinary placenta. *There were no signs of putrefaction whatever.* This case, like those in the JOURNAL of the 4th and 15th ult., has some interest, I think, especially in a medico-legal sense; and therefore I send it to be in company with the previous cases.

FREDERICK W. P. JAGO, M.B.Lond., Plymouth.

REMARKS ON CHOLECYSTOTOMY IN DROPSY OF THE GALL-BLADDER.

By J. MARION SIMS, M.D.,

Honorary Fellow of the Obstetrical Societies of London, Dublin, and Berlin;
Ex-President of the American Medical Association; etc.

AN American lady, aged 45, living in Paris, was married at twenty-three, and had one child, now nineteen years old. She had change of life at forty-three, without any constitutional disturbance. A woman of fine intellect and fine appearance, weighing one hundred and sixty pounds, she had enjoyed uninterrupted good health all her life. Her family history was excellent, and her regular habits of living were such that she had not consulted a physician for the most trifling ailment in the last twenty-five years. Besides all this, she was most happily married and enjoyed every comfort and luxury of life that wealth, friends, and a loving husband could bestow. But at last a great sorrow fell upon her, and her husband wisely suggested change of scene, and she spent the months of August and September 1877 in Switzerland. While there, she complained of the cold, and occasionally of pain in the right lumbar region, high up under the false ribs. For the last twelve months, she had now and then complained of pain in the right hypochondrium, when she stooped over to button her shoes, but not under any other circumstances. She returned home in October, not much improved in health; and, in the later part of November, she became suddenly jaundiced. In two or three days, the jaundice was of a *deep mahogany colour*. She complained of languor and debility, but of no pain. Her husband and friends wished her to consult a physician, but she refused, saying she was not at all ill, and she supposed the jaundice would disappear spontaneously, as it was not attended with physical suffering. The jaundiced tint became deeper, and at last she agreed to see a physician, and Dr. Felix Bremond was called on December 5th, 1877. He prescribed the usual remedies under such circumstances, but with no marked improvement. On December 30th, Dr. Moissonet and Dr. Paquelin saw her with Dr. Bremond, and they discovered some unnatural swelling about the lower border of the liver. They saw her again with Dr. Bremond on January 7th, 1878. On January 8th, on going to stool, she had a sudden discharge of clear uncoagulated blood from the rectum. The discharge of blood was preceded by a gripping pain around the umbilicus. She had passed a mass of coagulated blood from the bowels some days before; and for several days since then she had been passing small quantities of blood, which were always preceded by a gripping pain about the umbilicus, but she attached no importance to it and said nothing about it. Dr. Bremond, supposing that the blood came from the hæmorrhoidal vessels, at first tried astringent injections, but without effect. He then prescribed perchloride of iron, which appeared to control the bleeding; for on the 10th and 11th it was less, but on the 12th and 13th it was more profuse. The dose of the perchloride was then increased, and the bleeding ceased on the 17th. But it appeared again on the 18th, on the 21st, and occasionally up to January 30th, when it ceased entirely. During all this time, she took the perchloride of iron. On December 6th, about a week after the jaundice set in, she began to suffer from intense itching and burning of the skin, which were almost unbearable, and she occasionally had lancinating pains darting like electric shocks through the joints. The itching and burning were so severe that they prevented her from sleeping. They were always worse in the afternoon and evening. Dr. Bremond tried emollients, baths, anodynes, and nervines, with no permanent effect. The heat of the bed seemed to aggravate the itching, and then, if her arms and legs were uncovered, the exposure to the air made it still worse. It was most painful to witness sufferings that could not be relieved. She would often rest for hours on her knees and elbows to save her body from contact with the bed; and again, she would spend the night walking the floor, scratching, and crying like a child. Ordinarily she had great moral courage, but she lost it all under this uncontrollable itching and scratching. Every part of the body was the seat of itching, the scalp, and even the inside of the eyelids. She was never clear of it, but it was

always worse in the afternoon, especially towards five or six o'clock. About the middle of February, it became less in the lower extremities, but the upper extremities and the body suffered as usual. In addition to the itching and burning, there was great hyperæsthesia of the skin. Sometimes, when one hand accidentally touched the other, she would suddenly jerk and quiver as if an electric spark had passed between them. The hyperæsthesia was occasionally so aggravated that she could not bear the weight of the bedclothes, or a gentle touch; while again, the itching was so intolerable that she was compelled to scratch with great violence. She was never clear of the itching and burning sensation in the skin, which was occasionally attended with what is known as "goose-flesh" roughness, with a sense of internal chilliness, but she never had distinct rigors. She passed whole nights without sleeping, simply because of the itching and scratching. No remedy, internal or external, produced any permanent benefit.

On January 15th, 1878, Dr. Noël Gueneau de Mussy saw her in consultation with Dr. Bremond. The swelling in the right hypochondrium had increased, and was now easily recognised as a distinct tumour. For some time, she had complained of constant aching pain and weight in the tumour, extending back to the right lumbar region, with occasional pain under the right shoulder-blade. The pain in the tumour was sometimes lancinating, and, when she turned in bed, she was always conscious of the movement and pressure of the tumour. From this time, Dr. Bremond could see that the tumour grew from day to day. She had had nausea and vomiting from time to time, but now she vomited almost daily. From the inception of the jaundice, her stools had always been clay-coloured, except when they were bloody, and their odour was very offensive.

On February 7th, Dr. Labbé was called in consultation with Dr. Bremond and Dr. Gueneau de Mussy; but, in spite of their best efforts, there was no amelioration of suffering. The previous loss of blood and loss of sleep from itching, the continued enlargement of the tumour and the constant pain, the inability to take food in sufficient quantities, and the daily vomiting, all conspired to produce a physical and moral depression that created great anxiety. It is useless to give a daily report of the progress of the case. All days were bad and all more or less alike. The same itching and burning, the same sleepless nights, the same offensive clay-coloured stools, the same pain in the tumour, in the right lumbar region, and under the right shoulder-blade, with occasional vomiting, were suffered every day. Our patient, from being a stout handsome woman, became thin and emaciated; and was jaundiced, from the second day after her first attack, of a deep-brown mahogany colour. The urine was always scanty, intensely high coloured, and gave a bile tinge to the sides of the vessel when shaken. Besides Dr. Moissonet, Dr. Gueneau de Mussy, and Dr. Labbé, she was seen by Dr. Péan, Dr. Bouchut, Dr. Paquelin, and Dr. Dusseris.

I saw the patient with Dr. Bremond on March 30th, and obtained the history already given. The tumour, which was continuous with the liver, filled up the right hypochondrium, reaching far below the umbilicus; and Dr. Bremond showed me two diagrams, one made on March 6th and the other on the 16th, which plainly demonstrated the size of the tumour and the rapidity of its growth.

On March 6th, it extended eleven *centimètres* (four inches and a quarter) below the umbilicus, and it was eleven *centimètres* in its transverse diameter.

On March 16th, it extended fourteen *centimètres* (five inches and a half) below the umbilicus, and it had the same transverse diameter, measuring from the linea alba toward the false ribs. To the sight, the right hypochondrium was much larger than the left. The tumour was oblong, rounded, and slightly movable laterally. To the touch, it was sensitive and hard, or tense. The tension was so great as to mask fluctuation; still, I detected fluctuation, and gave it as my opinion, that it was a cyst connected with the liver, but whether hydatid or dropsy of the gall-bladder I could not say. But I advised aspiration as a diagnostic means to guide subsequent treatment. Dr. Bremond at once agreed to this course. Accordingly, on the following day, assisted by Dr. Bremond and Dr. Pratt, the tumour was aspirated, and thirty-two ounces of a dark-brown fluid were evacuated. From the colour of the fluid, I supposed it was bile. But an analysis showed that there was no bile in it and no hydatid hooks. The immediate effect of emptying the tumour was greatly encouraging. She was relieved of all pain in the region of the tumour and liver. She slept all night and a good deal during the following day. There was no vomiting, and she had no itching for two days. She was able to take fluid nourishment, and the pulse and temperature were normal. But the urine was scanty (eighteen to twenty-four ounces a day) and very high coloured. These favourable symptoms did not last long. Two days after the aspiration, she complained of itching again in the upper extremities, of pain in the right lumbar region and under the right shoulder-blade, and of nausea.

Her stools had the same fearful odour, and were always whitish or clay-coloured. She gradually became weaker, sleeping but little, worn out with itching, and prostrated for want of nourishment. On April 8th, nine days after the puncture, she had a slight bleeding from the nose.

April 9th. She was very nervous, and crying from the pain of itching, and felt sore all over from scratching; nauseated; exceedingly feeble; she fell into a sort of stupor, which was afterwards ascertained to be syncope. She had several of these attacks of syncope, with nausea and exhaustion, and Dr. Bremond was obliged to remain with her nearly all night. With the syncope, she had pain in the stomach, also about the umbilicus, and a sense of coldness; and towards morning she had hiccough, cold hands and feet, and vomiting, with complete prostration, the pulse being frequent and feeble. This state of prostration passed off in about twenty-four hours, when the skin became warm and the pulse normal. She passed no urine during all this time. Having been called from the city, I did not see our patient after the aspiration till April 13th, just a fortnight. I found her much weaker, and suffering as usual with itching, nausea, vomiting, and having stools of the same colour and odour as before; and she complained very much of the tumour, which was now nearly as large as before the puncture. It was heavy, and dragged as she lay or turned in bed. It was more sensitive on pressure than ever before; indeed, there was such a degree of sensitiveness that she could hardly bear to be touched. There was considerable tympanites, and a deep breath greatly aggravated the pain in the tumour. She also complained of the same old pain extending from the shoulder-blade down the right lumbar region. The pain in the tumour was so much worse—there was so much tenderness on pressure—such evidence of inflammatory action, with such a degree of prostration—that Dr. Bremond and myself, looking upon the case now as hopeless, agreed to cut down on the tumour, freely open it, empty its contents, and, if it proved to be the gall-bladder, to attach its incised border to the edges of the abdominal incision, and thus to make a fistulous opening that would insure against its refilling. We were encouraged to make a permanent fistulous opening, because, first, we saw such improvement in all her symptoms follow the temporary removal of the fluid by aspiration; second, it would be in imitation of the efforts of nature in all similar cases where recovery has taken place; and third, speedy death was inevitable if we did nothing.

Operation.—April 18th, 10 A.M. There was great tenderness and pain in the region of the tumour, aggravated by pressure. For the last three or four days, there was marked tympanites. The pulse had risen from 75 up to 110 and the temperature to 100 deg. Her sufferings were altogether so much worse than they had ever been before, that she implored us to lose no time in giving her the relief she expected from the operation. Dr. Hayden gave ether, and Dr. Bremond and Dr. Pratt assisted me. The operation was performed under proper antiseptic precautions, with carbolic spray, and carbolic lotion for hands, sponges, and instruments. It took an unusually long time (twenty-four minutes) to get the patient under the influence of the ether. An incision, three inches long, parallel with the linea alba, was made over the most prominent part of the tumour, about three inches to the right of the umbilicus. It was begun an inch above the level of the umbilicus, and extended two inches below it. The peritoneal membrane was soon reached, but was not opened till all bleeding from divided vessels was controlled. As there was such a hemorrhagic tendency, this required six artery forceps on each side of the incision. When the peritoneum was opened, several ounces of pinkish serum (perhaps six or eight) were discharged. I am somewhat in doubt whether the pinkish colour of the serum was due to the rupture of recent adhesions between the cyst and the parietal peritoneum, or to osmosis from the peritoneum. But I think it was from the latter cause; for I did not, by sense of touch, discover the adhesions, if any existed. A Dieulafoy's trocar of the largest size was thrust into the tumour, and twenty-four ounces of a dark-brown fluid withdrawn, which I supposed to be bile. As soon as the cyst was emptied, it was hooked up with a tenaculum and pulled to the outer edge of the incision, where it was seized with forceps and drawn out for about two inches. It was there held while the finger was passed into the peritoneal cavity, along its under and upper surfaces, when it was ascertained, by its attachments to the liver, to be the gall-bladder. Dr. Bremond, Dr. Pratt, and myself each thoroughly explored the sac by touch, and satisfied ourselves that it was the gall-bladder. This multiple manual investigation would have been unjustifiable and hazardous without antisepticism. The gall-bladder was then incised with scissors, to the extent of about two inches, and was thoroughly cleaned out with sponge-probings passed to the bottom of the sac, which, on measurement, was found to be eight inches deep. At first, there were removed about two ounces of a dark-brown fluid, much thicker (containing more mucus) than that already drawn off; and then there were drawn out with the probang a half-dozen or more gall-stones. One

probang after another was then passed in, and swept around, till sixty gall-stones were removed.

Having emptied the gall-bladder, it now only remained to secure its open border to the upper angle of the abdominal incision to insure a fistulous outlet. As it was already drawn out through the incision to a considerable extent, I resolved to amputate the projecting portion, which was a mistake. Its walls were greatly thickened, and bled when cut, so as to require the use of several artery-forceps. The puckered mouth of the amputated cyst was then crowded into the upper angle of the abdominal incision, and there secured with eight fine carbolised silk sutures, taking good care to pass each suture through the whole thickness of the abdominal walls, including the peritoneum. After this process was finished, we waited several minutes with small carbolised sponges (on probangs) resting just within the cavity of the peritoneum, to be sure that there was no bleeding from the needle-punctures. When we were satisfied on this point, the lower portion of the abdominal incision was closed with fine carbolised silk sutures, including the peritoneum. The whole wound was then covered with some cotton-wool saturated with carbolised oil, over which was placed a large compress of fine cotton-wool secured with adhesive strips and a flannel binder. When the wound was closed, there still remained a considerable quantity of pinkish serum in the peritoneal cavity, such as I formerly thought to justify the use of a drainage-tube. But the experience of Bantock and Thornton at the Samaritan Hospital proves pretty conclusively that drainage is not always necessary under Listerism, because it prevents putrefaction, and the reddish serum is absorbed without producing septic symptoms.

The operation lasted one hour and sixteen minutes, exclusive of the time consumed in getting the patient etherised. The most tedious part of it was in securing the cyst in the incision and closing up the wound. This took up all of thirty-five minutes. The patient recovered from the anaesthesia half an hour after the operation, and vomited once from its effects, and then lay quiet and comfortable, sleeping a good deal during the afternoon; and she slept all night.

April 19th, first day after operation.—The pulse and temperature were normal; there was no pain and no fever. Dr. Hayden remained all night, but was not called up. She took nourishment at stated intervals in sufficient quantities. She was free from pain; her pulse and temperature were good. She slept; had no nausea or vomiting. She had passed twenty-five ounces of dark brown urine in the twenty-four hours, which gave the tint of bile to the sides of the vessel when shaken; and the stools even became natural in appearance and odour, looking as if they might have been passed by a child. Taken altogether, her condition was good.

April 20th, second day.—There was a slight discharge of brownish fluid from the wound, or rather from the gall-bladder.

April 21st, third day.—She had passed a good night, sleeping and resting well. Her mind was clear, her memory good, and she was very bright and hopeful. She reminded her husband this morning that this was his birthday. There was no itching.—9 A.M. A little brownish fluid was passing from the wound.—5 P.M. The wound was dressed for the first time, and under carbolic spray. It had healed perfectly. The edges of the sac adhering to the upper angle of the incision looked greyish, as if the circulation had been obstructed by constriction. In the last twenty-four hours, she had passed but fourteen ounces of high-coloured brownish urine.

April 22nd, fourth day.—Her condition was satisfactory; she had slept well. She had passed nine ounces of urine during the night of the same deep brown colour. She complained of dryness of the mouth.

April 23rd, fifth day.—She had had a good night's sleep. Her pulse and skin were natural. She felt stronger. She had a natural stool.—5 P.M. Pulse 80, temperature 100. She had passed seventeen ounces of urine in the last twelve hours.—9 P.M. The tongue was red and dry, and blood was oozing from the gums and tongue. Six ounces of urine had been passed.

April 24th, sixth day, 8.30 A.M.—The nurse said she had a bad night.—8.45 A.M. The discharge from the wound was mixed with blood.—9 A.M. The wound was dressed. The abdominal incision below the fistula of the gall-bladder was perfectly healed. There was no pus about the sutures, which were allowed to remain. There was a little oozing of blood from the edges of the gall-bladder. Some cotton-wool charged with iron was placed over this point, and pressed down with a sponge held in position with strips of adhesive plaster. The oozing of blood from the gums increased.

April 25th, seventh day, 3 P.M.—Again there was oozing of blood and dark brown fluid from the wound, and it was again dressed with iron cotton-wool and a sponge-compress. Ergot was ordered to be injected hypodermically every four or five hours, with the hope of controlling the exudation of blood from the mucous membrane. Up to this time,

I expected our patient to recover; but when I saw the blood exuding continually from the mouth, I told the husband it was a serious symptom, and that in all probability the same thing would take place in the stomach, and that death would occur from black vomit, just as it does from yellow fever. The ergot was continued for twenty-four hours, and then we resorted to the hypodermic injection of dialysed iron, but without any amelioration of the bloody discharge from the gums.—5.30 P.M. Pulse 98; temperature 100.2.

April 26th, eighth day, 7.30 A.M.—She vomited six ounces of a dark coffee-grounds fluid, having all the appearances of black vomit of yellow fever.—9.15 A.M. She vomited again one ounce and a half of black vomit, in which blood was plainly visible. Pulse 100, feeble; respiration 26; temperature 99.6. From this time, she gradually sank, and died at 4.25 P.M. on April 26th, eight days and six hours after the operation.

Saturday, April 27th, 6 P.M.—Embalment and partial necropsy by M. Ganai, twenty-six hours after death. Besides M. Ganai and his assistants, there were present the Commissaire of Police, Dr. Bremond, Dr. Hayden, and myself. The body was much emaciated. Rigor mortis was well marked. The skin was everywhere of a deep orange mahogany tint. The abdomen was tympanitic, evidently *post mortem*. On the back, there were several bullae, varying in size from one to two or three inches in diameter, which, when opened, discharged bloody serum. A fluid similar to black vomit, showing granules of blood, had been running from the nose, and stained the right side of the face.

On removing the dressing from the wound, a dark brown fluid was discharged through the fistulous opening in the gall-bladder. On close examination, the abdominal incision was found to be perfectly united, and there was no pus around the sutures. M. Ganai made an incision from the ensiform cartilage to the pubes, and cut down to the peritoneum. Thinking he had cut through the peritoneum, he began to separate it from the abdominal parietes, saying: "Here is peritonitis with adhesions everywhere." I told him to open the peritoneum, which he did, and found that there was not the slightest evidence of peritonitis. The intestines all had a bloodless pearly appearance, almost diaphanous. M. Ganai then made an incision from the ensiform cartilage at right angles with the longitudinal one, in a direct line across the right hypochondrium, and another incision from about two inches above the pubes, across the right hypogastrium to the spinous process of the ilium. The three-sided rectangular flap of abdominal wall thus made was raised up and turned back over the edges of the false ribs on the right side, showing the gall-bladder firmly adherent to the walls of the abdomen, where it had been attached by the sutures at the time of the operation. M. Ganai then passed a director into the gall-bladder through the external fistulous opening, showing the continuity of the two. After satisfying himself that the operation had been successful in this respect, he cut the gall-bladder loose from the parietes of the abdomen, and then introduced his hand into it, and removed sixteen gall-stones from the size of a pea to that of a pigeon's egg. They were all sacculated, and this was the reason that they were not removed at the time of the operation. He then removed the gall-bladder entire; it was very large, and its walls were much thickened. After doing this, he was able to pass a probe from the gall-bladder through the ductus communis choledochus into the duodenum. The inner surface of the gall-bladder was very dark-coloured, almost black; but its structure was so firm that it could not be scraped off with a knife. On cutting into the substance of the liver, large quantities of serosity ran out, and its bile-ducts were much enlarged, as plainly seen by the naked eye. The stomach contained a large quantity of dark flocculent coffee-grounds fluid, which in yellow fever is called black vomit, and so did the small intestines. The mucous membrane of the stomach and small intestines was pearly white, with no patches of inflammation or ulceration to account for the exudation of the black bloody fluid. The sigmoid flexure, at its junction with the rectum, contained faeces of natural colour and consistence.

In the Douglas's *cul-de-sac*, there was about an ounce of uncoagulated blood, which appeared to have come from a little erythematous patch on the peritoneum, near the lower end of the sigmoid flexure. M. Ganai thought the fluid blood had passed from this point by osmosis. On the inner surface of the bowel, just opposite this elevated point in the peritoneal coat, the mucous membrane, for half an inch in diameter, was thickened, elevated, and had a papillated appearance, and it was supposed that this point might have been the seat of the prolonged bleeding that occurred between the 8th and 30th of January.

The contents of the gall-bladder, a piece of the gall-bladder, and the vomited matter were sent to M. Ranvier, Professor of Histology in the College of France, for examination, and the following is the report.

"Calculus cholecystitis and dropsy of the gall-bladder. Microscopical examination of the gall-bladder, its contents, and of the matter vomited.

A. *Microscopical examination* showed that this membrane was composed of three layers, easily distinguished even when feebly magnified, although they were not distinctly separated from each other.

1. An external connective layer resembling the subperitoneal cellular tissue.

2. A middle fibrous layer intermixed with fasciculi of smooth muscular fibres crossing each other in every direction. This layer was also supplied with vessels, the arteries and veins being quite large.

3. An internal layer, whose deepest parts continued imperceptibly with the preceding. It consisted of a granulated tissue (Virchow); viz., of embryonic elements, in the middle of which vessels might be seen very much congested and furnished with walls, which were still themselves in an embryonic condition. In many points, the walls of these vessels were ruptured, from which small hæmorrhages had resulted. There existed no trace of epithelial covering at the surface of the layer, nor was there to be seen in its thickness the presence of a single glandular tube.

B. *Liquid contained in the Gall-Bladder*.—This liquid was transparent and slightly tinted with red. After a minute examination, no trace of echinococci could be found, nor any striated membrane. Therefore, it was not from a hydatid cyst. A large number of red corpuscles were seen, which had preserved their natural form and colour. We will see later the importance of this fact from a pathological point of view.

C. *Gall-Stones*.—These were composed, as usual, chiefly of cholesteroline.

D. *Vomited Matter*.—The contents of both tubes, although vomited at different intervals, presented under the microscope the same characters. They consisted of a liquid, somewhat viscous and of a green colour, caused by the bile. On examining the deposit, which was abundant and also of a deep green colour, the following elements were observed.

1. Epithelial cells of different forms, the greater number being in the form of prisms of a green olive colour, caused by the biliary pigment. The colouration was uniform.

2. Isolated and conglomerated granulations of the colouring matter of the bile (biliverdin) formed blocks of considerable size.

3. Lymphatic cells infiltrated with little drops of mucus.

4. Vibriones and bacteria of different species: *Bacterium punctum*, termo, and catenula.

5. A number of red corpuscles very much altered, and well known by their pale circle and double outline.

On adding acetic acid to the liquid, a deposit was formed which had the characteristics of mucin. No sarcinæ ventriculi were found.

Conclusions.—1. The microscopical examination, and also the *post mortem* examination, allow us to conclude that the walls of the cyst-pocket belonged to the gall-bladder. The alteration which it had undergone does not, it is true, permit me to recognise either its villousities or its epithelial lining; but the structure of its middle and external layers is sufficiently characteristic. As to the glands, we know that their existence outside of the portion near the neck is very uncertain (Kölliker). The alteration which has taken place in the gall-bladder manifests itself on the mucous lining, and is purely of an inflammatory character. It is transformed into a granular tissue similar to that of fungus-granulations, composed of embryonic elements permeated with vessels of a new formation, whose walls are also in an embryonic condition. These lesions are identical with those we find in cases of obliteration of the canal of the gall-bladder (calculous cholecystitis).

2. The liquid contained in the dilated gall-bladder offers an example, not of colourless bile, but of dropsy of the gall-bladder, from which we are able to draw two conclusions.

a. Sometimes the gall-bladder contains a colourless liquid, still having the bitter characteristic of the bile, and in which, by the reaction of Pettenkofer, we are able to recognise the existence of biliary acids.

b. Sometimes, on the contrary, the liquid contained in the gall-bladder, also colourless and viscous, is deprived of the bitter principle of the bile, and a chemical reaction shows not only the absence of the colouring matter, but also of biliary salts. Cases of this kind are not rare. We find them mentioned by Cruveilhier (*Atlas d'Anatomie Pathologique*), who gave them the name of dropsy of the gall-bladder (Frerichs, *Traité des Maladies du Foie*; Moxon, *Pathological Society's Transactions*, 1870, vol. xxiv). They occur in many cases of occlusion of the bile-ducts, whatever may be the cause.

In the case related by Frerichs, the liquid which dilated the gall-bladder and biliary canals was transparent, slightly mucous, and a little alkaline. The reaction of Pettenkofer could not be obtained.

Under the microscope, a large number of mucus-corpuseles were found, and, by the addition of acetic acid, a precipitate characteristic of mucin was formed.

It is generally admitted, in order to explain the substitution of this liquid (different from the bile) for the bile, that the bile, for a long time retained and submitted to a considerable and increasing pressure, is absorbed, and a sero-mucous liquid, secreted by the mucous glands and the epithelial covering, takes its place. This is also the opinion of Professor Charcot (*Leçons sur les Maladies du Foie*, 1876).

If we now ask ourselves what is the nature of the liquid under consideration, and which so distended the gall-bladder, notwithstanding the absence of a chemical examination, we will find an answer to our question by the preservation of the red corpuscles in the liquid. Every one knows, since the [researches of Kühne (*Zeitschrift für Wissenschaftlichen Zoologie*, vol. ix, p. 261), that the bile, and particularly the biliary salts, destroy the red corpuscles, which first become pale and then disappear suddenly without leaving a trace. On this fact, which is very easy to verify, Kühne established a theory of malignant jaundice (*ictère grave*), which resulted from the destruction of a large number of red corpuscles by the biliary acids which were absorbed by the mucus of the intestine. Therefore, the presence of red corpuscles intact in this case is a certain proof that, in the liquid which contained them, there was not an appreciable quantity of biliary salts, and consequently it was not itself colourless bile.

(Signed) E. CHAMBARD, Interne des Hôpitaux, Répétiteur au Collège de France."

Like many others who have not given special study to the diseases of the liver, I supposed that dropsy of the gall-bladder meant a gall-bladder distended with bile; and when the chemist made the analysis, showing that there were no hydatid hooks and no bile in the fluid, I was amazed. So, when the operation of cholecystotomy was performed, I took care to have the highest authority on the subject; and I have now great satisfaction in submitting Dr. Chambard's report, which not only shows that the distended inflamed gall-bladder contained no bile, but gives the reasons why it did not.

Although this case terminated fatally, I look upon it as a triumph for Listerism; for the *post mortem* examination proved that there was not the least trace of peritonitis or other untoward complication to be found as the direct result of the operation.

The benefit of the operation was shown in the immediate relief of pain, itching, nausea, vomiting, and in the production of stools natural in colour and odour. Death occurred, as it usually does in all such cases depending upon total occlusion of the bile-ducts, from transudation of blood from the mucous surfaces, *i.e.*, from passive internal hæmorrhage, the result of the poisonous effects of the biliary salts on the blood.

I believe that this operation is unique. Is it justifiable? I think it is, because it is in imitation of the process adopted by nature in all cases in which recovery takes place. Death is absolutely certain in every case where the gall-ducts are mechanically obstructed, unless an outlet be obtained either into the alimentary canal or by a fistulous opening externally through the abdominal walls. All authors have advised against opening the gall-bladder until nature had prepared the way by forming adhesions between it and the abdominal walls, or till this had been done artificially by caustic potash. But this case proves that it is not necessary to wait for the tedious efforts of nature, on the one hand, or to resort to the clumsy process of caustic, on the other. Dieulafoy's aspirator renders the diagnosis certain, and antisepticism renders the operation of cutting down to the dropsical gall-bladder and establishing a fistulous opening quite as safe as to leave it to the slower process of nature. The propriety of the operation being established, we can hereafter resort to it at an earlier period, before the changes are effected in the blood by the bile-acids which lead to its extravasation from the mucous surfaces. The blood of our patient was already so changed, so impoverished by the toxic action of the bile, that the operation was nugatory in staying the fatal result. Fortunately for progress, the clinical history of the case and the *post mortem* examination establish beyond any question the safety of the operation *per se*.

It is too much the fashion now-a-days to coin new names for old operations. But, as this is a new operation, we must find a name for it. And I think cholecystotomy (χολή, gall; κύστις, bladder; τομή, incision) will answer. It is not necessary to encumber the name with the prefix "laparo", which is now used to designate operations through the walls of the abdomen, as there is no other route by which we could reach the gall-bladder. Were I called upon to operate again under similar circumstances, I would not procrastinate it a day after the diagnosis was fully established. For it is certain that the longer it is put off the more the blood becomes poisoned by the bile, and the more the chances of recovery are diminished.

I would perform the operation precisely as I did, except in this particular. I would not remove any portion of the gall-bladder; I would draw the gall-bladder, after emptying it, to the surface, open it longitudinally with scissors for an inch or two, seize each side of the incised part with spring-forceps, hold it firmly, then clear it out with sponge-probings, as I did in this case, or throw in a stream of carbolised warm water through a gum elastic catheter introduced to the deepest part of the cyst. By this means, I would expect to remove the gall-stones by the returning force of the injection with greater ease and with less manipulation than by the sponge-probings. It is a mistake to pull the gall-bladder through the abdominal incision and amputate any portion of it, because it will be found much thickened, and the removal of a segment of it leaves a large opening to be crowded up into the superior angle of the incision, there to be secured by sutures. It will answer a better purpose simply to incise the gall-bladder, as before said, than to remove any portion of it.

Since the time of Borrichius in 1676, cases of dropsy of the gall-bladder, complicated with gall-stones, resulting in abscess and a fistulous opening externally, have been frequently observed. In many cases, recovery has taken place even in very old people. In some, death followed often as the result of black vomit; in others, the discharge of bile through the fistula continued for a long time without detriment to the general health. In many, the fistulæ were eventually closed up, and in almost all of them gall-stones, in greater or less numbers, were discharged; some of them small and some of great size. As death so often occurs from impacted gall-stones, the question of surgical interference has more than once been raised. And recently Dr. Handfield Jones has revived the question. In speaking of the passage of gall-stones through the ductus communis choledochus, he says (*Medical Times and Gazette*, March 9th, 1878, p. 247): "I made the proposal, when danger became imminent, to one of my surgical colleagues to open the abdomen, and endeavour by manipulation to force the calculus out of the duct into the bowel. He declined the responsibility of such operative interference, and so the idea was given up. After death, before the necropsy was commenced, I tried to ascertain how far it would have been practicable to execute the proposed manœuvre. I found the calculus in the anticipated situation, but could not positively determine that it was such or an enlarged gland, nor could I press it forward. However, if I should meet with another like case, I should be much disposed to advocate the operation, as it might save life."

Mr. Spencer Wells and other ovariologists constantly make exploratory incisions into the abdominal cavity to determine the nature of doubtful tumours, and hardly give it a serious thought, as the operation is done with great impunity; and I am sure that, under antiseptic precautions, Dr. Handfield Jones's idea of opening the abdomen and exploring for gall-stones can be and will be carried out with the same impunity, and with the faith that, if it fail to save life, it will certainly not shorten it.

Given a case of persistent jaundice, with clay-coloured stools, nausea, and itching, we may almost certainly infer that there is mechanical obstruction of the ducts of the gall-bladder. Why, then, should we wait for months for the gall-bladder to become dropsical and to swell up into an enormous tumour filling the right hypochondrium, and extending even to the iliac region? Why not open the abdomen, explore the condition of the liver, and, if we find gall-stones, why not open the gall-bladder, remove the gall-stones, and sew up the incision in the gall-bladder with the same security, the same confidence, that we would stitch up a wound of the intestine? There is no reason why it should not be done, and it will be done; so it will eventually be seen that the operation of cholecystotomy, joined with Dr. Handfield Jones's proposition, will open up a new field in the great domain of abdominal surgery.

I do not know that itchiness of the skin is a common symptom of ordinary accidental jaundice. When I practised medicine in Alabama forty years ago, I frequently saw cases of jaundice; but I do not remember that they were attended with inveterate itching. I had jaundice myself in 1847, as a sequence of yellow fever; but I did not suffer from the peculiar itchiness that belongs to jaundice from mechanical obstruction of the gall-ducts.

Murchison says that itchiness is rarely observed, except in cases where the jaundice is due to the obstruction of the bile-duct. From recent investigations into the literature of the subject, I am led to think that inveterate itchiness, jaundice, and absence of bile from the stools conjoined will be found to be pathognomonic of mechanical obstruction of the bile-ducts. If this could be established as a law, then it would greatly aid us in determining such cases as might be promptly brought under surgical treatment. There is a difference of opinion amongst authors as to the cause of itching. It has been variously conjectured to depend in some way on the bile-pigment or bile-acids deposited in

the rete mucosum. If this be the case, then, we ought to find it in ordinary jaundice of a temporary character. In the case I have related, the itchiness was an early symptom, and it became intense, and remained so up to the time the gall-bladder was aspirated on March 30th. The sudden removal of the fluid from the gall-bladder by aspiration took off the pressure, and the itching was relieved for two days; but, when the gall-bladder began to refill, the itching returned, and soon became a troublesome symptom. By the aspiration on March 30th, there were removed thirty-two ounces of fluid; by the operation on April 18th, there were removed twenty-four ounces of fluid; by this operation, all the fluid and all the free gall-stones (sixty) were removed, and a fistulous opening was established through which the dropsical fluid of the gall-bladder could and did escape in certain quantities. Now, after this operation, the itching never returned, and yet the skin was of the same deep brown mahogany colour that it was before the operation. If this colouration be due to bile-pigment, as we all believe, and if the itching be due to the direct action of the bile on the sensory nerves, why was the itching so modified by aspiration, and so perfectly relieved by the operation of establishing a fistulous opening for the constant discharge of the contents of the gall-bladder? This leads to the inference that the itching is not due to the irritating effects of the bile locally, but is a reflex symptom; that it depends more upon the pressure of distension; for we see, in this instance, that the temporary relief of the pressure and distension was followed by temporary relief of the itching; and that the permanent relief of the pressure and distension was followed by permanent relief of the itching. As death occurs often in this affection from passive hæmorrhages, so clearly the result of cholætoxiemia, it would be fortunate if we could diagnose it in its early stages, so as to resort to a radical treatment before the blood became so poisoned as to preclude the hope of cure.

The history of this case shows that the tumour was discovered on December 30th; that is, about one month after the jaundice set in. It then presented all the characteristics necessary for a complete diagnosis. But all our authors, without a single exception so far as I know, positively forbid any surgical interference until the tumour is found knocking at the abdominal parietes for the exit of its contents. Guided by the highest authority amongst us, we were not justified in performing any operation, except as a *dernier ressort*; and it was then done too late, as our patient died precisely as she would if no operation had been done. But, guided by the experience gained by this case, we may hereafter resort to operative procedures at an earlier day, and with greater prospects of success. No case like this ever gets well, unless nature or art, or both united, establishes a timely fistulous opening to relieve the gall-bladder of its contents, and thereby restore the channel for the bile. Now, what I propose is this. Whenever we have persistent jaundice, with clay-coloured stools, nausea, and intense itching of the skin, we may take it for granted that there is mechanical obstruction of the gall-ducts, and it is our duty to open the abdomen and search for the gall-bladder as soon as we can detect any swelling in the region of the liver. If we find a dropsy of the gall-bladder, we should deal with it as I have already indicated. If we have been mistaken in our diagnosis, then we have made a simple exploratory incision, which, under antiseptic precautions, is devoid of danger. I would extend the principle of exploratory incisions to other affections of the liver. We know that abscess of the liver is a very dangerous and often fatal disease. It sometimes bursts into the peritoneal cavity, causing rapid death from shock and peritonitis; again, it makes its way into some portion of the alimentary canal, or comes to the surface through the abdominal walls, or passes upwards through the lungs, simulating consumption; while, again, it destroys its victim by pyæmia before it can find an outlet by the slow process of nature. Only three years ago, one of the great statesmen of my own country died of abscess of the liver that made its way through the lung, and it was supposed that he had consumption till a *post mortem* examination revealed the true nature of the disease. And, about twenty-five years ago, one of the most eminent of American surgeons, hardly second to our illustrious Mott, died of pyæmic abscess of the liver, which was discovered only after death. With antisepticism and aspiration, it would now be possible to give relief to such cases when correctly diagnosed.

In cases of suspected abscess of the liver, I propose to make an exploratory incision, to introduce the fore and middle fingers, the hand, if necessary, to examine the liver minutely by the touch above, below, and in all directions; and, if we find fluctuation anywhere, to pass in a Dieulafoy trocar and evacuate the abscess. This I should expect to do with the same ease and the same impunity that belong to the exploratory incisions that we constantly make in doubtful ovarian tumours.

The great lesson that this case teaches is this. In dropsy of the

gall-bladder, in hydatid tumours of the liver, in suspected abscess of the liver, and in gall-stones, we should not wait till the patient's strength is exhausted, or till the blood becomes bile-poisoned, producing hæmorrhages, but we should make an early exploratory incision, ascertain the true nature of the disease, and then carry out the surgical treatment that the necessities of the case may demand. If this should be done under antiseptic precautions, I am sure that much suffering will be relieved, and many valuable lives saved that would otherwise be lost. Without Listerism, the operations I here propose would be hazardous; with it I believe them not only feasible, but perfectly justifiable.

THE MENSTRUAL SECRETION: INCLUDING CRITICAL REMARKS ON THE PATHOLOGY OF RETAINED MENSTRUAL FLUIDS IN THE ORGANS OF REPRODUCTION.*

By GEORGE HARLEY, M.D., F.R.S.

As there is almost more danger to medical literature from its becoming overburdened with false facts than with false theories, the interesting report of Mr. Lawson Tait's case, entitled *Menstrual Fluid Retained in the Left Falopian Tube, simulating Ovarian Tumour*, in the to-day's number (May 11th, page 677) of the *BRITISH MEDICAL JOURNAL*, induces me to call attention to certain "facts" concerning the physiological function of menstruation in the human female; a due consideration of which may, perhaps, induce Mr. Tait to somewhat modify the title of his very interesting case of retention of the menstrual fluid in the organs of generation.

The critical remarks I am about to make are entirely offered in a spirit of friendly criticism, and will, I trust, be received in an equally friendly spirit.

Not being a surgeon, I do not intend to review Mr. Tait's case from an operative point of view; but solely from the stand-point of a scientific physician; and, if I err in my judgment regarding the point of doubt, I shall be very pleased to have the error pointed out, and corrected by any one who may chance to be better versed than I am in the subject under consideration.

In order that the points of doubt shall be made perfectly clear, and the arguments stated in the fewest possible number of words, I shall put forward the case in a categorical form.

1. From the description of the pathological condition of the uterine organs, as well as from the tenor of the general remarks made by Mr. Tait throughout the paper, there can be no doubt that it was a veritable case of retained menstrual fluid in the organs of reproduction. But,
2. There exist many grave physiological reasons for doubting the justice of the author's assertion, that the fluid was retained in the left Falopian tube.

3. On the contrary, I imagine that the menstrual fluid evacuated by Mr. Tait did not come from the left Falopian tube at all; but from the uterus itself. And moreover, if he is correct in stating that the "organ" from which the liquid came was left-sided, I think it is not beyond the possibility of exactitude that the case was one of double uterus, and that the fluid was retained in and evacuated from its left cornu.

In order to show explicitly the grounds upon which I venture to propound this view, I shall ask, and answer, the three following pertinent questions:

- A. What is the normal function of the human Falopian tubes?
- B. What parts of the female organs of generation secrete the menstrual fluid?
- C. What parts of the organs of generation are most likely to have their orifice or orifices occluded, and thereby become a receptacle for secreted, but non-excreted menstrual fluid, which might in due course admit of removal by surgical interference?

The replies to these three questions I shall now proceed to give in precisely the same categorical form.

A. No menstrual fluid (proper) is secreted by the Falopian tubes. The function of the Falopian tubes is simply passive, in so far as the function of menstruation is concerned; that is to say, the part played by the Falopian tubes, during the menstrual period, is precisely the same as the part played by the ureters during the process of urinary excretion. They are mere channels of elimination, and nothing more. The Falopian tubes are the ducts along which the ova are floated from the ovaries to the uterus. The ureters are the ducts along which the urine flows from the kidneys to the bladder; so that the passive func-

* This article is written according to the new method of spelling words, without encumbering them with needless duplicated consonants.

tions of both sets of ducts are precisely the same, viz., that of mere channels.

B. The menstrual fluid of the human female consists of three distinct parts: *a.* The ova; *b.* The fluid of the ovarian vesicle in which the ova are developed; *c.* A sanguineous discharge from the uterine mucous membrane. These three, combined, go to form what is known under the title of the menstrual secretion. I permit myself to speak authoritatively on this point, as I once enjoyed an opportunity of studying the physiological function of menstruation on a woman, who committed suicide when on the very brink of menstruating, such as no man, as far as I am aware, ever similarly enjoyed. The condition of things then found was carefully delineated in water-colors, by a professional artist, and still exist in all their pristine exactitude to verify every word which I am now about to say.

A healthy married woman, of twenty-three years of age, in a fit of jealousy, drowned herself in the Serpentine in 1861. At the time, the scientific comitee, appointed by the Royal Medical and Chirurgical Society, was actively engaged in the investigation of the best means of resuscitating the apparently drowned. As a member of that comitee, I had occasion to make the *post mortem* examination of the young married woman just mentioned; and, although the woman's organs of generation had nothing whatever to do with the question of suspended animation—as I was at the time in question lecturing to the students of University College on the subject of reproduction—after finishing the necropsy, in as far as the pathological appearances of drowning were concerned, I turned my attention towards the woman's organs of generation, when, to my surprise and delight, my eye caught sight of the congested surface of an ovarian vesicle, distended with fluid, of the size of a large hazel-nut projecting beyond the exterior of the left ovary. Although not then fully conscious of the invaluable specimen which accident had thrown in my way, I carefully extracted the whole group of the internal organs of reproduction, and conveyed them, for subsequent scientific investigation, to the Physiological Laboratory of University College, which was at that time under my immediate superintendence. On examination, the immense value of the specimen at once became apparent.

The uterus, which was a "virgin one", was found slightly congested, and towards its internal fundus was a vascular, engorged, puffy portion of the mucous membrane, covered over by a thin adherent layer of sanguineous mucus—more blood than mucus—and from it, extended downwards to within half an inch of the os uteri, a conical-shaped layer of blood; not a single drop of which had, however, as yet reached the internal orifice of the os. The true state of matters at once dawned upon my mind; and accordingly, I at once transferred my attention to the ovaries, both of which were slightly congested. On the surface of the left ovary was seen an ova-follicle, all ready to burst. Had I doubted that the follicle was on the very verge of bursting, the sequel would soon have undeceived me. For while I was handling it, and that tenderly too, it burst beneath my fingers, and from it flowed a whitish serous liquid, which was instantly carefully collected and microscopically examined. One ovum alone was detected in it. The condition of the Falopian tubes was next inquired into. The fimbriated extremities of both were found to be highly congested—much more so, externally, than either the external coat of the ovaries or of the uterus. But the internal coat of the tube was perfectly free from any trace of congestion whatever; and, by its pale white, shiny tendinous appearance, formed a very marked contrast to the highly congested lining mucous membrane of the uterus, the congested radius of which abruptly ended at the very orifice of the uterine ends of the Falopian tubes. Strange to say, it was actually at the margin of the Falopian tube orifices that the congested appearance of the mucous coat of the uterus was most marked. It may not be here out of place, incidentally to mention, that the right ovary contained a well-defined, non-impregnation, corpus luteum (commonly called false corpus luteum), as well as a beautiful, congested, unripe, ovum follicle, of the size of a large pea, embedded in its interior.

From these facts, as facts they undoubtedly are, I venture to propound the following theory as regards the normal function of human menstruation.

1. The menstrual fluid, as already said, consists of three perfectly distinct parts: ova, white serous ovarian-follicle secretion, and sanguineous mucus uterine secretion.
2. The ovaries and the uterus are the only parts which supply the menstrual secretion.
3. The Falopian tubes do not secrete any of the ingredients special to the reproductive function.
4. The Falopian tubes are mere passive canals for the transport of the secretion of the ovaries into the uterus.
5. No sanguineous menstrual fluid whatever enters the Falopian tubes, in a normal state. If it gets there at all, it can only be from the uterus by an abnormal condition of regurgitation.

If this theory of normal menstruation be correct, it follows, as a natural sequence, that Mr. Tait erred in supposing the menstrual fluid that he evacuated had been pent up in a distended Falopian tube. In case he should, however, still entertain any doubt on the subject, I shall now proceed to quote passages from his own paper, which are in direct confirmation of my views.

1. He states that the tumour "presented the red muscular appearance of the uterus".
2. A fragment of the tissue of the tumour, when subjected to microscopical examination, "proved to be composed of an abundance of unstriated muscular fibre".
3. "After the cyst was emptied", it contracted round and grasped the finger.
4. He "could find no canal leading into the uterus".
5. "About six quarts of thick dark-brown fluid, having the peculiar smell of menstrual fluid", were evacuated by means of a trocar.

These facts, taken in conjunction with the physiological description I have just given of the female organs of generation, as they appear at the menstrual period, seem to my mind to warrant the acceptance of one of the following theories regarding the source from which the grumous fluid was evacuated; namely, that the fluid was actually evacuated from a normal or from an abnormally formed uterine cavity. A. Because a grumous dark-brown fluid, posing a distinct menstrual odour, could not have readily existed at any other point of the reproductive organs above the os uteri. B. Because an occluded os uteri is not an unknown pathological condition.

Lastly, as the patient was an unmarried lady, thirty-eight years of age, and presumably a virgin; and as Mr. Tait distinctly states that it was from an organ on the left side of the body that the fluid was evacuated; it is by no means impossible that the patient was the subject of a double uterus, and that it was in the left occluded cornu of the uterus that the pent-up secretion was retained. This latter view is the one which accords most intimately with the description which Mr. Tait has given of the anatomical relations of the parts; and, had he only given as well a general history of the patient's catamenia, from the time of their first appearance up to the date of the operation, this theory could almost have been reduced to an axiomatic certainty, or the reverse.

SOME INDICATIONS FOR THE DIAGNOSIS AND TREATMENT OF AORTIC ANEURISM.*

By F. A. MAHOMED, M.D.,

Medical Registrar to Guy's Hospital; Assistant-Physician to the London Fever Hospital; etc.

It has been frequently remarked, that no disease presents itself to the physician under more varied aspects, nor offers greater difficulties for diagnosis, than aneurism; it is desirable, therefore, while studying it, that we should employ every method of investigation we possess likely to throw light upon the subject. It is in this and similar obscure conditions that we naturally look to those modern instruments which are supposed to give precision to clinical observations, and ask, What can they do for us, and how can they advance our knowledge of the condition under discussion? As an instrument especially devoted to the investigation of conditions of the circulation, the sphygmograph has been called upon, in the diagnosis of aneurism, to remove all difficulties from our path, and to demonstrate with scientific accuracy the presence and position of the aneurismal sac. When the ever-varying conditions of the circulation in health and the innumerable modifications introduced by disease, are considered, surprise cannot be felt that the mere resultant of unknown and numerous forces—for as such the pulse may be regarded—does not afford sufficient data from which to calculate the character of each force concerned in its production.

The sphygmograph gives increased facilities for observations on the blood-stream; but, until the causes of its varying indications are well ascertained, the deductions drawn from them must necessarily be fallacious. Those, then, who attempted to make use of it without previously ascertaining these, blamed the instrument for their mistakes, rather than their own want of experience.

Some years ago, I attempted to give some account of the results obtainable by the sphygmograph in the diagnosis of aneurism.† The question, however, is one of so much importance, that I feel justified in returning to it and stating the results of further experience. In thus confining myself to the consideration of a single symptom, let

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

† "The Physiology and Clinical Use of the Sphygmograph". *Medical Times and Gazette*, Nos. 9 and 10, 1873.

it not be thought that I regard it as more important than others; but, in this age of detail, when so much labour is spent on perfecting our knowledge of what may be regarded as minor points, one need not go far to find a precedent or excuse for that which must appear tedious and irksome, although perhaps necessary. While the most perfect physician may least depend on instrumental aids, nevertheless, to attain perfection, we cannot neglect the means of educating our senses which such aids afford us; then, if we have used them aright, we shall carry our sphygmographs in our finger-tips and our thermometers in our palms.

In a case of aneurism, the pulse may present certain characters which are recognisable by the finger; and, before applying to the sphygmograph for their explanation, it will be well to enumerate them.

1. *Delay* may occur in one or both radial arteries; it is of most value when limited to one, so that, on comparison of the two radials, the pulse can be detected in one preceding that in the other; if it exist in both, the impulse of the heart, or the first sound, will be found to occur an unduly long time before the pulse can be felt at the wrist. In either of these conditions, the pulse is said to be *delayed* in reaching the wrist by its passage through the aneurismal sac.

2. *Diminution in Volume*.—The pulse in one radial may appear much smaller than that in the other, or indeed altogether absent. This is usually wrongly ascribed to partial or complete obstruction of the vessel by clot in the aneurism, or occasionally to pressure of the sac upon the subclavian; these, however, are not the true causes of this phenomenon, as we shall see hereafter.

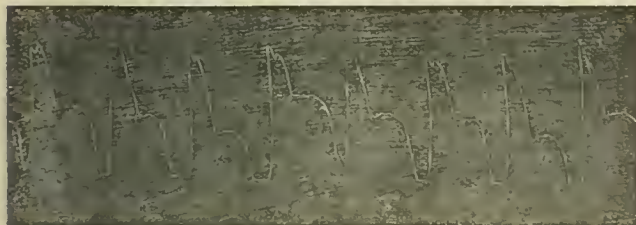
3. *Diminution in Force*.—That is, the pulse conveys a less sudden and forcible impulse to the finger than the normal pulse. It does not, however, necessarily mean a diminution of actual lifting power, but merely of the suddenness of the sensation imparted to the finger.

4. *Persistency*.—This character, the most important and perhaps the most difficult to recognise and estimate of any possessed by the pulse, refers to the amount of permanent distension of the vessel. Normally, the artery should not be perceptible to the finger except at the moment of pulsation; under certain conditions, however, the artery can be felt constantly distended, giving the well-known cord-like sensation to the finger; this permanent distension of the vessel gives the character of *persistency* to the pulse, and is the indication and gauge of arterial tension.

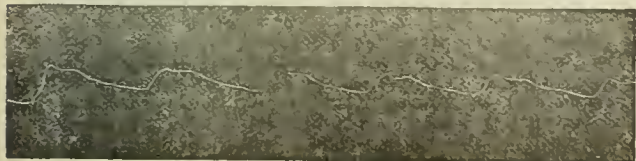
5. *Thrill* might perhaps also be considered a character imparted to the pulse by aneurism; under some rare and not very clearly defined circumstances, the pulse imparts a sensation of thrill to the finger. This probably occurs when the entrance to the aneurismal sac is very narrow, and the aneurism directly in the course of the vessel. It appears also to be occasionally produced by the rigidity of the wall of the vessel, or sometimes by a partially detached fragment of clot vibrating in the blood-stream.

If a sphygmographic tracing obtained from a case of aneurism be examined, the peculiarities of the pulse can readily be recognised. Fig. 1 shows the effect of an aneurismal sac introduced into an artificial circulation, and fig. II is a very typical specimen of the effect of an aneurism on the human radial. The tracings in fig. I were obtained from a straight elastic tube ten feet long and three-tenths of an inch diameter. The heart was represented by the ball of a Higginson's

FIGURE I.—Experimental Tracings. To show Effect of Aneurism directly in the course of the Blood-stream. From Straight Tube 10 feet long, 7-10th inch in diameter, and 3 feet from valve.



1. Normal Trace from Straight Tube, without Aneurism.



2. Trace from same, with Aneurism introduced six inches from Valve.

syringe, contracted by the hand; the sphygmograph was applied to the tube three feet from the valve, and the first tracing in fig. I was obtained. An oval elastic two-ounce bag was then introduced, six inches from the aortic valve, to represent an aneurism directly in the course of the vessel, and the second tracing was obtained. If the tracings from the vessels interfered with by the natural and artificial aneurism be compared, the effect produced in each will be seen to be very similar. Taking each point separately, they may be enumerated as follows:

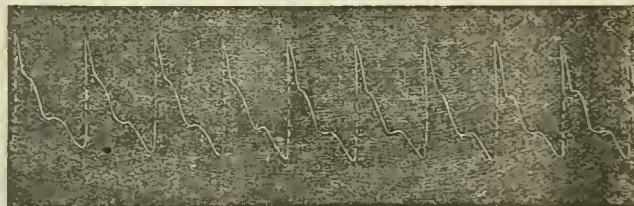
1. A sloping upstroke, which gives to the finger the character of *delay*; that is, the maximum distension, which causes the sensation of pulsation in the vessel, is not attained as quickly as in the normal; the pulse is, therefore, felt later on this side than on the other.

2. *Diminished Volume of Wave*.—The upstroke is much reduced in height; this is due to the smaller quantity of blood which forms the chief pulse-wave, a large amount of the wave being spent on the distension of the sac, which may be regarded as a kind of reservoir. It receives the great volume of blood during systole, and is partially emptied during diastole, by the continued flow of the blood-stream down the vessel, which is kept more permanently distended than by the passage of one large and more sudden wave. This gives the character to the pulse of *persistency*, the vessel being kept constantly moderately distended, a condition which cannot be recognised by the sphygmograph.

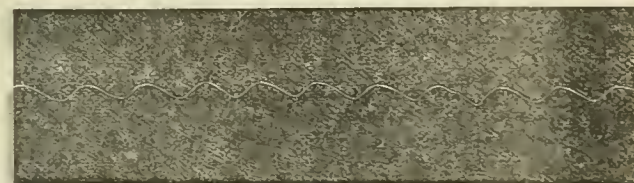
3. *Impairment of Percussion*.—The percussion-wave is entirely obliterated in these tracings, owing to the whole of the shock of the contraction of the heart being expended on the distension of the sac, which acts as a buffer.

4. *Obliteration of the Secondary Waves*.—It has just been remarked that the percussion-wave is lost, so also is the dicrotic; the downstroke, therefore, may be absolutely unbroken, as in fig. II. These

FIGURE II.—Axillary Aneurism; showing Typical Effect of Aneurism on Pulse-wave. Pressure, 2 ounces.



1. Left: fairly normal; shows a little Hypertrophy of Heart.

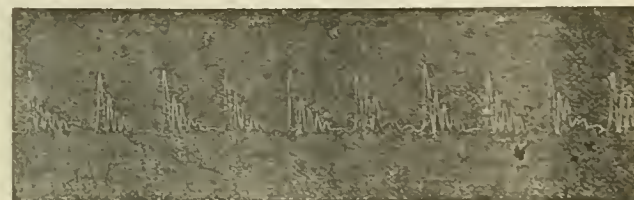


2. Right. Extremely Aneurismal in character.

small secondary waves are, like the primary wave, more or less lost in the distension of the sac.

5. *Vibratile waves* or thrill may be present. These are seen in fig. III to an exaggerated degree, produced in an artificial circulation

FIGURE III.—Typical Vibratile Movements, occurring in Schema of rather non-elastic Tubing.



formed of rather rigid tubing. Some small secondary vibratile waves of this character are occasionally present in tracings from cases of aneurism; the causes said to give rise to these vibrations have already been stated.

6. A different pressure from that employed on the normal side may be required to obtain the most perfect tracings from an aneurismal pulse; it may be either increased or decreased, according to the size and persistency of the stream.

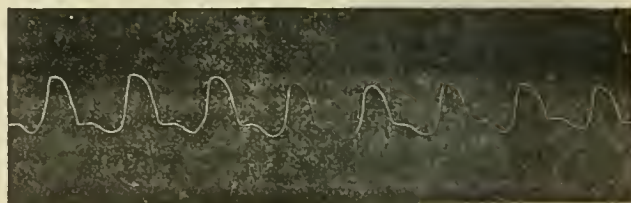
If, now, all these characters be considered, the general result to the finger is diminution, or perhaps actual disappearance, of the pulse on the affected side. This, however, does not necessarily mean any diminution of the actual amount of blood passing; it is only that its pulsatile character is diminished, and that it tends to become a continuous stream; it is, indeed, exactly the same effect as that produced on a pulse-wave by its transmission through a considerable length of elastic tubing.

It must not be thought so great a change in the pulse-wave as that seen in fig. 11 is always produced on the pulse by the presence of an aneurism. It only occurs when the aneurism is directly in the course of the blood-current, and on one of the large vessels, or involving their origin, but not when it is confined to the aorta itself. When the aneurism is one of the aorta, it only slightly modifies the pulse-tracing; it may not affect it at all. It is possible to obtain from a patient with a very large aneurismal sac connected with the aorta an almost perfectly normal pulse-trace at both wrists. In by far the larger number of cases, however, some signs will be discovered in one or both wrists; the most common are—a slightly sloping upstroke, a rounding of the apex of the tracing, and an obliteration or diminished sharpness of the secondary waves. The diagnosis of the seat of the aneurism will depend on the presence of these signs in both or one or other radial tracings. Fig. 1v somewhat imperfectly represents the effect of an

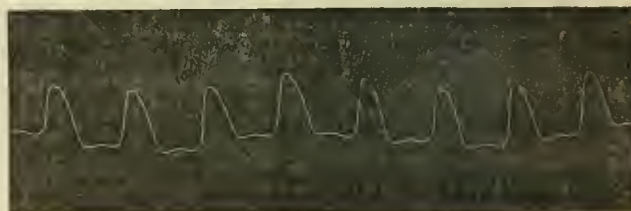
tained (fig. 1v), although, be it observed, the sac was not directly in the course of the blood-stream from which the tracing was obtained. On account of the absence of other branches, the effect produced by the aneurism is greater than would be that of a sac in similar relation to the aorta. In the third tracing in this figure, the effect of distal ligation is seen; this practically reduces the aneurism to one confined to the main tube from which the traces were obtained, and imparts the aneurismal character to the pulsations much more strongly than before. The fourth tracing was obtained after a ligature had been placed between the aneurism and the main tube, cutting it off entirely from the blood-stream; the tracing immediately returns to the normal type.

Illustrations may now be given of the indications afforded by a comparison of the tracings of the two radials in cases of aneurism in different parts of the aorta. In aneurisms of the first or ascending part of the arch, both radials must be affected in a similar manner, if any effect be produced by the aneurism upon them. It is in this position, however, that the sphygmograph teaches us least, for scarcely any deviation from the normal is observable in many such cases. Fig. v was

FIGURE V.—Aneurism of Ascending Part of Arch of Aorta, affecting the Flow through the Radials (Mr. Holmes).



1. Right. Pressure, 3 ounces. Presents well marked signs of Aneurism; sloping Upstroke; prolonged Tidal Wave; much Diastolism.



2. Left. Pressure, 1 ounce. Also well marked signs of Aneurism. Both pulses indicate very low tension (the patient's temperature was 99.8), and also an undulation in the base-line, due to blood-tension, varying with respiration.

obtained from a patient under the care of Mr. Holmes with a large aneurism of the ascending arch; the tracings are much alike at both wrists, but in each signs of aneurism are present, the upstrokes being slightly oblique and the apices rounded.

If the right pulse present more marked signs of aneurism than the left, the disease affects the innominate and arch. If the aneurism do not involve the aorta itself, but is confined to the innominate or subclavian, the left pulse will be perfectly normal and show no indications of aneurism, while the right will be very markedly aneurismal; as a rule, though not without exceptions, the further from the aorta or the smaller the vessel affected, the greater the change in

FIGURE VI.—Aneurism of Innominate Artery; pure; not involving Arch of Aorta or Subclavian.

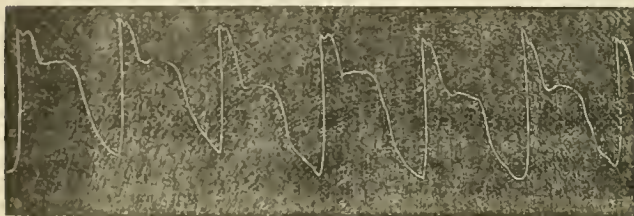


1. Right. Pressure, 4 ounces. Requires greater pressure to fully develop it.

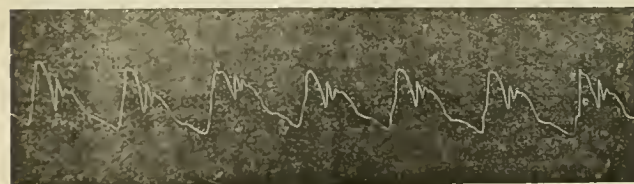


2. Right. Pressure, 7 ounces. Fully developed and highly Aneurismal.

FIGURE IV.—Experimental Tracings. To show Effect of Aneurism not directly in the course of the Blood-stream. From Straight Tube 10 feet long, 3-10th inch in diameter, and 3 feet from valve.



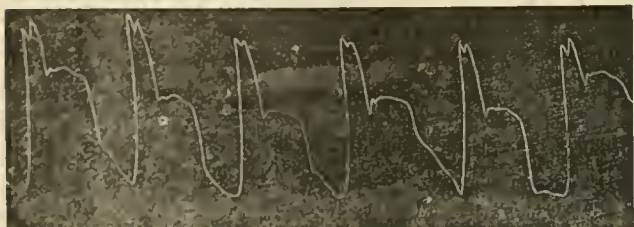
1. From Straight Tube without Aneurism.



2. Aneurism on Collateral Branch, allowing flow through it.



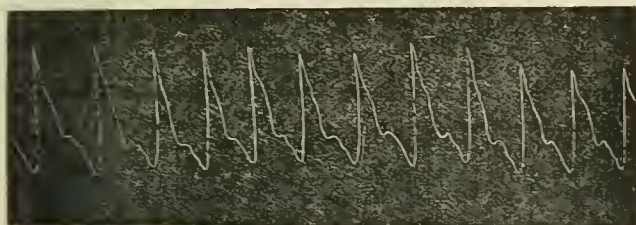
3. Aneurism on Collateral Branch; no flow beyond it, as if from Ligature beyond Aneurism. Distal Ligature.



4. Ligature applied between Aneurism and Main Stream: Proximal Ligature.

aneurism of the aorta upon the pulse-tracing; it was obtained from the same apparatus as before, but, instead of the aneurism being directly in the course of the blood-stream, a T-shaped piece of tubing was introduced six inches from the valve, and to the long arm of this the bag representing the aneurism was attached; the water was permitted to flow through the sac and some tubing beyond it, which thus formed a branch from the main blood-stream. A great modification is seen in the tracing now ob-

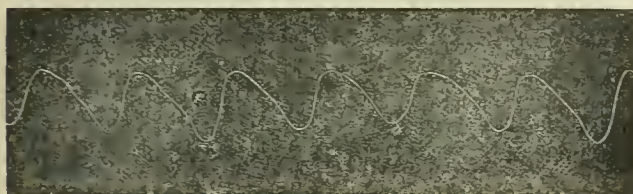
the pulse. Fig. VI, obtained from a patient under the care of Dr. Habershon, shows the effect of an aneurism, entirely confined to the innominate, on the pulse. In this case, the aorta was quite unaffected;



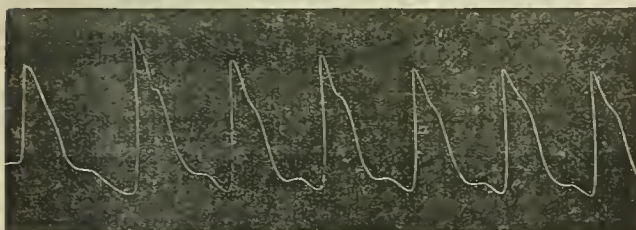
3. Left. Pressure, 4 ounces. Fairly normal.

the left pulse is, therefore, perfectly normal, while the right is highly aneurismal. The percussion-wave, well marked in the left, is entirely absent from the right, and the dicrotic is also less distinct. These tracings, showing the freedom of the aorta from disease, were of the highest value from a diagnostic point of view, especially with regard to the treatment to be recommended. Fig. VII, obtained from a patient

FIGURE VII.—Aneurism of Right Subclavian Artery in Second Part (Mr. Gant). Typical Aneurismal Tracing.



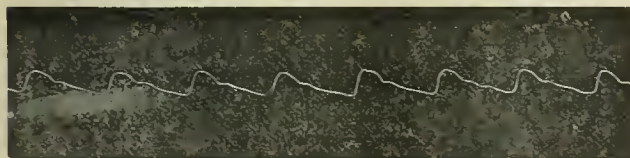
1. Right. Pressure, 2 ounces. Typical Pulse of Aneurism.



2. Left. Pressure, 5 ounces. Tracing characteristic of Aortic Regurgitation and Hypertrophy of Left Ventricle.

under the care of Mr. Gant, suffering from an aneurism of the second part of the right axillary artery, illustrates a still more aneurismal form of pulse; while the left pulse has no sign of aneurism about it, although it indicates aortic regurgitation and hypertrophy of the heart, both of which were confirmed by physical signs. This freedom of the left pulse from aneurismal characters often proves of great value in diagnosis; such, for instance, was the case illustrated by fig. VIII, that of a

FIGURE VIII.—Aneurism of Right Common Carotid Artery, involving Innominate (?), the Arch of Aorta remaining free (?) (Dr. Edmunds).



1. Right. Pressure, 12 ounces. This pulse is much smaller than the left, and presents Aneurismal Characters—i.e., diminution in all the waves.

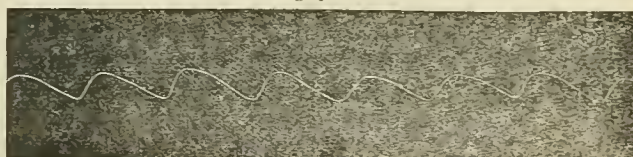


2. Left. Pressure, 7 ounces. Quite consistent with a fairly healthy heart and aorta.

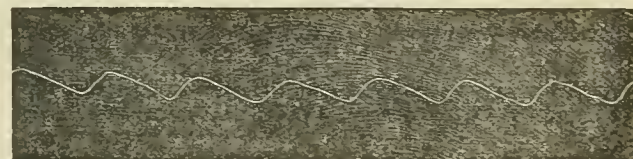
patient under the care of Dr. Edmunds, who kindly permitted me to examine her. It was a case apparently of aneurism of the right common carotid, for which Dr. Edmunds performed distal ligation of that vessel; the tracings, however, indicate, from the aneurismal character of the right pulse, that the innominate was also involved, though probably not to any great extent; while the fairly normal left pulse was a sign of the comparative freedom of the aorta from aneurismal disease—a point of the utmost importance in the prognosis and treatment of the case. This right pulse lost nearly all its aneurismal characters after the successful ligation of the carotid and apparent temporary cure of the aneurism; seven months subsequently, however, when she was again examined, the left pulse exhibited more marked aneurismal characters than the right, indicating the extension of the disease to the aorta itself. Of this case, we shall doubtless hear more from Dr. Edmunds, who has kindly permitted me to use it so far, to illustrate this sphygmographic point of diagnosis.

In some very rare cases, both pulses may be extremely aneurismal from the presence of a very large aneurism affecting all the vessels taking origin from the transverse arch. Such a case I believe that to be which is illustrated by fig. IX. These tracings were obtained from

FIGURE IX.—Very Large Aneurism of Transverse Arch, involving both Innominate and Left Subclavian Arteries (Dr. Douglas Powell and Mr. C. Heath). Both Radial Pulses highly Aneurismal.



1. Right. Pressure, 1 ounce.



2. Left. Pressure, 2 ounces. There was the most feeble pulsation in the Left Radial Artery, which required more pressure to develop it.

a patient under the care of Dr. Douglas Powell and Mr. Christopher Heath. Both pulses are in the highest degree aneurismal; to the finger, the pulse appeared almost absent: it could just be discovered in the right, but in the left was only detected with the greatest difficulty. It would naturally give an idea that the vessels were obstructed by clot; but, from the excellent tracings obtainable with the sphygmograph, it is most probable that there was no deficiency of blood passing down them: it had only lost in a great measure its highly pulsatile character owing to the presence of the large sac. The pulse had first diminished on the left side; and, as the aneurismal tumour was also first observable below the left clavicle, doubtless the aneurism commenced on the left side of the transverse arch, and gradually extended towards the right until it finally involved the innominate. Probably, at some future time, more light will be thrown on this case, and the present account may have to be modified; the very exceptional character of the tracings, however, induce me to introduce them.

[To be continued.]

CASES ILLUSTRATING THE FAMILY HISTORY OF SYPHILIS: WITH REMARKS.

By ROBERT J. LEE, M.A., M.D. Cantab., F.R.C.P.,
Assistant-Physician to the Hospital for Children, Great Ormond Street.

In order to determine the question of the certainty or probability of syphilis being communicated, in the event of marriage, to the mother and children, we require two series of cases, one of which, by affording certain data of a positive, the other by giving those of a negative character, will help us to arrive at the desired result. If we have a sufficient number of instances of family syphilis—that is to say, cases where the father has been infected previous to marriage, and the wife and children have exhibited symptoms of the disease more or less clearly marked—we may be able to decide, in any other particular case, the probability of such an occurrence. And, if we have a sufficient number of instances of the husband having suffered, but without any symptoms showing themselves in the

wife or children, we may also be enabled to decide of immunity being probable for the mother and children.

It is evident that we must be acquainted with all the facts which relate to the attack of syphilis from which the father suffered, the most important of which would be the interval of time between infection and marriage, the symptoms which characterised the various stages of the disease, and the condition of health at the time of marriage. This applies equally to the second series of cases—those of immunity in the family.

This method of finding a solution of the difficulties which surround the subject of hereditary syphilis appears to me, and must have suggested itself to many, as sufficiently reasonable to justify its trial, whatever labour may be required to obtain the data above stated.

The readiness with which the members of the British Medical Association respond to a request for information on any subject of professional interest, leads me to think that many who are engaged in family practice will be able and willing to communicate instances of family immunity amongst their patients, and thus assist in the collection of examples of the second series. The first series would more easily be obtained from the sources from which I have been able to collect the subjoined cases; viz., the out-patient department of a children's hospital.

There is no doubt that considerable trouble, time, and patience are necessary for the method here indicated of treating the subject of hereditary syphilis, as appears clearly from the careful collection of cases published by Mr. Hutchinson in the last number of the *British and Foreign Medico-Chirurgical Review*. But, as the questions involved are of great practical importance, and as I am inclined to think, from my own observations, that many interesting facts will present themselves, I have ventured to depart from the custom of introducing the subject at one of our societies, in preference for the more exact information to be derived from written details.

It appears to be possible to predict within certain limits the form which syphilis will assume in an infant or young child when the stage of the disease in the father at the time of conception is known; and, *vice versa*, there are certain syphilitic symptoms in the child which indicate certain conditions pre-existent in the father. That is to say, there is this difference between syphilis and zymotic diseases: that the child does not necessarily pass through a constant series of symptoms, but that, between the most severe form of the disease and the least distinct, there are certain forms which are related to the particular state of the parent or parents. Thus we perceive an indication of the existence of a period of immunity for the child, and the possibility of deciding in any particular case of the certainty, probability, or improbability of transmission.

But the great value which attaches to carefully collected cases, and the respect which I entertain for the exercise of independent reason, lead me to conclude without further remarks at present in this communication to the JOURNAL.

The parents in the following cases have given their personal histories.

CASE I.—M., aged 41, has been married three years. Four months before marriage, he had a chancre, and was under the care of Mr. De Méric at the Royal Free Hospital. He was soon cured of the primary sore. At the time of marriage, he was suffering from well marked secondary symptoms. Since recovery, and at the present time, he is in good health.—F., aged 22, suffered from severe secondary symptoms very soon after marriage, and, nine months ago, the throat was sore.—The first child was born dead and decomposed; the second is one year and eight months old. At the age of four months, a syphilitic eruption appeared, and it suffered from "snuffles". Now it has several large funiculi on the nates, one of which has been opened. The wound healed under mercurial treatment in four weeks.

CASE II.—M., aged 28, has been married five years. Five months before marriage, he had a primary sore, followed by buboes, which were discharging at the time of marriage. Subsequently, he had eruptions and secondary symptoms, such as sore-throat, etc. He is now in good health.—F., aged 24, had a primary sore one week after marriage, and buboes.—The first child was born at the eighth month, and lived five hours; the second is three years old. It was under my care at the Children's Hospital for congenital syphilis. It is now alive and well, though occasionally subject to discharges from the nose and mouth. The third is five months old. It was brought to the hospital when four weeks old with snuffles and syphilitic erythema.

CASE III.—M., aged 30, married between four and five years, had a primary sore between two and three years before marriage, which was healed in three weeks, and since then there have been no constitutional symptoms. He was treated simply with "black wash".—F., aged 28, suffered from sore-throat shortly before the birth of the first child, and has occasionally suffered since; but is otherwise in good

health.—The first child was born prematurely and dead; the second was under treatment at the Hospital for Diseases of the Skin in Blackfriars Road for syphilis, which appeared six weeks after birth, exactly as in the third child. The third, aged six weeks, is suffering from the ordinary symptoms of infantile syphilis in a mild form.

CASE IV.—M., aged 39, has been married ten years. Two years before marriage, he had a primary sore, which very soon healed. Twelve months afterwards, there were sore-throat and general weakness, from which he suffered at the time of marriage.—F., aged 34, has sore-throat slightly at times, but no well marked syphilitic symptoms.—The first child lived one week; the second three weeks; the third four years; and the fourth six weeks. The fifth was suffering from slight general symptoms of syphilis six weeks ago. Under mercurial treatment, they have disappeared.

CASE V.—M., aged 30, has been married one year and ten months. About seven years ago, he had a primary sore, which healed under treatment with "black wash" in six weeks, and, in three months, all symptoms had disappeared.—The wife has shown no signs of infection.—The child was brought at the age of three months to the hospital. There were general defective nutrition and some small superficial specific ulcers round the labia. Under mercurial treatment, the child soon appeared healthy.

CASE VI.—M., aged 38, married seven years, had a primary sore five years before marriage. He was treated with black wash, and took mercury. The gums were affected; the teeth decayed; and the hair fell off during the following three years. The skin has not been affected. His constitutional health is naturally more than usually robust. At the present time, this patient is under treatment for obstinate specific ulceration of the tongue.—F., aged 35, has no distinct history of secondary symptoms. She has severe periosteal inflammation of the left arm and synovitis of the elbow.—The first and second children died soon after birth. The third and fourth are alive and well. The fifth was brought to the hospital at the age of fifteen months with syphilitic funiculi on the nates and thighs. It was an eight months' child, and showed specific symptoms after measles. They soon yielded to mercurial treatment. The sixth child, aged four months, also showed symptoms of syphilis when ten weeks old, which were treated in the same manner as in the fifth child, and soon disappeared.

CASE VII.—M., aged 25, married two years and a half, nine months before marriage had an urethral chancre, and was treated for syphilis with "black wash". The symptoms soon disappeared, but returned three months later, when he went to a hospital, and, since he was discharged, has had no symptoms.—F., aged 27, suffered from local ulcerations three months after marriage; and, at the time of confinement, the skin and throat were much affected.—The first child was under treatment at the Children's Hospital, and died of syphilis, aged fourteen weeks; the second showed symptoms of the disease when six weeks old in a cutaneous eruption of the arms and legs, and was under treatment at the same hospital for ten weeks, when the symptoms disappeared. The parents and child regained apparently perfect health.

CASE VIII.—M., aged 20, has been married twelve months. He was infected twelve months before that, and, by medical advice, was allowed to marry. He had suffered from chancre, sore-throat, and constitutional weakness; but, at the time of marriage, was in good health.—F., aged 18, had local sores soon after marriage, and severe secondary symptoms.—The child was born nine months after marriage, and came under notice when three months old with general syphilis. It died between two and three months later, though every attention was given it.

CASE IX.—M., a healthy man, has married a widow aged 33. Her first husband had syphilis: the details are not ascertainable.—F., married fifteen years ago to her first husband, had four children.—The first was born dead; the second lived three months; the third and fourth were born dead. After remaining a widow between four and five years, she married again. It is seven years since the birth of the last child by the first husband, and the first child by the second is now fourteen weeks old. It presents well marked syphilitic dermatitis of the face, and has snuffles.

CASE X.—M., aged 28, has been married five years and a half. Between three and four years before marriage, he had a primary sore followed by buboes; but had no constitutional symptoms at any time.—F., aged 31, was constitutionally delicate. There is no account of syphilis till two years ago, when warty growths appeared on the labia, and there was erythema of the skin of the face.—The first child died at four, and was under the care of Dr. Cheadle at the Children's Hospital for congenital syphilis; the second lived three weeks; the third died at birth; the fourth was under my care at the age of three months for syphilis, and died subsequently of whooping-cough.

CASE XI.—M., aged 28, has been married four years. Between eighteen months and two years before marriage, he had a primary sore and urethral discharge, which healed under treatment in three months. No constitutional symptoms followed.—F., aged 22, has suffered since marriage from general debility; but no distinct symptoms of syphilis have shown themselves.—The first child, at the age of four weeks, exhibited well marked syphilitic symptoms, nasal discharge and snuffling, superficial cracks round the nose and mouth, slight coppery tinge of the skin, and spots on the abdomen.

CASE OF PLEURITIC EFFUSION: PARACENTESIS THREE TIMES: DEATH: NECROPSY.*

By W. MAKEIG JONES, M.R.C.S. Eng.,
Late House-Surgeon to the Rotherham Hospital.

FOR permission to report the following case I am indebted to Mr. B. Walker, Surgeon to the Rotherham Hospital.

G. M., aged 30, male, unmarried, was a tall fine made man, and had served nine years in the Indian army. He had enjoyed good health till three months ago, when he had an attack of acute pleurisy. Not recovering from this, and being in poor circumstances, he came under my care as an out-patient, and was attended at his own home.

On May 27th, 1877, when I first saw him, he was lying on his back in bed, nearly exhausted, and almost cyanotic. His respirations were very frequent, and he had a constant short hacking cough. His finger nails were clubbed. His tongue was foul, and he gave a history of profuse night sweats for some time past. On examining his chest, the right side measured eighteen inches, and was superresonant on percussion. The cardiac impulse was to the right of the right nipple line. The left side measured twenty-one inches, was absolutely dull on percussion, and no breathing sounds could be heard. The chest-wall on the left was so swollen and oedematous, that it was impossible to feel the ribs. Knowing what was the matter with him, I had taken the aspirator with me, and at once proceeded to tap him somewhere about the angle of the scapula. I used a large needle, but, although the chest-wall was so oedematous, the fluid withdrawn was clear serum. It measured thirty-five ounces. The upper portion of the lung expanded at once, and the heart's apex moved close to the right of the sternum. On the next day, a succussion-splash could easily be obtained, but this soon cleared off, and he nearly recovered and was able to walk about. In about a fortnight's time, however, it began to fill again; and, on June 19th, 1877, he was in much the same state as when I first saw him. I again tapped him, and this time drew off one hundred and forty ounces of clear serum. The cardiac impulse returned to its normal site, but the lung appeared to expand very slightly. He recovered in a few days, and used to walk out; but, on July 18th, 1877, I had again to tap him, drawing off forty ounces of clear dark serum. The cardiac impulse again returned to its normal site, but no breathing sounds whatever could be heard over the left lung. On visiting him the next day, he had gone out for a walk. On July 26th, 1877, he was seized with vomiting, and his urine was nearly suppressed. It was of a high specific gravity, acid, but contained no albumen. Symptoms of uremia soon developed, he became comatose, and died on August 3rd, 1877.

A necropsy was made on August 4th, 1877, when both kidneys were found on section intensely congested, the smaller vessels in both portions standing out as dark lines; the other abdominal organs were healthy. On opening the chest, the heart was seen lying in the right side of the thorax with its apex under the right nipple line. The tricuspid and mitral valves were covered with recent lymph. The apex of the right lung was tuberculous. The left pleural cavity contained several pints of clear serum. There were a few long stringy adhesions in some parts. The costal pleura was slightly thickened where the puncture had been made, but was otherwise apparently healthy. The whole of the left lung was compressed into a carnified mass about the size of the palm of a hand. Its pleura was covered with about a quarter of an inch thickness of tough leathery lymph, which must have prevented the lung from expanding. The head was not allowed to be opened.

REMARKS.—There are two points worthy of notice in this case. 1. Although the left side of the chest was oedematous, the fluid was not purulent. 2. If, after the first tapping, iodine had been injected or a drainage-tube inserted, the patient might have recovered. Either would have been useless after the subsequent tapping, as the lung was then incapable of expansion.

* Read before the Sheffield Medico-Chirurgical Society.

DISARTICULATION AT THE HIP.

By T. F. CHAVASSE, M.B. Edin.,
Assistant-Surgeon to the General Hospital, Birmingham.

THE BRITISH MEDICAL JOURNAL for April 27th contains the report of a discussion which has recently taken place, at the French Academy of Medicine, upon amputation at the hip-joint, the subject being introduced by a paper of M. Verneuil. In that communication, the eminent Parisian surgeon advocates driving back into the general circulation, by means of Esmarch's bandage, the blood contained in the limbs; and says that the operation itself should be performed by means of lateral flaps, a tedious dissection being undertaken as though removing a tumour, and all the blood-vessels ligatured before division. By these means, it is thought to procure a nearly bloodless operation, and, by facilitating the after-drainage of the wound, to render blood-poisoning less likely to occur.

What I conceive to be the best method of preventing hæmorrhage in this operation is compression of the aorta, not by the tourniquet, but by folded towels, or a pincushion, placed over the vessel, and a strong India-rubber band encircling the abdomen. Previously to this application, three or four turns with the elastic bandage should be made at the upper part of the sound thigh, to prevent egress of the contained blood until all is finished; thus constituting a sort of reservoir in the limb. On the affected side, if the operation be for malignant disease, it is better merely to elevate, and to allow the blood to gravitate, than to thoroughly empty the limb by the bandage. The blood contained should certainly not be driven out of both limbs, or, from the excessive engorgement of the internal viscera thus caused, the brain and lungs amongst the rest, unlooked for complications may arise for which the anæsthetic may be blamed.

By following M. Verneuil's particular method of operating, I must confess I cannot see any advantage to be gained. By a dexterous manipulator, the operation generally in vogue amongst English surgeons, viz., by transfixion, can be accomplished in from ten to thirty seconds, and a few minutes will suffice for securing all the important vessels. M. Verneuil's plan occupies at least half an hour, and so probably the danger from shock is increased. Mr. Spence, who, in this particular operation, has had more experience than falls to the lot of most surgeons, having performed twelve disarticulations at the hip with five successes, one of them being a primary for a machinery accident, remarks, in his *Lectures on Surgery*, vol. ii (second edition): "I have no hesitation in saying that, from my own experience, rapidity of execution in this operation is of great importance, as diminishing the risk from shock and loss of blood."

Ligaturing each vessel before it is cut, to prevent loss of blood, is unnecessary; for, in Mr. Spence's last case, at which I had the pleasure of assisting him, the operation was performed, as a last resource, upon a man with a very large malignant sarcoma of the femur; the veins of the limb were dilated to thrice their natural size. By compressing the aorta with a pincushion and India-rubber band, not more than two ounces of blood were lost altogether. The bleeding that did occur was nearly all from the large femoral vein, which had not been securely enough ligatured before the compress was removed.

Upon reference, I find that M. Verneuil advocated his operation at the Academy upon the strength of one successful case in which it had been performed. The plan of dressing that this surgeon recommends (*à la Lister modifié*) is not of the highest importance, as, by cutting the posterior flap carefully from without inwards, the edge of the wound need not, as Bell has shown, be so near the rectum but that the proper antiseptic precautions may be taken, putrefaction avoided, and free drainage effected.

ABNORMALITIES OF THE HEART IN AN EPILEPTIC PATIENT.*

By GEORGE J. HEARDER, M.D.,
Medical Superintendent of the Joint Counties Lunatic Asylum, Carmarthen.

E. G., AGED 44, was admitted January 27th, 1873, demented and subject to epilepsy. She had been deserted by her husband on account of her intemperate habits. Her height was fifty-seven inches; her weight one hundred and one pounds. The cardiac impulse was increased in force and area. A loud rough systolic murmur was audible, most distinctly in the line of the sternum, and was prolonged in the course of the great vessels. The radial pulses were very feeble, the left being

* Read before the South Wales and Monmouthshire Branch.

decidedly the weaker. There was visible arterial pulsation across the neck just above the sternum. The pupils were equal and sensitive. She was certified to be suffering from aortic valvular disease. The epileptic attacks, which averaged five a week, were complicated by syncopal symptoms; and she was, therefore, carefully watched, as sudden death was apprehended.

On January 21st, 1878—as on several previous occasions—the medical officers were sent for, as the patient was suffering from a fit of longer than usual duration, and death from syncope appeared imminent. She rallied from this attack; but on the following morning, while standing speaking to a nurse, she fell dead.

The body was examined twenty-four hours after death. The heart weighed twelve ounces. There was a white patch of the size of a shilling on the right ventricle, and another of the same size in front just above the apex. All the cardiac cavities were full of blood. The muscular substance was pale, very soft, and easily torn by digital pressure. Both ventricles were dilated, and the left was also considerably hypertrophied. The aortic valves were competent. The aortic opening was seven-eighths of an inch in diameter; the mitral opening one inch and an eighth; the pulmonary one inch and a quarter; the tricuspid one inch and a half. There were patches of atheroma on the inner surface of the aorta; the free edges of the valve were thickened; and there were calcareous spicula in the attached edges. The aortic valve consisted of only two segments; the anterior being the larger and covering the origin of both coronary arteries; the segments were thickened and somewhat sacculated. The two posterior segments of the pulmonary valve were joined together by their contiguous free edges as far as each corpus Arantii; therefore, the pulmonary valve, as well as the aortic, consisted practically of only two segments. The ductus arteriosus was patent, the opening being one-eighth of an inch in diameter. The innominate and the left carotid arteries arose from the aorta by a common trunk; the carotid crossing the neck at the level of the upper edge of the sternum.

CASE OF HIGH TEMPERATURE AFTER PARTURITION: TREATED WITH WARBURG'S TINCTURE.

By J. BURNLEY WALKER, M.D., Golcar, Huddersfield.

It has occurred to me that the following brief notes may not only serve as a fitting sequel to the interesting case published by Dr. Playfair, at page 687 of volume ii of last year's JOURNAL, but may also be a guide to the treatment of a class of cases which unhappily are but too common in general practice, and, from the attendant circumstances, probably cause more anxiety to the family practitioner than any other.

Mrs. A. B., aged 42, a spare delicate woman, was confined of her sixth child on January 9th, 1878. The labour was in every respect a natural one, and not attended with more than ordinary difficulty. On the second day after delivery, she complained of a creeping sensation, commencing at the feet and travelling to the face, accompanied by intense throbbing headache, which was followed by burning, flushed face, and extreme thirst. On palpating the abdomen, there was a little tenderness to the left of the uterus. The lochia were offensive, and lactation had ceased. This state of things existed (accompanied with insomnia) for several days; the temperature fluctuated from 101 deg. to 104 deg., with no distinct regularity, except that the afternoon temperature was always the highest. The pulse ranged from 110 to 120. The tongue was dry, fissured, and "leathery".

Without detailing particulars from day to day, I may say that, on January 26th, at 11 A.M., I found her much worse. Temperature 104.8 deg.; pulse 120. The patient was obliged to lie on her back, and could with difficulty speak. The breathing was hurried and shallow. There were continual "creepings" (no distinct rigor). There was no pneumonia. On examination, the uterus was found to be fixed as by adhesions, and on the left side there was considerable tenderness to the touch. I ordered her fifteen grains of salicylate of soda every two hours, and one ounce of brandy every three hours, in addition to milk, eggs, and beef-tea. By the time three doses of the salicylate had been taken, the temperature had fallen to 98.6 deg. and the pulse to 88. The breathing was much slower; there were no creepings; the thirst had gone; the tongue was moist, while there was profuse diaphoresis.

The cure, however, had produced more discomfort than the disease; there was deafness, with distressing noises in the head, which the patient described as intolerable.

On my visit next morning, I found the temperature had risen to

104.8 deg. and the pulse to 132. There was increased tenderness on palpating the abdomen, with some tympanites; the breathing was again hurried and oppressed. The patient's condition was now so critical that I suggested a consultation, and at noon Dr. Clarke of Huddersfield saw the case with me. At his suggestion, I prescribed half an ounce of Warburg's tincture; no food having been taken for an hour previous to its administration. Failing this remedy to reduce the temperature, we determined upon resorting to cold affusion. However, the administration of the tincture was immediately followed by profuse perspiration and refreshing sleep. At 8 P.M., the temperature had sunk to 98.6 deg. and the pulse to 100. The frequency of the respiration had correspondingly diminished. The patient expressed herself very much relieved; she could now lie on her side and sleep for two or more hours at once. I ordered three drachms of the tincture to be given during the night, and one ounce of brandy every hour, as the consequent exhaustion was so marked. Since this, the case has had no untoward symptom. The pulse and temperature remain normal, while the abdominal tenderness has entirely disappeared.

This case needs no comment. The immediate improvement was so marked that, I have no doubt, this patient's life was saved by the timely administration of "Warburg". The case has this additional interest: that cold affusion was not employed, as in Dr. Playfair's; hence more reliance may be placed on the value of the drug, which, since the publication of its formula by Dr. Broadbent, should now no longer rank in the list of quack medicines, but should be added to the armamentarium of every practitioner.

CLINICAL MEMORANDA.

CROUP: DIPHTHERIA.

ON re-reading Dr. Johnson's letter (*Lancet*, February 16th) by the light of his last, in the BRITISH MEDICAL JOURNAL of June 1st, I can readily see how I should have so misapprehended Dr. Johnson's intention; but still, as his views are at present not my views, and as he did not say, but only "meant to say that the membranous exudation which characterises diphtheria, when not the result of direct contagion from a previous sufferer, is caused by a drain-poison", he will the more readily pardon my unintentional misconstruction. Since, however, my misapprehension has elicited from Dr. Johnson so clear and explicit a definition of the point at issue, I regret it the less. And, as the final settlement of this important practical question is the end and object of us all, I hope Dr. Johnson will forgive me, if, notwithstanding his last letter, I still have the hardihood to contend that "a false membrane which has resulted from infection by a drain-poison" may not be diphtheria. It is possible, as stated by Dr. Johnson, "that, in the absence of direct contagion, the occurrence of membranous pharyngitis or laryngitis affords conclusive evidence of infection by sewage-poison conveyed through either air or water"; but I am quite unable to admit that the single pathological symptom "false membrane" always means diphtheria.

ROBERT L. BOWLES, M.D., Folkestone.

VARICELLA OCCURRING IN AN INFANT TWENTY-FOUR HOURS AFTER BIRTH.

ON March 17th, 1878, I attended Mrs. M. in her seventh accouchement. On visiting her the next morning, the nurse drew my attention to the child, "who had a rash coming out"; its body was quite clear from any eruption at birth. I found a well-formed vesicle on one wrist, also several red papule on the face and forehead. The following day, another crop of vesicles and papules appeared, and the illness ran the usual course of a case of chicken-pox, lasting about ten days, the infant passing through the ordeal nicely. The mother was free from any vesicular rash, and had had no symptoms of illness whatever; but the other children, six in number, were suffering from chicken-pox in its various stages. Now, I believe the incubation in varicella is from three to four days, with a premonitory fever lasting from twenty-four to seventy-four hours, when the rash appears; how, then, are we to account for a child in so few hours from its birth contracting this disease? Either it must have been peculiarly susceptible to the above contagion, and the usual period of incubation and primary fever was wanting, or else the infection was conveyed through the parent to the fetus *in utero*. I must add that the child had not been taken from, neither had the other children been admitted into, the lying-in room. This case will do away with the theory, held by some of the older physicians, that varicella only occurs in the vaccinated.

T. WELLS HUBBARD, M.R.C.S. Eng., Lenham.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

IMPASSABLE STRICTURE OF THE URETHRA: WHEELHOUSE'S
OPERATION: SEVERE URETHRAL FEVER: RECOVERY.

(Under the care of Mr. CHRISTOPHER HEATH.)

FOR report of the following case we are indebted to Mr. A. J. PEPPER, Surgical Registrar.

S. B., aged 31, a man of colour, suffered from gonorrhœa several times. The last attack occurred ten years ago. Two years after this, he noticed that his stream was perceptibly smaller, and at that time he was catheterised, which, he stated, relieved him considerably. Soon, however, the urethral passage began to contract again, and this continued to become worse up to the time of his admission. He had occasional pains in the left renal region and along the groin of the same side.

On admission, the patient was a fairly healthy-looking man, and complained of nothing except a difficulty of micturition, the intervals between the acts varying from one to four hours. The urine, as a rule, came away by dribbles. There was no hæmaturia, and no pain in the lumbar region. Nothing abnormal could be made out on abdominal palpation; pressure above the pubes caused no inconvenience. There was no induration to be felt through the perinæum. The passage of a catheter was arrested about half an inch in front of the bulb, and an attempt to reach the bladder was unsuccessful, as not even the smallest instrument could be got through the stricture. There was scarcely any pain either during or after micturition. Temperature normal. The urine was of specific gravity 1022, acid; it contained a trace of albumen, and deposited a sediment of mucus; it contained no sugar.

Operation., December 12th, 1877, three days after admission. The patient was anæsthetised with ether, when Mr. Heath proceeded to perform Mr. Wheelhouse's operation; the patient being placed in the lithotomy position. A beaked staff was passed down to the stricture, and the urethra opened upon it. The staff was then pushed through the wound, and the anterior part of the urethral passage hooked forwards. Each side of the mucous membrane was retracted with forceps, and search made for the aperture into the posterior part of the urethra. This stage of the operation was somewhat prolonged, owing to the difficulty in finding the contracted opening; but eventually a blunt-pointed probe was passed into the bladder, and along this Mr. Wheelhouse's probe-pointed gorget was directed and made to dilate the stricture. A full-sized elastic catheter passed through the meatus, traversed the perineal wound, and slid along the gorget into the bladder. The catheter was tied in.

December 13th. The patient passed a tolerably good night. The urine had been drawn off at intervals by removing the plug from the catheter. To-day, an India-rubber tube was attached to the catheter, and conducted to a vessel containing a disinfectant solution. Temperature 101.3 deg. Fahr.; pulse 128.

December 14th. Yesterday, the urine was mixed with a large amount of blood. This morning, it was of porter colour and fetid, though in quantity good. There was severe pain in the left renal region. Temperature 100.3 deg. Fahr.; pulse 108. The catheter was removed.

December 15th. There was decided improvement in his general condition. The greater part of the urine was passed voluntarily by the wound, but a small quantity escaped from the urethra. Temperature 99.8 deg. Fahr.; pulse 100.

December 16th, 7 A.M. A rigor set in, which lasted for a few minutes. Temperature 104 deg. Fahr. At 5 P.M., a second rigor occurred, and lasted for twelve minutes; the temperature at the time was 104.5 deg. Fahr. Half an hour afterwards, it had risen to 107.2 deg. Fahr. in the axilla. At midday, some blood escaped with the urine. Sulphate of quinine (five grains) was ordered to be taken every six hours.

December 17th. The patient slept well during the night. The temperature this morning was 99 deg. Fahr. The wound looked healthy.

December 19th. The urine was alkaline; it contained no blood, only a trace of albumen, and a copious deposit of mucus. Temperature 100.1 deg. Fahr. He was now taking two grains of quinine every six hours.

December 29th. Since the 19th, the greater part of the urine had escaped from the wound, though occasionally some was passed by the natural passage, and this more when in the sitting than in the recum-

bent position. The wound itself was granulating healthily. The urine was ammoniacal and fetid. He had pain in the suprapubic region, with tenderness on pressure. A No. 12 catheter was passed down to the wound, where some obstruction existed. A No. 6 bulbous catheter introduced from the wound into the bladder. Temperature 99.4 deg. Fahr. He was ordered tincture of hyoscyamus, twenty minims; infusion of buchu, three ounces; to be taken three times a day.

January 1st, 1878. The urine was acid; it contained no sugar; no albumen; there was a deposit of mucus. Temperature 98.8 deg. Fahr.

January 5th. A No. 8 catheter was passed. Some obstruction was met with at the anterior part of the wound.

January 12th. A No. 9 catheter passed easily. More than half the urine was passed by the meatus. There was marked general improvement.

January 26th. A No. 10 catheter passed readily. The wound was nearly healed.

January 30th. The wound was very small. Almost all the urine was passed by the meatus. He had slight cystitis. Temperature normal. His general health was good. A No. 11 catheter was introduced. He was discharged to-day. He could pass a good-sized stream.

REMARKS.—The points of interest about the case are: 1. The nature of the operation; 2. The severe attack of urethral fever; 3. The favourable termination of the case. During the operation, one source of trouble was the hæmorrhage, which, though slight, was sufficient to obscure the view of the parts when the urethra was laid open. The main difficulty, however, consisted in the small size of posterior aperture of the urethra leading from the wound, care being required to avoid passing the probe in the interstices of the tissues and making a false passage. After the probe had been introduced into the bladder, no further difficulty arose. The day after the operation, the urine contained a large admixture of blood, which evidently was not derived from the wound in the perinæum, as no external hæmorrhage occurred. The pain in the renal region pointed to reflex congestion of the kidney; and it is interesting to note that it was not until the fifth day that the sharp attack of fever presented itself. The temperature at that time being unusually high, though possibly influenced by some malarial taint, cystitis followed the operation, and it was most severe on the seventeenth day after. Very marked improvement took place on administering buchu and hyoscyamus, so that in two days the urine became acid. Subsequently, no bad symptoms presented themselves, and the patient steadily convalesced.

SAMARITAN FREE HOSPITAL.

CONSULTATIONS.

MAY 17TH.—*Abdominal Tumour: Uterine or Ovarian?*—Dr. BANTOCK introduced for consultation a woman, aged 58, suffering from a large abdominal tumour. She had been married twenty-three years, without issue. The catamenia, which had ceased five years ago, had always been regular, lasting four or five days and unaccompanied with pain, excepting for a few hours before their appearance. Her general health had been good. Last summer, she found that her clothes did not fit comfortably round the waist, and at Christmas there was distinct abdominal enlargement, with crampy pains in the left groin, which prevented her from lying on the left side. Both walking and standing caused the patient great discomfort. She consulted Mr. Spencer Wells, who at once recommended her as an in-patient for the hospital. Dr. Bantock observed that the diagnosis of the abdominal tumour, which certainly existed, was a matter of great difficulty. The rapid growth of the new body, the absence of any special derangement during the period of menstrual activity now past, and the conditions detected by vaginal examination, together with the rapid emaciation since the first appearance of the tumour, indicated ovarian disease. On the other hand, there was a very obscure sense of fluctuation elicited by percussing the abdomen—a symptom often observed in cases of soft, elastic uterine fibromata. Dr. Bantock proposed to find out the nature of the tumour by employing an aspirator, before he considered the question of removal. —Dr. GREENHALGH believed that the tumour was a multilocular ovarian cyst, as he found it had commenced soon after the cessation of menstruation, and had increased very rapidly within a twelvemonth. The uterus was not so much drawn up as in ordinary cases of large fibro-myomata of that organ, and the tumour had first been noticed in the left side of the abdomen, without any previous complaint of pressure or discomfort in the pelvis.—Mr. SPENCER WELLS remarked that this was a case where the cervix might be drawn down with a vulsellum forceps, to see whether the uterus were free or not, after Hegar's plan. There was evidently a large tumour, freely movable, which could be readily raised by the hand when applied immediately above the pubes. The growth was sufficiently soft to raise a suspicion of its originat-

ing in the ovary itself; but there was no fluctuation in the tumour, and there were nodular portions to the left, harder than in most ovarian outgrowths; the cervix was hard, and so small that the sound could not be introduced. The tumour was certainly closely connected with the uterus; and, taking into consideration the *facies uterina*, together with the absence of distinct fluctuation, the closure of the os, the hardness of the cervix, and the close connection of the portion of the tumour felt by the vagina with the body of the uterus, there was strong evidence of the tumour being uterine.—Dr. W. H. DAY considered that the absence of fluctuation, the rapid growth, and the close connection of the tumour with the uterus, indicated fibroma of the uterus, or a sarcomatous tumour, but not a cyst of the ovary.—Mr. KNOWSLEY THORNTON stated that the absence of fluctuation, and the general consistence of the tumour on palpation, indicated a soft uterine fibroid; and, from pelvic examination, he was led to believe that it rose from the front and top of the fundus, and was directly continuous with the cervix.—Dr. CHAMINEY could detect no true fluctuation, but there was a wave of fluid, on percussion, over the surface of the tumour, and a feeling of elasticity on palpation of opposite parts of the abdominal growth. The tumour was very hard and nodular, and closely connected with the uterus. The date of its commencement and its rapid growth were against the probability of the whole being fibroid.—Mr. DORAN felt no doubt about the fibroid character of the growth, which, on vaginal examination, could be felt on the left of the cervix uteri. He thought it improbable that it could be continuous with the abdominal tumour, except by secondary adhesions; for that swelling was very much softer, and, though it might be also uterine, it was more probably ovarian. The physical characters and history both indicated sarcoma rather than the ordinary cystic disease of the ovary.—All the staff agreed with Dr. Bantock in recommending exploratory measures before operation.

MANCHESTER ROYAL INFIRMARY.

FATAL CASE OF OPIUM-POISONING IN WHICH ATROPIA WAS ADMINISTERED.

By F. A. SOUTHAM, M.B., F.R.C.S., House-Physician.

THOMAS H., aged 38, was admitted into the Manchester Royal Infirmary on the evening of April 12th, suffering from symptoms of poisoning by opium. He had been found in bed breathing very heavily about 9.30 A.M. the same morning, and two empty bottles, which had each contained an ounce of laudanum, were lying in the room. Several attempts were made to awake him, but, though unsuccessful, medical aid was not summoned till 4.30 P.M. in the afternoon. A medical man then saw him, and the stomach-pump and galvanism were used; but, all attempts to arouse him failing, he was brought to the hospital.

When admitted, at 7.30 P.M., he was in a state of profound coma; the pupils were contracted to pins' points; the conjunctivæ were insensible. Respirations were about four a minute, very feeble. Pulse very quick and irregular, and so weak as to be with difficulty perceptible. The skin was cold and moist. The complexion was somewhat cyanotic. He was immediately removed to bed, heat was applied to the extremities, and one-thirtieth of a grain of atropia (four minims of liquor atropiæ sulphatis, B. P.) at once injected into the arm. Flagellation with the wet towel and galvanism were then applied to the chest.

At 7.45 P.M., one-thirtieth of a grain of atropia was again injected, and artificial respiration was employed alternately with the galvanism and flagellation. Under this treatment, a marked improvement in the symptoms took place; the respirations increased to sixteen a minute, though still very feeble, and attended with loud stertor; the pulse could now be distinctly felt, falling to 84; the conjunctivæ became sensible, and the pupils began to dilate. The patient, however, was still deeply comatose, and unable to be aroused.

At 8.30 P.M., one-thirtieth of a grain of atropia was again injected, as the breathing had become very weak and irregular, being occasionally completely suspended for some seconds. This was immediately followed by another temporary improvement, the respirations again reaching eighteen a minute, though still very feeble. Pulse 84, very weak and irregular. The pupils had now become widely dilated. The condition of profound coma, however, still continued, the breathing again becoming very shallow and imperfect, and from time to time altogether suspended, but being temporarily ameliorated on again employing galvanism and artificial respiration. An attempt to give stimulants by the mouth being unsuccessful, owing to the power of swallowing being abolished, an enema containing an ounce of turpentine was given at 9 P.M., and warm fomentations were applied to the chest, with the view of keeping up the circulation, which had become very feeble. The pupils still remained widely dilated.

At 9.30 P.M., the respirations, which had gradually become feebler

and slower, having almost entirely stopped, one-thirtieth of a grain of atropia was again administered. This, as before, was followed by a marked improvement, the respirations at once rising to fourteen a minute; the improvement was, however, very transitory, as after a few minutes the breathing, becoming very weak and slow, altogether ceased; at the same time, the countenance became more cyanotic, the lower jaw fell, the skin covered with a cold clammy sweat, and the pulse almost imperceptible. Artificial respiration and galvanism were again used and maintained for some time.

At 9.45 P.M., another thirtieth of a grain was injected, but without any effect; and death ensued, from evident failure of the respiratory function, about 10 P.M.

Post Mortem Examination.—The surface of the body, especially the back, face, and arms, was mottled and of a dark purple colour; the vessels of the pia mater were much congested, and about two ounces of serous fluid escaped during the removal of the brain. The choroid plexuses were much congested and oedematous; the centrum ovale was more studded than usual with minute blood-points. The stomach was empty and its lining membrane healthy, being covered with a little viscid mucus. Both lungs were much congested.

REMARKS.—The value of atropia as a respiratory stimulant in cases of opium-poisoning is well illustrated by this case; for, under its influence, the respiration at once rose from four to sixteen a minute, and after each subsequent injection a temporary but marked improvement took place. The difficulty appears to be to know how often and in what quantity the atropia should be given; in the present case, the rule as laid down by Wood was followed—viz., of administering a small dose and renewing it as often as there is any tendency for the respiration to show signs of failure: no indication could be drawn from the condition of the pupils, for after the second injection they became very widely dilated, and remained so until the end of the case. Whether a more favourable termination would have followed if the atropia had been given in a larger dose (e.g., one grain), as recommended by Fothergill, it is impossible to say; but, from the length of time which had elapsed before the patient came under treatment (the opium having probably been taken at least eighteen hours before, and in considerable quantity), I do not think it at all likely that the administration of the antidote in larger doses would have been followed by recovery.

ADELAIDE HOSPITAL, DUBLIN.

CYSTITIS IN A FEMALE SIMULATING STONE IN THE BLADDER.

(Under the care of Mr. BARTON.)

E. R., WIDOW, aged 29, by occupation a nurse, was admitted into the Adelaide Hospital on February 16th, on the suspicion of having a calculus in her bladder. She stated that her health had been failing for several months, and that for the last month she had experienced an uncomfortable sensation in the region of the bladder, with a frequent desire to micturate. The symptoms increased; appetite was lost, and fatigue easily induced. At times, she had shooting pains across the lower part of the abdomen and down the inner part of the thighs. About a fortnight before her admission to hospital, after some exertion, she felt faint, had a severe pain in the hypogastric region, and, after great straining in micturition, passed a considerable quantity of blood, and had to take to bed. The pain, which was excruciating, was unrelieved by passing urine, which she did every half-hour. The urine was acid in reaction, and contained blood and pus. A mass of enlarged glands was noticed on the left side of the neck. Mr. Barton sounded the bladder for stone, but failed to discover one. Bland injections were made into the bladder, and tonics and anodynes administered, but without effect. Mr. Barton, therefore, determined to dilate the urethra, which he did by means of Weiss's dilator, by two operations, with an interval of fourteen days; after which, the urethra was so expanded as to admit the index-finger freely into the bladder. The mucous membrane of this was quite rugous; there was but slight hæmorrhage, and the urine trickled away for about twelve hours. She steadily improved after this, and left the hospital on April 6th, with complete control over the bladder; all pain was gone and her appetite was good; the urine was healthy, and the glands in the neck much reduced in size. Upon each occasion that the dilator was used, the patient was placed under the influence of chloroform. The dilatation occupied nearly a quarter of an hour. It was carried as far on the first occasion as to admit the tip of the index-finger into the urethra, but not into the bladder. This was followed by such marked relief that it was hoped no more would be required; but the symptoms persisting, although in a mitigated degree, the second dilatation was performed, when the index-finger was freely passed into the bladder; incontinence lasted only one day. Complete cure followed.

REVIEWS AND NOTICES.

THE ANTIDOTAL TREATMENT OF DISEASE. By JOHN PARKIN, M.D.
Part I. London: Hardwicke and Bogue. 1878.

THE author begins his work by inserting a number of quotations from various sources to prove that the art of healing is at present in a very "lamentable state". This he traces to two reasons, the first of which "has been the adoption of so many new theories, and the laying aside of that simple and scientific mode of treatment pointed out by the father of medicine himself"; and the second is "that we have remained up to the present time in complete ignorance of the immediate and proximate cause of the majority of diseases". That we may no longer remain in this state of primeval darkness, he proceeds to enlighten us on the last point; and, after a long and rambling argument, he informs us that the cause of all febrile and all inflammatory conditions of every description is the same; viz., malarial poison. Taking ague as the type of malarial disease, he informs us that "in the cold stage of the disease, the poison is situated in the capillaries of the lungs. . . . In the febrile stage, the same matter is confined in the systemic capillaries, having been transported there with the current of the blood on the termination of the cold fit"; whilst during the intermission "it is contained in the venous system, into which it has been propelled on the termination of the febrile stage". Having thus proved to his own satisfaction that the ultimate pathology of a large number of very diverse morbid conditions can be brought down to the one focus of malarial poison, he disposes with equal ease of the question of their rational treatment. "There are only two methods of treatment that can be scientifically adopted; one is to neutralise the offending matter by the administration of an antidote, or, failing this, to cause its expulsion."

Without altogether ignoring the latter method, it is the former which has attracted the author's particular attention; and it is here that he has made his great discovery. Believing that his universal malarial poison is closely allied to the "class of poisons termed septic", he was led to infer that "carbon and its compounds would be or ought to be antidotes for the poison . . . and specifics for the diseases arising from the operation of malaria in the human frame". Considering carbonic acid to be the simplest form in which to administer carbon, he treats all descriptions of disease which come within his wide-embracing category with the ordinary *Mistura effervescens* of our hospital pharmacopœias. This is all:

"Parturiunt montes, nascetur ridiculus mus."

Two good-sized volumes are necessary to prove inductively and deductively that effervescing mixture may be given to feverish patients. Except that the use of quinine is decried in ague, the result arrived at is harmless enough; but the author would have consulted his reputation for logical argument better had he followed Lord Mansfield's well known dictum, and stated his results without attempting to give the reasoning by which he arrived at them.

PUBLIC HYGIENE IN AMERICA. By HENRY I. BOWDITCH, M.D.
London: Trübner and Co. 1877.

THE volume before us contains a centennial discourse delivered before the International Congress which was held at Philadelphia in 1876, but the discourse has been greatly expanded, and with appendices, in which are embodied the data that formed the groundwork of the address, it now occupies a thick volume of nearly five hundred pages. The address, as it at present stands, consists of two parts, in the first of which the author gives an account of the birth of the science of preventive medicine, and of its gradual development up to its present state. In the second part, a summary is given of the answers returned by a large number of medical men in all parts of the Union to a series of questions formulated by Dr. BOWDITCH, with the view of ascertaining what amount of attention was being paid to the subject by the legislatures of the different States. Both divisions of the subjects are full of interest, and the latter will very probably be of great service in America, by calling attention to deficiencies in the hygienic condition of the towns, and by pointing out the directions in which reform is needed.

In the first division of his subject, the author divides the history of sanitary science into three epochs, the first comprising the period ending with the year 1832. This he terms the epoch of "systems" of medicine, when everything was believed of drugs and nothing was expected from nature in the curing of disease. But then came the reaction first started by the teaching of Louis, when medical scepticism began to show itself, and it soon led to an almost total disregard for drugs, and an overweening confidence in the power of nature to right

herself. The pendulum having thus swung to its full extent in the opposite direction, it took its fresh start in America, in the opinion of the author, in the year 1869, when the first State Board of Health was legally organised. Dr. Bowditch is very sanguine that we have entered upon the final epoch of medical development, and that we shall advance steadily into the far future on our road of improvement. We must confess to being less hopeful of having reached the broad straight road to perfection, and we fear that action and reaction will govern our movements as heretofore. At the same time, we think the author is fully justified in attaching great importance to the period when the study of preventive medicine was first seriously begun; and it cannot be doubted that it is from this side that disease will be most effectually attacked in the future. This, moreover, is a battle in which, as Dr. Bowditch points out, the whole community, lay as well as medical, can, and indeed must, take part; and the questions, the answers to which form the second part of his discourse, were drawn up with the principal view of ascertaining to what extent the lay authorities were alive to this fact, and were accepting the responsibilities devolving upon them. We cannot say the answers were encouraging, for in a large majority of states, it appeared that the legislatures were not at all alive to their duties; were unwilling to spend any money to improve the health of their people; had passed no laws for that purpose; whilst the drainage, even in such cities as Boston, appears to be still in a very primitive condition. Public opinion, however, seems to be waking up on the subject; and we think the present volume is eminently calculated to give impetus to the sanitary movement which has now been started. We wish Dr. Bowditch every success in his righteous endeavours; and we trust that when the next sanitary census is taken, the returns will show a much more satisfactory state of things than at present exists.

A NEW SYSTEM OF MEDICINE ENTITLED RECOGNISANT MEDICINE, OR THE STATE OF THE SICK. By BHOLANATH BOSE, M.D., Her Majesty's Indian Medical Service. Pp. 204. London: J. and A. Churchill. 1877.

PRINCIPLES OF RATIONAL THERAPEUTICS. By the same Author. Pp. 88. London: J. and A. Churchill. 1877.

THESE essays are an extraordinary compound of old ideas under new names—tirades against prevalent teaching, and absurd self-assertion, with a certain amount of ingenious speculation, quaint phrasing, and fantastic comparison. We do not often review an Indian treatise, and regret that we have not better words for this one; but a few extracts will speak for themselves. "All diseases may be said to have a two-fold action on the living frame—viz., a forward and a backward *at the same time* (?): the forward is more or less circumscribed and most prominent, and is, in fact, the disease, including symptoms; and the backward, which is equally manifest, but pervades the whole system, is what constitutes the *state of the patient*." (Page 4.) "All our acquired knowledge is and can be but of three kinds—viz., of effects, of causes, and of states. . . . A state or states, call it property, attributes, relations, etc., must be the only condition for a thing to be, or the existence or being of a thing; it is the only possession of an existence—God, man, and the universe; it is the great symbol of life; and lastly, it is alone, so to speak, the chief clothing, the ornament, the dress, the beauty, the expression, and the tangibility or cognisability of all beings." (Page 11.) [We really think our author has made a special study of Bardsolph's speeches.] "Where are we then to look for the *state* between the symptoms and the disease? Shall we find it in semeiology, etiology, diagnosis, etc.? Does the student proceed from symptoms to the state of the body, and then to the disease? . . . Not so: the first thing he does is to learn the name of the disease; symptoms follow; then diagnosis, prognosis, etc. To him the condition of the sick is a secondary event scarcely worth consideration. . . . He is referred to a mass of undigested, absurd, and contradictory opinions, or to vague expressions, as debility, etc. It appears as if he were blindfolded during this voyage through the state of the body, lest some terrific scene should affect his too tender eyes, and frighten his innocent mind. His theories—like those of his teachers, being chiefly founded on symptoms, the least important part of a pathological whole, and often on some idols of imagination—are like so many gunpowder plots, which terminate sooner or later in an equal number of explosions, each blowing off thousands of our race, who unfortunately happen to be under their mortal influence. The purpose of our present inquiry is not to delineate disease and point out symptoms, but *to unfold and develop, as far as lies in our power, the intermediate condition of the sick*, or the principle of morbid causation, by which our health is chiefly undermined and death works its way."

With regard to the author's meaning of "*recognisant*", he explains

that every component part of the body is endowed with a certain sense peculiar to itself, by which it knows and performs its function. "Thus the muscular fibre takes cognisance of its stimuli, and contracts; in other words, the muscle is irritable; that is to say, it has a sense of its own, by the exercise of which contraction takes place." [Bardolph again.]... "These senses are born with the parts in which they reside...and are connected by means of nerves to fulfil specific ends, as the individuals in a republic. Their peripheral extremities take cognisance of events, of which their central terminations (brain-cord-ganglia) take cognisance, occasioning a sensation." Are not these all but synonymous with the well-known terms, *direct* and *reflex*? Thus, Dr. BOSE instances muscular contraction under galvanism—"in which neither the muscular nerve, the brain, cord, nor ganglia take part"—as a spasm resulting from a direct impression on the muscular tissue, that is, a *cognisant* spasm, which would be *recognisant* if excited by motor nerves. "A cognisant action or cognisance is the result of an independent exercise of the inherent power or sense with which each organ is provided. On the other hand, a recognisant action is always a dependent phenomenon. Every disease is a cognisance struggling with nature, i. e., recognisance. In hepatitis, the distension of the organ, the effusion of serum, pus, and lymph are *cognisant* phenomena, and pain, fever, vomiting, etc., are *recognisant*. The modern physician is too much occupied with *cognisant* functions; indeed, his knowledge of *recognisance* is extremely limited, and does not extend beyond such expressions as fever, inflammation, tonicity, etc."

In the chapter on Motion, we are informed that motion of some kind seems essential to organisation; that no matter can be said to be truly fixed. "The loftiest mountains, the great and magnificent cities, the silent and solemn pyramids,...and the calmest ocean, are all moving through the infinity of time and space...Every existence has a certain age...age, in fact, is almost synonymous with motion" (!). [The number three is of much importance in the New System of Medicine.]... "There are three primitive motions—the ciliary, the tubular, and the cellular. ...There are also three varieties of spasm: (1) The complete existent spasm, wherein circulation is excited (hysteria-cholera); (2) The partially coexistent spasm; and (3) The complete coexistent spasm. Rheumatism is of spasmodic nature."

Concerning the "continuity of animal functions", we are informed that there are three digestions: the first is simply "alimentation"; the second realimentation (comprising suction of chyle and lymph, their mixture with venous blood, etc.); and "nervous digestion" or super-realimentation, whereby the nerves are nourished. But the grandest of all digestions, the final stage of alimentation, is spiritual digestion (!) ...The knowledge of God so derived is the last form of *chyle*, the divine food, which we offer our Almighty Father to receive his eternal benediction and peace!"

A sensation is called "sentient accordance", and a motor influence is "motor accordance". "The body in a state of concordance may be compared to a wedge jammed in between two powerfully compressing surfaces—viz., the external world, and the brain, spinal marrow and ganglia, each, as it were, striving to meet the other in close approximation by their peculiar impressions through the intervening wedge". And again, "The mind, with the ordinary senses and the brain, serves, so to speak, as a guardian to the flesh against its external dangers, and watches over the exportation from, and importation to, the corporeal country—the body. It is, as it were, the military department of the animal, with a good commissary-general at its head."

In treating of the "humours in disease", we are gravely informed "that it is not improbable that in many cases an abnormal state of the epithelial membrane is an immediate cause of disorder to the secretive functions. Many of the skin-diseases attended with scaling, which sometimes baffle the best conducted treatment, are, in reality, instances of epithelial disorder".

"...When we have fulfilled our task, we shall ask our professional brethren if they are prepared to cast into eternal oblivion another great bugbear in medicine, and an illusion still more frightful than inflammation, viz., fever—a term which has no meaning in science, and, to say the least, has been a labyrinth of confusion in all ages. Fever is really determination and congestion of the whole frame, and is better called *kyāltis* (from Sanscrit *kyā*, the body); and there may be current *kyāltis*, recurrent and concurrent ditto." (Page 157.) Are we much wiser than before?

As an instance of the application of the nomenclature of Dr. Bose, we recommend to the Committee on Hydrophobia the following definition. "It = general existent (convulsions) and partial coexistent (lockjaw) and concordant spasm (tonic spasm) of voluntary muscles and excessive spinal motor accordance and perverted mental accordance (fear of water) and canine poisoning."

The second and smaller essay commences with the description of an imaginary patient, Gullible Plastic, giving his interviews with his housemaid, his mother, Mr. Quack, Mr. Aubant (*aub*, water), Mr. Dilution Globule, and Mr. Biggy Ball, and other M.D.s (or mad dogs), in a strain rather beneath that of an average Punch. But the real object of the *brochure* is "to elucidate vital drug-power in its entirety, to reconcile professional differences of opinion, and to raise therapeutics on a basis of common sense to something like a precise art". [This in seventy small pages.]

From a "broad and philosophical study of the present chemical constitution of our globe", our author concludes that "it behoves us, as the oxygen element, to first reduce the housemaids, quacks, *et hoc genus omnes* (*sic*), into speechless stones and ashes! then to combine with the hydropath (the homo-hydrogen) and homœopath (the homo-nitrogen) or compel them to combine into therapeutical water and air, in order that we may, as it were, by a rational convulsion, be nature's true handmaids, and hope to be the real saviours of life, when the vital spring is muddy, or Death prematurely knocks at the door".

After a few lines devoted to quinine, which is, as we are informed, an irritant to gastric mucous membranes, a narcotic, sedative, and tonic, we have a disquisition upon "tone" and the varieties of *organic* life. Of this there are two principal ones: 1. The simple cell, cilia, or fibre-life; and 2. The tubulo-cell life, which may be uni-tubulo-cell, or bi-tubulo-cell, or tri-tubulo-cell, or per-tubulo-cell or intellectual life. If we have any doubt about this, we are advised to study nature well and see. It follows that there are cell-medicines and tubulo-etc.-medicines. What our author would, we suppose, call the *principles* of his therapeutics are, such as that cell-medicines must be bland and inoffensive—not too discordant—must be minutely divided and absorbable, must supply elements of blood, and act continuously; but we can find no extraordinary improvement on the usual teaching in these statements, nor in the division of cell-medicines into cell-tonics, cell-laxatives, and cell-alteratives, nor in the idea that these act through the medium of the liquor sanguinis. Neither is it specially new or definite to presume that, while "iodine and mercury operate equally on all parts, iron, strychnine, and arsenic prefer to act respectively on the blood-corpuses, sarcoous particles, and cutaneous cells, and that quinine, nitre, and digitalis tend to preponderate their forces on the nervous, renal, and circulatory systems". Arsenic acts, we are informed, by a "preferential operation on dermoid structures" either "by destroying acrogenous vegetation, or by indirect alteration of the derma, or by counterirritation, obviating irregular nervous accordance, and the spasm in which recurrent *kyāltis* originates" (!). There is a quaint truth in the including of the following amongst per-tubulo-cell or mental medicines. "The direct supporters of cerebral tone may be enumerated as contentment, cheerfulness, liberty, personal and social independence, wisdom, hope, confidence, etc. Its relaxants will be discontent, wretchedness, dependence, stupidity; and, lastly, its alteratives would be good-breeding, patriotism, intellectual and moral culture, religion, etc."

SELECTIONS FROM JOURNALS.

SURGERY.

AIR IN VEINS.—II. Fischer (Volkmann's *Sammlung Klinischer Vorträge*, No. 113) discusses the questions arising concerning embolism from the admission of air, and describes the following experiments which he has carried out. 1. From a broad cut through the internal jugular vein at the lower part of the neck, there follows death; and from such a cut in the axillary vein at the level of the thorax, there follows generally in a few minutes the death of the animal, after plainly audible entrance of air, the symptoms being those of asphyxia. On *post mortem* section, immediately performed, the right heart is found dilated, filled with air and frothy blood; and so also the pulmonary artery down to its smallest branches. 2. If a firm pierced cylinder be introduced into the larger veins of the body, death occurs after from five to fifteen minutes, with gradually increasing restlessness and constantly growing asphyxia. This applies to the external jugular vein, the veins of the arms, and large veins of the thigh. 3. If a large quantity of air be rapidly forced into the veins of guinea-pigs, death of the animal will be caused, with the appearance of suffocation, whatever veins be operated on, even the smallest in the body. When, however, air is slowly and steadily introduced, death of the animal results equally; and it only survives when a very small quantity is introduced—as an example, from ten to twenty *centimètres* in half an hour. Thus the entrance of air into the veins is highly dangerous under all circumstances; and it appears that even the slow entry of smaller quantities is more mis-

chievous than might have been supposed from the researches of Uterhart, Laborde, Pirogoff, etc.

THE TREATMENT OF HÆMORRHOIDS BY FORCIBLE DILATATION.—Dr. W. Wannebroucq (*Bulletin Médical du Nord*) considers the treatment of internal hæmorrhoids by forcible dilatation of the sphincter ani as a most valuable surgical process. In most cases, medical means suffice; where surgical aid is necessary, however, the abrupt distension of the sphincter by the fingers gives immediate relief, and commonly effects a permanent cure, dispensing with either Salmon's operation (the best of all surgical proceedings for ablation) or cauterisation, whether by the actual cautery or by saturated solution of chloride of zinc.

INTERMITTENT HYDARTHROSIS OF KNEE-JOINT.—M. Panas and M. Verneuil have reported to the Société de Chirurgie two cases of intermittent effusion into the knee-joint. M. Panas' case had a perfectly regular intermittent character. It was in a young woman aged 22, who had never suffered from any joint-inflammation, and had no apparent diathesis. The effusion recurred at intervals of fifteen days, and lasted a week. These intermittent attacks in each case commenced soon after accouchement. They lasted for some time, and were apparently uninfluenced by quinine or iodide of potassium.—*THE BRITISH MEDICAL JOURNAL* of February 3rd, 1872 (page 128, column 2) contains a notice of two cases of intermittent effusion into the knee-joint, in the practice of Dr. Löwenthal of Berlin and Dr. Bruns of Tübingen. Both patients were females. In Dr. Löwenthal's case, the attacks were suspended during pregnancy; in that of Dr. Bruns, relief was obtained by the administration of arsenic with quinine, after quinine had failed.

ANATOMY.

RELATIVE CALIBRE OF THE TRACHEA AND BRONCHI.—From his researches on the relative calibre of the trachea and bronchi, M. Marc Sée draws the following conclusions. In the normal state, the united calibres of the two bronchi are equal to the calibre of the trachea. It may be added, as the result of the measurement of a limited number of cases, that the united calibres of the bronchial divisions are equal to the calibre of the bronchus from which they spring. The respiratory tubes, therefore, are a cylinder, and not a cone. In pathological states, the equilibrium between the capacity of the trachea and that of the bronchi may be destroyed either in favour of the bronchi, as in chronic tubercularisation, or of the trachea, as in emphysema.

OBSTETRICS.

USE OF THE FORCEPS IN PARTIAL DILATATION OF THE OS UTERI.—Dr. A. M. Fauntleroy, (*American Journal of Obstetrics*, Jan. 1878) advocates the use of the obstetric forceps before the os uteri is dilated, in the following cases: 1. When the head descends immediately without the intervention of the liquor amnii; 2. In placenta prævia (Dr. J. S. Eshlemon of Philadelphia is said to have been the first to apply the forceps in placenta prævia through an os uteri of only one and a half inches in diameter). He would also resort to the forceps in the following cases: 1. When the foetal head, from malposition or inertia of the uterus, may become fixed; 2. When labour is retarded by either absolute or relative disproportion of the foetal head to the pelvis; 3. In all cases of *ante partum* convulsions, where there is sufficient dilatation; 4. In occipito-posterior positions, where traction alone, or traction and compression, will assist rotation to the front; 5. In some face-presentations, and in some cases of pendulous uterus; 6. When the vagina is so rigid as to seriously obstruct labour; 7. In breech- and foot-presentations, where the foetal head is not readily delivered, the forceps may be used as recommended and practised by the late Dr. C. D. Meigs of Philadelphia. Dr. Fauntleroy's method of application is that called the pelvic, *i. e.*, application of the blades of the forceps along the sides of the pelvis, and making traction according to the "curve of Carus".

MEDICINE.

SUDDEN DEATH IN DIABETES.—Dr. Jules Cyr, in a very interesting memoir published in the recent numbers of the *Archives Générales de Médecine*, has given an account of several cases observed at Vichy, in which death has occurred suddenly, from which he concludes that in some cases, and those the most numerous, the persons have been surprised in a state of health which gave no reason to suppose that so sudden and disastrous a result would occur; others have been attacked by acute diabetes; others have arrived at an advanced period of emaciation due to diabetes, so that the fatal termination was not

surprising. In all these cases, three principal stages or symptoms were observed with considerable constancy: 1, excitement; 2, dyspnoea; 3, coma. The period of excitement is manifested by some incoherence, vivacity, and rapidity of speech with some indistinctness, vague *malaise*, and disquietude going on even to anguish. To this excitement succeeds difficulty of breathing, occurring suddenly and sometimes voluntarily; large expirations made with effort; the thorax-muscles acting vigorously, the lungs dilating, and nevertheless oppression persisting, so that the air which penetrates the lungs appears not to be acting on the lungs, and the gaseous exchange to be impeded. The blood has, as it were, lost the faculty of revivifying itself in contact with the atmospheric oxygen. This stage is the most characteristic. It is followed by exhaustion and coma; and death occurs sometimes in twenty-four hours, sometimes in less. *Post mortem* examination was made in eight cases out of thirty which were observed. The most variable lesions were recognised: congestion of the abdominal viscera and of the lungs, fatty degeneration of the pancreas, oedema of the lungs and of the glottis, congestion of the pia mater, etc.; and sometimes nothing at all. The diagnosis is difficult, if the existence of diabetes be not previously known. The pallor, the total absence of contractions or convulsions, the complete collapse, and the sometimes spirituous odour of the breath, characterise this coma; and of course the examination of the urine reveals its true origin. No treatment has appeared to produce any good result. The cases are especially those of young subjects between twenty and thirty years, which coincides with the well-known clinical fact that diabetes is the more grave in proportion as the subject is the less advanced in age. The determining cause of the symptoms has appeared to be excessive fatigue, long journeys, etc. Among the diverse theories which have arisen to explain these facts, two appear specially acceptable. The first—that of acetonaemia and the poisoning by acetone produced by the abnormal formation of glyucose or paraglyucose—is referred to. Acetone is a stupefying substance, which by its action at once resembles ether and alcohol. It appears, therefore, very natural that the cause of sudden death in the course of diabetes may be attributed to poisoning by this substance. The second theory—hyperglycaemia—explains also the succession of phenomena. The retention of sugar is a consequence of the diminution of the urine and sugar excreted, whence a change in the composition of the blood; sudden arrest of the vital phenomena, and cessation of the oxygenation of the blood, whence dyspnoea, muscular resolution, and coma. This anoxaemia would produce a rapid death, and without applying specially to cases ending in three to four hours. These theories, however, are not universally applicable, and further researches are required. These researches are especially interesting in connection with the clinical study of acetonaemia in our patients.

OPHTHALMOLOGY.

ESERINE AND PILOCARPINE IN EYE-DISEASE.—Dr. H. W. Williams, in the *Boston Medical Journal*, March 14th, 1878, presents a summary of the value of the above remedies in eye-diseases. Experiments by numerous investigators have shown that eserine has the following action. The activity of the circulation is increased, the pressure within the anterior chamber is lessened, the action of accommodation is excited, and the radius of curvature is lessened. The indications for use follow directly from the mode of action. Thus in all corneal ulcers, in suppuration after cataract operations, in glaucoma, its value is unquestioned. Its clinical effects are these. A drop of a solution of sulphate of eserine (two grains to the ounce) causes the pupil to contract strongly in about fifteen minutes, and this effect continues for eight hours. The application causes little or no pain. A solution of eight or ten grains of borax to an ounce of water may also be used twice a day, or oftener, to lubricate the ulcerated surface and soothe its irritability. In phlyctenular or herpetic eruptions of the conjunctiva or of the epithelial layer of the cornea, eserine is of service especially when photophobia is present, and is far preferable to atropia. In traumatic or gonorrhœal ulceration, in ulcerations of the cornea in persons advanced in life or following exhaustive disease, and in creeping ulcer (*ulcus serpens*), eserine has been useful. The circum-orbital or supra-orbital pain, often accompanying these ulcers, has been relieved in a marked degree as soon as the remedy had time to act, and the ulceration has assumed a healthier aspect. In paralysis of accommodation and mydriasis resulting from diphtheria, measles, or scarlatina, eserine abbreviates the abnormal condition. In paralysis of the ciliary branch of the third pair resulting from exposure to cold, it is equally useful. In hysterical photophobia, eserine forms an important part of treatment. The chlorhydrate of pilocarpine differs in its effects in that it produces less conjunctival irritation, less supra-orbital pain, and less spasm of the accommodative power.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW TUPELO TENT FOR DILATING THE OS AND CERVIX UTERI.

THE material of which these tents are composed is the root of the tupelo tree, which grows in swamps and wet places in Georgia and Florida. It consists of finely grained but soft woody tissue, the fibres not being straight, but interwoven and collected in bundles. The tents are cut of the required length and from four to ten times thicker than they



are intended to be for introduction, and are reduced to this size by hydraulic pressure; they are sometimes made hollow, with an internal metallic tube to allow the escape of fluid during the menstrual period, as advocated by Dr. Sassdorf in the *New York Medical Record*. The following are the advantages said to be possessed by these tents over those made either of sponge or sea-tangle. 1. Being smoother and firmer, they are much more easily introduced; 2. Being very light and absorbent, they quickly receive sufficient moisture to expand them and keep them *in situ*; 3. They are probably themselves of antiseptic nature, or at least will not decompose the fluids with which they come into contact; 4. They have none of the offensiveness always accompanying sponge or sea-tangle tents, and are not likely to induce septic poisoning or local irritation; 5. The rapidity with which they expand when in contact with the secretions of the uterus is one of their chief advantages, the time required for complete expansion varying from one hour in the smallest to six hours in the largest; 6. The firm and even pressure they exert is calculated to effect a beneficial alterative influence on the tissues upon which they operate; 7. The difficulties encountered in removing sponge and sea-tangle tents are obviated in this material; they will not break or fracture when dry; nor when moist, will they peel off and leave small particles adherent to the mucous membrane as sometimes happens with other tents; 8. Their dilatable properties may be roundly stated to be from the size of a goose-quill to that of a sixpence. They are conveniently packed in neat boxes, each containing one dozen assorted sizes, and are moderate in cost.

AN IMPROVED FORCEPS FOR DEPILATION.

MESSRS. ARNOLD AND SONS of Smithfield have forwarded to us an improved forceps for depilation, of which the accompanying woodcut is an exact copy. In length, this instrument measures five inches and a half. It is intended to be taken in the hand and held horizontally, or at a right angle, to the head of the patient. There is thus secured a great increase of power in manipulating the affected hairs, and the process of depilation can be carried on without the inevitable fatigue

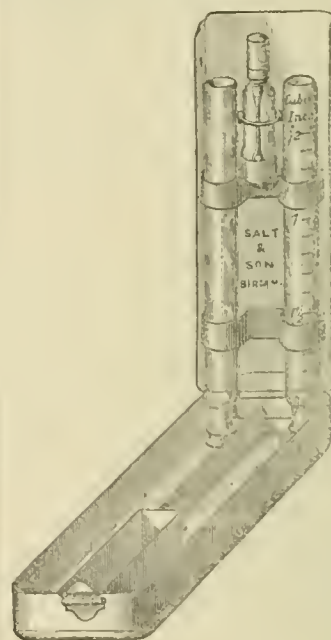


IMPROVED FORCEPS FOR DEPILATION.

to the finger and thumb resulting from the use of the ordinary depilating forceps. The end is somewhat curved, or rather bent at a slight angle, and thus one or many hairs, as required, may be readily seized. It was made at the suggestion of Dr. Dyce Duckworth, who warmly recommends it as being efficient and convenient in use, and as being likely to render much more popular the practice of depilation, which he believes has, by reason of the unsuitableness of the instruments hitherto usually employed for the purpose, often been neglected or very imperfectly performed.

NEW CASE FOR TESTING THE PRESENCE OF SUGAR IN THE URINE.

IN the BRITISH MEDICAL JOURNAL of March 2nd, was a note descriptive of a little apparatus I had devised for the detection of sugar in urine by fermentation. The plan proposed was an extemporaneous adoption of common, inexpensive, and constantly at hand materials, giving a perfectly reliable result. Since then, Messrs. Salt of Birmingham have most successfully carried out my ideas of a more complete and permanent arrangement in every respect desirable, combining portability, facility of use, and certainty of result. An inspection of the wood-cut will show this.



Fermentation-Test for Urine.

The bottles are supplied with glass stoppers, perforated by a capillary opening, and having a cross-shaped notch on their outer surface, allowing the escape of fluid when inverted, if gas be eliminated from its contents. One of the bottles is graduated into tenths of a cubic inch for an approximate quantitative estimate; the other bottle is plain, not graduated: they are most conveniently retained in their proper position by metallic clips, affording security under use, and safety of packing when the case is closed.

Messrs. Salt have added a capped and stoppered bottle for the yeast, having a spoon reaching to its bottom, and holding about the quantity of ferment required. The whole apparatus is well got up, and will, I doubt not, prove valuable, easy of use,

and perfectly effective. The wood-cut is a fair representation of the case, and is drawn to a scale of one-fourth of actual size.

In using, the graduated bottle is filled to the very brim with the suspected urine, a little yeast is to be added, the stopper is then to be firmly placed in the neck of the bottle, the superfluous urine escaping through the opening, leaving the bottle perfectly full, without a particle of air being retained. It is then inverted, and placed, with its stopper immersed in a thin stratum of the urine, and exposed to a gentle temperature. If sugar be present, fermentation soon begins; gas is eliminated, collecting in the upper part of the bottle, and driving out portion of the urine through the opening in the stopper. The second and ungraduated bottle is filled with the same urine, and treated in the same way as the first, but no yeast is to be added to this; when placed beside the other, it affords a sure means of comparison; this bottle (from the absence of ferment) remaining quite full, no gas being given off, the sugar remaining undecomposed.

TITOS. BIRT.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 8TH, 1878.

THE METROPOLITAN COUNTIES BRANCH AND ASSOCIATION VOTING.

THE Metropolitan Counties Branch has been displaying a good deal of activity. It has completed the arrangements for establishing a district organisation, which will provide local centres of scientific and social meeting for the one thousand two hundred members of the Association included within its district. The evening meetings to discuss the present position of the provident medical dispensary system, under the guidance of Mr. Holmes, have given a further distinct impetus to a question which this Branch has for many years not ceased to press upon the attention of the medical profession and the public, and they have greatly helped to provide a solution. The co-operation of the Charity Organisation Society, and notably of Sir C. Trevelyan and Sir Rutherford Alcock in that Society, is producing a great practical effect in London. We hear that three metropolitan free dispensaries have during the last few weeks resolved to transform their system and to adopt provident restrictions. The papers of Dr. Seaton and Dr. Green on vaccination, read at a meeting on May 22nd, constitute a new departure for a discussion of a question which is sure sooner or later to engage national attention.

But on Wednesday, May 15th, an afternoon meeting was held to consider the Bills for the amendment of the Medical Act now before Parliament. The experiment of an afternoon meeting was, however, a very unsuccessful one as far as numbers went. Instead of the full audiences which attended Mr. Holmes's paper, and the animated discussion which was carried on through two sittings, there were not more than twenty members present at any time, and the meeting was, we should imagine, the smallest meeting of the Branch ever held. The importance of the speeches made by persons who have officially given so much time and attention to the question of Medical Reform as Dr. Waters, Dr. Quain, Professor Haughton, Dr. A. P. Stewart, and Mr. Nelson Hardy, deserved a much larger audience. A very full report of these speeches, which give a lively picture of the views of the two different parties on this subject, has been published in the JOURNAL; and, like the judge who consoled himself for the narrowness of his court by the consideration that "he sat in the newspapers", this report has, it is hoped, served in some measure to console Dr. Waters and Dr. Haughton, as well as their opponents, for the small numbers who assembled to hear the most exhaustive *viâ voce* debate on the subject of medical reform which has taken place in the Association since 1870. The resolutions, it was stated, had been circulated in print to every member of the Branch prior to the meeting, and the smallness of the attendance served once more to show how great is the political apathy of members on this question, and how much easier it is to get their signatures to a document presented to them than to induce them to take the trouble to attend personally to argue the subject or to support their champions by a personal vote on either side. One resolution, as circulated, declared distinctly "that it is not expedient to oppose the progress of any Bill which may contain satisfactory provisions for the establishment of conjoint examining boards, the amendment of the penal section of the Medical Act, and the registration, under proper supervision, of foreign and colonial

degrees and diplomas, on account of its not including provision for the direct representation of the profession in the Medical Council"; in other words, that it is not expedient to repeat the policy pursued by the Reform Committee in 1870 in rejecting Lord Ripon's measure of medical reform, but that, if the Duke of Richmond's Bill should, when amended, give conjoint boards, a satisfactory penal clause, and satisfactory regulation of foreign and colonial degrees, it would not be desirable to reject it on the sole ground that it does not give "direct representation". This resolution runs counter to the voting-papers issued by the Medical Reform Committee, which have been largely signed in the metropolis as well as elsewhere. Nevertheless, not twenty members attended to express or to hear any opinions; and, of those who did, the majority voted in the sense of the resolution. Many hundred written votes have, we believe, been sent from the metropolis against the sense of this resolution, but its circulation did not induce as many as twenty to attend.

The same apathy was noted in the case of the special general meeting of the whole Association held at Birmingham lately. Although "burning questions" were to be discussed, including those of the "privileges of lady-members" of the Association, which had been the subject of much apparent preliminary excitement, and although Dr. Grigg stated that he had received two thousand written adhesions to resolutions which he moved, also after somewhat vivacious preliminary incidents,—out of the seven thousand members of the Association, not more than two or three score members outside the limits of the Birmingham and Midland Counties Branch attended the meeting; and, whereas the vote which Dr. Grigg had taken is alleged by him to have furnished two thousand in favour to forty against his resolutions, the meeting was practically unanimous against him. Results such as these might, on critical occasions, seriously embarrass administrative action; and, out of many morals which might be deduced, one is prominently deducible, and will probably command general acceptance; and that is, that it would be well either to be more chary in signing voting papers, or to be more active and consistent in attending to take part in debates and *viâ voce* votes subsequently on the same subject. The voting-papers in the first case were unauthorised, and only the vote of the meeting has official weight; but in the case of the meeting of the Metropolitan Counties Branch there is a direct official contradiction. The votes of the metropolitan members on papers are, we believe, distinctly in favour of the rejection of the Duke of Richmond's Bill, even if granting all the other cardinal points of medical reform, if it did not give direct representation. The vote of the Metropolitan Counties Branch—after officially circulating to every member of the Branch the resolution we have quoted—is in favour of passing the Bill under these circumstances; and this resolution will have been forwarded to the Duke of Richmond, who will thus have received very contradictory results from the same section of the Association, and can hardly fail to draw unsatisfactory conclusions as to the earnestness of members or the care with which their opinions have been formed on the subject.

UNIVERSITY INFLUENCE ON METROPOLITAN MEDICAL TEACHING.

II.

THE benefit to our students from the mutual association proposed by the resolutions adopted by the Convocation of the University of London in something beside athletics would be great. Except in three or four of the largest medical colleges, there is little scope for the development of powers and correction of foibles, which intercourse with our fellows ensures. In some, there are already strong corporate feeling and hearty comradeship; and these are elements which help to form an university. Our students well deserve that all possible should be attempted to give them the best instruction and the best education. The contrast between what they were thirty years ago and what they are now is too little appreciated. If, here and there,

"Pauci tamen suberunt priscae vestigia fraudis",

these survivals will become more rare as our students enjoy more liberal instruction and freer intercourse. Even now, the average student in London works much better, and plays almost as well, as the average undergraduate in Oxford: he is not more ignorant, and is almost always unaffected.

Probably, the wisest way in which the Senate could improve medical education would be by leaving the smaller schools to arrange for co-operation (like the smaller colleges at Oxford), only insisting on certificates coming from teachers who have adequate time and appliances for teaching their subjects, and itself to undertake one or more of the advanced and less necessary branches of study. This would be for senior students who have passed the Colleges of Physicians and Surgeons, or have taken their Bachelor of Medicine degree. The Report to Convocation puts the importance of this class of studies very clearly in the following paragraph.

"No years are more precious or more often wasted than those which intervene between graduation and active employment in professional life. It is at this time that the mind, disciplined by sound training and stored with acquired knowledge, is best able to enter upon special departments of pure science, and to advance knowledge by mature study and independent research. To aid in this object, to detain the graduate *inter silvas academi*, and guide him in the pursuit of knowledge, seems peculiarly the office of an university as distinct from a college. Your Committee, therefore, believe that the Senate might with great advantage consider the advisability of founding university chairs in subjects, of which the following list may serve as an illustration: the higher mathematics; the critical study of classical authors whose works rarely form part of an examination or of a college curriculum; jurisprudence and public law; the history of medicine; public health and forensic medicine; certain departments of mental philosophy and ethics; of human and comparative anatomy; of pathology; of chemistry; or of physics.

"As examples of the kind of lectures meant, your Committee may refer to the Hunterian Lectures at the College of Surgeons, the Goulstonian and other lectures at the College of Physicians, and the Brown Lectures, which have already and with signal success been instituted by the Senate.

"It would be necessary, in order to reap the full benefit of such means of promoting the higher learning, for many of the lectureships to be provided with laboratories or museums or libraries; and in some cases these would be the primary and more important means of promoting the advance of the science, to which the lectures would form an useful adjunct as a means of exposition. Here, again, your Committee are happy in being able to refer to the solid results which have followed the wise audacity of the Senate in refusing to confine their labours to the superintendence of examinations, and accepting the responsibility of an endowment. The laboratory of the Brown Institution is a standing proof that it is only necessary to open a room where men can work, with very moderate and inexpensive aids, in order to call forth original research of the highest order."

This kind of work is just what ought to be expected of men who aspire to the higher university degrees of M.D., D.Sc., and M.S.

"There seems to be almost an absurdity in subjecting candidates for the degree of Doctor of Medicine (to take one faculty as an example) to a repetition of the same process of examination which they passed, perhaps with high honours, only a year before. The Senate have wisely introduced the important collateral branch of mental philosophy at this stage of the curriculum. But why not admit, as a qualification for the higher degree, some evidence that the Bachelor of Medicine has learnt to use his acquirements in the pursuit of fresh knowledge? The evidence of this power might be furnished by so humble but useful a piece of work as a statistical inquiry into some department of hospital records, or by the observation of some new fact in anatomy or medicine, or by devising an ingenious piece of apparatus or a new experiment; or the claim to the doctor's degree might rest upon discoveries of sufficient importance to be published in the *Proceedings of the Royal Society*."

The practice of requiring a formal thesis for the doctor's degree is one now out of fashion; but, from the experience of Edinburgh, Paris, and the German universities, it seems in some cases to do much good, and in most to do no harm. Even the poorest essay of the kind, if genuine, must be the fruit of a little thought and not a little reading; while a *thèse pour le doctorat*, on a subject given by a teacher to an

intelligent student, calls forth his powers, and awakens the desire of adding something to the store of common knowledge. Indeed, in not a few cases, such inaugural dissertations have been the germ of important later researches.

The resolutions, then, of Convocation, while pointing to a policy which would greatly increase the reputation and usefulness of the University of London, also suggest means of supplying what we believe to be the most important deficiencies in our medical education.

Even if what is now called the University of London did not exist, or if it were to refuse all functions of an university but that of examining, it would be none the less necessary to carry out the objects we have indicated. If further improvement in medical education can be connected with the development of the university in other branches of learning, the benefit will be doubled; for the more thorough, the more liberal, the more complete the education of our profession, the better, not only for it, but for the nation.

THE NON-ALCOHOLIC TREATMENT OF DISEASE.

LORD ABERDARE presided on Thursday, May 30th, at an annual meeting of the London Temperance Hospital, which was established five years ago to carry out the non-alcoholic treatment of disease. The meeting was held in the Memorial Hall, Farringdon Street; and among those on the platform were Cardinal Manning, the Rev. Dawson Burns, Mr. Hugh Owen, sen., and Mr. Cash. Sir Wilfrid Lawson was absent through ill-health. The fifth report of the institution stated that the year's proceedings had in all respects been confirmatory of the conviction derived from previous experience—that the non-alcoholic principle of treatment was scientifically sound as it was morally safe. The in-patients' department had received 130 persons, making a total of 585 in-patients since the opening of the institution four years and a half ago. The out-door patients had numbered 1,272, making a total of 5,478 in the same period. Of the in-patients for the year, 70 were males and 60 females; 85 had been abstainers, and 45 non-abstainers; 99 had resided in the metropolitan district, and 31 in the country. The medical and surgical cases of a severe and serious type had been quite equal to the average proportion in other hospitals, and such as, according to traditional usage, would have been treated with a liberal supply of alcoholic liquors; but the absence of these liquors had not been considered by the visiting physicians to have been attended with any disadvantage, but to have conduced to recovery or to an abatement of disease. It was pointed out that the year had yielded many evidences of the growth of medical and public opinion in favour of the non-alcoholic treatment of disease. Where alcohol was given, the quantity administered was often reduced; and how much could be done in this direction by medical officers, was shown by the facts published in regard to Longford, Wrexham, and many other places. A recent example was at Wandsworth and Clapham Union Infirmary, where the ounces of distilled spirits given in one week in 1877 amounted to 1,340, but fell to 320 in one week in 1878. The pints of porter and ale also given in the same week sank from 998 in 1877 to 658 in 1878. It was added that the suspicion awakened as to the superstitious value hitherto attached to alcoholic compounds could not but bear good fruit in the minds of enlightened members of the medical profession. Both the dietetic and medicinal use of alcohol had been recommended by its supposed power of increasing the sum of strength, and so tending to preserve health and to assist in its recovery. But belief in this notion was fast disappearing from thoughtful minds. Amid loud cheers, the words of Mr. Gladstone at the Coffee Taverns Company were quoted: "There is a general belief that alcoholic liquors tend to give greater bodily vitality; but I do not believe that there is a greater superstition than to suppose that these liquors can give men a greater capacity for bodily or mental exertion; and in this I am supported by the highest medical testimony." To this earnest declaration was added the sanguine hope of the committee: "The temperance reforma-

tion will receive from science that undivided help which will multiply its triumphs, and give to its operations a greater security and permanence than it has ever before enjoyed."

Lord Aberdare, in moving the adoption of the report, showed a sage reserve in declining to accept, upon the dicta of this report and of the officers of this hospital, the conclusion that disease either can be advantageously, or ought to be, treated in all cases without alcohol. He drew attention to the Declaration concerning Alcohol, signed by a great body of eminent medical men, which was originated some years ago with the late Dr. Parkes, Mr. Ernest Hart, and Mr. Rae, and which, being widely circulated and much discussed, subsequently had great effect in modifying the prevalent public errors concerning the supposed tonic and nutrient value of alcohol. The text of that weighty manifesto was authenticated by the signature of the great majority of leading physicians and surgeons in the metropolis and a large number throughout the country; and, as it is now frequently misquoted and overlaid with commentaries which are not strictly in accordance with its meaning, it may be useful here to quote it.

"As it is believed that the inconsiderate prescription of large quantities of alcoholic liquids by medical men for their patients has given rise, in many instances, to the formation of intemperate habits, the undersigned, while unable to abandon the use of alcohol in the treatment of certain cases of disease, are yet of opinion that no medical practitioner should prescribe it without a sense of grave responsibility. They believe that alcohol, in whatever form, should be prescribed with as much care as any powerful drug, and that the directions for its use should be so framed as not to be interpreted as a sanction for excess, or necessarily for the continuance of its use when the occasion is past.

"They are also of opinion that many people immensely exaggerate the value of alcohol as an article of diet; and, since no class of men see so much of its ill-effects, and possess such power to restrain its abuse, as members of their own profession, they hold that every medical practitioner is bound to exert his utmost influence to inculcate habits of great moderation in the use of alcoholic liquids.

"Being also firmly convinced that the great amount of drinking of alcoholic liquors among the working classes of this country is one of the greatest evils of the day, destroying more than anything else the health, happiness, and welfare of those classes, and neutralising to a large extent the great industrial prosperity which Providence has placed within the reach of this nation, the undersigned would gladly support any wise legislation which would tend to restrict within proper limits the use of alcoholic beverages, and gradually introduce habits of temperance."

The Temperance Hospital goes far beyond this manifesto in its principles and practice. Such an institution, established to maintain and not to test a view can never, according to all past experience, produce any results of scientific value. The experience of all the "homoeopathic" and "mesmeric" hospitals, and their flourishing statements, shows that very good reports may be obtained from the experience of all persons of extreme views in the treatment of disease. Clinical medicine is not yet, nor is there any apparent likelihood of its becoming, an exactly scientific art. The factors with which it has to deal are too complex and varying; and the subjects of observation, being suffering human beings, cannot be selected with the severity or submitted to the rigid conditions of experiment which scientific accuracy demands. We may be perfectly sure that in a temperance hospital, supported by total abstainers, very good results will be attained. But such results will do nothing, or if anything very little indeed, to settle the question of what is the place of alcohol as a stimulant in the treatment of disease. The experiment may serve to fix attention upon the fact that diseases of all types can be treated without alcohol and by the substitution of other stimulants. But it will furnish no solution to the problem whether we should do wisely to discard from our armoury one of the most valuable of medicinal agents on the ground that it is liable to abuse by persons in health. On the same ground, opium, morphia, chloral-hydrate, chloroform, and ether may be rejected. As a standing protest against the abuse of alcohol, and as a reminder of the exaggerated value sometimes attributed to alcohol, such an institution may have its uses. But we doubt whether it can expect a permanent

existence; and it is pretty certain that the scientific value of its records can never be great in settling the question of the use of alcohol in medical practice.

THE CHANTRELLE CASE.

WE know that there are many estimable persons who object to the punishment of death for any crime and under any circumstances. While we respect their opinions, we must protest against the course which they frequently adopt when they appeal to the Home Secretary for the reprieve of a man convicted of murder by poison. They have taken up a theory that the punishment of death is not deterrent, and that it is useless as a means of protection for society. It would be easy to disprove this statement; but that is not our present object. We have to complain that medical witnesses and medical science are improperly made a scapegoat for criminals on these occasions. The facts are generally misstated, and the evidence is distorted, while the scientific witnesses are attacked as incompetent and their opinions pronounced to be untrustworthy.

The case of M. Chantrelle, recently tried at Edinburgh for the secret murder of his wife by poison, will serve as an illustration of these remarks. After a four days' trial, in which all the witnesses who could throw light upon the case were examined on both sides, and a most elaborate defence had been made by the counsel for the prisoner, the accused was convicted of the crime. It is true there was no direct evidence of the administration of poison by the hand of the prisoner but a number of circumstances conclusively pointed to his guilt. It was clearly demonstrated to the satisfaction of the Court, that the accused had the motive, the means, and the opportunity for perpetrating the crime, and that he further tried to conceal the act by a false pretence—a sure sign of conscious guilt. In secret murder by poisoning, direct evidence of administration, for very obvious reasons, can rarely be obtained; and if we wait for this kind of evidence before conviction, the most cunning and crafty criminals would escape the penal consequences of their acts.

The memorialists, in their address to the Home Secretary, allege: "That the prisoner is very poor, and, as a consequence, no medical evidence was adduced on his behalf at the trial, which would have been, as can now be shown, of signal importance, his counsel contenting themselves with a knowledge that the evidence as to opium-poisoning was so inadequate to convict that they did not go to the *expense or trouble to propose any theory of death from natural causes*. Nor was there a single medical expert on behalf of the prisoner at the *post mortem* examination, exhumation, inspections, examinations, or analyses. and that, notwithstanding these facts, your memorialists are firmly convinced that the case for the prosecution signally fails to show conclusive evidence of guilt."

We believe that the true reason why no medical evidence was adduced at the trial on the prisoner's behalf was really that the *post mortem* examination revealed no natural cause of death, and no medical man of repute could be found to take an adverse view of the evidence given on the part of the prosecution.* The memorialists appear to think that had the prisoner had the means, "a theory of death from natural causes" might have been purchased. But the counsel for the defence showed greater wisdom. They foresaw that to call any medical man of repute—and none other would have served their purpose—would have been to ruin their case. Any honest expert by cross-examination would have been brought to agree with Drs. Littlejohn and MacLagan, and would have thus been converted into an additional witness for the prosecution. If, therefore, they failed in refuting the evidence of opium-poisoning, it was because it was too strong for refutation.

* In another part of the memorial it is stated that "beyond the possibility of dispute, the case was one of undiagnosable kidney-disease", and that this was the natural cause of death. There was no reasonable foundation for this statement. The kidneys were not examined, except externally; and it is from this negative evidence that the memorialists infer that this disease existed and might have caused death.

We are told in the memorial that not a single medical expert was called on behalf of the prisoner. This is not strictly correct. Professor MacLagan was called on the part of the defence, and stated fairly in answer to questions all that could be said in favour of the accused. So also, Mr. Falconer King, city analyst, appeared as a chemical expert, and as we have elsewhere stated, endeavoured to throw a doubt upon the accuracy of the chemical evidence given by Drs. Littlejohn and MacLagan, in reference to the discovery of morphia and meconic acid in the opium stains on the night-dress of deceased. In his examination in chief, this witness said that stains of saliva, vinegar, and orange-juice, might be mistaken for opium. In his cross-examination, however, he simply confirmed the witnesses for the Crown, by admitting that he knew of no substance or mixture of substances but opium which, like these stains, would give the reactions of morphia and meconic acid.

Assuming the character of experts, the memorialists say: "We desire further to state confidently that the symptoms of dishevelled hair, tossing about of the bedclothes, and other appearances of agitation, which in this case, are inconsistent with opium-poisoning." They also state that the absence of clammy perspiration and stertorous breathing are always present in opium-poisoning. We deny the truth of this confident statement, from a case of opium-poisoning which fell under our observation.*

One other point requires notice. We are told that the theory of opium-poisoning in no way accounts for the illness of the deceased on the previous day. This may be freely admitted; but it is quite possible that a person may be labouring under illness one day and be poisoned with opium the next.

We think we have shown, by this analysis of the statements in the memorial, that the attempt to raise a doubt in the minds of the public and the Secretary of State of the propriety of the conviction in this case, is based upon misstatement or a misconception of the real medical facts, and it has been very properly rejected by the authorities.

The memorialists, however, are not contented with the effort to remove the charge of guilt from the convict; they insinuate that the opium stains on the sheet may have been produced by the prisoner's mother-in-law, who had it in her possession for four days before it was submitted to analysis. We offer no comment on this suggestion, for which we cannot see that there is the slightest foundation.

The recently broken gas-pipe in the bedroom was considered by the prosecution to be a strong proof of guilt, but the memorialists have a theory to account for this consistent with the prisoner's innocence. When the accused found his wife in a comatose state, he believed that she would not recover; and in order to cheat the Accidental Death Insurance Company, in which her life was insured for one thousand pounds, he broke off the pipe to make it appear that she had died from gas-poisoning. A similar motive led him to persuade the medical attendant that the death of deceased was not due to natural causes, but to accidental gas-poisoning.

These efforts on the part of a few persons to mystify a clear case of murder have proved unavailing. On a future occasion, we think it would be better if memorialists would leave the medical facts and conclusions to be dealt with by members of the medical profession, and confine themselves to the general evidence.

At the dinner of the Victoria Hospital for Children, at Gough House, Chelsea, under the presidency of the Earl of Cadogan, it was stated that the hospital was wholly without endowment, and that since its establishment in 1866 it had relieved upwards of 3,040 in-patients and 149,000 out-patients, children from all parts and all denominations being admitted. The expenditure during the last twelve months was £474 in excess of the sum received. Subscriptions were announced amounting to about £1,000.

* The mother of an eminent chemist took by accident an overdose of laudanum. When found she was restless, and tossing about the bed; the skin was hot, and the breathing stertorous.

THE Goldsmiths' Company have voted £500 to the Maintenance Fund now being raised for the support of the London Hospital.

THE Standing Orders Committee of the House of Lords declined to dispense with those orders in favour of the Manchester Water Bill—the Thirlmere scheme—which had not complied with them. The Bill is, therefore, at an end for this session.

A PETITION in support of the amendment proposed by Mr. Young, M.P., on the Dental Practitioners' Bill has been signed by most of the leading medical men in London. The object of the amendment is to prevent any one from using the title of surgeon, either alone or in conjunction with any other word or words, unless he is a surgeon or registrable under the Medical Act of 1858.

A BANQUET in connection with the Harvey Tercentenary was held at the Royal College of Physicians on Saturday, and about one hundred guests and fellows of the College dined together in the library. The chair was occupied by the President of the College, Dr. Risdon Bennett, F.R.S. Among the speakers were Professor Huxley, who pronounced an eulogium on Harvey, Lord Ripon, Mr. Gladstone, Mr. Lowe, Mr. Benett-Stanford, M.P., Dr. Allen Thomson, Dr. Quain, Dr. Michael Foster, and Mr. Birkett.

THE Ottoman Red Crescent Society for the relief of the sick and wounded Turkish troops has given notice to all the foreign surgeons in its employment whose contracts terminate at the close of this month, that those contracts will not be renewed. Most of these surgeons have served in various ambulances in Europe and Asia.

At a recent Committee meeting of the South Midland Branch of the British Medical Association, held at the house of the President (W. Moxon, Esq.), a testimonial in the shape of a handsome silver salver was presented to Dr. Bryan of Northampton, in recognition of his services as Honorary Secretary to the Branch for about twenty years.

We publish to-day the report, from the pen of Dr. Marion Sims, of an operation which is, we believe, unique. It is in every way highly interesting, and its teachings are likely to have an effect in showing that a class of cases of occlusion of the gall-bladder, hitherto considered beyond the reach of early surgical interference, may be attended with good hope of successful result.

THE interesting communication of Dr. George Harley is, it will be observed, printed, at the request of the author, in a peculiar orthography, which he has devised as a means of spelling reform, which aims at economy and simplicity in writing by the omission of "needless or, as he spells it, 'needles' duplicated consonants". The suggestion is ingenious, and is well supported in a pamphlet on the subject, which Dr. Harley has published.

PUBLIC attention is just now naturally very much directed to the applications of that marvellously interesting magnifier of sound, the microphone, which, deeply interesting and valuable in itself, came so soon after the discovery of the telephone as to lead to the legitimate hope, that we are on the eve of a further great extension of our physical resources by the aid of scientific investigation and professional ingenuity. Our own profession is keenly alive to the possible application of these novel and remarkable physical instruments of research to physiological inquiry and clinical practice. We hear of large sums being offered to philosophical instrument-makers for the first trials of any instrument which makes the principle of the microphone applicable to stethoscopic examinations. Other applications are being made or attempted.

WE publish in another column a very interesting report, by Sir Henry Thompson, of the results of the clinical application of the microphone to the detection of stone in the bladder.

THE following communication appears also in the *Times* of May 31st, under the heading of Deafness and the Microphone. "Under the above heading, the writer of a letter to the *Times* of May 30th makes the following remark in speaking of those who are deaf: 'Science hitherto has done little or nothing for them, either in curing or in assisting hearing by instruments.' While fully alive to the truth of the latter portion of this statement, in justice to both English and continental surgery, I trust you will find space to allow me to question the correctness of the first portion of this sentence. The symptoms of deafness or blindness depend absolutely upon some change (the result of accident or disease) in either the conducting apparatus of the ear or the eye, or upon change (similarly produced) in the nervous portions of these organs. It may be accepted as a general truth that change in nervous structure is for the most part uninfluenced by treatment; but, in regard to the conducting portions of the ear, no less than in the case of the eye, it is well known to surgeons that the treatment of change in these parts has made during the past few years very considerable advances, and that diseases which twenty years ago were regarded as irremediable are at the present time treated most satisfactorily. It is now gradually but surely becoming appreciated that the success derived from surgical interference in affections of the conducting portions of the ear is no less certain in this than in other structures of the body, and that the same rule holds good in these as in other diseases—viz., that whenever abnormal tension is the cause of disorganisation, the results to be expected from treatment vary directly with the period at which treatment is commenced. It remains only for me to add that the application of the microphone as an aid to incurable cases is now under investigation.—I am, sir, your obedient servant, W. B. DALBY, Aural Surgeon to St. George's Hospital."

SIR THOMAS WATSON has published, in the *Nineteenth Century*, a paper on "Small-pox and Compulsory Vaccination", in which he advocates the return to vaccination from the heifer, or at least to a renewal of vaccine lymph by the introduction of fresh sources of calf-lymph from time to time. We confess, however, that his paper is far from being so carefully studied as Sir Thomas Watson's productions usually are; and we cannot but think that it would be advisable that he should have given some further attention than he has done to the grave doubt which investigation has thrown over the alleged good results of calf-vaccination in Belgium and Russia, to which he refers as though they were facts undoubtedly proved. The subject is one of such very serious importance, that anything like hasty conclusions drawn from insufficient grounds are very greatly to be deprecated, especially when such conclusions are expressed by so eminent and respected an authority as Sir Thomas Watson in a popular publication.

MR. SIBLEY, President of the Metropolitan Counties Branch, received the members at a *soirée* on Wednesday last. A very pleasant evening was spent. Numerous objects were exhibited, among which were the telephone, microphone, and phonograph, the operation of which was witnessed with great interest.

FOR many years, the hospital transport ships which return to France from Saigon have, say the French medical papers, sown the route with dead bodies. The average deaths were twenty for each ship. The transport ship *Aveyron*, which arrived at Toulon on April 20th, had not a single death; this result was due to the employment of the precaution against dysentery recommended by Dr. Dounon. This consisted in nothing else than the well known method of boiling the drinking water, so as to transform into inert matter the anguillulæ which, by fixing themselves on the intestinal mucous membrane, give rise to dysentery, etc. The efficacy of boiling in destroying active animal and vegetable parasites is well known; and according to Dr. Dounon, dysentery is always caused by the introduction of contagia into the body by drinking water; and the hope is expressed that that fatal disease may in all countries be suppressed by the adoption of this very simple precaution.

BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE annual meeting of this Society was held at the Medical Institute, Birmingham, under the presidency of Alfred Freer, Esq., of Stourbridge. The report of the Society showed that there were thirteen annuitants, and that £445 had been expended in grants during the past year; that there were two hundred and thirty-eight members, thirty-one of whom had been elected during the past year. The following officers were appointed. *President*: Mr. Watkin Williams.—*President-elect*: Dr. J. J. Nason, Stratford-on-Avon.—*Vice-Presidents*: Mr. T. Elkington, Fenny Compton; Mr. J. Garner, Birmingham.—*Honorary Secretary*: Mr. T. H. Bartleet, Birmingham.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

THE annual general meeting of this Society was held lately at the Leeds General Infirmary; Mr. Scattergood (the Pre-ident) in the chair. The Committee, in presenting the sixth annual report, congratulated the members of the Society on its continued prosperity. At the last annual meeting, the number of members was one hundred and eighty; since that time, two members had died, four members had resigned, and ten had left the neighbourhood. On the other hand, fifteen new members had been elected, so that the present number was one hundred and eighty-three. Eight ordinary meetings had been held during the last session, and had been, as usual, well attended. The May meeting was devoted to a discussion upon typhoid fever: this was so successful that the Committee hoped to be again able to devote a whole evening to the discussion of some one subject of general interest. The following gentlemen were elected office-bearers for the ensuing year. *President*: Dr. Holdsworth (Wakefield); *Vice-Presidents*: Mr. Pridgin Teale and Mr. Hodgson Wright (Halifax); *Treasurer*: Dr. Heaton; *Honorary Secretaries*: Mr. McGill and Dr. Churton; *Librarian*: Mr. Horsfall; *Committee*: Dr. Clifford Allbutt, Mr. E. Atkinson, Dr. J. H. Bell (Bradford), Dr. Eddison, Dr. Ginders (Normanton), Mr. Lodge (Bradford), Mr. Nunneley, Mr. Seaton, Dr. Symes (Halifax); Dr. Tibbits (Bradford), Mr. T. Walker (Wakefield), and Mr. C. J. Wright. The meeting terminated with a vote of thanks to the Chairman.

POISONOUS VIOLET POWDER.

AT the Epping Petty Sessions, on Friday, May 31st, Henry George King, wholesale chemist, again appeared to answer the charge of having caused the death of Eliza Sears and others, and further with having unlawfully and fraudulently sold violet powder containing large quantities of arsenic, to the danger of the public health. Mr. Poland prosecuted, and the prisoner was undefended. Evidence was adduced to show that many children had died after the employment of the violet powder upon their bodies. The defendant said, as soon as he heard of the facts, he tried to stop the sale of the powder, which was being sold all over London. Mr. Poland admitted that the defendant had done his best to restrict the sale of this powder, and hoped that he would give the names of his customers, so that the powder might be traced. The defendant said he wished to do so. He hoped the newspapers would publish the facts, that people might be warned. Dr. Duple of Westminster Hospital stated the percentage of arsenic, ranging from fifteen to fifty-one, found by him in the packets submitted to him for analysis. He had examined two packets taken from the defendant's premises, and both were free from arsenic. He also received a packet of terra alba, which was free from sulphate of lime and contained no trace whatever of arsenic. Mr. Barnard Thomas, of the Treasury, had handed him a packet of violet powder, one of those seized by Sergeant Roots in Cambridge Road on Monday, and, on testing it, he found it to contain a great percentage of poison. Anyone accustomed to deal in starch and terra alba could easily distinguish them from arsenic, which was a dull, not white, powder. Terra alba was more white and opaque. Powders mixed with 30 per cent. of arsenic ought easily to be recognised by persons dealing in such things; in fact, they could distinguish the difference with the eye and with the hand, as there was a great difference in the weight. The symptoms described by the

witnesses were similar to those which followed the application of arsenic to the skin. He knew that there were cases recorded in which death had ensued from outward application of arsenic. Fly-papers and insect-powders, which were amongst the list of articles sold by the defendant, might contain arsenic. The case was again adjourned.

MEDICAL SERVICE AT ST. PAUL'S CATHEDRAL.

A SPECIAL service for the medical profession was held in St. Paul's on Friday last; and, if numbers may be taken as any test, it should be pronounced a great success, between four and five thousand people being present, amongst whom were many well-known members of the medical profession. The musical part of the service was ably rendered by the vocal and instrumental choirs of the London Gregorian Choral Association, who numbered in all about four hundred; the congregation joining very heartily in the service. The office was sung by the Rev. Minor Canon Shuttleworth. The Rev. Henry Arnott, F.R.C.S., formerly on the staff of the Middlesex Hospital, but now in deacon's orders, was in the choir. The first lesson was read by the Rev. George Greenwood, M.A., Warden of the Guild of St. Luke; the second by the Rev. T. W. Belcher, M.D., D.D., Vicar of St. Faith's, Stoke Newington. The sermon was preached by the Rev. George Body, M.A., on the Ascension. The idea of the service originated, we are informed, with the Guild of St. Luke, a society of students and practitioners of medicine; it has for its Provost Dr. Alfred Meadows. The objects of the guild are "to encourage the growth of personal holiness in its members, and to promote works of mercy, etc." Meetings are held on the third Wednesday in each month for the discussion of medico-ethical questions and others bearing on the relation of the clerical and medical professions. At its next meeting on June 19th, which will be held at 68, Mortimer Street, at 7.45 P.M., the subject for discussion is a paper by J. W. Lea, Esq., B.A. Oxon., on the Suppression of Immorality from a Medical Point of View. Members of the profession are invited to attend and take part in the discussion, which will be chiefly on the medical aspect of the question.

PROVIDENT DISPENSARIES.

THE movement in favour of the extension of provident dispensaries is daily assuming a wider importance. There can be little doubt that the conversion of all free dispensaries to the provident system is merely a question of time. The medical officers attached to free dispensaries are becoming sensible of the injustice of having to give their services gratuitously, while their more favoured brethren on the staff of institutions on the provident footing annually participate in a good lump sum subscribed by the benefit members. In every class, a fair day's work can only be expected for a fair day's wage—"The labourer is worthy of his hire".

THE IMMUNITY CONFERRED BY REVACCINATION.

THE immunity from small-pox enjoyed by the medical officers, nurses, and others employed in small-pox hospitals affords one of the most powerful arguments in favour of adult revaccination as a protection from small-pox. No more satisfactory or conclusive statistics bearing upon this point have ever been published than those contained in a recent report, by Dr. William Gayton, the Medical Superintendent, upon the work done in the Metropolitan Asylum Small-pox Hospital from its opening on 1st February, 1871, to 31st December last. The Registrar-General reproduces some extracts from this report in his last weekly return, and supplements it with some additional information supplied by Dr. Gayton. During the period of nearly seven years, the number of nurses and others who have at various times been engaged in this hospital is not less than 367. Revaccination has been an indispensable condition of employment, unless the applicant had had small-pox, or had been revaccinated previously to application. The result of these precautions is thus described by Dr. Gayton: "That *one only* amongst the large number of nurses and others who have been occupied here (and in her case the operation was neglected) should have contracted the disease is, or should be, convincing proof of its great

and almost certain prophylactic influence." It is impossible to over-estimate the value of this evidence, which, in the Registrar-General's words, "cannot be too generally known". That adult revaccination affords all but absolute protection from small-pox, no one with this evidence before him can reasonably doubt; for in these hospitals the nurses and others are brought into contact with the most intense and virulent forms of the disease. While the expediency of making revaccination compulsory may well be doubted, there can be but little doubt that our national vaccination system should not only offer greater facilities for revaccination, but systematically encourage its more general adoption.

SMALL-POX IN KENSINGTON.

DR. DUDFIELD reports a severe outbreak in the south sanitary division of his district, and states that he believes the disease to have been spread to a great extent by concealment of cases at home. He instances a laundress who was seen by a local practitioner on the day she sent home a large quantity of washing, when the eruption was "well out upon her". Another laundress was nursed at home by her husband and the business carried on during the whole time, although there were sixteen lodgers in the house, all of whom left, and probably spread the disease broadcast amongst the inhabitants. He mentions another case of a lady's-maid, who alone was attacked out of a large household; and, as she scarcely ever went out, the cause could not be discovered. After a time, it was found out that a sempstress who came to the house had had two children ill of this disease, but escaped it herself. Dr. Dudfield alludes to the refusal of revaccination by adults and their subsequently contracting small-pox, which has frequently happened in this epidemic. The necessity for revaccination amongst the poorer classes especially seems to be almost utterly ignored, and should be earnestly urged upon every one in a house where the disease breaks out. Too much pains cannot be taken in pressing upon those who have been exposed to the infection of small-pox the importance of immediate revaccination.

LEAD-POISONING BY FLOUR.

WE recently published a notice of a rather serious epidemic of lead-poisoning in the Taunton Sanitary District in consequence of the holes in millstones having been filled up with lead. The practice appears to be not confined to this country. In the last number of the *Nordiskt Mediciniskt Arkiv* is a paragraph taken from a Norwegian periodical, in which it is stated that Dr. O. Johnsen of Sarpsborg had met with an extensive endemic of gastric disorder, often accompanied with diarrhoea, for which he could find no cause in the local conditions, nor was there any evidence of contagion. The lead-line on the gums was detected; and it was ascertained that the flour which the patients used had been procured from a mill, the owner of which had filled up the holes in the millstones with a mixture of whitelead and glycerine. There were no cases of paralysis or of brain-disease; and the patients, with the exception of one who died, all recovered. A similar occurrence is reported to have taken place in France from the use of lead to repair millstones.

TYPHUS AND SCARLET FEVER AT LEEDS.

BOTH these diseases have lately been prevalent at Leeds; indeed, Dr. Goldie says that he despairs of ever seeing the town free from scarlet fever, as he does not receive sufficiently early information of outbreaks. He also states that he has known infected houses let without proper precautions having been adopted; "that infected beds are sold and pawned which are innocently and eagerly purchased at a small figure, the purchasers receiving more than they bargained for". The typhus cases appear to have been very malignant, as in one family not only none escaped, but even visitors were attacked, and the disease was only checked by removal to the hospital. Dr. Goldie also notices a considerable excess of deaths from inflammatory diseases of the lungs, owing to the prevalence of cold easterly winds. The importance of early information being given to the sanitary department of cases of

infectious diseases may be felt, but is practically ignored; and it is only by repeatedly pointing out the injury resulting from concealment of these cases that medical officers of health can obtain what they desire.

ACCIDENTAL POISONING.

AN inquest was held on May 29th at West Barkwith, before Dr. Mitchinson, coroner, on the body of Charles Pacey, aged two years. On the previous Monday, the child drank from a medicine-bottle on the table, which the mother believed to contain a solution of quinine. This had been given to her some time previously by the clergyman's wife (Mrs. Thompson), when she was suffering from debility. The child became ill and died. Dr. Harrison, who was called in, took possession of the bottle from which the child was supposed to have taken the poison, and telegraphed to the London chemists (Messrs. Keene and Ashwell of New Bond Street) who had prepared the medicine for Mrs. Thompson. In reply, they informed him that it was a solution of strychnine which had been furnished to a lady six or seven years ago. The jury returned a verdict that the child died from the effects of strychnine-poisoning taken accidentally, and that no blame was to be attributed to the mother; but at the same time they wished to express their strong dissatisfaction that the chemists should have sent out so strong a poison without putting a poison-label upon the bottle. Mrs. Thompson was under the impression that it was simply a solution of quinine. Several persons appear here to be in fault. The practice of handing about medicine from one person to another, without any adequate knowledge of the contents of the solution or its suitability for the individual, is in itself reprehensible. On the other hand, it is wrong to dispense such a medicine as that described in the present case without a very strong indication of its poisonous character; and, in our opinion, not only should the word "poison" always be very clearly inscribed, but such solutions should only be dispensed in coloured fluted bottles.

SIR EVERARD HOME AND INTRA-VEINUS INJECTION.

WITH regard to the statement in the JOURNAL of May 18th, in reference to Sir Everard Home injecting into the circulation sixty drops of the vinous infusion of colchicum, Mr. Richard Jones of Leamington writes: "I was a pupil of Sir Everard Home in the years 1818 and 1819; and I most unhesitatingly assert that he never made any such communication to his pupils as the *Pittsburg Gazette* describes. I have little doubt that the mistake has arisen from his taking colchicum as a medicine for gout, to which he constantly had recourse. I need hardly add that an experiment so novel and so important as that of transfusing medicine into the blood would never have been forgotten by the pupils, or otherwise regarded by the profession than a discovery only second in importance, as the *Chicago Journal* very justly observes, to that of the immortal Harvey."

SCOTLAND.

AT a recent meeting of the Town Council of Jedburgh, a letter was read from the factor of the Marquis of Lothian, intimating that the Glebe Park could now be taken possession of by the provost and magistrates for the use of the inhabitants as a public park, at a nominal rent of one pound *per annum*. There was great rejoicing in the town at the announcement of this munificent gift.

EXECUTION OF M. CHANTRELLE.

THE sentence of death pronounced three weeks ago upon M. Chantrelle, for the poisoning of his wife, was carried into effect on Friday, May 31st, within the precincts of the Calton Prison, Edinburgh. Immediately before the execution, the convict was asked if he had any acknowledgment or statement to make; to this he quietly replied in the negative. He has left no confession. This case is the only one in which a person of education has been executed in Edinburgh during the last fifty years for a crime committed in the city. Pritchard was tried and condemned in Edinburgh for murder committed in Glasgow, but

his sentence was carried out in the latter city. Another notable fact, which is stated on good authority, is that, in no trial for murder by poisoning, was there ever before in Edinburgh an unanimous verdict of guilty.

ENTERTAINMENT AT ASYLUMS.

AT a recent meeting of the Barony Parochial Board, Glasgow, a report on the Lenzie Asylum was read. After speaking of the good management of the establishment generally, and stating that stimulants are little used, it went on to say: "A remarkable exception, however, is found from the entries of last month. The Committee gave an 'entertainment to the patients', and on the occasion, drew from the dispensary stores, and within a few hours used for themselves and friends no less than thirty-four bottles of whiskey, a quantity equal to the ordinary medical requirements of the whole establishment for some months. The whiskey is entered as used for the patients, and converts the five bottles really so used during the month into thirty-nine bottles. Such practices go far to degrade parochial management." The report was adopted. It was stated in the minutes of the Medical Committee, that during the month of April, nine hundred and twenty-seven cases been treated by the medical officers of the Board, being a decrease of twenty-one as compared with the previous month.

PRECOGNITIONS AND MURDER TRIALS IN SCOTLAND.

A RETURN ordered by the House of Lords, on the motion of the Earl of Minto, has been issued showing "the number of cases of sudden death, or of death under suspicious or unknown circumstances, which have been the subject of precognition by Procurators-Fiscal, in each of the years 1875 and 1876, and in which the investigations were from the first connected with charges of murder, culpable homicide, etc.; also specifying the number of such cases as have afterwards become the subject of criminal trials." From this return, it appears that the total number of such investigations in 1875 was 88, relating to 97 deaths; and that the total number of criminal trials consequent on the investigations was 54. In 1876, the number of investigations was 92, relating to 99 deaths, and 48 criminal trials resulted. As might be anticipated, the largest number of investigations and trials was in Lanarkshire, where in 1875, there were 27 investigations and 18 trials; and in 1876, 17 investigations and 8 trials. In Edinburgh, there were, in 1876, 10 investigations and 6 trials; in Stirling, 9 investigations and 5 trials; in Forfar, 7 investigations and 5 trials; in Aberdeen, 11 investigations and 4 trials. In other counties, the numbers were smaller; and in Argyll, Berwick, Bute, Clackmannan, Dumfries, Haddington, Kinross, Kirkcudbright, Nairn, Orkney, Peebles, Shetland, and Sutherland, there were no trials at all.

IRELAND.

TWO members of the profession died last week at advanced ages, viz., Dr. Henry Pentland of Kells, county Meath, aged 75; and Dr. James Heffernan of Limerick, who was in the seventy-second year of his age. Both gentlemen were graduates in medicine of the University of Edinburgh.

RATHFARNHAM AND WHITECHURCH DISPENSARY.

AT a meeting of the Dispensary Committee held last Monday, to elect a medical officer to the district in the room of Dr. Henry Croly, who had resigned, Dr. Albert Croly was unanimously appointed. A resolution to allow superannuation to Dr. Croly senior, after his long and arduous services, will shortly be brought before the Committee.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE thirty-sixth annual meeting of the friends of this estimable Society was held on last Monday, June 3rd, at the College of Physicians, the chair being occupied by Dr. Samuel Gordon, President of the College. The total number of applications this year was ninety-seven; thirteen

being from medical men, seventy-two from widows, and twelve from orphans. Five of these were refused, four being orphans who were over age, and one case which was not considered as deserving of relief. In the interval between the last general meeting and the present, the central committee were obliged to make grants to thirteen cases of great urgency, amounting to £208. The money allotted among the ninety-two eligible claimants on the Fund this year amounts to £1,332 10s.; and in the following proportions: To medical practitioners, £457 10s.; to widows, £762; and to orphans, £113. Donations were received during the year amounting to £305, including £100 from Dr. Hudson, and a similar sum from that gentleman's brother; and it is satisfactory to learn that the receipts for the year derived from interest and subscriptions will be more than sufficient to pay the sums allotted. Dr. Magee Finny, having resigned the honorary treasurership, which office he filled for the past five years, has been replaced by Dr. Fleetwood Churchill. The report referred to the vitality and efficiency of the Society's branches in the East Indies, which remitted, during the past year, subscriptions amounting to £188. After the report had been adopted, a discussion took place as to the propriety of continuing to fund the donations and bequests of the Association; and eventually it was resolved, that in future they should be either funded or distributed at the discretion of the Managing Committee for the time being, unless in cases where otherwise specified. Votes of thanks to the honorary officers, and to the medical students who had contributed to the funds of the Society, having been passed, the committee and officers for the ensuing year were elected, and the proceedings terminated.

HEALTH OF BELFAST.

THE report of Dr. Browne, Medical Superintendent Officer of Health, brought before the Belfast Town Council last week, shows that, during the four weeks ending May 25th, the deaths from zymotic diseases amounted to 40, a number considerably below the average. The death-rate, although still high, being 25.18 per 1,000 on the corrected population, has arisen from the amount of diseases of the respiratory organs caused by the variable weather. Dr. Browne states that he is unable to trace the cause of the late sudden outbreak and spread of small-pox; but he believes that the constant communication which prevails among the humbler classes, between the healthy and the sick, without any precautions being observed, fosters the infection and spread of contagious diseases to a lamentable extent. He urges the necessity of vaccination and revaccination, as, although the present epidemic of small-pox has not hitherto been of a violent type, as manifested by the comparatively light mortality, no one can foresee when it may assume a more malignant form: hence the entire community should endeavour, by every means in their power, to aid the medical profession and the sanitary authorities in their efforts to stop the spread of and eradicate this loathsome disease.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual meeting of the Fellows of this College, to elect a President, Vice-President, Council, and Secretary, for the ensuing year, was held on Monday last. Philip C. Smyly, M.D., Surgeon to the Meath Hospital, was elected President; Edward D. Mapother, M.D., Surgeon to St. Vincent's Hospital, Vice-President; William Colles, M.D., Secretary; and the following nineteen Fellows Councillors, viz.:—William Colles, Alfred H. McClintock, George H. Porter, George H. Kidd, Benjamin G. McDowell, William A. Elliott, T. Joliffe Tufnell, Edward Hamilton, Edward Ledwich, Rawdon Macnamara, Robert McDonnell, F.R.S., John K. Barton, Archibald H. Jacob, Henry Gray Croly, John Denham, Anthony H. Corley, Benjamin F. McDowell, William Stokes, and Samuel Chaplin. It will thus be observed that the outgoing Council, with the exception of Mr. Albert Walsh, were re-elected; the vacancies on it being filled up by the election of the retiring President and Messrs. H. Gray Croly, Elliott, and A. H. Jacob. There was some canvassing carried on before and during the time of the election, which was very reprehensible, and has caused much comment.

THE MEDICAL ACTS AMENDMENT BILL.

WE are informed that the Medical Reform Committee of the British Medical Association has decided that the Bill of the Association should be introduced in the House of Commons, in consequence of the Lord President's Bill, as then before them, not enforcing the conjunction of the universities with the corporations, and not including direct representation. It was arranged to do this, and the Bill was introduced on Wednesday May 29th, before the Chairman received the newly printed and amended Bill of the Lord President.

The Duke of Richmond and Gordon received, at the Privy Council Office, on Friday afternoon (May 31st), a deputation representing the London School of Medicine for Women, and those ladies who, as registered medical practitioners, had already petitioned against the Bill. The deputation, consisting of Mrs. Thorne, Mr. A. T. Norton, Dr. Garrett Anderson, Dr. Louisa Atkins, Dr. Sophia Jex-Blake, and Dr. Ann Clark, was introduced by Lord Aberdare, who stated to the Lord President the wishes of those present. They were anxious, he said, to ascertain whether it was intended that both the examinations and the diplomas under the Bill should be identical for all candidates of both sexes who presented themselves to the conjoint board; and especially they desired to know whether it would be in the power of any medical corporation to create an invidious distinction between those men and women who had passed the examinations with equal success, by bestowing different diplomas upon them without further examination. He pointed out that at present those women who were on the *Medical Register* had passed the ordinary examinations and received the same medical titles as their male competitors. The Duke of Richmond and Gordon said, in reply, that the Government had no intention of making any difference between the professional examinations and status of candidates, and pointed out that the Bill expressly provided that if any distinctions were made in the examinations, they should yet "guarantee equal proficiency". He would, however, consider whether it might be feasible to omit from the Bill all mention of possible distinctions in examination. With regard to diplomas, he further stated that it was distinctly the intention of the Government that these should be granted to all alike, and he did not consider that, under the Bill, it would be in the power of any corporation to refuse to grant to women the same diploma that they granted to men after examination by the conjoint board. After a few remarks from Dr. Jex-Blake, Dr. Anderson, and Mr. Norton, the deputation thanked the Duke of Richmond and Gordon for his assurances, and withdrew.

PARLIAMENTARY BILLS COMMITTEE.

At a meeting of the Committee held at the offices of the Association on June 3rd, 1878, there were present Mr. Ernest Hart (in the Chair), Dr. A. P. Stewart, Mr. Sibley, Dr. Grigg, Dr. Bryan, Mr. Nicholson, Mr. Walter Rivington, Mr. Tomes, Mr. Donald Napier, and Mr. J. H. Craigie.

Army Medical Department.—The Chairman made a report to the meeting of communications which had been made to the War Office during the last three months, on the subject of the improvement of the position of army medical officers in reference to the Committee at present sitting to consider the steps necessary for restoring popularity to this department. He laid upon the table a brief statement, summarising the present grievances and disadvantages of officers in the department, which had been submitted to medical officers of various grades, and met with general approval. Copies of this had been officially forwarded to the Secretary of State for War, and by him submitted to the members of the War Office Committee. It had also been placed in the hands of members of Parliament who had interested themselves in the subject, especially Mr. Lyon Playfair, Mr. Meldon, Dr. Lush, and Dr. O'Leary. A motion on the subject had been put on the paper of the House of Commons by Mr. Meldon; but the discussion upon it had been postponed, at the request of the Secretary of State for War, until after the conclusion of the investigation by the Committee. Dr. O'Leary had also proposed to call the attention of the House to the subject, and had been in communication with Mr. Ernest Hart; but, at the request of Lord Cranbrook, he had likewise postponed parliamentary proceedings. Meantime the War Office had addressed to the Chairman of the Parliamentary Bills Committee of the Association a schedule of questions relating to the estimated average emoluments of civil practitioners. A copy of this schedule had been forwarded to all the members of the Committee and to the Secretaries of the Branches of the Association. Thirty answers had been re-

ceived, of which twenty-seven contained approximate estimates, according to the opinions of the writers. In most instances, however, those estimates were accompanied by letters pointing out the uncertainty of the data. A tabulated analysis of the replies was laid upon the table. Dr. Stewart and other members of the Committee discussed the question; and a general opinion was expressed that, as absolute data were altogether wanting for replying with accuracy to the queries issued by the War Office Committee, and as such data might be found with more accuracy in the income-tax returns, a suitable letter should be addressed to the Assistant-Secretary at the War Office, giving a view of the returns furnished, but pointing out that they were necessarily wanting in positive data, and referring to the income-tax returns as being more reliable; at the same time intimating that such financial data were not themselves likely to be returned as materials for satisfying the claims of the army medical officers to moral as well as material amelioration of their condition. The schedule of questions from the War Office and the statement of grievances have already appeared in the JOURNAL.

Factory Acts' Amendment Bill.—The Chairman reported that the Factory Acts' Amendment Bill, in respect to which this Committee had taken part in the deputation to the Home Secretary with the Certifying Surgeons' Association last year, had been again introduced into Parliament this year; and that, in accordance with the views expressed last year as to the desirability of supporting the Certifying Surgeons' Association in advocating the amendment of the Bill, he had taken active measures to procure Parliamentary support in the amendment of the Bill. Early in February, he had received urgent communications from Dr. Arlidge, the President of the Certifying Surgeons' Association, and, in concerting with him, had arranged to press amendments aiming especially at the improvement of the fee for certifying, and the amendment of certain clauses which proposed to exempt factories employing less than ten children from inspection by the certifying surgeon. These proceedings had involved a considerable amount of trouble. Mr. Cross had, however, intimated to Mr. Lyon Playfair and to Dr. Cameron that, if the desired amendments were previously submitted to him, together with the reasons for them, he would consider how far he could give way on the subject. A tea-room meeting of members of the House of Commons had been arranged, and ultimately the Secretary of State had consented to remove the exemption to the smaller factories from inspection, but had refused to give way on the subject of the sixpenny fee. An attempt was made to induce him to alter this decision in the House of Commons, but this did not succeed. The amendments proposed by Mr. Lyon Playfair on behalf of the Committee had, however, been accepted. So far, the Parliamentary action of the Chairman on behalf of the Committee had been attended with important success. Letters of thanks were read from the Chairman of the Certifying Surgeons' Association and from the Secretary of the Certifying Association of Scotland, expressing their sense of the value of the energetic exertions which had been made on their behalf with a certain measure of success. A very voluminous correspondence relating to the subject was laid on the table.

Coroners' Courts.—The minutes of the Subcommittee on the Coroners' Court were read and confirmed, and printed papers were presented, including memoranda from Dr. A. S. Taylor, Dr. Hardwicke, Dr. Ferrier, Dr. Southey, and others, together with a considerable correspondence relating thereto. It was reported that, the Subcommittee having been informed that a Bill on the subject was in preparation at the Home Office for the purpose of bringing about improvements in coroners' investigations, the materials collected by the Committee had been forwarded to the Home Office for the consideration of the Home Secretary, with the request that the Committee might be informed of the purport of any intended legislation, and that some suggestions indicated by Dr. Hardwicke and Dr. A. S. Taylor should have the special consideration of the Home Secretary; and further expressing a desire to be allowed to confer with the authorities employed in drafting the Bill at a suitable stage. Communications were read from the Under Secretary of State, thanking the Committee for the information afforded, and promising that full consideration should be given to the documents and views submitted.

The Irish Public Health Bill.—Copies of communications from Dr. Grimshaw, Chairman of Council of the Irish Medical Association, relating to the Public Health (Ireland) Bill, and from Mr. Meldon, M.P., on the same subject, were laid before the Committee; and it was resolved to assist the Irish Medical Association in bringing forward desirable amendments in that Bill for improving the medical supervision and sanitary districts, and for appointing inspectors in connection with the Local Government Board of Ireland.

Dental Practitioners' Bill.—Sir John Lubbock's Bill, as amended, was laid upon the table; and the Chairman stated that, in pursuance of

the resolutions passed at the last meeting of the Committee, he had communicated with Dr. Cameron, M.P., who had interposed to prevent the passing of that Bill through committee, on the ground that it deprived registered medical practitioners of the power of practising as dentists, unless they had a special dental licence; and also that it proposed to give the title of dental surgeon to persons registered under the Dental Act, who also might not be members or licentiates of any college of surgeons. Sir John Lubbock had accepted the amendments proposed in respect to the first matter, and had reprinted the Bill as amended by him to meet that view, giving all practitioners registered under the Medical Act full privileges of dental practice. Mr. Hart wished to consult the Committee as to whether they would desire to continue their opposition to the Bill, on the ground that it still proposed to allow the title of "dental surgeon" or "surgeon-dentist" to persons not members of any college of surgeons. With the view that the Committee should hear the arguments on both sides, he had invited Mr. Tomes, who had supported the Bill, and Mr. Donald Napier, who expressed the opinions of those opposed to it. The Bill was supported by Mr. Tomes, Dr. Stewart, and Mr. Sibley. Objections to the use of the title of dental surgeon, under the circumstances stated, were expressed by Mr. Napier, Mr. Rivington, and the Chairman. Dr. Grigg moved that the title of surgeon, under any circumstances, should be limited, in the opinion of this Committee, to persons who were members of a College of Surgeons. The motion was seconded by Mr. Rivington. Being put to the vote, it was lost, whereupon it was moved by Mr. Sibley, seconded by Dr. Stewart, and carried, that this Committee approves of the Dental Practitioners' Bill as now amended.

IRISH MEDICAL ASSOCIATION.

THE annual general meeting of this Association was held in the Royal College of Surgeons on Monday last. Several of the members of the Association breakfasted together in the morning at the Shelbourne Hotel, under the Presidency of Dr. Grimshaw, Chairman of the Council. In the unavoidable absence of Dr. Darby of Bray, the President of the Association, Mr. Nolan of Gort, one of the Vice-Presidents, took the chair at the general meeting. The report of the Council was read by the active Honorary Secretary, Dr. Chapman; and, as showing the watchful interest which this body takes in behalf of the profession in Ireland, we may mention that the Committee of Council, upon whom most of the business of the Association devolves, held forty-seven meetings during their year of office. The chief subjects alluded to in the report were the Public Health (Ireland) Bill; the Medical Act (1858) Amendment Bill; the Amendment of the Vaccination (Ireland) Laws; the Registration of Births and Deaths, etc.; the Poor-law Union and Workhouses Amalgamation Inquiry Commission; Medical Witnesses at Coroners' Inquests; Superannuation to Medical Officers; etc. Only twelve new members joined the Association during the year. In addition to the customary resolutions on these occasions, and resolutions forming the Association into a registered and incorporated company, and adopting amended "objects and rules" of the Association as drawn up by the Council, the following were unanimously adopted by the meeting.

"That, whilst it would be an act of justice to the medical officers holding appointments in the Poor-law service, it would also tend to the benefit of the public, that such of those officers who, through illness or infirmity, have become unfit to discharge their public duties, or who, having either served twenty years or attained the age of sixty years, should be entitled to claim superannuation allowance, in amount not less than two-thirds of all their official emoluments.

"That the indiscriminate issue of tickets for dispensary medical relief which now prevails not only occupies unfairly the time of the medical officers, but also greatly and improperly increases the expenses of the poor-rate. This Association, therefore, approves of the propositions put forward by the Council in their communication addressed to the Poor-law Inquiry Commission on this subject.

"That it would be but just to the medical officers holding Poor-law appointments, and would tend towards increasing the efficiency of the service, that they should be entitled to a reasonable period of leave of absence in each year, as in the case of civil servants; and that provision for the same should be made at the public expense.

"That this Association approves of the action taken by the Council, concerning the Medical Act (1858) Amendment Bill now before Parliament, with reference to direct representation of the members of the profession on the General Medical Council, and also with reference to uniformity of education and examination for granting medical qualifications.

"That this Association approves of the action taken by the Council

concerning the Amendment of the Public Health (Ireland) Bill, and also approves of their action with regard to the Bills suggested by them to Amend the Vaccination Laws, and the Registration of Births and Deaths (Ireland) Act; and hereby directs that the Council shall continue their efforts to have these reforms carried into effect."

The following is a list of the officers of the Association elected for the ensuing year. *President*: Dr. Robert McDonnell, F.R.S. *Vice-Presidents*: Leinster—Dr. Hudson, Dublin; Ulster—Dr. C. D. Purdon, Belfast; Munster—Dr. J. R. Harvey, Cork; Connaught—Dr. Sharkey, Ballinasloe. *Council*: Drs. Baggot, Enniskillen; Charles Benson, Dublin; Samuel Browne, Belfast; Burnside, Clondalkin; H. G. Croly, Dublin; Darby, Bray; Drapes, Enniscorthy; G. F. Duffey, Dublin; Faussett, Clontarf; Gray, Armagh; Grimshaw, Dublin; Hayes, Naas; A. H. Jacob, Dublin; D. Jacob, Maryborough; J. Bellew Kelly, Drogheda; Lyster, Kilkenny; Macnamara, Dublin; James Martin, Portlaw; Mayne, Ballybrack; Molony, Tulla; J. W. Moore, Dublin; Nolan, Gort; Perceval, Stradbally; Pollock, Blackrock; George Porter, Dublin; T. Purcell, Dublin; H. J. Smith, Donaghmore; Speedy, Dublin; Tagert, Monkstown; Usher, Dundrum; A. J. Walsh, Dublin; Whistler, Bray. *Auditors*: Drs. Morogh, Dublin; Nugent Duncan, Ballybrack.

In the evening, the annual dinner of the Association took place in the Albert Hall of the Royal College of Surgeons, Dr. Robert McDonnell, the President, in the chair. On the right of the chair were Dr. Gordon, President of the College of Physicians; Mr. Porter, Surgeon to the Queen, President of the Dublin Branch of the British Medical Association; Dr. Little, Vice-President of the College of Physicians; Mr. T. A. Purcell, Q.C.; Surgeon-General Crawford, A.M.D.; Dr. Kidd; Dr. Rawdon Macnamara. On the left of the chair were Mr. P. C. Smyly, President of the Royal College of Surgeons; Dr. Darby; Dr. Mapother, Vice-President of the College of Surgeons; Dr. Grimshaw; Dr. Duffey, Honorary Secretary of the Dublin Branch of the British Medical Association; Mr. O'Brien Furlong, B.L.; and Mr. Tufnell. About fifty gentlemen sat down to dinner. After the usual loyal toasts had been proposed and warmly drunk, the toast of the "Army and Navy" was given by the President and responded to by Surgeon-General Crawford, the principal medical officer in Ireland. In the course of his speech, he remarked that he hoped, through the advocacy of the College of Surgeons in Ireland, and through the able advocacy of other corporations connected with the medical profession in this country and others, that the medical departments of both services will eventually be put on a basis that would make it popular not only with the medical profession, but with the country at large, as it ought to be. After the health of the Presidents of the College of Physicians and of the College of Surgeons had been drunk, the President proposed, in the most cordial terms, "Prosperity to the British Medical Association", and coupled with the toast the name of Mr. George H. Porter, the President of the Dublin Branch of the British Medical Association. The toast was most warmly received; and, in responding, Mr. Porter alluded to the identity of the objects and interests of the two Associations, and the harmonious mode in which they had acted heretofore, and would, he was confident, continue in future to act together for the general good. Indeed, the hearty good feeling existing towards the British Medical Association was apparent throughout all the proceedings of the day, and was alluded to with satisfaction by more than one speaker at the general meeting.

We congratulate the Association on its very successful meeting, and on the progress it is making in public esteem. The latter fact is well evidenced by the full notices of the meeting in the daily papers, and the favourable leaders in them on the usefulness of the Association not only to the profession, but to the public at large.

THE HARVEY TERCENTENARY MEMORIAL FUND.

THE subscriptions now exceed £1650. During the past week, Colonel Charlesworth has contributed £20, through Sir James Paget; the Faculty of Physicians and Surgeons of Glasgow has given £21; and some members of the East York and North Lincoln Branch of the British Medical Association £2 5s. to the Fund. The accounts are to be audited on Tuesday next, before which date the Honorary Secretaries request that all promised subscriptions may be paid. A meeting of the London subscribers will, by the kind permission of the President of the Royal College of Physicians, be held on Wednesday next, the 12th instant, at 5 P.M., at the College, Pall Mall East, when it will be proposed that the Executive Committee be instructed to make arrangements for the selection of the artist to whom the execution of the

statue may be entrusted. Further subscriptions are still required, and will be thankfully received by Sir George Burrows, Bart., or Mr. Prescott Hewett, the honorary treasurers; by Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone, the honorary secretaries; or they may be paid in to the account of the Fund at the Western Branch of the Bank of England, Burlington Gardens, London, W.

HOSPITAL AND DISPENSARY MANAGEMENT.

LIVERPOOL ROYAL INFIRMARY.

WE often hear that hospitals are in debt, and that the treasurers are at their wits' end to devise "ways and means". But it is seldom that an old established charity presents such serious deficiencies as those which are set forth in the recent Report of the Liverpool Royal Infirmary, Lunatic Asylum, and Lock Hospital. During the year 1877 the debt upon these conjoined institutions increased from £422 to £5,131. This appears to have been caused by the legacies falling short of their usual amount, and by a great decrease in the annual subscriptions, while the expenditure was £628 in excess of that of the previous year. Legacies are, no doubt, liable to fluctuation, and this the committee cannot control. But it is otherwise with the annual subscriptions. Surely there must be a fault somewhere. Well may the committee conclude their brief report by saying that the condition of their finances causes them great anxiety, and that immediate steps must be taken to clear off the debt, and to bring the income and expenditure more nearly into harmony.

ST. GEORGE'S HOSPITAL.

THE following passages in the Annual Report of St. George's Hospital for 1877 show that the Board of Management have given serious consideration to the condition of their out-patients. We could wish that equal attention were bestowed upon the subject at all the other large hospitals.

"The out-patients have increased much of late years—in 1827 the number was 3,139; in 1877, 16,818—and it may be expedient that the governors should again take this subject into consideration. It has occupied their attention for some years, and no doubt the precautions they have taken to restrict the admission of patients as much as possible to those who fairly belong to the class for which the hospital was instituted has been attended with this result, viz., that a smaller number of out-patients are received at St. George's than perhaps at any other hospital.

"When a charity in any way tends to lower the power of self-reliance and self-dependence, it may cease to do good, if it does not do positive harm. If in relieving so large a number of out-patients any number of persons are tempted not to depend on their own earnings for their own support, and to make no provision for attendance in ordinary illness, it becomes a question if such an amount of relief should be given.

"If the locality of St. George's Hospital is considered, it will be found to be singularly surrounded by the homes of the rich, and not the poor. A radius of a mile from the hospital contains Hyde, St. James's, and the Green Parks, Buckingham and St. James's Palaces, and Marlborough House, Grosvenor, Berkeley, Hanover, Portman, St. James's, and all the Belgravian Squares; on the immediate edge is Westminster Hospital, and on the skirts of the radius are St. Mary's, Middlesex, Charing Cross, and St. Thomas's Hospitals, as well as the Hospital for Consumption; so that the portion for which St. George's should supply assistance would be a part of St. George's, Hanover Square, Chelsea, and Brompton. Whether upwards of 16,000 persons are beyond the number that this district should supply as *bond fide* patients, where there are about six Provident Dispensaries, and ample provision has been made by the proper authorities for the *pauper* class, is a question that may require consideration."

TYRONE COUNTY INFIRMARY.

THE annual report of the Tyrone County Infirmary shows that a large amount of good work has been done during the year. As proposals are now under consideration, which will, if they are adopted, seriously affect the position of county hospitals in Ireland, we are glad to notice the valuable services which this one is rendering to its neighbourhood. Between January 5th, 1877, and January 5th, 1878, seven hundred and eighteen patients were received into the Infirmary; while fifty applicants were refused on the ground that they were either incurable or suitable for the workhouse. Sixty operations were performed, and many severe cases were under treatment. The mortality on the total

number of cases was only eighteen, or 28.4 per 1,000. The average cost of each patient was £2 3s. 3½d., and the cost per bed £39 18s. The total number of beds is fifty; twenty-five of which are for surgical, twenty for medical, and five for ophthalmic cases. The average number of beds occupied during the whole year was thirty-nine. The report, which is drawn up by Dr. E. C. Thompson, is a carefully compiled record of useful work.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 28TH, 1878.

CHARLES WEST, M.D., President, in the Chair.

NOTES ON THE SPIRILLUM FEVER OF BOMBAY, 1877.

BY H. VANDYKE CARTER, M.D. (BOMBAY.)

THE author began by expressing his conviction that, by means of the clinical thermometer and microscope, it had been demonstrated that the new Bombay fever was identical with the famine fever, relapsing fever, or recurrent typhus of Europe; and he insisted upon the importance of this fact. Proofs were arranged as being derived from the natural history of the epidemic, from the symptoms noted, and from the pathology indicated, as follows: 1. The rather abrupt appearance of a malady evidently connected with unusual and excessive want, fatigue, and overcrowding; its spread with the increase and subsidence with abatement of these hygienic defects; 2. The remarkable resemblance in clinical characters of this new malady with the relapsing fever of Europe—a resemblance so close as of itself to be decisive of actual identity; 3. As a special feature, the invariable presence in the blood during pyrexia of a minute parasite which, so far as known, was peculiar to one form of fever only, viz., the relapsing. It was also noted as significant that the new fever had raged most at that season of the year when there was least malaria, and had declined when remittents commonly begin to appear. Quinine did not check its course. It was already apparent (in the author's estimation) that this epidemic arose contemporaneously with excessive afflux of famine-stricken people; that, as the pressure of immigration augmented, the "fever" death-rate rose; and lastly that, contemporaneously with diminished influx and with active deportation of families to relief-centres in the interior, this comparative fever-mortality began to decline, though, had it been due to malarious influence alone, the reverse would have been the case. And, with regard to the influence of defective sanitation, there was no evidence that Bombay was in a worse state than previously; besides, relapsing fever did not arise from filth. Most stress was, however, laid upon the proved identity of symptoms and pathology; and, in proceeding to discuss these, reasons were given for introducing the designation "spirillum fever"; and occasion was taken by the author to acknowledge the valuable co-operation of Drs. Succaram, Arjoon, and Anna Moreshwar of the Jamsetjee Jejeebhoy Hospital, Bombay. Some general observations followed, the sources of information being a camp of refuge, and two large hospitals, of which the author had charge at different times. In all, nine hundred cases of "fever" of all kinds, and taken without selection, had been examined; and of these about three hundred and fifty were demonstrated to be instances of spirillum disease; about the same number of cases (chiefly malarious) did not show the parasite, and the remainder were not microscopically scrutinised; they were the milder, obscurer, and mostly sequelar instances. Upon full consideration, the author concluded that upwards of one half (it might be more) of the sickness in Bombay was due to the famine-fever. From the data now alluded to, it was evident that malarious fevers were to be infallibly distinguished by the absence of the spirillum; but the author admitted he had no previous conception of the variety of form and degree which the parasite fever might assume; it might, indeed, like the malarious, be regarded as an order and genus of specific fevers. As to its analogies with the last-named group, secondary or later paroxysms might closely resemble intermittent or aguish attacks; and, as the blood-parasite might or might not be found in such brief exacerbations, much difficulty might be felt in deciding upon their real character. Here experience in India quite accorded with that in Breslau and Petersburg (for example), and different explanations might be offered. The author alluded to an instance he had met with of ague-like fever being occasionally attended with a spirilloid blood-parasite. The more important question of the relationship of the spirillum fever with remittents was briefly discussed; first paroxysms always, and relapses frequently; a persistent pyrexial state, which might be either continuous or remittent—in Bombay it was, perhaps, as

one as the other—but was invariably marked by the presence of the blood-spirillum, whilst this would be vainly sought for in pure remittent attacks. Sometimes the apyretic or free interval was so filled up with daily change of temperature, that the date of relapse was not evident in the chart; if not due to local complications, there might here be addition of a remittent, or, as the author thought not unlikely, of veritable typhus. By means of the microscope, it would always be possible to demonstrate the occurrence of a relapse, even under these circumstances. Symptomatic fevers as complications were next alluded to; and, lastly, the author expressed his concern that remittent fever continued to be the official name of a malady so distinct in important respects as the spirillum or relapsing fevers. Instances of typhus icterodes and of hæmorrhagic typhus were then mentioned in which the blood-parasite was found, as it had been in Europe; it had not been found, however, in "enteric" fever (with a very doubtful exception), varicella, elephantoid fever (where the filaria was detected), and every other ordinary febrile ailment concurring with the specific. Some general remarks on fever followed—the course of future inquiry was suggested. The value of a thorough acquaintance with all stages of the spirillum fever was insisted upon, because only by this means could obscure or late instances be understood. The entire correspondence in symptoms of an ordinary attack of the relapsing fever of Bombay with that of Europe was pointed out, the author adverting to his own illness in part proof, and due prominence was given to this important identification. Instances in which no relapse occurred were particularly mentioned; they were 23 per cent. of all recovered cases; but, if fatal ones were added, of persons dying during or just after a first paroxysm, then the proportion of instances showing but one febrile exacerbation rose to 40 per cent. Upwards of one-half of all recovered cases showed one relapse; 6 per cent. two relapses; 5 per cent. three; and 2 per cent. four relapses. The mean duration of the first attacks and intervals was seven or eight days, with a rather wide range; relapses lasted a shorter time. No difference was noted between an abortive and a relapsing attack, or any fixed relation between the severity of first and second paroxysms. Repeated attacks of the spirillum fever in the same individual at long intervals were well-known in Bombay. Individual symptoms were next reviewed. Prodromata might be wanting, although the spirillum was found within an hour of the initiatory chills of a first attack; they were commonly absent before relapses. Jaundice, delirium, and the typhoid state, and protracted convalescence were more frequent than usual in Europe. Abortion occurred in pregnant women, and was early recognised. Hunger as a symptom was sometimes seen. The mortality, as based upon hospital statistics, might be estimated as 10 per cent.; it was greatest at the height of the epidemic; but latterly several deaths occurred in cases offering typhus symptoms, which had caused a somewhat increased death-rate. The author estimated the rate in ordinary fevers (mostly malarious) as double the above, and in remittents as treble. During the same period, three-fourths of deaths from spirillum fever took place near the close of the first paroxysm, and during the early part of the following apyretic interval. Excepting that of the blood, no anatomical lesion was absolutely peculiar to the fever, and none was invariable. The commonest changes were enlargement of the spleen (nineteen times in thirty-seven necropsies), also fibrinous infarcts (eight) and softening (three); enlargements of the liver (seventeen times in thirty-seven necropsies); fatty degeneration (sometimes acute) of the gland-cells of the liver, kidneys, and spleen was noticed, but not of the heart-muscle; also hæmorrhages in the arachnoid and other serous membranes, and in the intestinal mucous membrane. The influence of age, sex, season, and occupation were noticed; the remarkable limitation of the epidemic to the indigent and those nearest them was pointed out, the middle and upper classes having virtually escaped. The origin *de novo* of this fever from want might seemingly occur, yet this could not be the usual mode of origin, and contagion as a means of spreading the disease must be admitted. Rabbits and pigeons resisted inoculation of infected human blood. Adverting to the sanitary and hygienic condition of Bombay in 1877, Dr. Carter turned to the year 1864, when, from a wholly different cause, viz., excessive prosperity, the town became dangerously overcrowded, and an epidemic of fever broke out which was clearly contagious, and by good authority was compared with typhus. Whether at that time relapsing fever also occurred was now unknown; but the author was inclined to believe that the latter was not a new disease in the Presidency. The remaining portion of the paper was occupied with a description of the spirillum (spirochæte) and other blood-elements detected in this disease during the many hundred observations which had been made in Bombay. The author had had the satisfaction of finding that his independent experience entirely corresponded with most of that collected during recent years in Europe; and he regarded this identification of the spirillum fever as a substantial addition to our previous knowledge.

SEQUEL TO A CASE OF ANEURISM OF THE AORTA, AND THE
INNOMINATE, SUBCLAVIAN, AND CAROTID ARTERIES,
TREATED BY THE DOUBLE DISTAL LIGATURE.
BY RICHARD BARWELL, F.R.C.S.

Robert Watson was exhibited to the Society on November 13th, when the paper entitled as above was read. On November 14th, he left the hospital. On the 20th, he came to the hospital on formal business; and, as he was suffering from bronchitis, Mr. Barwell persuaded him to remain. He was very intractable, and, not being allowed brandy, left on the 22nd. He walked home (about two miles) very thinly clad, through snow and sleet, sat four hours in wet clothes without a fire, became rapidly worse, and died on November 24th. On November 25th, a *post mortem* examination was made. The aneurism, which appeared solid, was removed, together with the heart and great vessels. No other disease was discoverable, except very acute bronchitis (muco-pus in the large and small bronchi), hypostatic pneumonia, and œdema of the lungs. The blood in the arterial system was dark, like that of the veins. The aneurismal tumour, rather larger than a tennis-ball, sprang from the junction of the first and second parts of the aorta. Its pressure had altered the course and relations of the trachea and œsophagus; the large veins also were peculiar. It was remarkably hard and firm. At its upper part, it was elongated into a subsidiary enlargement, which lay in the neck, and was in front divided from the rest of the aneurism by a groove marked in it by the clavicle. The back of the sac was moulded on the apex of the lung. The sac was laid open from behind forward. There was within it, still persistent, a globular cavity, perhaps an inch in diameter; this was surrounded by very firm clot of variable thickness; and in front, close to its opening into the aorta, it was rather more than one-third of an inch thick; behind, an inch and a half. The subsidiary tumour was quite obliterated, so that here the clot was more than two inches thick. No vessel opened out of the aneurism; the innominate being, like the right subclavian and carotid, obliterated. The left vessels came off from the aorta itself below the mouth of the aneurism. The specimen showed that the tumour had greatly shrunk since the operation; that the whole tumour was as much killed as could be expected in the time; that, had the man chosen to remain in the hospital, or been moderately prudent, the whole cavity must almost of necessity have become obliterated, since the aneurism, thickened by hard clot, could neither have enlarged nor burst; and, since there was no thoroughfare within the sac, there could have been no blood-stream through it. In fact, though the man, by his own perversity, contracted an intercurrent fatal disease, the aneurism was to all intents and purposes cured.

TWO CASES OF INTUSSUSCEPTION, IN ONE OF WHICH ABDOMINAL
SECTION WAS PERFORMED. BY C. HANDFIELD JONES, M.D.,
F.R.S., AND HERBERT W. PAGE, M.C., F.R.C.S.

Two cases were recorded, in patients of Dr. Handfield Jones, in St. Mary's Hospital. The first, a harness-maker aged 60, admitted May 12th, 1874, had, although enjoying good health, passed blood *per rectum* for the previous twelve months. On May 5th, he was seized with abdominal pain, and then passed a teacupful of clotted blood. The pain became constant after May 8th, and, when admitted, a tumour was found in the cavity of the bowel, round which the finger could be passed, and there was dulness in the left flank, with constipation. He was examined on the 21st, with a view to operation; but the surgeon (since dead) concluded there was cancerous disease, having brought away a portion of growth on the finger. The man died on the 23rd. Extensive peritonitis was found *post mortem*, and a large invagination projecting into the rectum, which could be reduced with ease, and there was no cancer. Regret was expressed at the delay and mistake in diagnosis, as operation might have easily relieved the condition, and perhaps have saved life. The second case presented features of great interest. A boy aged 5 was admitted December 31st, 1877, with a history of having lost flesh and been very ill for six weeks. He had severe paroxysms of pain in his abdomen, varying much in frequency, and with some diarrhœa. He improved during the first few days; but, on January 14th, he had more pain, and there was dulness on percussion in the left flank. This condition increased, and on the 20th, the child being very ill, and there being a distinct hard lump in the left iliac fossa, inflation was performed *per anum*, and was followed by a rapid subsidence of all the urgent symptoms. His state continued very variable from day to day until February 4th, when the tumour again appeared, and was a second time relieved by inflation. On February 11th, for a third time, and again on February 16th, the tumour reappeared, and was removed by insufflation; and on February 25th, the operation was again repeated for the fifth time, and caused the disappearance of the tumour, then much larger than before, and both seen and felt in the left iliac fossa. He was taken out of the hospital by his

parents on February 27th, with a warning that a recurrence of the disorder was almost certain. He was readmitted on March 4th, in an alarming state, the symptoms having returned two days before. A large tumour was now felt, reaching from the iliac to the umbilical region; and inflation, when performed in the afternoon, only changed its position, but did not make it disappear. The child continued in great pain, and in the evening insufflation was again tried, and failing, water was injected, but without success. On the following day, he was much worse; and at 5 P.M., when pulseless and collapsed, he was seen by Mr. Page, who at once performed abdominal section. The tumour was so large that it was necessary to prolong the incision above the umbilicus, and to remove the small intestines from the abdominal cavity. Traction on the upper end of the volvulus was only successful in the extrication of about two inches of ileum; and an attempt to draw off the ensheathing part at the lower end was frustrated by the presence, then discovered, of a second and lower intussusception of the colon, in which the order of parts was reversed—the inferior portion being ensheathed in the upper, which thus became the ensheathing part. The two volvuli met and overlapped each other at their extremities, and it became necessary to reduce the backward intussusception before the ordinary invagination could be relieved. Owing to the great distension of the bowel and slight adhesions at the ultimate part of the intussusception, this was a work of much difficulty, and was only accomplished by considerable force. The upper or more usual invagination was then reduced with great ease, by gently squeezing the lower end of the volvulus—an action which simultaneously drew off the ensheathing, and pushed out the ensheathed, part of the bowel, the vermiform appendix being the last to appear. There was some visible congestion and thickening about the cæcum, but no general peritonitis or adhesions. The operation, of which a detailed account was given, lasted an hour and a quarter. The child considerably rallied after it, but died exhausted the following morning, having lived nine hours and three-quarters. At the necropsy, the lips of the wound were found adherent. There was commencing peritonitis of the small intestines, but none of the large bowel. At a point corresponding with the upper limit of the volvulus, the mucous membrane of the ileum was swollen and greatly congested, and that near the vermiform appendix was much the same. The meso cæcum was so lax as to allow the cæcum to be drawn over the left iliac fossa. The method of reducing the upper volvulus was specially referred to, as confirmatory of Mr. Hutchinson's experience, recorded in the fifty-ninth volume of the *Transactions*, that pulling down the ensheathing part rather than pulling out the ensheathed part was the true mode to pursue. Reduction of the backward intussusception was rendered most difficult from the slight adhesions at its furthest end, and from great distension of the gut; and, although accomplished without damage to the structure of the bowel, it was thought that such force as was requisite might itself have been dangerous. Reference was made to the long continuance of pain before any definite appearance of tumour; and it was suggested, as an explanation of the occurrence of intussusception, that pain and the subsequent motor derangement must be ascribed to a functional disorder of the abdominal nerves and ganglia, a relaxed state of a lower segment certainly favouring the intrusion of an actively contracting part above. It was, therefore, most probable that the essential condition of intussusception was a local paralysis of a portion of the small intestine, which became the sheath of the volvulus. Neuralgic pain in other parts was associated with motor paralysis, and probably was so in the abdominal organs. At the same time, the laxity of the meso-cæcum might throw light on a predisposing cause of the intussusception. The second and ascending intussusception formed a very remarkable feature in the case, the existence of a single instance of such a condition having been called in question by the late Dr. Brinton. The absence of peritonitis and adhesions after many recurrences, and the presence of slight adhesions only when the child had been taken home, and when there was long delay in resorting to inflation, showed how necessary it was that this treatment should be had recourse to as soon as intussusception was evident; while the state of the mucous membrane, although the serous surface of the bowel might be free from inflammation, pointed out the imperative need of surgical interference at the earliest possible moment after other means had failed to give relief.—Mr. GAY remembered a case of his own which was somewhat similar. He was called in consultation to see a lady, more than seventy years old, supposed to have suffered for several years from internal piles. Sometimes there was bleeding and difficulty of defecation; and when this last was overcome, blood was passed in some quantity. He could find a considerable swelling in the rectum, which seemed to be a polypus when examined by the speculum, and to that he applied a ligature. When he next saw her, there were peritonitis and vomiting, and no motion had been passed. He removed the ligature, and separated the part by the knife. She improved for a time, but after a few weeks she

sank and died. No *post mortem* examination was allowed; but the tumour, when examined, was found to be an old invagination, and it could even be unsheathed with a little trouble. The case showed, at all events, that invagination might last for years without giving rise to marked signs.—Mr. BROOKE thought a small bougie passed round about the tumour might be of use in detecting such cases.

FATAL PURPURA, FOLLOWING THE ADMINISTRATION OF A SINGLE DOSE OF IODIDE OF POTASSIUM, IN AN INFANT THE SUBJECT OF CONGENITAL SYPHILIS; WITH REMARKS UPON SYPHILITIC AND IODIC PURPURA. BY STEPHEN MACKENZIE, M.D.

An infant aged five months, the subject of well-marked congenital syphilis, had prescribed for it a mixture containing iodide of potassium, in two-and-a-half-grain doses. About three-quarters of an hour after taking the first and only dose, the child's face was noticed to "turn black"; and this rapidly increasing, it was brought to the London Hospital, three hours after taking the medicine. When first seen, the whole of the face was swollen, of a purplish-black tint, the eyelids closed from extravasated blood, the lips and chin tensely swollen and of an almost black colour. The cheeks were discoloured by aggregated patches of purpura. There were a few spots on each arm, but at this time none elsewhere. There were also scattered over the body a few abortive pustules. While the patient was watched, the purpuric patches perceptibly increased in size until, in the course of an hour or so, the scalp and face were fairly covered. The next day, the whole face was swollen and of a port-wine colour, and there were purpuric spots on the arms and legs. The extravasated blood underwent some changes of colour, and parts of the skin of the face became necrosed in the course of this and the following day. The child died sixty-eight hours after taking the medicine. The necropsy showed characteristic signs of syphilis and ulceration of the intestines. The previous medicines which the child had been taking were procured and analysed; they were free from iodine. From the quantity abstracted from the bottle containing the iodide of potassium, it was certain that not more than two-and-a-half grains had been given to the patient. The author stated that, as purpura was known to occur in connection both with syphilis and the ingestion of iodide of potassium, it was necessary to review what was known concerning syphilitic and iodic purpura. He especially referred to cases of the former recorded by Wilson Fox, Bälz, and Behrend, and others observed by himself. As regarded iodic purpura, he alluded to the writings of Fournier, Van Buren, Bradbury, and Sydney Ringer, and to cures he had himself seen. His conclusion was that, in his case, the fatal purpura was due to the iodide of potassium, though the syphilitic dyscrasia under which the patient was labouring might have contributed to the result.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 7TH, 1878.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

Cancer of the Tonsil.—Mr. BUTLIN read a report, signed by himself and Dr. Goodhart, upon two cases exhibited by Mr. L. Browne at a previous meeting. In one case, there was a large soft growth—a lympho-sarcoma—implicating the right tonsil, the posterior wall of the pharynx, and the soft palate, which had a ragged sloughy surface; in the second case, the left tonsil was defaced by a ragged ulcer, which had extended from the base of the tongue, and which was an epithelioma.

Ulceration of the Bowel in connection with Granular Kidney.—Dr. DICKINSON exhibited these specimens, which he described as rare. In his Croonian lectures two years ago, he had described two other cases, in both of which existed granular kidneys, cardiac hypertrophy, and arterial tension, with ulceration of the ileum, which was nearly, if not quite, penetrated, and both had died with peritonitis. No other cause also for the ulceration had existed in either case, unless it was the granular condition of the kidneys. Since then, a third case exactly similar had been under Dr. Greenhow in the Middlesex Hospital. The present was the fourth case known to him; and the patient, a man aged 20, had been in St. George's Hospital, at first under the care of Mr. B. Carter, suffering from retinitis due to granular kidney. He had hypertrophy of the heart, with astonishing hardness of the pulse; in fact, Dr. Dickinson described it as the hardest pulse he had ever felt in his life. He had hæmorrhages from the bowels and nose, and into the retina; he also had peritonitis, became prostrate and collapsed, and died. The kidneys were found to be granular, and contained much fibroid growth. The renal symptoms had been due to scarlatina con-

tracted fourteen years previously, and accompanied at the time by dropsy. He had also the same state of ileum as was found in the three other cases. The peritoneum contained purulent fluid, and the bowel was pierced in two places. Within the bowel were circular ulcers. The patient had not had typhoid fever nor tuberculosis. He had pigmentation of the affected intestine, which led Dr. Dickinson to suggest that possibly the ulceration was due to interstitial hæmorrhage into the bowel, and was a consequence of the granular state of the kidneys.—The PRESIDENT asked what was the explanation that in all four cases the patients had been exceptionally young for such a condition of the kidneys.—Dr. DICKINSON said that in this fourth case it was due to scarlet fever; in one of the other cases it had been due to calculous disease.—The PRESIDENT inquired what was the temperature in the cases? what was the proof that typhoid fever was not the cause of the ulcerations in the bowel?—Dr. DICKINSON replied that there was no history of typhoid, and no rise of temperature in either case to cause any suspicion of typhoid. The cases were chronic; and in the last case the temperature was certainly not high.

Renal Calculus composed of Mixed Carbonate and Phosphate of Lime.—Dr. ORD exhibited this specimen, taken from a left kidney that had been destroyed by a sarcoma which had occluded the ureter. The kidney was merely a lobulated cyst, and contained purulent fluid and a calculus of the usual elongated and branched form of calculi found in the pelvis of the kidney. Such calculi were formed from three or four nuclei corresponding to the pelvis and infundibula, and there growing coalesced into one large calculus. This specimen had originally four nuclei, consisting of uric acid and urate of ammonia. The central portions of the branches were friable, and composed of phosphate of lime, interspersed with needles and prisms of urate of soda or lime, coated with a mixture of urate of ammonia, and sometimes with phosphate or carbonate of lime. The calculus with its different layers showed well the varying stages of its growth. Its friability proved that it had almost certainly been formed after partial occlusion of the ureter had produced dilatation in the pelvis of the kidney, allowing sediments to lie in diverticular sacs out of the track of the current of urine. Where carbonates entered into the composition of calculi, such calculi were probably formed out of the course of the urine where other fluids than urine would be present. This calculus did not yield any trace of indigo or of indigogenous material, although it came from the body of the patient in whose right kidney was found the indigo calculus exhibited recently by Dr. Ord at the same Society.

Two Specimens showing the Spontaneous Disintegration of Calculi in the Bladder.—Dr. ORD also exhibited some calculi sent to him by Mr. Lockhart of Blackheath, twelve of which had been passed by a gentleman aged 56, since dead of bronchitis. All were segments of a fusiform calculi, and looked like the fragments of an exploded shell. Some had a fawn-coloured basis of uric acid; some were pale, and covered with urate of ammonia. They had no nuclei, but in each calculus the pyramidal end was hollowed out where the nucleus had originally been. The second set of thirty-two calculi had been sent to Dr. Ord by Mr. Buckston Browne. Some of these were water-worn and polished; some had perfectly sharp and untouched edges. They had been passed at various times by the patient, a male aged 63, who had died of uræmia. The basic substance was almost pure uric acid arranged in radiating fibres, the fibres being interrupted by laminae. All were fragments of fusiform calculi which appeared to have undergone spontaneous disruption in the bladder, and then become coated with urate of ammonia. The calculi were evidently originally deposited from an acid urine; the urine had then become more alkaline, and the outer layers of the calculi were consequently of less acid material. In this changed state of the urine, the nuclei had swollen and acted as a bursting charge in a shell.—The PRESIDENT inquired if in such cases the nuclei were never found.—Dr. ORD replied that he had searched for them in vain. In the College of Surgeons' Museum, however, was a specimen exhibited as a disrupted fusiform calculus, in which the apex was not truncated but perfect, and composed of a nucleus.

The Microscopical Characters found in Tissues affected by Measles.—Dr. BRAIDWOOD of Birkenhead exhibited specimens of drawings, prepared by himself and Mr. Vacher. They were in continuation of their previous researches on contagium; but, as specimens of scarlatinal disease had not been obtainable, they had worked at measles during an epidemic of that disease in Birkenhead. He commenced by remarking that the observations on small-pox, presented last year to the Society, had been completely confirmed by their later microscopical studies of that disease. Human tissues had no counterpart amongst the lower animals. The breath of a morbillous patient, on the third day of the illness, being examined microscopically, was found to contain numerous spherical sparkling bodies, and others elongated with sharp cut ends,

sparkling and colourless. These specimens were contained in the glycerine into which the patient had breathed. Two fatal cases had been examined; one child had died on the eighth day, the other about the fifteenth, after the appearance of the rash. The body in each case was examined within twenty-four hours of death. The specimens, when hardened in alcohol, had been cut in sections and prepared by Cole and Son. In the first case, the skin showed thickenings of various parts, due to great proliferation of the cells of the rete Malpighii, extending along the hairs and the sweat-ducts into their glands. In the true skin were sparkling spherical and spindle-shaped bodies, which did not take the carmine tinge, which resembled the so-called micrococci of vaccine, but were larger, were not found in the sweat-glands, ducts, or hair-follicles, nor more deeply situate than the level of the sweat-glands. The lungs showed infiltration of the air-vesicles, and of the inner surface of the bronchial tubes, by altered blood-corpuscles and excessive proliferation of cells; amongst which were found also the sparkling spherical and elongated bodies such as were found in the skin. The same bodies were discovered in the liver, scattered around the bile-ducts. In the kidneys, spleen, and mesenteric glands, nothing distinctive was found. In the second case, the swelling of the skin was less pronounced; but similar contagium-particles were found. In the lungs was pneumonic infiltration, with bronchial catarrh and the specific organisms found in the first case. The same spherical and elongated contagium-particles were found in the liver, especially in the tissue immediately outside the walls of the vascular spaces. Nothing especially distinctive was found in the spleen or kidneys; the former was large and friable. These observations pointed to the existence of a "measles-micrococcus", to be ranked with vaccine-micrococcus, and probably with a scarlatinal species; it was probably developed chiefly in the lungs, and, passing into the respired air, formed an important means of spreading the disease.—The PRESIDENT considered that the Society was much indebted to Dr. Braidwood for having come so far to read his paper. The specimens were beautifully prepared, and the drawings accurately represented them; but the real point was: were the particles which had been described the real contagium-particles of measles? That observation of the particles found in the breath, if it should be confirmed by further observations, was most important. He would say, multiply the observations, in order to discover if such particles were always found in the breath in measles. Could they be cultivated also? If so, and the crop were found to be capable of reproducing measles, the experiment would go a long way to prove that they were the true contagium-particles of the disease.—Mr. MORRANT BAKER inquired if Dr. Braidwood had examined the breath in the same manner in the other exanthemata.—Dr. THIN believed some such observations had been recently made. Prickly heat, measles, etc., so far as their skin-affections were concerned, all depended upon congestion of the skin, and yet, to the naked eye, were all different from one another. He commented on the characters of bacteria, and thought it impossible to say, from microscopic observation, whether the particles described by Dr. Braidwood were living organisms.—Mr. BUTLIN thought it extremely probable that bacteria would usually be found in the breath in measles, as they were contained in large quantities in the fur of the tongue. Had Dr. Braidwood examined the respired air in the diseases?—Dr. LEARD described Tyndall's apparatus for observing how certain odours absorbed heat-rays, and thought that advantage might result from the examination of odorous emanations from the bodies of those afflicted with contagious diseases.—Dr. WILBERFORCE SMITH had often examined the fur on the tongue, and found it to consist of a fungus-material mixed with epithelia. Had Dr. Braidwood examined the bladder in these cases? He himself had often noticed desquamation of the bladder epithelium in measles.—Dr. ORD remarked that one case had been examined late in the disease, on the fourteenth day in fact, when the rash had passed away, whilst the other case had been examined at a different date. Was there any difference in the condition of the bacteria in the two cases, and what was the size of the particles?—Dr. COUPLAND inquired how the specimens had been prepared for examination. The reagents which might be used varied the appearances so very much, that even Dr. Klein had been deceived thereby. He thought conclusions should be withheld until the observations had been multiplied under various conditions.—Dr. BRAIDWOOD, in reply, regretted that his observations had been so few, but had thought it best that they should be brought before the Society as soon as possible. He was glad of the discussion which had arisen. The research was difficult, because he and Mr. Vacher could not use artificial light for their observations, and during the day he was otherwise much engaged. Although the particles under the microscope, from differently diseased tissues, might appear the same, and have a similar chemical reaction, yet they would produce quite different effects when introduced into the favourable soil of the human body. They could scarcely be cultivated,

except in the natural way, as was the case with the vaccine micrococci. The activity of vaccine lymph was certainly due to these spherical particles. He had not examined the respired air in cases of other diseases, and was quite willing to admit that the causes of error in single observations were very numerous. The particles in the breath in that one case were like the particles found in the tissues. He should continue these observations upon the breath in other cases. He had not examined the bladder. He had called the particles "elongated sparkling bodies" rather than bacteria. There was a distinct difference in the appearances found in the skins of the two patients who had died at different stages of the disease. The spherical bodies described by him were a trifle larger than the vaccine micrococci, which were the 1-20,000th of an inch in diameter. He and Mr. Vacher had employed the simplest form of examination. All their specimens had been prepared alike in alcohol, and they had examined each slide over and over again.—Dr. DICKINSON inquired if Dr. Braidwood had had his attention called to the observations of Dr. Salisbury, made many years ago, to the effect that the contagium of measles was connected with the growth of wheat.—Dr. BRAIDWOOD had not met with these observations. He said also that it must be remembered that neither measles nor scarlatina could be cultivated in the human subject.

Epithelioma of the Female Lip.—Dr. THIN showed microscopical preparations taken from such a case under the care of Mr. Bell of Edinburgh. The patient was a widow aged 65, who had smoked for twenty-eight years, and who in the spring of 1877 blistered her lip by using a new clay-pipe. She returned to her old short "cuttie" for two months; but, as the lip pained her, she then discontinued smoking. When she came to Edinburgh last January, there was at the right angle of the mouth an ulcer with a hard dry base, extending on the cheek about an inch and a half. The tumour was excised, and the patient cured. The usual characteristics of epithelioma were revealed by the microscope, the mucous glands being especially distended and dilated; whilst in the surrounding skin the sebaceous glands were infiltrated, whilst the rete mucosum was not affected.

Cancerous Ulcer of the Skin of Forty-three Years' Duration.—Dr. THIN also exhibited this specimen, which had been removed by Sir James Paget on January 21st from a female aged 68, who, about forty-three years ago (when she was consequently twenty-five years old), had first noticed a pimple over the spine of the left scapula, which five years afterwards was of the size of a pea, was pronounced to be a common wart, and was removed by ligature. It returned, and in ten years had become as large as a moderate strawberry, was pronounced to be a "vascular wart", and was again removed by ligature. After this operation, the base had never healed, but remained as a superficial ulcer, which had since spread slowly during twenty-seven years, causing little pain, but discharging pus freely. During the last year, however, the pain had much increased, and the ulcer had grown rapidly, and, as her health was failing, Sir James Paget had thoroughly excised it. At the time of operation, although it covered the whole of the scapula, it was entirely removed, only healthy tissue being left. Progress was most satisfactory three weeks after the operation, the wound having a healthy granulating appearance. There had been no concomitant glandular affection. The edge of the ulcer was surrounded by an elevated rim, the product of cell-growth, which spread as columns of close packed cells into the surrounding rete mucosum; but which were more scattered in the deeper layers of the skin. The cells were like the lining of the sweat-glands; and these latter were filled with cell-growth. The case was neither one of epithelioma, nor was it a rodent ulcer, but it resembled Verneuil's adenoma of the sweat-glands. Mr. Gaskoin had recently exhibited a specimen of a similar kind at the Royal Medical and Chirurgical Society.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 1ST, 1878.

JAMES H. AVELING, M.D., Vice-President, in the Chair.

Effusion of Blood into the Peritoneal Cavity.—Dr. BARNES exhibited two specimens illustrating two forms or causes of intrapelvic blood-effusions. The first was a tubal gestation which had burst. The gestation was estimated at seven or eight weeks. The sac was within an inch of the left angle of the uterus. The patient had undergone a fatiguing journey, and died under symptoms of shock and collapse. The other specimen was an illustration of a more rare description. A patient was admitted into St. George's Hospital suffering from retroflexion of an enlarged uterus, causing much pelvic distress. The displacement was reduced under anaesthesia without much difficulty, and a Hodge's pessary applied. Though relief followed on the second day, pain set in, and the pessary was expelled while coughing, and three

days after she died rather suddenly. At the necropsy, the abdominal cavity was found full of blood; the source of the hæmorrhage was traced to the pelvis, where an imperfect cavity had been formed by the adhesion of the retroflexed uterus to the omentum and intestine.—Dr. JOHN WILLIAMS, Dr. HAYES, Dr. WILTSHIRE, and Dr. HEYWOOD SMITH made remarks.

The Uterus during Menstruation.—Dr. CORY showed some microscopical sections of an uterus taken from a subject who died suddenly the same day as menstruation commenced. These showed well the appearances described by Dr. John Williams. The mucous membrane was separating from below upwards, that part of it nearest to the cervix had already separated, and immediately above this some remains of it could be seen hanging in shreds, which still further towards the fundus it was still intact.

Fracture of Cranium in a New-born Child.—Dr. POOLE of Sidcup exhibited the cranium, lungs, and heart of a recently born child. When he was called to the mother, a servant girl, she stated that six hours previously, whilst in bed, labour came on, and the child, in being expelled, fell over the edge upon the bare boards. She was lying upon her right side, with her back close to the edge. The left frontal bone had three fractures, proceeding from the coronal suture; the left parietal had three an inch and a half long, from the sagittal suture; and the right parietal had one long fracture, starting from the same suture. The lungs gave evidence of respiration having been well established. The funis was twenty-four inches long, and was ruptured eighteen inches from the umbilicus. The bed was twenty-six inches from the floor; and the question was, could the fall, broken by the resistance of the funis, have caused the fracture?—Dr. AVELING thought it very doubtful whether this case should be discussed by the Society while still *sub judice*, and he submitted this point to the Fellows.—After remarks from Dr. BRAXTON HICKS, Dr. ROUTH, and Dr. WILTSHIRE, Dr. MURRAY proposed that the discussion should be deferred until the case had been adjudicated.—This resolution was seconded by Dr. BRUNTON, and carried unanimously.

A Case of Cæsarean Section was communicated by Dr. BRAXTON HICKS. The patient, when eight months advanced in pregnancy, was admitted into Guy's Hospital on account of malignant disease of the vagina, etc., seriously impeding the passage. The rectum was surrounded by a malignant deposit, and the recto-vaginal septum was consolidated into a dense and unyielding mass, nearly filling up the vagina, and almost preventing the finger from reaching the os. Delivery *per vias naturales* being impracticable, it was decided to perform Cæsarean section about a week before the full term. Feverish prostration and pains of labour occurred, however, three days after admission, and the operation had to be undertaken under these disadvantageous circumstances. The placenta was found to be seated beneath the incision; there was, however, very little bleeding. The uterine wound was brought together by grasping the uterus, and uninterrupted sutures of carbolised silk were passed through the peritoneal coats. The external wound was then closed, and a catheter passed through the os uteri, so as to facilitate the breaking up of clots, and to allow irrigation. Bilious vomiting soon set in, and the patient sank about twenty-four hours after the operation. On *post mortem* examination, the whole of the uterine wound was found gaping, every stitch having been torn away. There was a small quantity of grumous purulent fluid in the pelvic peritoneum. Dr. Hicks considered that the accession of irritative fever previously to the operation had much influence in the fatal termination, and that the very severe vomiting, coupled with a vigorously acting uterus, had doubtless caused the tearing away of the uterine stitches.—Dr. GODSON referred to the successful cases of Cæsarean section lately brought forward by Dr. Edmunds, where no uterine sutures had been employed, and asked Dr. Hicks what circumstances induced him to use sutures in his case, for the result showed how useless they had been.—Dr. HEYWOOD SMITH asked to what depth the sutures had been introduced.—After some remarks from Dr. MURRAY, Dr. BRAXTON HICKS stated, in reply, that he had put in the sutures through the uterine wall to the depth of from a quarter to half an inch; he was led to employ them because the wound gaped to such an extent. He thought it might be said that when a case promised well, sutures were not required, and when the reverse, sutures were of little use.

Pregnancy complicated with Malignant Growth in the Vagina and Rectum.—This case, which was contributed by Dr. POTTER, occurred in the Westminster Hospital in January 1876. The patient, aged 29, was five months pregnant; and, on vaginal examination, a hard lobulated mass was found occupying the upper and posterior junction of the canal, and extending to within two inches of the vulva. The cervix and os uteri were not implicated. *Per rectum*, a large fungating mass could be felt, evidently identical with that occupying the vagina. The bowel was almost impervious. When about seven and a half months

pregnant, premature labour was induced by means of a gum elastic catheter. In eight hours, labour had fairly commenced. The presentation was vertex and footling, and delivery was completed by pulling down the feet; the head ultimately being brought through the narrowed space with the forceps. The child was born alive, and the mother made a good recovery from her confinement. Colotomy was subsequently performed, and the patient died seven days after from peritonitis. No necropsy was permitted.

Membranous Dysmenorrhœa.—A case was reported by Dr. CORY as supporting Dr. Hausmann's view, that membranous dysmenorrhœa is due to an imperfect impregnation. The patient, previously to her marriage at the age of 30, had never passed any membrane. She aborted three times between the second and third months during the first two years of married life. Since then, she had almost invariably passed at her menstrual periods membranes, which proved to be very perfect casts of the uterine cavity, and presented all the naked-eye and microscopical appearances of its mucous lining. The membrane usually came away on the second day of menstruation, previously to which the dysmenorrhœa was acute. Later on, she had lived apart from her husband nine months, during which time she had menstruated regularly without passing any membrane.—Dr. GODSON showed, as bearing upon this case, a specimen of a decidua membrane, with a very small vomer upon it; and he remarked that, had it not been very carefully examined, the vomer would probably have escaped notice, and the membrane have been looked upon as dysmenorrhœal.—Dr. GALABIN said that the facts of Dr. Cory's case appeared to establish the interpretation adopted by the author, that the membrane thrown off in successive months was the product of conception repeatedly occurring. On this assumption, it afforded interesting evidence as to the rate in the menstrual cycle at which conception may occur. Since the period was never delayed more than two or three days over time, conception must have occurred shortly after the preceding period on each occasion, since otherwise there would have been no time for the decidua to develop.—Dr. JOHN WILLIAMS thought there could be no doubt that the membrane exhibited by Dr. Cory was the decidua containing an impregnated vomer. The fact that the membrane was only passed when the woman was living with her husband favoured the view that it must be a kind of abortion, and for this reason he objected to the case being quoted as one of membranous dysmenorrhœa. Such a name ought not to be given in any case in which the lining membrane of the uterus was not expelled.—Dr. AVELING said that he had some hesitation in accepting the view put forward in the paper. He thought that a hyperæmic condition leading to membranous dysmenorrhœa might have been caused by the irritation of sexual intercourse.—Dr. POTTER and Dr. JOHN BRUNTON also made some remarks.

Treatment of Chronic Inversion of the Uterus.—Mr. LAWSON TAIT contributed a note on this subject. After alluding to the proposals of Simpson and Tyler Smith to rectify the displacement by continued pressure, and mentioning the disadvantages of the operation recommended by the latter, Mr. Tait referred to the instrument devised by Dr. White of Buffalo. It was apparent to him that no plan could so efficiently diminish the size of the inverted uterus as pressure upon it by a conical cup; and it was equally evident that the best way of dilating the contracted and inverted cervix was to make it do the work, as it were, by pressing upon itself. He, therefore, abandoning the pelvic curve of the older instruments as useless, had box-wood cups made of three different sizes, each with a straight stem about six inches long, with notches at the end for strings. The case to which the treatment was applied was that of a young woman aged 20, who had been delivered by a midwife ten weeks previously. The uterus was completely inverted, and thorough involution had taken place, so that the inversion had passed into the chronic stage. After she had been in the hospital for six weeks, the large rigid cup was introduced under ether, and a double thread of elastic was applied to the stem, and fastened to the waist in such a way as to give a strain, probably not exceeding a pound at the utmost. The next morning the uterus was found reinverted, and enclosing the cup. On the removal of the latter, it was found that the reinversion was not complete; and the smallest sized cup was then introduced with the effect of securing perfect reduction. The simplicity of the treatment in this case, he thought, entitled him to say that in future very few cases should be submitted to the extreme measure of amputation.—Dr. AVELING remarked that the case would serve to encourage us in the treatment of a very difficult condition, which, till recently, had been thought only relievable by amputation. The use of straight stems was, however, not a novelty; they had been first advocated by Madame Boivin, and Dr. Braxton Hicks had employed an instrument very similar to a stethoscope.—Dr. GODSON said that the three cases recorded in the last volume of the Obstetrical Society's *Transactions* of amputation of the uterus for inversion, which had been

a subject of surprise to Mr. Lawson Tait, were taken from a large number of cases of inversion which had been treated in St. Bartholomew's Hospital, and were brought forward not for the purpose of recommending the operation, but to show that the uterus might be amputated without any great danger to the patient's life. He thought there were two different kinds of cases of inversion of the uterus. Some might be easily reduced by pressure, and he had seen one which reinverted itself the day after pressure had been applied by the hand alone. That treated by Mr. Tait appeared to belong to this category. Others seemed to defy all attempts at restoration. In such cases, if the life of the patient were in jeopardy from the profuse and uncontrollable hemorrhage, which was an alarming symptom in the cases recorded by Dr. Godson, amputation was not only justifiable, but was demanded to save life. If bleeding to a dangerous extent were not present, it was, on the other hand, the duty of the practitioner to continue his efforts to restore the displacement.—Dr. J. BRAITHWAITE of Leeds had recently had a case of inversion which had been treated by means of continuous elastic pressure. In order to apply this, no special apparatus had been procured; an ordinary boxwood stem and cup pessary had answered the purpose admirably. The cup was covered by a soft India-rubber circular pessary containing air, made to adhere to the cup by means of shellac. The proximal end of the stem was set in an India rubber band, and this was fastened to an abdominal belt. In the case named, after the pressure had been well sustained for four days, the inversion was reduced half returned, and no difficulty was then found in completing the reduction.—Dr. HAYES thought that, in recording cases of inversion of the uterus, the degree of involution which had taken place should be mentioned. The difficulty of reduction was directly dependent upon this, and only indirectly upon the duration of the displacement.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, MAY 8TH, 1878.

JOHN MURRAY, M.D., President, in the Chair.

The Origin of Infection.—Dr. THORNE THORNE read a paper on the origin of infection. At the outset, he explained that the question he proposed specially to hold in view was whether any case of acute specific fever could arise independently of an antecedent case; and, with a view to the elucidation of this question, he gave a review of the principal grounds leading some observers to answer the question in the negative, others in the affirmative. The various arguments which might be brought forward on both sides of the question were illustrated by typical instances from the author's own experience and from that of other observers. Those in favour of the view that the infectious fevers are exclusively self-propagating were as follows. First, there was the general inference to be drawn from the well-known fact that these diseases largely owed their spread to communication with prior cases; and, this being the ordinary source of infection, it might be urged that it was the invariable one. Then it was suggested that this argument was strengthened by consideration of the frequent discovery of new channels by which the poisons of the specific fevers might be conveyed, as by intermittent water-services, etc. Cases were next cited which, having been brought forward as favouring the *de novo* origin theory, were, as the result of the subsequent discovery of some apparently trivial circumstance, found in reality to favour exactly the opposite view. The extreme variation in the length of periods of incubation of the various specific fevers was next illustrated by numerous examples, and next as constituting a source of error not sufficiently recognised. The prolonged period during which some of the poisons of these diseases lay in a dormant condition was also pointed out, and illustrated by typical cases. And, finally, the long continued immunity from these fevers which certain countries had enjoyed prior to the diseases being imported into them by contagion, was described. The arguments on the opposite side were next considered; it being, however, admitted beforehand, since those who believed in the independent origin of the specific poisons had to prove a negative, their task was more difficult than that of their opponents. Judging from analogy, however, they had the support afforded by the possibility of the spontaneous generation of the traumatic infections, and by the artificial production of cases of apparently specific malignant peritonitis by inoculations from selected cases of simple peritonitis. Then there was the unexplained origin of certain infectious fevers under certain known conditions, as that of typhus in connection with the maladministration of armies in the field, coupled with the depressing emotions consequent on defeat. The numerous instances which occurred where no antecedent cases of the disease could be found, even when the circumstances were specially favourable to their discovery if they existed, were next noted; and, after some minor points had been discussed, the author assumed the

right of all who did not believe that each of the specific poisons was the result of a definite act of creation, to maintain that, if they had once arisen independently of antecedent cases, it was impossible to assert that what had taken place could never take place again. So far, Dr. Thorne had sought to avoid taking any side in the argument; but in the remainder of his paper he explained in detail the grounds which had led him provisionally to lean to the view that the property of infectiveness is, under certain circumstances, one capable of progressive development. In support of this opinion, he gave the history of some investigations he had made for the Local Government Board into outbreaks of diphtheria, and he explained how he had found cases of apparently simple non-infectious sore-throats somewhat uniformly spread over an area of several miles, whereas, at certain limited points in the same area, and at a somewhat subsequent date, the sore-throats in question were distinctly infectious, and in some localities had led by transmission through a series of persons to the development of well-marked severe diphtheria. In conclusion, he pointed out that such a view as he had maintained was not that of the development of a living organism out of matter independent of antecedent life, but rather the production by a process of evolution of that which gave to an already existing organism that property by which it became infective.—In the discussion which ensued, the PRESIDENT, Dr. BUCHANAN, Dr. CORFIELD, Dr. SAUNDERS, Inspector-General LAWSON, and Mr. NETTEN RADCLIFFE took part.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

WEDNESDAY, MAY 15TH, 1878.

S. J. A. SALTER, M.B., F.R.S., President, in the Chair.

Necrosis of Superior Maxillary Bone, following the Eruptive Fevers.—Mr. LYONS showed a patient (a young woman) who, when four years of age, had an attack of measles, from which necrosis involving the superior maxillary bone supervened. An operation was then performed, whereby part of that bone, consisting of the alveolus, extending from the right first temporary molar to the left canine, and part of the vomer and palate were removed; the disease also extended over the right ala. She first came under Mr. Lyons's notice a few months since, being then twenty years of age, and presented a most unprepossessing appearance through inability to close the right side of her mouth, owing to the contraction of the cicatrices, which drew the lip upwards. On March 18th, she was placed under chloroform, and the folds of mucous membrane connecting the cheek with the bone were carefully divided. The operation was so far successful that she was at once able to close her lips upon each other and allow an artificial piece, as well as an artificial ala, to be inserted with most satisfactory results as regards her comfort and personal appearance.

On Some Forms of Trismus arising from Dental Irritation.—Mr. GAINE read a paper on this subject. He prefaced his remarks by observing that some of these cases of trismus were very obscure in their origin, but the majority of them arose either from difficulty in erupting the wisdom teeth, owing to an overcrowded condition of the teeth generally, or to periodontitis or necrosis. The majority of the cases that had come under his notice occurred in young women, and were associated with hysteria; and in the diagnosis it would be well to separate those which arose from dental irritation from those mixed up with hysteria. The former, if seen at an early stage, were much more readily dealt with than the latter, though at the same time the local symptoms might be much more severe. In those cases arising from dental irritation, when the jaws were closed, recourse must be had to some anæsthetic in order to forcibly separate them, when some lesion would generally be found connected with one or more teeth, which should be at once removed. A notched wedge, or Mr. Maunder's screw-gag, was of great service in these cases, and the patient should be instructed to constantly wear it, and move it backwards and forwards at frequent intervals, until mobility was established. In cases of long-standing, Mr. Gaine found it the best practice to force a piece of tapered ivory between the molar teeth, and gradually work it on until the screw-gag could be inserted. The other class of cases—those connected with hysteria—was frequently difficult to diagnose; the closure of the jaws occurred suddenly, and many of the symptoms of tetanus were present. Mr. Gaine then related several cases of trismus, associated with this hysterical condition, which had recently come under his notice, arising from tooth-irritation. In all the cases that he had seen, he did not know that he could point to one that came on suddenly that was not more or less associated with hysteria—of course, alluding only to cases of trismus unconnected with tetanus. He believed it was generally an accepted fact, that spasm of some form or other affecting in nearly all

cases the masseters and pterygoids by what is termed reflex action was the cause of the muscular rigidity which had to be contended with. Nor was it only these muscles that were affected, but indirectly through the connections of the fifth nerve with the seventh nearly all the facial muscles sympathised; and frequently the glosso-pharyngeal nerve through the otic ganglion affected the muscles of deglutition. Mr. Gaine concluded by observing that he thought much light might be thrown upon the pathology of these cases, which were closely mixed up with hysteria, by a pathological investigation of the connection of these nerves with the sympathetic.—A discussion ensued, in which the PRESIDENT, Mr. W. A. N. CATTLIN, Mr. NAPIER, and Mr. S. H. CARTWRIGHT took part.—Mr. GAINE briefly replied.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 16TH, 1878.

GRAILY HEWITT, M.D., President, in the Chair.

Large Tumour of the Left Cerebral Hemisphere.—Dr. HUGHLINGS JACKSON read a communication on a case of cerebral tumour, of which some account had been previously published. It occurred in a boy, who at eight complained of tremulousness of the right hand. This was in October 1876; he survived till May 1878. The tremulousness was followed by headache and then by vomiting, and ultimately by convulsions. Then, later on, the eyesight began to fail. He grew bigger. Hemiplegia gradually came on. Nystagmus appeared. A fit came on, when the left side was rigid. Later on, he complained of intense pain in the head, followed by a tetanoid fit, when there was well-marked opisthotonos; the limbs were all rigid, and the eyes were divergent, the left pupil widely dilated, and the right pupil greatly contracted. At the necropsy, a large tumour measuring three inches and a half from before backwards, and two inches and a half across, was found involving the left corpus striatum and crus cerebri, the corpora quadrigemina not being involved. The optic tracts were affected. Haemorrhage was probably the cause of the fatal fit. The pons Varolii and cerebellum were quite normal. From the slow onset of the hemiplegia, tumour was indicated, in addition to the other symptoms. The question was, what sort of an adventitious product was it? Probably a voluminous one. The growth of the head suggested this. It might have been a tumour of the middle lobe of the cerebellum from some symptoms. There was no aphasia or defect of voice. Haemorrhage from a tumour is often the cause of sudden death in these cases.

The Effects of Position on Local Circulation.—Mr. JOSEPH LISTER read a paper on this subject.—In the discussion which followed, Dr. HUGHLINGS JACKSON and the PRESIDENT both expressed their admiration of the views expounded, and the manner in which they were set forth; but said that time was required to digest the facts properly.—Drs. BURNEY YEO, AVELING, and FITZPATRICK spoke; and Mr. KNOWSLEY THORNTON told of the absence of secondary hæmorrhage in Professor Lister's wards in Edinburgh during the time he attended them.—Professor LISTER replied briefly; and the meeting adjourned till the next session of the Society.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 30TH, 1878.

EDWARD HAMILTON, M.D., President, in the Chair.

Chronic Pleuropneumonia: Atheromatous Degeneration.—Dr. FINNY showed the thoracic viscera of an old soldier, who had suffered from an abscess in the leg and another in the groin connected with the ileum. A basic systolic murmur, heard best at the right second interspace, and dulness on percussion over the upper part of the right lung, were the chief physical signs. After death, examination revealed the presence of chronic interstitial pneumonia, with cheesy deposit and bronchiectasis in the right apex. The right pleura was adherent, much thickened, and extremely cartilaginous. The aorta was dilated, and afforded an example of atheromatous change in its three stages. The heart, originally hypertrophied, was in a condition of fatty degeneration, owing to the extension of endarteritis deformans to the coronary arteries.

Muscular Anomalies.—Dr. KENDAL FRANKS brought forward examples of muscular anomalies. The pectoralis minor was absent on the left side, although the pectoralis major was present. The serratus magnus on the same side, in addition to its normal origin, arose from the costal cartilages and the sternum itself. There was likewise an abnormal development of the flexor sublimis digitorum. All these anomalies were on the left side of the body. On the right side, there were three pectoral muscles.

Carcinoma of Abdominal Viscera.—Dr. W. G. SMITH showed the abdominal organs of a man aged 57, who had suffered chiefly from increasing debility and incessant vomiting of large quantities of greenish watery fluid. The abdomen was distended, and there was some ascites. Solid tumours and nodules were felt over the abdomen. The urine was high coloured, and there was an excess of indican. A thick layer of subcutaneous fat existed in the abdominal wall, which was glued to the viscera by tough cottony adhesions. A large triangular mass of scirrhus occupied the situation of the omentum. It creaked on section. The liver was shrunken and ovoid in form. The kidneys and spleen were healthy. The pylorus, mesenteric glands, and peritoneum were affected with the scirrhus variety of carcinoma. The pylorus was the part first affected.

ASSOCIATION INTELLIGENCE.

EDINBURGH BRANCH.

THE annual general meeting of the above Branch will be held at 5, St. Andrew's Square, Edinburgh, on Tuesday, June 18th, at 4 P.M.: Sir ROBERT CHRISTISON, Bart., President, in the Chair.

CHARLES E. UNDERHILL, *Honorary Secretary.*

Edinburgh, June 4th, 1878.

EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held in the Infirmary, Peterborough, on Friday, June 21st, at 11.30 A.M., in conjunction with the Cambridge and Huntingdon and South Midland Branches: THOMAS J. WALKER, M.D., President elect, in the Chair.

After Branch preliminary business at 11.30, there will be a general meeting about 12.15, when the President-elect will read an address; at the conclusion of which, he kindly invites members to luncheon at his house before the next general meeting at 2.15 P.M., for papers, discussions, etc.

Gentlemen wishing to read papers, or to dine, are requested to communicate as early as possible with one of the Honorary Secretaries.

WM. A. ELLISTON, M.D., Ipswich, } *Honorary Secretaries.*
J. B. PITT, M.D., Norwich, }

Norwich, May 14th, 1878.

CAMBRIDGE AND HUNTINGDON BRANCH.

A COMBINED meeting of the above Branch with the South Midland and East Anglian Branches will be held at the Infirmary, Peterborough, on Friday, June 21st. The following arrangements have been made.

Separate meetings of each Branch for business at 11.30 A.M.

General meeting of the three Branches to hear the President's Address at 12.15.

Luncheon at One o'clock, at the house of the President—Dr. T. J. WALKER.

General meeting at 2.15, for papers, discussions, etc.: after which, should time permit, an inspection of the Cathedral and the adjacent buildings will be made.

It is intended that those members who are able should dine together in the evening.

BUSHELL ANNINGSOON, *Honorary Secretary.*

Cambridge, May 21st, 1878.

BATH AND BRISTOL BRANCH.

THE annual meeting of the Branch will be held at the Mineral Water Hospital, Bath, on Wednesday, June 26th, at 4.30 P.M., when H. M. AF-SHALI, M.D., will resign the Chair to H. HENSLEY, M.D. The members will afterwards dine together at the York House.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, June 4th, 1878.

MIDLAND BRANCH.

THE annual meeting of this Branch will be held at Lincoln, on Thursday, June 27th: President—C. H. MARRIOTT, M.D.; President-elect, A. MERCER ADAM, M.D.

Members desirous of reading papers are requested to communicate with C. HARRISON, M.D., *Honorary Secretary.*

Lincoln, May 14th, 1878.

THAMES VALLEY BRANCH.

THE next general meeting will be held on June 13th, at the Greyhound Hotel, Richmond, at Six o'clock.

Papers will be read by—

1. Mr. Balmanno Squire: The Use of Chrysothanic Acid.
2. Dr. Trouncer:
3. Dr. Atkinson: Vaccination and Revaccination.

Dinner at the above hotel at Seven o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.
Kingston-on-Thames, May 13th, 1878.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE sixth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday, May 29th; Dr. MARSHALL, President, in the Chair. There were present sixty-eight members and four visitors.

Discussion on Alcohol.—Dr. Fox opened a discussion by reading a paper on Alcohol in Health and Disease: a very interesting and animated discussion followed, in which Drs. Davey, Atchley, Fyffe, Pittman, and Goodridge, and Messrs. Batrum, Melford, Jessop, Stewart, and Carr took part.

CORRESPONDENCE.

THE ELECTION OF COUNCILLORS AT THE COLLEGE OF SURGEONS.

SIR,—As the official circular to the Fellows of the College of Surgeons of England has now been issued, and the election to the Council will take place in a month's time, will you allow me, as an independent Fellow, to point out to my fellow-electors one aspect of the annual election which I fancy is somewhat overlooked. There are no doubt many highly respectable Fellows, both in London and the provinces, who may fairly enough aspire to a seat for a few years in the Council of their College, but who lack the professional status and personal qualifications which are essential for the President, if he is to represent his College officially on great public occasions with dignity and honour. The first election of a councillor is, therefore, comparatively unimportant, at least *quoad* the presidency; but a re-election is a very important business, both for individual councillors and for the College as a whole. It is true, that the actual selection of a President rests with the Council and not with the Fellows; but we ought not, I think, to throw upon the Council the invidious task of passing by one of its own body, by neglecting our duty of re-electing only those who can with dignity fill the President's chair.

I beg leave to say that these remarks are not intended to have any special bearing upon the coming election, and that it is only from accidental circumstances they have not been put forward at an earlier date.—Yours obediently,

London, June 1878.

A FELLOW OF THE COLLEGE.

THE WORK OF THE REGIUS PROFESSOR AT OXFORD.

SIR,—“Your Editorial Contributor” does not yield to “Spectator” in his jealousy for the medical school of Oxford; but he thinks that the prospects of that school will not be diminished by the observance of fairness and courtesy. “Spectator” says that Dr. Acland has “converted” a number of paid medical offices into sinecures; that he deliberately obstructs and prevents medical teaching in its essential branches; and that this official “has destroyed in the past” the medical school, etc.

Now, is this true? Or is it rather true that Dr. Acland took these “paid medical offices” as he found them, and that he can scarcely have destroyed that which seems never to have existed?

And is it not rather true that Dr. Acland has done ten times the work of any of his recent predecessors in the cause of medicine as he regards it? And, finally, that, although that work does not include the kind which “Spectator”, like myself, would desire from him, yet he has done work which not only he himself, but every physician in Oxford, and also the Professor of Anatomy at Cambridge, believe to be far more useful for the attainment of that end which we all desire; namely, the higher development of the medical art in this country. That an official is industrious in a wrong or incomplete method, and that he is faulty or imperfectly biased, is one thing; it is another thing to represent him as a mere sinecurist and a mere marplot.—I am, etc.,

YOUR CONTRIBUTOR.

MEDICAL ENDOWMENTS AT OXFORD.

SIR,—The advocates for the revival of the lost medical school at Oxford are under a heavy debt of gratitude to the JOURNAL for advice, support, and an opportunity, not only of ventilating their grievances, but also of establishing concerted action. They proved, however, to be but a miserable minority of even the medical graduates of the university, and their efforts and your and their representations have only ended in defeat and disappointment, the more mortifying when we regard the very different attitude towards medical education of the University of Cambridge. *Non equidem urideo, miror magis*. I shall not dwell upon the circumstances of our defeat, partly because it would only give rise to reproach and recrimination; but our feelings on the subject are none the less strong, and certainly are not likely to grow weaker, when we read in the JOURNAL and elsewhere, week by week, incisive exposures of the fallacies and misrepresentations that were urged against the feasibility of our project.

The report of the University Commission is the death-blow to our hopes, when it decides against “the establishment of a practical school of medicine in Oxford”. The Commission was led to this conclusion by the evidence and opinion of certain distinguished physicians and surgeons. I do not impugn the motives of their evidence, when I suggest that the Commission might well have considered and made allowances for the fact that these most weighty witnesses were closely connected with the great London hospitals by past or present ties, and could not be expected to regard without prejudice, much less with favour, a proposal which implied that even the elements of medicine and surgery could be with advantage studied elsewhere than in their own wards and class-rooms. I entirely acquit them of any paltry jealousy of present or future provincial schools, but not of an unconscious and very pardonable belief that it would not be less than a sin to allow Oxford and Cambridge men to forego the rare privilege of being their pupils and admirers.

Some, however, of the recommendations of the report seem proofs that our movement has not been entirely without fruits. The Commission recommends the provision of a reader in human anatomy with a stipend of from £250 to £300 *per annum*. That is a step in the right direction, and may lead eventually to some further steps which seem logically and practically consequent upon it. That, however, bears rather upon the future than the present. But another recommendation, to which I urge particular attention, is of immediate consequence to the profession, and yet will most certainly fall to the ground, unless a strenuous effort be made for its fulfilment. This is in favour of “the foundation and endowment of scholarships or exhibitions, tenable after a certain fixed period of residence in the university, for students in any special branches of study (including subjects which do not fall within the ordinary university course, such, for example, as medicine), which may be usefully promoted by such encouragement under conditions properly adapted to make their enjoyment dependent upon the *bonâ fide* prosecution of such studies”. This recommendation is even now engaging the attention of the resident Fellows, who have virtually in their hands the disposal of the immense revenues of the colleges. They mean well; they have high ideals of education; but they know absolutely nothing (*experto crede*) of the requirements of medicine (how should they?), and are, moreover, fatally indifferent to the whole subject of professional education, whose clerical phase has always been their bugbear. They will, however, have to deal with the subject as best they may, and you may be sure that the legal and clerical views of professional education will be fully and eloquently laid before them, and their necessities amply provided for. But the interests of medical education will, I fear, be simply ignored; no member of common-room knows or cares about them; the medical profession, as an abstract entity, is decidedly at a discount among the classes which call themselves cultivated. Barristers and parsons are expected to be more cultivated than the average laity, and, as a rule, are so. No one expects a doctor to possess any knowledge or show any interest in anything which does not serve to put money in his pocket, and it must be confessed that that expectation is seldom disappointed. Doctors are generally supposed to be raising a cry for university education, in the sense that every practitioner is anxious to have the right of putting M.D. after his name; but that no one is willing to go through the ordinary course of university education, which, in England at any rate, is the condition of a degree. I do not think that is so, but believe that the profession is conscious of some of its failings, and in that belief call upon it to assert its just rights and claims upon the university; for I must repeat that, unless pressure be brought to bear upon the colleges by the profession from outside, law and divinity will devour the share of the spoil that ought rightly to fall to medicine. Let it, then, be clearly understood that, while the university is advised not to have a school of prac-

tical medicine in Oxford, it is recommended to offer pecuniary encouragement to the study. To carry out this recommendation effectually, provision should be made to afford help to deserving men at each of the following stages:—1. While they are at Oxford going through the usual course of study there; 2. While they are medical students in London or elsewhere; 3. While, after graduating in medicine, they are for some time doing good but generally unpaid professional work at the hospitals, and as yet unable to depend upon their profession for subsistence. To make requisite provision for each of these stages, I would suggest the institution at Oxford of—

1. Additional scholarships in natural science. (This is to be done, I hear.)

2. Studentships in medicine of the value of from £100 to £150 *per annum*, and tenable for five years. Candidates for these must be graduates in arts and intend to become *bonâ fide* medical students at some recognised school; their continued tenure might be made to depend upon the production of certificates of industrious study at their medical schools. They should be awarded for proficiency in any of the subjects of the final schools for honours at the university. Among these are biology, chemistry, and physics; but there is no reason why the students in medicine should not have been previously distinguished in other branches of knowledge, such as law, mathematics, philosophy.

3. Fellowships in Medicine of the value of £200 *per annum*, and tenable for five years. Candidates must be graduates in medicine. They might be awarded for proficiency in any one of the following subjects: *a.* Medicine; *b.* Surgery; *c.* Obstetrics; *d.* State Medicine.

In all cases, there should be limitations of age, university standing, and against marriage. Provision should be made to defer elections in case of insufficient merit among the candidates of any year. Every year, at least four Studentships and two Fellowships should be open to competition among the many intending medical students which such prizes would attract to Oxford and the profession. This would involve an annual expenditure of from £4,000 to £5,000; for I do not, of course, include in this sum the additional scholarships in science, as they are demanded in the interests of general, and not merely of medical, education. The sum is not a large one for a rich university to devote to the poorest of the learned professions; indeed, it is but a trifle of what is spent upon the legal and clerical professions. The colleges and university are debarred by the terms of the report from doing anything for medicine but endowing it. Whether they do this depends upon the action of the profession at large, but more especially of its corporate bodies and great organisations, to whom I most respectfully suggest the necessity of a prompt vindication of the interests of the profession. The governing bodies of each of the colleges should be severally invited to carry out an express recommendation of the Commission in a manner worthy of the university and of the profession of medicine by contributing to a general fund for this purpose, or by founding studentships and fellowships of medicine in connection with their respective colleges, as may seem best to them.

I hope this communication may invite both comment and criticism. Details have been of purpose omitted, as the scheme is merely tentative and designed to elicit expressions of opinion from others, and, above all, to lead to some action. I cannot, however, refrain from hoping that some such scheme may rid us of some glaring evils, such, for example, as the melancholy necessity, destructive of independence and real work, under which the junior members of our hospital staffs labour of becoming boarding-house-keepers, half bear-leaders, half crammers, or lecturers on botany; the enforced retirements, owing to poverty, of some of the most promising members of the profession from competition for the ill-paid hard-worked posts of the permanent staff of hospitals, and the consequent appointment of inferior but richer men. In fact, the end of the proposed scheme would be *la carrière ouverte aux talents*.—Your obedient servant, G. P.

THE TITLE OF DOCTOR.

SIR,—Hardly a week passes but there is in your columns some reference to that now doubtful decoration of *Doctor*. If the general opinion of the profession could be known, it would be seen that the once regarded distinction is now verily held in low esteem; and deservedly so. In these days, it is no proof of academic or professional excellence. It has become so communised that it carries no weight with it, either amongst the public or amongst ourselves. The people generally cannot judge between the genuine and the spurious article. The *doctorates* of Oxford, Cambridge, London, and Edinburgh cannot be known from those conferred by the smaller Scotch universities—from those in a summary way procured in Germany—nor from the still more objectionable degrees which are chiefly vended in the distant States of America. Again, the licentiates of the Colleges of Physicians of Lon-

don or Edinburgh not unfrequently pretend that they are *Doctors*. I any one glance at the pages of the *Medical Directory*, he will perceive how large a number of the general practitioners have, from one place or another, procured this title. Homœopaths, hydropaths, electro-galvanists, sanatorium proprietors, corn-cutters, itinerant lecturers, and so-called teachers of philosophy must all have the affix. Quacks and charlatans regard its use as favourable to their various enterprises. In the poorer parts of our cities and large towns, the *Doctor* is rendered conspicuous on huge brass-plates, and proclaimed in grand gold letters in association with gorgeous lamps and brilliant bull's-eyes. During the last half-century, it has been so degraded and dragged through the mire, that it now rather lowers than elevates our great calling. There are many amongst our ranks who have, and justly, a lofty conception of our high vocation, and are aggrieved that the medical profession does not in the public mind hold place with the law and the church. The debasement of the *doctorate* is, and with much show of reason, regarded as one cause that medicine occupies a lower platform.

A distinguished Fellow of the Royal College of Physicians, when speaking to me lately on this subject, remarked: "The surgeons socially have a great advantage over us. They have not to always use the now equivocal title. They can pass on in society as plain *Misters*." Not long ago, another well-known Fellow with a few friends left London for a day's recreation. He soon felt that his enjoyment was about to be marred. One of the party would continually *Doctor* him, although the former turned and said, "Now, my dear fellow, pray do drop all this *Doctoring*; I have come out for a little relaxation, and let me have the pleasure, for at least one day, of thinking I am a gentleman!"

Clergymen in some few instances adopt the *Doctor*, but when they do so such are generally in connection with some scholastic establishment. It is true, that Irish barristers also take up this *Doctorate*. When they come to the English bar, they have the good taste to put it down.

I know it to be the opinion of many, and of some prominent names, that the title of *Doctor* has with social changes lost its value; that the medical profession would rather gain than lose in importance with its abolition; and that for its members to be merely known as physicians and surgeons, and addressed as *Misters*, like barristers and solicitors, would be a benefit to all and a loss to none.

April 27th, 1878. I am, your obedient servant, F.R.C.P.

YELLOW FEVER.

SIR,—Since my letter on Yellow Fever appeared in the *Times* of April 23rd, I have had communications from medical men requesting me to "ventilate the subject", and perhaps this can be best done by relating some facts and opinions connected with this fatal disease in the *BRITISH MEDICAL JOURNAL*.

The Surgeon-General of the Colony, in his evidence before the Commission of Inquiry into the Epidemic of Yellow Fever in Demerara in 1866, stated "that there is no similarity between intermittent and yellow fever, neither has remittent fever any connection with the disease"; and the late Professor Parkes, certainly the most careful and reliable authority on such matters, says "that the progress of inquiry shows that true yellow fever is distinct from malaria and paroxysmal fevers".

The Demerara inquiry corroborated the opinion that it is a disease of towns, barracks, cities, and parts of cities. It was stated in evidence that, in 1861, in consequence of yellow fever being present near the barracks, the men were removed to the country. "On the 3rd June, 1861, the whole of the white troops, consisting of two companies of the 21st Fusiliers, were removed into camp at Belfield, a few miles distant. On the 13th, a case of yellow fever occurred in the camp; on the 18th, two; on the 20th, three; and another a few days afterwards, making altogether seven cases. With one exception, they were of a mild type, and all yielded to treatment. There were no other cases during the remainder of their stay at Belfield". The men remained in camp until the 18th of the following January; they were, therefore, there during the months—July, August, and September—generally supposed to be the most unhealthy in that tropical climate.

The beneficial results of removal from barracks to the country and the bad consequences of delay were illustrated in an epidemic of yellow fever a few years ago in Barbadoes. "In the cases of the 21st Foot and 1st West India Regiment—the former were placed under canvas in the country at a place called Gun Hill, although in the rainy season, and escaped the disease. The officers and European non-commissioned officers of the latter were, at their urgent solicitation, allowed to remain in their comfortable barracks to escape the risk to their health of

rer oval to tents, and they suffered a severe mortality" (*Report of Commission*, page 8, and *Appendix*, page 39).

The late Dr. Parkes says that the course of inquiry makes it more certain that yellow fever, like cholera and typhoid fever, is a faecal disease. In the Demerara epidemic of 1866 amongst the white troops, it was proved in evidence that the garrison-trenches which received all the excreta from the barracks, from latrines placed over them, had not been properly cleaned out for upwards of four years, and that the men who suffered from the disease had been employed working along the margin of these trenches removing grass, etc. The Commission reported: "The garrison grounds are intersected by about four miles of open trenches. They receive the whole of the sewage and faecal matter of the garrison. On account of the dead level of the land, it is most difficult to keep these open trenches in proper order. The trenches are flushed with salt water, which is largely charged with alluvial deposit about half-an-hour after every high tide, and are left half full for about three hours, when it is discharged into the river by an outlet sluice. We consider the principle by which the whole faecal matter is retained floating in these trenches from tide to tide radically bad. The only thorough remedy is the introduction of the dry earth system." (*Report of Commission*, page 6.)

The course of inquiry tends to show that yellow fever, when once introduced, may spread in temperate and colder climates, and, to quote again Dr. Parkes, who shows that the disease "has prevailed at New-castle in Jamaica, 4,200 feet; at Xalapa, 4,330 feet; and on points of the Andes as high as 9,000 feet".

These facts then—that it is a disease of houses, towns, cities, and parts of cities; that faecal matter has, in all probability, largely to do with its origin; that it can spread in a colder climate than was formerly supposed—show how necessary it is that all medical officers of health and sanitary authorities should be well acquainted with the nature of yellow fever, so that they may be able to deal in a practical way with any cases that may arise in this country. In order to prevent the spread of these diseases, it is, before all, necessary to have clear views as to the mode of propagation.

If the faecal origin of the disease, supported as it is by so eminent an authority as the late Dr. Parkes, be correct, it shows what care should be taken in this country when a case occurs similar to the one recently reported in one of the squares in Belgravia, for contamination of any water-closet or latrine might lead to the spread of the disease, and in the most fashionable district of London.—I remain, sir, yours obediently,

GEORGE A. HUTTON,

Surgeon-Major, Half-pay, late Rifle Brigade.

Leamington, May 14th.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES. SUGGESTIONS FOR THE SANITARY REGULATION OF DAIRIES.

IN consequence of the severe outbreak of typhoid that occurred last year at Glasgow and was traced to a single dairy at Stonehouse, a meeting was held and presided over by the Lord Provost, when a resolution was unanimously agreed, "That it is desirable that a general measure of legislation should be passed with regard to the regulation of places of milk-supply"; and a Committee was appointed to take steps for carrying it out. A subcommittee, consisting of Dr. Anderson, the Professor of Clinical Medicine; Mr. Sheriff Spens; Mr. McCall, the Professor of Veterinary Medicine; Mr. Miller; and Mr. Leadbetter (Clerk), were appointed. The attention of the Committee was specially directed to two points; viz., diseased milk from foot-and-mouth disease, etc., and infected milk. They considered that the risk to the public is greater from the latter than the former. They therefore drew up certain suggestions in the form of a Bill for the consideration of the Government containing twenty-two clauses. These briefly are, that every milk-vender shall be registered by the local authority, whether he sell milk by wholesale or retail; that the medical officer of health shall keep a register of places of milk-supply; that the medical officer of health or inspector shall inspect all premises used for milk-supply, and, if not satisfied, no certificate be granted—subject, however, to an appeal to the sheriff; the medical officer to have power to inspect at all times, and to draw up and issue by-laws for enforcing efficient sanitary arrangements of such places. It is then proposed that every person so registered shall communicate to the local authority the existence of any infectious disease in his household within

twelve hours of its occurrence; and that every medical practitioner who shall attend such a case in a place of milk-supply must give information to the medical officer of health, for which he shall receive a fee of half a guinea; further, that no person recently recovered from a contagious disease shall handle, sell, or deliver milk; and that no master shall employ such a person until a certificate shall have been given that he is free from the disease. The penalties proposed are very heavy, as any person delivering or allowing to be delivered milk after a prohibition from the medical officer would be liable to a penalty of £30; for a second offence, not less than £50. Provision is also made for the compensation (not exceeding £50) of those who are prohibited from selling or despatching milk, provided there were no fault on the part of the person registered. The Act would be restricted to Scotland.

This is an important proposition to have proceeded from such a Committee, as it shows that a necessity for some such action is gradually permeating the minds of others than medical officers of health and medical men. The proposed Bill cannot be found fault with for want of thoroughness, but would certainly have gained in weight if it had been approved by the Glasgow Town Council, inasmuch as the compensation will have to be paid by the local authority. There should also have been a clause to the effect that the penalties recovered be payable to the local authority; otherwise they will have all the expense of carrying out the Act if passed, and none of the sums obtained from the offenders. The Bill is a considerable advance on anything yet proposed, and is worthy of efficient support from the profession and the public.

SIR,—Having read the account of the correspondence between Mr. Buck of Newport, Essex, the Board of Guardians, and the Local Government Board, I would like to trouble you to give your opinion on a somewhat similar case that happened to me a short time ago.

Last November, I received an order from the relieving officer to attend a patient who was suffering from the effects of pregnancy, and was within six weeks of her confinement. About a fortnight after receiving the order, she applied for another for me to attend her in her confinement. This, however, was refused; consequently, thinking she would have to pay, did not send for me. I was also required to attend her after her confinement. I may also add, that her husband was on the sick-list at the time, and was receiving parish relief, and continued doing so till a week or two ago.

If I had attended this patient in her confinement, could I, legally, have claimed the usual fee?—I am, sir, yours truly,
GEORGE SEARANCEKE,
Medical Officer and Whitford District, Holywell Union.

Gronant, March 5th, 1878.

. We consider that if this woman had sent for the medical officer to attend her in her confinement, he would not only have been justified in at once attending, but liable to censure if he had refused so to do, and therefore could have legally claimed a fee. The guardians, by sanctioning the order of the relieving officer for medical attendance prior to her confinement, had *de facto* constituted her a pauper, and could not justifiably refuse her subsequent application. The case is still further strengthened by the sickness of her husband, and the fact that he was at the time in the receipt of parochial and medical relief. It is a very apt illustration of the unfair way in which some boards of guardians act towards their medical officers. We would advise that our correspondent should lay the facts before the Council of the Poor-law Medical Officers' Association. The case of Mr. Buck and this one form a very good text on which a letter to the Local Government Board may be framed. Those who desire to read the law on this subject are referred to *Glan's Consolidated Orders*, foot-note B, pages 160, 161, and 162.

SUPERANNUATION.

IN reply to "An Old Member", we state that it is much to be regretted that he should not be better posted in the questions relating to Poor-law medical officials and superannuation than he appears to be, since this indicates great apathy in following the action of the Poor-law Medical Officers' Association, which has obtained from the Legislature an Act (unfortunately only permissive), whereby boards of guardians can superannuate worn-out medical officers. In order to obtain superannuation, he must be able to show that he has had twenty years of service; that he is above sixty years of age; that he is incapacitated by infirmity; that he has obtained a certificate from the Poor-law inspector of his district to that effect (easily obtained by application); and that he has resigned his appointment. As regards the latter, we would advise our correspondent not to resign until he has sounded his board and learnt whether they are disposed to grant superannuation or not. Many medical officers have been superannuated.

DRAYTON RURAL.—This is the first report by Dr. Sandford, and he states that a considerable amount of sickness had occurred in the vicinity of Market Drayton; typhus and typhoid fevers prevailing in the early part, and scarlatina in the later part of the year. The typhus outbreak was introduced by a stranger, and spread to a considerable extent, owing to the insanitary conditions under which the patients were placed; and scarlatina also spread, owing to want of proper isolation of the sick and disinfection of the clothing, etc. The birth-rate was 32.3 and the death-rate 17.0 per 1,000 population.

MILITARY AND NAVAL MEDICAL SERVICES.

MILITARY, VOLUNTEER, AND CIVIL SURGEONS.

SIR,—In your issue of the 11th instant, "Militia Surgeon" reports his individual hardship, which is similar to many other militia medical officers, and whose battle was fought in Parliament by Dr. Playfair and other gentlemen, and lost, for Mr. Hardy was determined not to yield. But "Militia Surgeon" has another grievance: probably he forgets, as Mr. Hardy has broken faith with militia surgeons once, it may be done a second time, in this manner, by declining to allow the surgeon the usual year's pay on disembodiment of their regiments; and it would be well if the medicos had that assured to them before they went on embodied service.

I was sorry to see in the same issue that a volunteer surgeon was inclined to accept Dr. Munro's circular, as by giving gratuitous service injury is done to army surgeons, whose profession it is, and whose wrongs will never be redressed if Government be backed up by civil practitioners or volunteer surgeons, who ought rather to support their ill-used brother medical men in the army and navy.—I remain, your obedient servant, M.D.

ARMY MEDICAL SERVICE IN INDIA.

SIR,—Your correspondent "Perick", in the JOURNAL of April 13th, writes to point out that the medical officers who joined the army on the first invitation by the new Warrant—*id est*, that of April 1876—find themselves in very much the same condition that the subjects of a certain king of whom we read in Bible history were in: in other words, they asked more and were given less. They would not join under the Warrant that secured to them substantial advantages, and also the pay in India of 317 rupees, which, when granted, was worth about £31 14s.; so a new warrant was issued, which, he informs us, took away many of those substantial advantages, and it at the same time only granted the same number of rupees, now worth as a money value only £25 14s. 9d., and, compared with the purchasing power ten years ago, much less. In answer to all this, I have one question to ask him, or if Perick be not within hail of the penny postage, you or any of your numerous readers: What is the number of the paragraph in the Royal Warrant of April 1876 that refers to Indian pay, as I am unable to find any such clause in it? I am aware there is a printed paper being circulated called "Extracts from the Royal Warrant of April 1876", wherein it is stated the pay will be £31 14s.; but, as far as I can see, it is not a correct statement; as no such thing existing in the Warrant, it cannot be an extract. The Warrant provides for £250 a year and extras; and as those extras in India have been 166 rupees a month, the Warrant provides for 374 rupees a month, and for what reason the right pay is withheld I can find no one to inform me; and those who are content to serve on 57 rupees a month less than they are entitled to, appear to me to differ in opinion from one who considers himself

NOT A FOOL.

OBITUARY.

JAMES M. CUNNINGHAM, M.D.

WITH regret we have to announce the death of Dr. James M. Cunningham of Hailsham, Sussex, in his seventy-fifth year, which event took place on Wednesday, April 24th, from acute pulmonary congestion and hæmorrhage. He entered the Royal Navy at an early age, but subsequently turned his attention to medicine, and took his degree as M.D. at the University of Edinburgh. After two years' practice at Whitstable, he removed to Hailsham, where he remained forty-five years, until his death, highly esteemed. He was an old member of the South-Eastern Branch of the British Medical Association, and at the time of his death was a Vice-President. He was medical officer of the parish, and also of several benefit societies in the neighbourhood, and also Assistant-Surgeon to the 3rd Sussex Artillery Volunteers. He was an enthusiastic member of the Masonic fraternity, by the brethren of which he was held in the greatest esteem and veneration, having attained the highest honours in the province in craft, capitular, and mark masonry.

DAVID MANSON, M.D.

DR. DAVID MANSON was the fourth son of the late Mr. Manson of Fingask, who was for many years Manager of the British Linen Bank at Aberdeen. He was educated in that town, and became a graduate of the University, where, having passed through his medical curriculum with distinction, he obtained the degree of M.D. in 1872. He shortly afterwards went to Amoy, and very recently removed to Foochow; and got into excellent practice in both places among the European residents. He died at the latter place on the 1st of April, from sunstroke, aged only 30, deeply regretted by his relatives and numerous friends in Aberdeen.

VOLUNTEER SURGEONS.—The following volunteer surgeons, having undergone the requisite examinations, have been granted certificates of proficiency, entitling their respective corps to additional Government grants: Acting Surgeon W. A. Renshaw, M.D., 25th Cheshire R.V.; and Surgeon G. E. Corrie Jackson, 46th Middlesex R.V.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 30th, 1878.

Aldin, Ebenezer Wenham, Oxford
Castle, Hutton, Newport, Isle of Wight
Homes, James, Ledbury
Hughes, Thomas Montgomery, 175, Kennington Road, S.E.
Lighton, Henry Alfred Hamilton, Ross
Lynn, Edward, Woolwich, Kent
Michael, Henry James, Colchester
Watson, Evan John, Durham

The following gentlemen also on the same day passed their primary professional examination.

Hardy, Henry Louis Preston, London Hospital
Jones, Arthur Lloyd, London Hospital
Wey, Alfred Cox, Middlesex Hospital

In the list for March 7th, Frederick Enos Fenton, St. Mary's Hospital, should have been St. George's Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Tuesday, Wednesday, and Thursday, May 7th, 8th, and 9th, the following candidates were successful.—For the Licence to Practise Medicine: previous examination.

Bartholomew, Isabella

Final examination.

Clark, Ann Elizabeth

Sweeny, Terence Humphrys

For the Licence to Practise Midwifery.

Clark, Ann Elizabeth

Sweeny, Terence Humphrys

Hyne, Frederick Alexander

MEDICAL VACANCIES.

THE following vacancies are announced:—

KENT AND CANTERBURY HOSPITAL—Physician. Applications to be made on or before the 28th instant.

LONDON FEVER HOSPITAL—Resident Medical Officer. Salary, £200 per annum, with residence, coals, gas, and attendance.

MANCHESTER ROYAL INFIRMARY, DISPENSARY, and LUNATIC HOSPITAL—Ophthalmic Surgeon. Applications to be made on or before the 29th instant.

MIDDLESEX HOSPITAL—Assistant-Physician. Applications to be made on or before July 2nd.

ROYAL HOSPITAL OF BETHLEHEM—Assistant Medical Officer. Salary, £500 per annum, with furnished apartments. Applications to be made on or before the 20th instant.

SOMERSET COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum, with board, residence, and washing.

TOWNSHIP OF MANCHESTER—Assistant Medical Officer. Salary, £140 per annum, with furnished apartments, washing, attendance, etc. Applications to be made on or before the 19th instant.

WEST BROMWICH DISTRICT HOSPITAL—House-Surgeon. Salary, £30 per annum, with board, residence, and washing. Applications to be made on or before the 20th instant.

WOLVERHAMPTON and STAFFORDSHIRE GENERAL HOSPITAL—House-Physician. Salary, £100 per annum, with board, washing, and apartments.—House-Surgeon. Salary, £100 per annum, with board, washing, and apartments. Applications to be made on or before the 24th instant.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGES.

JACKSON—BARNES.—On the 5th instant, at St. George's, Hanover Square, by the Rev. Charles Sedley Hagreen, Vicar of Staunton Long, cousin of the bride, assisted by the Rev. Capel Cure, Rector of the parish, Ernest Carr Jackson, of 91, Harley Street, Cavendish Square, eldest son of the late Thomas Carr Jackson, F.R.C.S., to Ada Coustance Sedley, younger daughter of Robert Barnes, M.D., F.R.C.S., of 31, Grosvenor Street, Grosvenor Square.

WOLSTON—LEAN.—On the 4th instant, at the Registrar's Office, Lambeth, Surrey, Walter Thomas Prideaux Wolston, M.B., Edinburgh, to Mary, third daughter of the late Francis Lean, R.N.—No cards.

PRESENTATION TO DR. MORTON.—This gentleman was last week presented by his friends in Castleblayney and its neighbourhood with an address, and a purse containing two hundred guineas, on the occasion of his leaving that place to reside in Nenagh. The address stated that, in losing him as their medical attendant, they would miss the clear-sighted skill and watchful attention which many of them had learned to value in time of sickness, and they would deeply feel the loss of his influence which he invariably exercised for good; and his example of uprightness and consideration for others, especially the sick poor under his charge in the Castleblayney Dispensary District, had gained for him universal respect and esteem.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
- TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.
- THURSDAY... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.
- FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.—Royal College of Surgeons of England, 4 P.M. Mr. T. Spencer Wells, "Lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours". Lecture I: Mode of examining Patients with Abdominal Tumours; External, Internal, and Combined Examination; Form of Note-book for recording Cases; Collections of Fluid in the Abdominal Cavity and in the Cyst; Ovarian, Renal, and Hydatid Cysts; Illustrated Specimens from Museum; Chemical and Microscopical Examination of Fluids removed by Tapping.
- WEDNESDAY.—Royal College of Surgeons of England, 4 P.M. Mr. T. Spencer Wells, "Lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours". Lecture II: Semisolid Abdominal Tumours; Different Kinds of Ovarian Tumours—Specimens illustrating various other Conditions resembling Ovarian Tumours; Fibroid and Fibro cystic Uterine Tumours; Tumours of Abdominal Wall; Tumours of Omentum and Mesentery, of Liver, Spleen, Kidney, and Mesenteric Glands; Cancer and Tubercle; Aneurism; Haematoma and Pelvic Abscess; Faecal Accumulation; Phantom Tumours.—Physiological Society, 8 P.M. Dr. McCombie, "On the comparison of Spasmodic (Statistic) Epidemics, 1771 and 1877".
- FRIDAY.—Royal College of Surgeons of England, 4 P.M. Mr. T. Spencer Wells, "Lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours". Lecture III: Surgical Treatment of Ovarian Cysts and Tumours; Tapping, by Abdominal Wall, Vagina, or Rectum; Tapping, with Drainage; Injection of Iodine, or Antiseptics; Incision and Drainage; Ovariectomy—Selection of Cases—Preparation of Patient—Instruments—Anæsthetics; Duties of Assistant and Nurse.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

- CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
- CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.
- AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Foulsham, 7, Great Queen Street, W.C.
- PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health, if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.
- COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

Sir, I am very glad to hear that your readers tell me that the *Best Italian and Spanish Text-books* are very useful. Yours truly,
H. C.

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CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ALCOHOL AS FOOD.

SIR.—It is not asserted by any scientific man that alcohol enters into the composition of the tissues, thereby assisting to build up the body, and thus to make up for the wear and tear consequent upon exertion; but even such an authority as Dr. Carpenter holds that "it may be transformed into force in the human economy under certain unknown circumstances, and as such it may be useful without danger as a luxury". Dr. Richardson, on the other hand, declares that alcohol adds no force whatever to the animal organism. Now, it is quite possible to reconcile, to a very great extent, these apparently contradictory statements. We must keep before us the fact, scientifically demonstrated, that a large proportion of the alcohol introduced into the economy undergoes chemical transformation in the tissues, and is not, as has been asserted, eliminated unchanged by the excretory organs. Now, as all chemical changes produce a certain amount of force, it is impossible to escape from the conclusion that alcohol adds energy to the system. But this by no means renders it certain that man gains strength by the imbibition of alcoholic drinks, for it has also been distinctly shown that the human body is capable of more exertion without alcohol than with it. In other words, it is scientifically proved that alcohol adds a certain amount of force to the body; and, on the other hand, it has been satisfactorily demonstrated that it abstracts a considerable amount of energy from the system.

It is impossible to understand this question thoroughly unless we bear in mind that alcohol is both a food and a stimulant. A stimulant is an agent which compels the organism to expend the energy which has been stored up in the tissues, while a food imparts the energy required by the system for carrying on the various vital processes. A food imparts strength or force, while a stimulant dissipates the force or energy received from the food. It must therefore be evident that the usefulness of any substance as a nutritive agent entirely depends upon the proportion which its force-producing properties bear to its stimulating power. If the stimulant properties predominate, there will be more energy caused to be expended by the substance than its force-producing power is able to supply; but should the force-giving properties be in the ascendant, there will be more energy imparted by the substance than will be caused to be expended by it. Beef, for example, is both a food and a stimulant; but it is a highly nutritive agent, because its force-producing properties are very much greater than its stimulating power. Beef-tea, on the other hand, has very little nutritive strength, because its stimulating power is very great in proportion to its force-producing properties; but with alcohol its stimulating power is so very excessive, when compared with its quality as a force-product, as to render it not only useless as a nutrient, but positively injurious as a luxury. Against this conclusion are usually brought certain facts which show that persons have lived upon alcohol alone for months, and even years. Such facts I do not attempt to deny; for my own experience in private practice in Liverpool (a place not pre-eminent for its total abstinence) has furnished me with reasons for believing and means of explaining them. The explanation of such cases is as follows. When the system has been, by long continued and excessive use of alcohol, deprived of its power to be stimulated except by immense quantities of the drug, then the body gets the advantage of its force-producing power, provided that the amount administered stops short of the quantity required to produce stimulation to any but the smallest extent; in other words, man can gain no vital force from alcohol until he has so far ruined his nervous system by means of it that his life has become a burthen. This explanation is in entire accordance both with scientific experiment and clinical experience. The cases which seem to militate against it, in which persons have lived for weeks when partaking of nothing but alcohol, even although the nervous system has not been previously accustomed to it, are all capable of quite another explanation, for it has been shown that such persons would in all probability have lived longer without any alcohol whatever. Many patients live for weeks upon nothing but water; indeed, it is quite marvellous how little food is required to maintain life when the body is at complete rest and is maintained at a suitable temperature.—Yours,
JAS. MUIR HOWIE, M.B.

5, Rodney Street, Liverpool, May 18th, 1878.

SIR, Will Dr. Markham try to settle the above question in the following way? I am out of health just now, but that would be of advantage to Dr. Markham in solving the problem in the way I propose—viz., that he, and I should walk twelve miles a day until one of us yielded. His "nourishment" should be as much as he pleased of bread and plain water; mine, bread and the best draught stout, as much as I pleased likewise. Should Dr. Markham not like to experimentise upon himself, the plan could be applied to any other two men. The result would be practical and conclusive; and that the stout would beat the water and prove itself a food I am certain.—I am, sir, your obedient servant,
May 1878.
L.R.C.P. Lond.

TETRACHLORIDE AND BISULPHIDE OF CARBON IN NEURALGIA.

SIR.—Unless I have myself been labouring under an unaccountable delusion, there is a singular error in Mr. Hancock Wathen's note on his treatment of neuralgia by tetrachloride of carbon. He writes that that drug (p. 775) as having been "originally recommended by the late Dr. Kenyon" (his name was *Kennon*, by the bye), whereas it was the fearfully offensive bisulphide of carbon which Dr. Kennon used to apply, vaporised, to the temple or behind the ear, as "a specific for headache of all kinds". It would be interesting to learn how Mr. Wathen came to employ an allied carbon compound, though it is perhaps not strange he should find it of efficacy in the same genus of symptoms. At one time I gave the bisulphide a persistent trial, with widely varying results. In occipital or other reflex headaches, having their origin in "bilious" epigastric catarrh, slow digestion, apæpsia, and what not, where the painful sensations are merely impressions transmitted through the inferior cervical ganglion to the brain, I invariably found the bisulphide completely fail, and no wonder, since it could neither remove nor counteract the cause; whilst in certain other forms of head pain, such as the migraine of hysterical and nervous women, or the regularly recurrent brow-ache of debility, I have very often (but not invariably) found it a rapid alleviant. Where of use at all, I have always found it succeed at once—"like magic", patients have phrased it; so much so, that, as the first measure of all, when in doubt as to the *rationalité* of the ache, I have used the bisulphide as an aid to diagnosis; if it failed at once to relieve, dismissing at once from calculation a certain class of causes and anodyne remedies, proceeding round to totally different treatment founded on quite opposite hypothesis.—Yours, etc.,
Market Rasen, May 25th, 1878.
F. ARNOLD LEES.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

PURCHASE OF PRACTICES.

SIR,—The point raised by "Doubtful" in the **JOURNAL** of May 25th involves so many important considerations, that it cannot be dealt with by a mere affirmative or negative. It is important to remember that what is bought and sold is not an annuity, neither is it a business in the same sense as a shop or hotel. It consists essentially of an *introduction* to patients, and is peculiar in this important particular—viz., that the goodwill, as it is called, is for the most part vested in the *person* conducting the practice, and not in the *place* where it is carried on. Hence the more personal the practice becomes, the more unsafe it is as an investment; and, in fact, in every case where the practice depends entirely upon the high personal and professional reputation of a particular man, it cannot be transferred to another. In the vast majority of cases, however, a general medical practice is not of so purely personal a nature, and is, as a rule, perfectly transferable to a suitable successor; and facts and experience fully justify the assertion, that failure in succession almost invariably arises from the unfitness of the purchaser for the sphere he seeks to enter, and is not due to the want of good faith on the part of his predecessor. Cases of so-called "swindling" are not common, and when they do exist, are due either to the caution mentioned, or to want of due care and precaution in investigating the genuineness of the practice before purchase. The value of the practice can easily be ascertained by a full investigation, conducted upon certain principles well known to experts, who, moreover, can frequently supplement the statements of the vendor by valuable information derived from independent and reliable sources. The cases of "swindling" are mostly heard of in connection with private sales; and those who are the victims are those who want something exceptionally good far below the market value, and those who have too much confidence in their own opinion to take the advice of men specially skilled in such negotiations. If the preliminary investigation prove satisfactory, the investment may be considered safe, provided the purchaser be adapted to the connection to which he seeks to be introduced. Of course, the income cannot absolutely be guaranteed; for, if so, then the market value of the practice would be higher than that of an annuity, inasmuch as the latter ceases with the life of the annuitant, whereas the former has a considerable saleable value after death. The successor could not buy at the price if there were absolutely no risks; but these are reduced to a minimum if he be a steady, prudent, and industrious gentleman of average professional ability and good address. Such men rarely fail. The long permanence of a practitioner in a particular locality is of course a guarantee of the genuine nature of the practice; but it must not be overlooked that in such a case part of the connection is essentially of a personal character, and requires much tact to secure to a successor. Finally, why cannot a man succeed equally well by commencing "on his own account", without purchasing? In rare cases this may be possible, but experience is wholly opposed to such a proceeding. The essential condition of success is a rapidly increasing locality, uninfluenced by the reputation of any neighbouring practitioner; and the man who thinks it depends solely on his own personal skill and character deceives himself. It may be said, as a rule, that the plan is a failure, except in the East End of London, the Black Country, or the manufacturing districts in the North of England, where the densely populated districts offer special opportunities for success. The failures of medical men engaged in these attempts in the suburbs of London form a voluminous but melancholy history. It may therefore be safely asserted that, with due care, the purchase of a medical practice or partnership is not only a safe but a lucrative investment, but is, with the exceptions above quoted, the only satisfactory way of commencing practice.—Yours faithfully,
J. GEOFFREY LANGLEY, M.B. Lond., M.R.C.S.
50, Lincoln's Inn Fields, W.C., May 1878.

SIR,—In last week's issue of your paper, a correspondent inquires whether it is safe to buy a practice? To such a very vague interrogation it is scarcely possible to give any but a very indefinite reply. The chances in favour of a purchaser depend almost entirely upon personal qualifications and experience. Where one man will walk into a poor practice and succeed, another may purchase a first-class one and utterly fail. Patients are not to be bought and sold so easily as some seem to suppose. From the tenor of your correspondent's letter, I should assume him to be but recently qualified and somewhat nervous as to his own capabilities; and under these circumstances it would be wise for him to abstain from purchasing a practice altogether, except under very favourable circumstances. If he can meet with a really *bona fide* unopposed practice, which has not been made public property by constant advertisement by numerous agents, he might do worse than purchase, provided of course he can get a long introduction; but let him beware of practices *made* to sell, and which are constantly being advertised as "opportunities rarely met with", or to be "disposed of" on "very easy terms", etc. A good article will always ensure a fair price. By all means, if he can do so, let him wait his opportunity of purchasing a share in a really good practice, or be content with an assistantship with a view to the same. If he go to an agent, let him be careful to whom he goes, and to select some firm that will really look after his interests, and not recommend a bad investment simply to get their own commission out of the seller—a practice, unfortunately, frequently employed.—I am, sir, your obedient servant,
FIDES.
May 25th, 1878.

SUDDEN ARREST OF THE HEART'S ACTION.

SIR,—A letter on the above subject in your number of May 25th brings to my recollection a case which occurred in my practice about ten years ago. M. H., able seaman, aged 23, was found dead in the water-closet, whither he had gone shortly after dinner. He had fallen forwards from the seat, with his hands resting on the floor. The body was minutely examined, from the brain to the pelvis, on the succeeding day, about twenty hours after death. The only abnormal appearance existed in the heart. This organ was in a state of most rigid general spasm, and in none of the cavities, right or left, was there a single drop of blood, while the adjacent large venous trunks were swollen and gorged up to their junction with the right auricle. There was no degeneration of the cardiac structure whatever. The stomach contained an enormous amount of solid food in an undigested state, and was so large as to press forcibly against the diaphragm. The size of the organ caused much surprise: it appeared to contain not less than treble the amount of even a heavy dinner.

Death was attributed to "spasm of the heart", induced probably by the pressure of the overloaded stomach against the diaphragm, intensified by the straining at stool. The man had been in good health previously, and had never complained of his heart.—Your obedient servant,
R. N.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

UNIVERSITY EXAMINERS AND EXAMINATIONS.

SIR,—The discussion of the title of M.D. still progresses, and yet the solution appears to me most simple, at least for the future. Why do not all London students graduate in London? I think you have given the explanation in your **JOURNAL** at page 757, where you say: "Many teachers must be sorely perplexed in their endeavours to be at the same time honest to themselves, and yet to teach *such views* as are likely to satisfy examiners." Is it possible to write a greater satire on examinations? "views likely to satisfy examiners"! I believe the observation is perfectly appropriate. When I passed in Edinburgh in 1834, a man was ploughed for ignorance only: he might be a Mahomedan or a Puseyite, or a homoeopathic, or a Brunonian, or a Cullenite. He was only required to give the facts and arguments on each side of any position. I remember to this day the amused expression of old Alison when I asserted the force of the *sy stole* to be equal to one hundred and eighty thousand pounds, and quoted Borelli; and he requested me to give the reverse opinion, and I was forced to confess that Keill put it at eight ounces, and was an equal authority, and had to give the opinions of Senac, Tabor, Sauvages, and Bernoulli, all more or less against me. In those days, if a man knew his work he might hold what opinions he pleased. But then the examinations were more or less public, at least two examiners being present. They extended over four hours, and were entirely oral, so that a student could not be severely bullied.

I have had four sons who have graduated respectively at Cambridge, at Edinburgh, at Oxford, and Dublin, and two have tried to pass the matriculation of the University of London and have failed. They have failed, however, in good company, as the senior boy of Harrow was unsuccessful at the same examination. All my sons were educated at public schools, ostensibly for Oxford, but two went afterwards to private tutors for the "ologies" for London. Curiously enough, in one instance my son's private tutor told me it was always doubtful if any man would pass the London matriculation; but as he was so very strong in natural philosophy, and must get so many marks in that (and of course he was so far above the average in classics), he would probably get through. He was ploughed, however, on natural philosophy, his strong subject: in fact, he had not learned "such views as are likely to satisfy examiners".

Now for the remedy: nothing more simple. Require that all papers be preserved, not thrown out of the window of a railway carriage. Secondly, let each candidate be required to give the name of his tutor. Such tutor shall have permission to read the papers of all the men who have passed, and also those of his own pupils who have not. Let the examiners sign their names to each paper and the number of marks it is worth, and let a committee of any of the learned societies of London have access to all the papers if they desire it. Again, let the matriculation be passed at any period of a man's life, and let the examination follow, irrespective of how he acquired his knowledge. In fact, let the M.D. be the test of a certain amount of knowledge, and not of holding "such views as are likely to satisfy examiners".

The London University is under the control of Government, and was founded by the Liberals, and is the most liberal of all our universities. Can we not make a push to bring it within the spirit of the age, and make knowledge, not "views", not yet crutches, the source of honour? Why should there not be one standard for matriculation at all our universities? Is it not true, now as ever, that "they manage these things better in France"?—Your very obedient servant,
M.A. DUBLIN, M.D. EDIN.

P.S.—Is it true that some of the London medical schools ignore their university, and prepare their pupils only for the College of Physicians?

H. M.—The fees for a complete medical education in Paris amount to 1272 francs, or about £53. A Paris degree does not at present entitle its possessor to practise in England.

CONJOINT BOARDS.

SIR,—On reading an account of a deputation from the Council of the University of London to the Duke of Westminster on Tuesday last, there is one thing which appears never to have entered the minds of Drs. Carpenter, Storrar, Sharpey, etc., in attacking the universities and corporations of Scotland and Ireland—viz., the present system of permitting quacks and unlicensed practitioners to prey much as they like upon the public. Now, before these self-constituted censors attack universities and colleges in the sister countries, which have so honourably carried out all the recommendations of the General Medical Council to raise medical education to its present high standing, they should never forget that there are matters of the greatest possible moment to be adjusted to the satisfaction of the public and profession alike; and it is not by abusing medical schools outside of England that good will result. Why is it only now discovered that we are in such a disgraceful condition that immediate legislation is demanded to overturn a system which has wrought such benefit to the entire community? It is certainly untrue to say that the licensing bodies of Scotland and Ireland have been negligent in their duties by sending forth to the world practitioners ignorant and badly educated. There is not one college in the three kingdoms but has its honour and credit staked in the condition of its examinations; and to say that, unless there is a combination of all the bodies to participate in the examinations, no properly qualified practitioner can emerge from beneath college portals, is simply to urge an impracticable and unjust scheme. Medical examinations are so carried out now-a-days, that no one who does not show a fair knowledge of all the branches of his profession has the shadow of a chance of gaining a certificate to practise under the Medical Acts. It is not to be expected of a candidate that he should possess the erudition and skill of a professor of the numerous branches in medicine and surgery.

If legislation be necessary to raise the standard of medical education, let the Government adopt the system in vogue in Germany—viz., to look upon all qualifications from universities and colleges as merely a signification that the holder of such has complied with the regulations and prepared himself for undergoing the state examination—an ordeal by no means easy. Till some such plan is the law of the land, there can be no true check upon the host of quacks and pretenders to medical knowledge, who prey upon the public with the greatest audacity, and without hindrance from those in authority.—I am, etc.,
Edinburgh, May 23rd, 1878. JOHN COCHRANE, L.R.C.P., L.R.C.S. Ed

BONDS WITH ASSISTANTS.

SIR,—If any of your readers would oblige me by answering the following questions respecting bonds with assistants, it would be of general interest. What are the precise terms or items in a bond between master and assistant, in which the former binds the latter not to practise after he has ceased employing him? Does it require a lawyer to make the bond every time an assistant is changed? If so, what is the usual charge?—I am, etc.
MEDICUS.

LAC NOIR, SWITZERLAND.

Sir,—Allow me to recommend to the notice of your readers an establishment and health-resort in a mountainous part of Switzerland, situated in the vicinity of Fribourg, and of easy access from that town, being a three hours' drive by omnibus or carriage. It offers at once the attractions of a country residence, without being so far from town life as to cause inconvenience. There is a good hotel, with accommodation for eighty or ninety persons. The charges are among the most moderate to be met with in Switzerland, ranging from six to nine francs a day. Telegraphic communication with Fribourg and Berne has been recently established. A post leaves every morning for Fribourg at 6 A.M., courier returning with the mail at 9 P.M. The lake from which the place takes its name is of great depth, and as clear as crystal, abounding in fish of great variety and delicacy. Sailing and rowing boats are provided free of expense to all visitors, while numerous excursions can be undertaken among the surrounding mountains, where lovely wild flowers, as the alpenrose or rhododendron, gentian, etc., are to be met with. A sulphur-spring at the back of the hotel has been found of great benefit to invalids, and the master of the establishment has accordingly caused baths to be constructed for the benefit of visitors suffering from any complaint likely to be remedied by the sulphur waters. A few hours' climbing brings the tourist to the magnificent panorama of the overland range.

As a cool retreat during the hot summer months, I consider the place unequalled; and to those suffering from chronic chest-affections, general debility after illness, anæmia, or derangement of the digestive organs, it can be strongly recommended. The air is rendered quite fragrant by the surrounding pine forests similar to those of Bournemouth, and the soil is almost equally dry. By those who are robust, bathing can be indulged in, as the proprietor has erected two bathing-houses at the edge of the lake, the water of which is at all times of the clearest crystal, reflecting, as in a mirror, the surrounding heights, covered at one point with magnificent pines, in other places clothed with the richest pasture. I may add, the elevation of Lac Noir, being three thousand five hundred feet above the level of the sea, ensures even at the height of summer a cool atmosphere, free from fog; and even after heavy rains the ground rapidly dries, a desideratum not always met with in similar altitudes.—I am, etc.,
C. V. CAY, M.D.,
Surgeon-Major Coldstream Guards.

A MEDICAL OFFICER OF HEALTH (Torquay) asks: What is the best material with which to stuff the beds of a fever hospital, and which is the best dry heat disinfector?

THE BRUSSELS DEGREE.

WILL C. B. G. kindly send his name and address, which have been mislaid? A member of the profession is desirous of communicating with him respecting the subject of his letter in the JOURNAL of April 6th.

F. FRYER (Dewsbury).—The pamphlet on *Provident Dispensaries*, by Sir Charles Trevelyan, together with a model set of by-laws for such dispensaries, may be procured from the Secretary of the Charity Organisation Society, Buckingham Street, Adelphi, London.

ON THE TREATMENT OF PUERPERAL HYPERTHERMIA BY COLD; AND ON HOSPITALISM.

Sir,—Will you kindly allow me to make one or two observations on Dr. Wiltshire's very interesting article "On the Treatment of Puerperal Hyperthermia by Cold," which appeared in your JOURNAL on the 18th instant? The refreshing, grateful sensation from the action of cool air on the skin, and from the evaporation of water or eau de Cologne on the palms of the hands and the soles of the feet, in all cases of fever, is acknowledged by every one; and the dry cold method, by which the patient is conveniently packed round with closed vessels filled with pieces of ice, in lieu of the wet applications and the cold bath, is, as Dr. Wiltshire says, of much importance in the treatment of hyperthermia in cases where the patient is much exhausted and cannot be moved.

The abstraction of heat from the body by the application of cold appears to me to be merely a physical action, and if not continued long enough there may be great reaction; the application must therefore be renewed frequently, and finally, when the temperature of the body is reduced, this must evidently be in some measure at the expense of the patient's vitality. We submit that, by securing a good atmosphere for our patient, we obtain that physiological animal heat which assuredly is the best means of overcoming the morbid action. This will not deprive us of the grateful action of cold by local applications: the vital powers being well supported, the recovery will be more prompt and sure.

In puerperal cases, there is an immense amount of putrescible animal matter carried into the atmosphere which surrounds the patient, and which accumulates rapidly in the furniture, in the porous walls, ceilings, and floors, if it be not continuously swept away and purified by the admission of fresh air. Dr. Wiltshire clearly shows us this when he says that the patient who died would have recovered if she could have been removed from the hospital, "for again and again her temperature fell to normal, or nearly to it, and she appeared to be on the verge of convalescence; she seemed, however, to get fresh doses of poison, and relapsed accordingly." Why should this be? Cannot the atmosphere of the hospital be kept pure when we know whence the poison comes? If the walls and ceilings be covered with an impermeable coating, the oak-floors waxed and well rubbed, and if the quantity of air necessary to carry off the impure atmosphere be constantly admitted, with the prescribed habit of order and cleanliness required in hospitals, we shall no longer have to contend with those fearful puerperal and other nosocomial diseases. The hospitals will then be in a fit state to receive cases of this nature without any fear of contagion, for these diseases are transmissible there only where they may have originated.

As hospital diseases are preventable, and as the salubrity of the hospital is completely under our control, do you not think, sir, that these diseases should be prevented? and when death occurs from the neglect of proper hygienic measures, do you not consider that such a death is a case for a coroner's inquest, and that the Board of Governors of the hospital should be made responsible for it?—I am, sir, yours faithfully,
CHARLES SHRIMPTON, M.D.

5, Whitehall, May 22nd, 1878.

ANÆSTHETICS IN DENTAL SURGERY.

Sir,—I have read with much interest your report of, and remarks on, "Deaths from Anæsthetics" in the BRITISH MEDICAL JOURNAL of May 11th and 18th, and hope some discussion may arise therefrom. Whilst strongly deprecating the want of caution too frequently exhibited when the use of an anæsthetic is demanded, I think that there is something arising in the practice of dental surgery where a more perfect anaesthesia than the use of nitrous gas is requisite; and I advance this after more than twenty years' experience. For instance, a patient comes to us with a quantity of diseased teeth and broken-down teeth, setting up alveolar abscesses,

frequently scattered in different parts of the mouth, and not lying contiguous to each other. The individual has submitted to a great deal of suffering from a dread of the cold steel, which many an unfortunate mortal in the same condition frequently exhibits. The patient being exhausted by local pain, as well as by the concomitant ills which such a condition is sure to set up, surely here is a case demanding an anæsthetic quite as legitimately as many other operations for which chloroform or ether would, without hesitation, be used, if the patient, on examination, proved a fit subject. If in this case we used peroxide of nitrogen, the patient would have recovered consciousness long before the completion of what was requisite, for the state of anæsthesia produced is so transient that under the most favourable circumstances we can rarely remove more than a couple of molar teeth while it lasts; and if there be any complication, frequently not one. Here, surely, it would be justifiable to choose one of the anæsthetics you would so inexpressibly banish from the dentist's consulting-room, and complete the work, rather than condemn the patient to return home until he or she had got over the administration of the gas, to return another day for a repetition of the operations.

I think we are in no case justified in administering any anæsthetic without a thorough examination as to the physical condition of our patient, to ascertain if any symptoms exist that would contraindicate its use; and personally, under no conditions whatever will I administer any anæsthetic without the presence of a medical man, for not even peroxide of nitrogen is without its risks. Two cases have proved fatal to the patient; and I have heard of cases where artificial respiration had to be resorted to to recover the patient—a state of affairs I would rather not have to face unassisted; and who is to say when it may recur?—Hoping this letter may provoke discussion, believe me, yours faithfully,
J. T. BROWNE-MASON.

6, Southernhay, Exeter, May 25th, 1878.

DR. EDWARD T. WILSON, Westal, Cheltenham, will feel greatly obliged to any of our readers who will kindly supply him with reports of hospitals for infectious disease, or any information respecting the practical working of such institutions.

MEDICAL ADVERTISEMENTS.

Sir,—The following is a copy of an advertisement put into a local paper by a young surgeon commencing practice in this town, a short distance from, and in opposition to, his old master.

"W. Parker Tait, Surgeon, 5, Stanley Square, Staleybridge, has opened his Surgery at the above address. Messages left will be attended to."

As to the presence or absence of medical etiquette in the two acts, I will leave your readers to judge.

I forward you with this letter a paper containing the advertisement referred to, and beg to remain, respectfully yours,
HERBERT A. BRIDGMAN.
53, Grosvenor Square, Staleybridge, June 1st, 1878.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Strand News; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. J. Marion Sims, Paris; Mr. T. Spencer Wells, London; Dr. R. Greenhalgh, London; Dr. Ringrose Atkins, Watford; Dr. W. A. Sturge, London; Surgeon-General C. R. Francis, Sutton; Dr. J. B. Bradbury, Cambridge; Surgeon-Major J. H. Porter, Netley; Dr. George Harley, London; Dr. F. A. Mahomed, London; Mr. William Adams, London; Dr. Farquharson, London; Dr. J. W. Moore, Dublin; Dr. J. Milner Fothergill, London; Dr. J. Bell, Edinburgh; Dr. Edis, London; Dr. Radcliffe, London; Dr. A. S. Taylor, London; Dr. D. Foulis, Glasgow; Mr. G. Eastes, London; Mr. R. S. Fowler, Bath; Dr. F. J. Brown, Rochester; Dr. William Squire, London; Mr. Richard Barwell, London; The Secretary of the Royal Medical and Chirurgical Society; Mr. Richard Davy, London; The Secretary of Apothecaries' Hall; M.D.Ed.; Mr. Balmanno Squire, London; The Registrar-General of England; Mr. T. M. Stone, London; Dr. C. Theodore Williams, London; Mr. Wanklyn, London; The Registrar-General of Ireland; W.; M.R.C.S.Eng.; Dr. W. Fairlie Clarke, Southborough; Dr. Clifford Allbutt, Leeds; Mr. J. M. Williams, Rhyl; Dr. Alfred Renshaw, Sale; Mr. J. G. Langley, London; Dr. Annington, Cambridge; Dr. Wardell, Tunbridge Wells; Dr. E. Markham Skerritt, Bristol; Dr. Duke, London; Mr. Allen Fielding, Canterbury; Dr. Levinge, Bristol; Dr. Bowles, Folkestone; Mr. J. M. Bennett, Liverpool; Lord Cairns, London; Dr. Thin, London; Mr. A. H. Nason, London; Dr. Collie, Homerton; Dr. T. F. Chavasse, Birmingham; Mr. Bridgman, Staleybridge; Dr. Waters, Chester; The Secretary of St. Thomas's Hospital; M.D.; Dr. C. Murchison, London; Dr. Birnbaum, Swabach; The Secretary of the Epidemiological Society; Mr. Samuel Benton, London; The Rev. Dr. Haughton, Dublin; Dr. Cameron, M.P., London; Mr. Christopher Heath, London; Dr. Tripe, London; Dr. Trollope, Hastings; Dr. Haddon, Bandon; Mr. F. Fryer, Dewsbury; Mr. W. Moxon, Northampton; Mr. C. H. Hutchinson, Scarborough; Dr. Robinson, Dublin; Mr. A. H. Benson, Dublin; Dr. Alfred Meadows, London; Mr. G. E. Corrie Jackson, London; Mr. W. H. Wright, Dublin; X.; Our Edinburgh Correspondent; Dr. Wilson, Cheltenham; Our Dublin Correspondent; Messrs. H. K. Edge and Co., London; Dr. R. T. Cooper, London; Mr. A. Corrie, London; Mr. G. H. Fosbrooke, Bedford; A. H. T. C., Liverpool; Mr. Tomes, London; Mr. C. Williams, Norwich; Mr. R. Pounsett, Lindfield; Dr. C. J. Roy, Strassburg; Mr. W. H. Michael, London; Dr. Joseph Rogers, London; Anti-Humburg; etc.

LECTURES

ON THE

DIAGNOSIS AND SURGICAL TREATMENT
OF ABDOMINAL TUMOURS.*Delivered at the Royal College of Surgeons of England.*

BY

T. SPENCER WELLS, F.R.C.S.,

Professor of Surgery and Pathology in the College; and Consulting Surgeon to the Samaritan Hospital.

LECTURE I—June 10th, 1878.

Mode of Examining Patients with Abdominal Tumours; External, Internal, and Combined Examination; Form of Note-Book for Recording Cases; Collections of Fluid in the Abdominal Cavity and in the Cyst; Ovarian, Renal, and Hydatid Cysts; Illustrative Specimens from Museum; Chemical Examination of Fluids removed by Tapping.

MR. PRESIDENT AND GENTLEMEN,—The honourable position of Professor of Surgery and Pathology, which, by the kindness of my colleagues on the Council, I hold this year, has been filled in past times by some of the greatest men in our profession. Abernethy, Cooper, Bell, Green, Lawrence, Brodie, Guthrie, and Fergusson are among those who have passed away. Of past professors still happily amongst us, and giving encouragement by their presence, some have published their lectures as actually delivered here; and I have only to mention Paget's *Surgical Pathology*, Hilton's *Rest and Pain*, Clark's *Surgical Diagnosis*, Hancock's *Surgery of the Foot*, and Hewett's *Injuries of the Head*, without doing more than allude to recent lectures which have appeared in the medical journals soon after delivery, to prove that the able men who have preceded me in this professorship have worked so well that, while they afford the stimulus of a bright example, they also make me painfully conscious of my inability to tread worthily in their footsteps. It would be presumptuous in me to attempt to rival them. All that I can do is to bring before you in the plainest manner the results of twenty years' exceptionally large observation and practice in a department of surgery which, until lately, has not received much attention here; and in endeavouring to tell what I have learned about the diagnosis and surgical treatment of abdominal tumours, how I have learned it, the lessons that I have been taught by mistakes and failures, the satisfaction which has attended increasing success, I may be of use in directing the thoughts and studies of some of the men who will practise surgery in years to come, and thus help to fulfil the great object for which this College exists, the lessening of suffering and the saving of life.

In the printed summary which has been circulated, it may be seen that I have arranged in an order which will allow me to present to you many valuable specimens from the museum, abundant material for the six hours allotted to me, and I will now ask you to imagine that we are about to examine a patient who is supposed to have an abdominal tumour. I need hardly say it is desirable to pursue in an examination of this kind a somewhat uniform plan or method; and, after a good many trials, I arrived at a mode of arranging the various questions and answers in a form, which, after a variety of changes, have at last arrived at this form of Note-Book, which I will send round, and which is published for general use by Messrs. Churchill. You will find in each book, arranged in pages, a series of questions which may be put in order to a patient when she presents herself in one's own consulting-room, or when called to see her at her lodgings; and spaces are left for the answers that may be given.

On the first page, one simply enters the date of the visit, the name and age of the patient, and the residence, which should be filled up in considerable detail and exactitude, because years afterwards, if it be imperfectly done, there is a good deal of trouble in finding out what has become of a patient. It is only those who have tried to do this who know how difficult it is to trace a case from its commencement to its close. Following the residence, comes a note where the patient was born and formerly resided, which also affords some assistance towards

understanding the history of the patient. When I was in America, at Professor Gross's Clinique in Philadelphia, he invited me to make some clinical observations upon a woman, and, to my surprise, she was a black woman. Dr. Atlee, who was present, whispered to me: "It is a very rare thing to see ovarian disease in a black woman." That at once put me on my guard, and really the tumour did turn out to be not ovarian, but a fibroid tumour of the uterus, which Dr. Atlee afterwards told me was extremely common amongst negroes. Dr. Knox told me it was rare to find ovarian disease amongst what he called cross-breeds; that the Celt and the Saxon are liable to them, but he had never seen one in what he called a cross-breed. That is a question I have never been able to examine into very closely, because it is so difficult to find exactly what may be a real true Celt or Saxon in these days, or what Dr. Knox would call a cross-breed. But these points are of some interest; and, after examining a great many patients, and getting a number of these books together, one can by annotation, examine how far statements of this sort are true or not.

Then one comes next to the question as to whether the patient is married, single, or a widow: if married, how long; if she have children, how many, and what their ages are, and whether she has suckled them. I have left out "lactation" in my note-book; but it is rather an important point, and will be inserted in any future edition. Then I have a question as to the number of abortions, and the name of the usual medical attendant. These are merely a few questions which serve to commence an acquaintance with the patient, and afford information of importance. On the next page, you will see a number of notes as to the general appearance of the patient. I am speaking rather of the patient herself than of her abdomen—the general aspect which she presents—what is her expression, whether cheerful or anxious, and what her apparent age as related to her real age. That is a matter of some consequence, because I think most of us would say a woman who looked considerably older than she stated herself to be, would be a less favourable subject for an operation than a woman whose apparent age was less than she stated, who looked younger than she really was. Then, with regard to the height or build of the patient—whether she is a strong well-built person, or a person below par in that respect. Then, as to complexion—whether she is fair or dark, pale or florid. This, we shall see, has some bearing on the diagnosis between ovarian and uterine tumours. Women with uterine tumours have a physiognomy which is more or less marked, one of the points being a good deal of coloration of face; whereas ovarian patients are more commonly pallid. Then we note something as to corpulence or emaciation, and muscular development. Then we regard the amount of hair developed on the surface of the body. Some persons have supposed that patients who have a large growth of hair are more subject to cysts like ovarian cysts, and so on, but I really have not been able to note that; for I have seen patients with a great deal of hair, and also with very little hair, both suffering from the same complaint. We next note the temperature of the skin and extremities; perspiration—whether it occurs during rest or under exertion, or whether there is any peculiar odour or acidity about it. Then we notice the presence of any glandular swellings, or eruptions, or ulcers, or old cicatrices—whether there are any varicose veins, particularly about the legs, or œdema of legs or feet; the condition of the areola round the nipple, particularly when there is any doubt as to pregnancy, and any special alterations in the hair or nails. These are all points which are seen at once, and when one is in the habit of going over these headings regularly, the first view of a patient enables one to see directly what the case is likely to be.

Having done that, one turns to the next page, and proceeds from the general examination to an examination of the abdomen; and this may often be done quite as well in a surgeon's consulting-room as with the patient in bed. Of course, in some cases it is more convenient to examine the patient in bed, where the chest and abdomen can be thoroughly examined; but it is quite easy, in one's consulting-room, to remove the dress of a patient sufficiently, and to cover the limbs and lower part of the body with a shawl or towel, in such a way that the examination can be quite satisfactorily made without the least indecency.

Then, I would say, the first thing is to notice what one sees. We see at once whether there is visible enlargement of the abdomen or not, and if this enlargement is general or local; if one side of the abdomen is enlarged or if both sides are enlarged. One notices also the amount of subcutaneous fat, and, of course, if the patient is unusually thin and the abdomen retracted. The umbilicus is at once seen, whether it is concave or convex; and one also notices if there be any discharge there. Dilated veins at once come into view. One notes their size and the course they run, and sees any lineæ albicantes which may have remained after pregnancy or any other distension of the abdomen, and

one sees occasionally that these may be oedematous. These lineæ albicantes were formerly called varicose lymphatics, but there is no ground for that. Then, one frequently notices, in pregnant women, and most markedly in those pregnant for the first time, a brown mark running down the centre of the abdomen, which is a very common sign of pregnancy; and any hernial protrusion is also seen.

From seeing one proceeds to feeling; and we notice, by passing the hand over the surface, what its heat may be, and whether any unusual heat is confined to one side or is symmetrical; and one also feels if the abdominal wall is tense or flaccid; if there are any knots about it, or if it is oedematous. Then we also notice if there is any crepitation—if, on pressing the hand over any swelling, there is a feeling of friction beneath the hand; and also whether there are any movements of gas, or of mixtures of gas and fluid, which may gurgle. And then, with the two hands, one also may feel if there is that sensation of fluid, or wave of fluid, which is so well known as fluctuation; and one may be able also to appreciate whether the wave is fluid, or merely a sort of bag of jelly which moves about with the sensation which has been called "elastic impulse". Pulsation may also be felt, or a thrill; and one can estimate, with a little care, the seat of pulsation—whether it follows the course of the aorta, or whether it is felt elsewhere, and whether it may be simply the impulse transmitted from the heart's action downwards. Then we should also notice how these movements are affected by deep inspiration and full expiration, and also by sudden pressure.

Next, as assisting inspection, we come to measurement; and there is, on the third page, a diagram, which we are in the habit of using, in which five different measurements are marked down: first, the girth at the umbilical level, then a measurement from the lower end of the sternum to the umbilicus, and from that to the pubes, and then from the right and left anterior superior spine of the ilium to the umbilicus. By these five different measurements, and also by marking out on the diagram the outline of any tumour that may be felt, we obtain a very accurate record of any swelling or tumour which is existing at the time of the first examination of the patient.

Then, from seeing, feeling, and measuring, we proceed to listen; and are able to mark out pretty distinctly what are the outlines of the liver or spleen, and what parts are dull, and which are resonant on percussion, and their exact seat and limits. We observe any unusual dulness over the liver, and whether it extends too far downwards, or whether the heart is pushed out of its place, or whether there is any definable tumour of any part of the abdominal cavity, by the dull sound which solid tumours give on percussion, as distinguished from the resonance of the intestines. The effect of altered position would also be noticed: turning the patient from side to side, raising the shoulders or hips, seeing what effect that has, and watching also the effect of respiration upon any dulness, and also seeing whether, on re-percussion, there is anything like hydatid fremitus developed by the alternate impulse of the two hands. (A diagram showing the position of the viscera was referred to.)

Proceeding to observe the sounds heard on auscultation, one may note where any gurgling sound of the intestine and any friction sound is audible, where the sound of the aorta may be heard, whether there is any vascular murmur, or any foetal heart-sounds, and whether there is any sound accompanying succussion or fluctuation. All these things are frequently heard, and occasionally, where there is a mixture of air with fluid, one can hear the sound so well known by auscultators as "metallic tinkling"—air bubbling through fluid. What assistance the microphone may give us, I hardly know yet; but it is very probable that the foetal heart-sounds may be heard much more distinctly than they are by an ordinary stethoscope.

All this examination may or may not lead to the detection of a tumour; but we will suppose a tumour has been discovered; and then we have to determine whether there is only one tumour or more than one; supposing there to be more than one, if they are united or separate; whether they can be moved one upon another; and we mark on the diagram the exact position and outline of each of them, and note in what position of the patient they are best seen and felt. Then, one would also notice whether there is any connection with any of the abdominal organs—with the liver, the kidney, the uterus, or the spleen. This would at once become apparent by the position of the tumour; and one would notice also the surface of the tumour, whether smooth, or irregular and knotty; what its consistence was, hard or tense, soft or boggy, or whether any fluctuation which could be detected in it was uniform or limited, deep or superficial, and whether the superficial fluctuation was over the surface or only felt upon deep pressure of the tumour.

With regard to mobility, one would note to what extent the tumour may be moved upwards or downwards, or from side to side; whether the abdominal walls moved over it or not, or whether they were con-

nected with the tumour, and whether any movable portions of the tumour are more or less independent of its general mass; whether one tumour may be moved independently of others, and occasionally, when the abdominal wall is flaccid, one is able to make some kind of guess as to the probable weight of the tumour. It may be advisable also to ascertain what is the effect of meals, of vomiting, of purging, or of catheterism on any tumour that has been detected.

Having examined the abdomen in this way, one proceeds to the examination of the pelvis. In a man, of course, this is not so frequently necessary; but, in examining a woman, it is always necessary to ascertain whether an abdominal tumour is connected with any of the organs of the pelvis. One has to ascertain the position and size of the uterus, and the connections of any tumour with it; and all this can be done before any questions need be asked of the patient beyond a few preliminary inquiries. The examination by the vagina—feeling the uterus, feeling any tumour between the uterus and the rectum, or any tumour that interferes with the movement of the uterus, or presses it downwards, or draws it upwards, or presses it to one side—is an examination upon which I need not enlarge now; but there are one or two points on which I wish to say a few words. In the first place, examining by the vagina in a young unmarried woman with a perfect hymen is often quite needless. One can ascertain all that is necessary by rectal examination. With one finger in the rectum of a woman, one can feel very well the posterior surface of the uterus, and can make out pretty clearly whether there is anything below the brim of the pelvis without examining by the vagina at all. In married women, or in women where it is necessary to make a vaginal examination, the simple vaginal examination only does not, as a rule, afford very much information. You can tell whether the neck of the uterus is in its normal position, whether it is enlarged or whether it is small, whether it is hard or soft, or with any apparent growth from it; but one can get a great deal more information in cases of suspected tumour by combining the internal and external examination, putting one hand on the abdomen, and passing the finger of the other hand into the vagina, feeling the uterus; and then, moving about any abdominal tumour that there may be, one is able to tell pretty clearly whether the uterus is closely connected with any tumour, whether the tumour moves independently of the uterus, or, supposing it does move with the uterus more or less, whether that movement is transmitted or one closely associated with it; whether the uterus itself is enlarged and moves with the tumour, or whether any movement that affects the cervix of the uterus is simply communicated to it.

One may go further than this in combining internal and external examination. By passing a thumb into the rectum and a forefinger into the vagina, one can feel very clearly what is contained in Douglas's pouch; and, on the other hand, putting a thumb of the right hand into the vagina and the forefinger into the rectum, one can feel very distinctly a considerable part of the uterus even to the fundus, and so get a notion of its size and form, and that of anything attached to its exterior either in front, behind, or at the fundus. Supposing this fold is depressed by fluid, or that the small intestines come down lower than usual, on pressing the thumb and the finger together, one gets very clear and distinct information of anything there may be between the uterus and the rectum, or the posterior wall of the vagina and the rectum.

Simon of Heidelberg laid great stress on the combined examination of the bladder and the uterus after dilatation of the urethra, believing that this was not only useful in completing examination of the bladder itself, but also for examining growths in the pouch between the bladder and the uterus. If you have anything formed between the front of the uterus and the top of the bladder, if you dilate the urethra well, you are able to make a very accurate examination, not only of the state of the bladder, but also of anything there may be between the bladder and the uterus. I cannot say I have myself ever found this very necessary, or have got much information from it.

In some cases, where there may be a doubt as to the state of the uterus, and where the cervix is small and one is doubtful what may be its condition, then, if the sponge-tent be introduced, left for a few hours, and the cervix well dilated, one is afterwards able to make more complete and accurate examination. Or, by a combined examination between the abdominal wall and the rectum, one is occasionally able to ascertain that there is a congenital absence of the uterus; for one's finger in the rectum meets the finger depressing the abdominal wall, and that may be sometimes checked also by examination of the bladder.

Ilegar has lately added a good deal to our knowledge of this combined examination, by showing what one gains by pulling the neck of the uterus downwards after fixing it by a long hooked forceps. I have used Sims's hook, as less likely to do harm; and, by drawing the

cervix downwards, one is often very able to ascertain whether the uterus forms part of a tumour or growth, or whether it is separated from it. Combining this pulling down of the uterus with a hand on the abdominal wall and a finger in the rectum, one can get a very accurate idea of the contents of the pelvis; or, entrusting the uterus pulled down by a hook to a careful assistant, who will not pull too violently, with one finger of the surgeon's hand in the rectum and the other hand depressing the abdominal wall, one obtains a very complete idea of what there may be below the brim of the pelvis. Of course, I am supposing that there is not any extraordinary amount of fat on the abdominal wall, or any peculiar rigidity in the vagina. In this way, one is able to recognise any flexions of the uterus, and may be able to replace them without the use of the sound. The examinations may be carried out sometimes with the patient on her back, sometimes on her side; and sometimes one observation is checked by the other, examining first in one position and then in the other; and occasionally, though very rarely, it is necessary to try the knee-and-elbow position, raising the pelvis and lowering the chest. In this position, a heavy tumour falls upwards and forwards, and sometimes a tumour which is low down, and giving great trouble by its pressure on the bladder or the rectum, may, by the mere position of the patient on her elbows and knees, be pressed out of the pelvis, pushed into the abdomen, and in this way great relief is given.

Simon of Heidelberg laid great stress upon the fact that, when a patient is deeply narcotised by chloroform, the whole hand of the surgeon may be passed into the rectum. He showed this to me at Heidelberg one day. A patient was put deeply under the influence of chloroform, and, without much difficulty, I put my whole hand into the rectum and passed it upwards, so that, under Simon's direction, I could quite distinctly feel the left kidney. There was no doubt about it. I got my hand well up into the descending colon and felt the kidney very distinctly. In some two or three cases of very doubtful diagnosis of tumours in women, I have done this in England; but I really cannot say I have gained more information by it than I could gain by the finger in the vagina or rectum, combined with pressure upon the abdominal wall.

All this knowledge one has gained for one's self without any questioning of the patient at all; simply by what one has been able to see, and feel, and hear. From that we must come to questioning. One is obliged to get from the patient some account of the state of her digestive organs and nervous system; the state of her respiratory organs and blood-circulation, all of which is noted in succeeding pages of the note-book. Following the examination of the pelvis, one comes to questions as to the state of the catamenia; when they commenced; when they ceased, if they have ceased, in an old woman; and any history of sudden suppression of catamenia from cold or any other cause; if there be any history of excess or deficiency, or any leucorrhoeal discharges, or discharges of any other kind. A very few questions enable one to fill up this page. The state of the urinary organs requires a little more time, because the urine has to be examined afterwards, unless the patient has previously sent a specimen; and then one gets the ordinary information about the colour and odour of the urine; its specific gravity, and what it contains. Then one comes to the history of the disease for which she applies for relief, and one learns something about any hereditary influence and the fecundity of the females, and the general duration of life in the family; her mode of life, any moral causes, and any previous diseases or accidents: these all require some slight note.

With regard to the early symptoms of the present illness, one likes to know something about the first signs: what was the first departure from good health; whether there has been pain or tenderness, particularly in the groin or the pubic region; any sense of fulness in the vagina, or bearing down of the uterus; any pressure on the bladder; any pain, numbness, or weakness in the thighs or legs; whether there is any constipation; what the state of the breasts was; whether she suffers from much nausea; whether the symptoms were aggravated at the monthly periods; and then as to when the tumour was discovered. Whether she noticed it for herself, or whether, as is likely, it was discovered by some medical man; then the rate at which it enlarged, whether rapidly or slowly, or whether there was any regularity in its enlargement; and particularly whether the increase or diminution was associated in any way with the monthly periods. Women with uterine tumours will frequently tell you that they are distinctly larger before the periods and smaller afterwards; and this helps us a great deal in the diagnosis between uterine tumours and tumours that are not uterine. Then as to movements felt in it, particularly with regard to pregnancy; and then a note of any early treatment often becomes interesting.

Proceeding from the early history of the case to the progressive

symptoms, a note is made of any changes one is told of in the situation of the tumour, and you are very frequently told some odd stories about it. I do not think there is much confidence to be placed in what patients tell you about these things; but still, occasionally, some history of particular changes in situation becomes of importance afterwards.

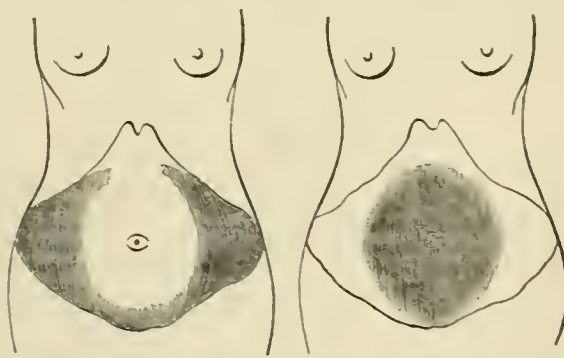
Then with regard to the aggravation of the early symptoms: any increasing difficulty of breathing; any increasing distension of the abdomen or intestines; any history of febrile attacks; any inflammation of a cyst or peritonitis surrounding it; whether there have been successive attacks of peritonitis, and any proof of the presence of peritoneal fluid. Next, if there have been any discharge of any kind, either through the uterus, the vagina, the bladder, the bowel, or through the abdominal wall. All this would have considerable weight at times. And, then, whether there has been any history of a rupture spontaneously, or by a blow or fall. Frequently there will be this sort of history given—that the abdomen gradually became larger and larger, and, at last, the patient suddenly fell down, or got a blow; or that, without any reason at all, there was a sudden alteration in the shape of the abdomen; a sudden attack of acute pain, followed by a large discharge of fluid, either by the kidneys or by the bowel, and then the abdomen flattened down more or less. Then, supposing the patient had been tapped, one likes to get the date of the tapping, and, as far as one can, some report of the nature of the fluid removed, and its quantity.

With all this information, we really ought to be able, and generally are able, to arrive at the heading which follows on the eleventh page of the book—a diagnosis of what the tumour may be; whether the patient has a tumour; what it is; and, generally speaking, I think this can be done at the first visit of the patient. It is very seldom one has to put off a patient and say the case is so doubtful that, until one has examined the urine, or made a more complete examination of something or another, it is impossible to say what it is. That, no doubt, is occasionally necessary; but, as a rule, with the sort of examination I have been trying to describe, we are pretty well able, by the time that we arrive at this eleventh page of the note-book, to make a diagnosis which is fairly and reasonably accurate.

Before deciding as to the treatment, one is able, I think, to form some kind of estimate as to what the probable duration of life will be if the patient is left alone, or if she is simply treated medically, or by palliative methods. We do know what the duration of life is in patients who have abdominal tumours of a sufficient size to interfere with locomotion and respiration—we know it is not long—and we are able to make a kind of approximate guess at what it is likely to be in any particular case.

One can also form a pretty good idea of what the general treatment should be as to diet and mode of life, and medical treatment, if any is necessary, and is able to say what surgical treatment may possibly be required hereafter.

Now, I will suppose we have a patient who has a collection of fluid, either free in the abdominal cavity, or contained in some cyst.



These two diagrams represent the abdomen of a patient containing fluid. We will suppose the central dark shade to represent fluid, and that the rest of the surface is resonant on percussion. The part of the abdomen which contains the fluid is dull on percussion. In this other case, the dark shade shows dulness on percussion on both sides, the patient lying on her back; the centre is resonant on percussion, but the sides are dull. In the first case, the central part is dull on percussion, and the sides are quite clear. The inference would be at once

that, with intestines at the sides and the fluid in the centre, the woman lying on her back, the fluid must be enclosed in a cyst. On the other hand, here the intestines are floating, giving a clear sound on percussion, and the fluid gravitates to the most depending parts of the cavity, and you will see at once the fluid must be free; the intestines are floating about and the fluid is beneath. As a rule, I suppose, in nine cases out of ten, that would probably be the correct diagnosis. You would say here was a case of ascites, and here, where the intestines are pressed backwards and the fluid is in the centre, that will be encysted fluid; and, in a large number of cases, that will be certainly true. But there will be exceptions. There may be so much fluid in the peritoneal cavity that the intestines do not touch the front of the abdomen, or the intestines may be fastened backwards by adhesions; and fluid, which appears to be in front and is in front, is there, not because it is enclosed in a cyst, but because the intestines are held back. And, on the contrary, one may get a case where fluid is enclosed in the front by coils of intestine round it, and is circumscribed in that manner.

I have had a number of preparations brought down to show the way in which adhesions of different portions of the intestine to each other, and to the abdominal wall, may simulate cysts—may become false cysts. The fluid is encapsuled, not by a cyst, but by surrounding portions of intestine or omentum adhering to each other, or to some part of the abdominal wall. Those are our most puzzling cases in diagnosis at times. In the book on *Diseases of the Ovaries* which I published some years ago, there is rather a full account of all this, with which I need not trouble you now. I ought, however, to have mentioned that this fluid, when it is free, will move from side to side as the patient is moved. If she be turned on to her left side, the intestines go to the right; and when she is turned back again, the fluid sinks to the right side, and the intestines float up to the left. So when she is sitting up more or less, and her shoulders raised, the fluid sinks down towards the lower portion of the abdomen, leaving the upper free. If you put a pillow under the hips and lower the shoulders, it at once goes upwards towards the sternum. So, occasionally, one may be deceived by a cyst of moderate size sinking, if it be movable, from side to side as the patient is moved.

The alteration of the position of the patient makes considerably greater and more rapid changes in cases of ascites than in patients with ovarian cysts; the cyst moves about much more slowly than fluid. The superficial veins are more commonly enlarged in ascites than in ovarian dropsy, and, on measurement, the enlargement of the abdomen in ascites is more likely to be symmetrical than in the ovarian cyst; and then, on feeling the abdomen, you are more likely to get a flaccid abdominal wall in ascites, and a more tense wall in a cyst; and very often, in ascites, the greatest girth is at the umbilical level; whereas, in ovarian dropsy, it is sometimes considerably lower.

The way in which the fluctuation is felt is of some importance in ascites, the wave being a wave felt more immediately beneath the hand and not limited so distinctly by the cyst as in ovarian dropsy. Then, a very important question is the way in which the movements of respiration affect the dullness. Supposing one finds that, as the patient breathes deeply, resonance descends, it will often guide you correctly in a doubtful case by a careful examination as to how far the line of clearness on percussion varies or corresponds with the line of fluctuation. When you get distinct fluctuation beyond the limit of dullness—when you get evidently a wave of fluid moving about amongst the intestines—it is pretty certain that the fluid is free. However it may be limited, if one find that one has a distinct wave of fluctuation where one has a resonance indicating the presence of intestine, that must always certainly be free peritoneal fluid, and it is the same whether it is ascitic fluid or fluid escaped from a cyst. The fluid is free, with the intestines floating about. In the other case, you feel the wave of fluctuation limited exactly by the outline of the dullness. One can very seldom go wrong by carefully observing these two points.

I have said just now a doubt may arise where the quantity of fluid free in the peritoneal cavity is so very large that the front of the abdomen is pushed forward far beyond the reach of the intestines, the intestine cannot reach the surface of the abdominal wall, and so one has the fluid in front.

Another point of doubt and difficulty may arise from air having entered an ovarian cyst; for, as an ovarian cyst contains a certain amount of fluid, it may also contain gas, and either the fluid is decomposed after tapping, or there may have been some possible communication set up between the intestine and the interior of the cyst. Sir Thomas Watson records a case in which a patient had a cyst filled alternately with fluid and with air; when the fluid collected to a certain quantity, it seemed to open some valve-like communication with the intestine, emptied itself, and became filled with air. As the fluid gradually reformed, the air was displaced, and the same series of

changes went through again. I have known a case in which air distinctly entered an ovarian cyst through the Fallopian tube—at least, we could find no other means of entrance; and, after death, it was found there was a large and distinct communication between the interior of a large ovarian cyst and the uterus through an enlarged Fallopian tube; there would have been, at any rate, no difficulty in air entering in that way.

Supposing doubt does arise as to whether fluid is free or not, one has always the resource of tapping; and a chemical and microscopical examination of the fluid that is removed will settle any doubt as to whether it is free peritoneal or ovarian fluid, or fluid of some other cyst. Years ago, before Scherer's test to distinguish albumen in its true form from the forms of albumen that chemists do not seem very accurately to determine, it was sometimes extremely doubtful to arrive easily at this determination. But Scherer showed that the albumen which, when coagulated by heat, is redissolved by acetic acid, is a very different albumen from true albumen. Paralbumen and metalbumen are forms that, when coagulated by heat, can be dissolved by acetic acid boiled. One takes a test-tube and boils the fluid, and the albumen is coagulated. You add some strong acetic acid, and give it a good boil, and shake it up, and if the albumen be true, the coagulum does not redissolve in the acetic acid. But supposing it to be paralbumen, then it either dissolves, or forms a whitish transparent fluid, or breaks up into a kind of jelly-like transparent mass, which is quite easily distinguishable from undissolved albumen coagulated by heat. This was supposed to be, for a long time, a pretty certain means of distinguishing between ascitic fluid and ovarian fluid. If the coagulated albumen were dissolved in acetic acid, it was said to be ovarian; and if it did not redissolve, it was said to be ascitic; and that was frequently right. Sometimes part would redissolve and part would not; and then the supposition was that it was a mixed fluid, some ovarian and some peritoneal, that an ovarian cyst had burst and some of the fluid was in the peritoneal cavity, a certain amount of fluid had been poured out, and there was a mixed fluid, which contained some true albumen and some paralbumen.

After a little further examination, one saw that there were exceptions to this rule. For instance, Dr. Schetelig of Hamburg once examined the fluid from a large renal cyst that I had emptied, and he found paralbumen and cholesterine, and no trace of urea, because the proper structure of the kidneys seemed to have been completely destroyed. He found in another patient that the fibrine found at the first tapping of the patient disappeared after another tapping, and he concluded that, at the first tapping, the fluid was removed from the peritoneal cavity, and, at the second tapping, from an ovarian cyst. It is quite possible, in tapping the abdomen, to remove a certain amount of peritoneal fluid and leave an ovarian cyst behind; and that, at another tapping, the ovarian cyst might be tapped and emptied, and the fluid escape.

After the chemical examination of the fluids removed, one has to resort to the microscope, and this we will consider at the commencement of the next lecture.

NOTE ON THE MICROPHONE AND TELEPHONE IN AUSCULTATION.

By JOHN G. MCKENDRICK, M.D.,

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IN common with many others, I have been deeply interested in the recent remarkable inventions of the telephone, phonograph, and microphone, not only because these instruments promise to be useful, but also because I feel convinced that every advance in the obscure region of molecular physics is destined to have an important influence on our interpretation of many physiological phenomena. The results already obtained have given us a new conception of the delicacy of the organ of hearing and of the action of the membrana tympani, and it is interesting for the physiologist to note that the secret of success with the telephone and phonograph is to imitate as nearly as possible the conditions in which the living organ of hearing works.

The ingenious invention of Mr. Hughes, the microphone, has already been employed by Sir Henry Thompson for the detection of minute calculi in the bladder, and not a few are attempting to apply it to ordinary auscultation. During the past fortnight, I have been trying a number of experiments, the results of which may be of interest, and possibly they may suggest improved methods to others.

The arrangement of Mr. Hughes which I have used consists of two little pillars of gas-carbon, having between them a spindle-shaped piece of the same material free to move in sockets in the pillars. The wires

are attached to these pillars, and a weak battery (say one or two Daniell's) and two telephones are put in circuit.* Such an arrangement, if carefully made and adjusted, is very sensitive; and, although the wings of imagination have carried some writers much too far as regards the possibilities of the instrument, still many of the results described may be obtained by anyone with little trouble.

To hear the cardiac sounds, the best arrangement I have devised is the following. The microphone is fixed on the membrane of one of Marey's tambours placed vertically, and connected by India-rubber tubing with the cardiograph, also of M. Marey.† Thus the sounds may be transmitted to a distant telephone. It is important to note, however, that their character is altered. They have a resemblance to the cardiac sounds, but they are different in *timbre*. This effect may be well observed by fixing the microphone to the key-board of a piano. The sounds heard in the distant telephone, when the piano is played gently, are sharp and tinkling, like the sounds produced by a musical box, and without the resonance of the ordinary sound of the instrument.

Respiratory sounds can also be heard. When the cardiograph is placed over the larynx, a whisper is transmitted quite distinctly.

So far as my experience goes at present, the combination of the microphone with the telephone does not reveal to the ear of the auscultator new sounds with which he was previously unacquainted; but it can effect the transmission of sound to a great distance. I can conceive it quite possible that even such feeble sounds as those produced by the heart and lungs might be transmitted for many miles and be correctly interpreted by an educated ear. There is a limit, however, even to the capabilities of the microphone. The intermediate piece of carbon must be free to move, and any vibration communicated through solids, liquids, or gases must have energy sufficient to move the carbon, or, at all events, to exert a strain upon it. If it be too weak to do either, then the telephone will make no response.

In these days of rapid progress, when facts are observed which startle even our most learned physicists, it is unwise to predict or conjecture; but the success hitherto obtained by others is a stimulus to every one to be up and doing.

A CASE OF CHOREA TREATED BY THE SUBCUTANEOUS INJECTION OF CURARA.

By DAVID DRUMMOND, M.A., M.D.,

Physician to the Newcastle-upon-Tyne Infirmary, and Children's Hospital.

A BRIGHT intelligent girl of seven years was brought to the Children's Hospital as an out-patient about the middle of October last, two or three weeks after the commencement of an attack of chorea. She was seen at the out-patient room several times, and treated with bromide of potassium and arsenic, for general chorea. On November 12th, no abatement of the movements having taken place, she was admitted into the hospital about six weeks subsequent to the first appearance of the disease—a period when many children suffering from this affection begin to improve. I had been for some time anxious to try the effect of curara, or woorara, as some name the drug, in chorea; but, as a rule, as is well known, the attack only lasts about eight weeks, and, consequently, any experiment is apt to be fallacious; for what influence in the cure is ascribed to the therapeutic agent is most probably due to the *vis medicatrix nature*. But, in my present case, the disease was evidently not going to run its most usual course, therefore I resolved to try the poison, known for a long time to experimental physiologists, but only recently, I apprehend, to therapeutists; the fact that it has been recommended in hydrophobia having brought it prominently before the profession. With some trouble, I procured two drachms of a one per cent. solution—all the curara that was to be obtained in Newcastle. I commenced with five minims by the mouth, about one-twentieth of a grain of curara, three times a day, and in a few days increased this dose to one-tenth. This was continued for nearly a fortnight, but by this time no improvement had taken place, and all the curara was used. Whilst getting some more, I put her upon a mixture containing three grains of croton-chloral and ten grains of bromide of potassium for the dose, three times daily, which in a few days was doubled—that is, six grains of chloral and twenty of the bromide

* I have not had the opportunity of seeing any microphone made by Mr. Hughes. The first one I saw was in the laboratory of Dr. Burdon Sanderson, about three weeks ago. Those I have worked with were made in my own laboratory.

† Marey's cardiograph is an instrument designed for transmitting cardiac movements to a recording tambour; but it is so suitable for auscultation, that I am surprised it has not been used for that purpose. By attaching an India-rubber tube of suitable length to it, one may auscultate with precision at a distance of many feet. The advantages are obvious.

three times daily. This treatment was continued for about ten days, but without effect, the choreic movements becoming more exaggerated. I now received a second supply of curara, as before, in solution, but this proved to be quite inert; even a quarter of a grain administered subcutaneously produced no physiological effects. I was about to give up trial as hopeless, when Mr. Bolam, chemist of this town, procured a few grains of the solid curara, and made a solution himself for me. It was now about fourteen weeks since the origin of the attack, and still there was no appearance of the choreic movements subsiding. Of this solution I commenced, on January 5th, injecting one-fortieth of a grain subcutaneously, only giving one injection in the day. On the 7th, I injected one-twentieth, next day one-tenth of a grain. On January 9th, one-eighth was used; she was by this time very much quieter; on January 11th, one-fifth, after which she was nearly steady. Two days afterwards, she got a quarter of a grain; after this, it seemed unnecessary to push the administration of so potent a poison any further.

It is very unfortunate that the specimens of curara vary in their strength and quality. Curara found in commerce is a brown-black resinous mass, soluble in water, but very slightly so in alcohol. The best solution for hypodermic injections is an aqueous one; it keeps well, and is, I imagine, less painful when used than either the alcoholic or the water and glycerine solution. One grain to twelve minims of water makes a good solution. The curara should be left in the water for forty-eight hours, and then filtered. The dose seems to be about one-quarter to one-half of a grain, though, owing to the uncertainty of the specimens, it is probably well to commence with a much smaller quantity. Of course, the rationale of the treatment of such affections as chorea, rabies, etc., by curara, depends upon the researches of Bernard, who, in 1844, discovered that the poison paralysed the ends of the motor nerves; and Schiff observed that the sensory nerves have to some extent their conducting power destroyed and reflex action much diminished, but that they are less affected, and after a longer interval, than the motor nerves. Death would eventually occur through paralysis of the respiratory centres, the circulation remaining almost normal. Sir Benjamin Brodie managed to save animals apparently killed by curara, by keeping up artificial respiration until the poison was eliminated.

Curara administered by the mouth seems to have very little effect, but should be injected under the skin; Ludimar Hermann explained this fact by showing that, when the kidneys were cut off from the circulation, physiological effects could be produced as well, though more slowly, through the stomach as by direct introduction into the circulation, the poison being very rapidly eliminated by the kidneys. A curious fact, and one which was well exemplified in my case, is that, even after the muscles are pretty well curarised, they react to electrical stimulus as perfectly as normal muscular tissue does. I compared the electrical reaction of the muscles of the forearm of the child, the subject of the present case, with that of a healthy child, and there was no difference. Bernard laid stress upon this fact, and showed that the muscles of a curarised frog, stimulated by the galvanic current, reacted perfectly; but such was not the case when the current was applied to the nerve itself, the muscle supplied by it refusing to react.

CASE OF LITHOTOMY, IN WHICH AN ENLARGED MIDDLE LOBE OF THE PROSTATE GLAND WAS ACCIDENTALLY REMOVED.*

By CHARLES WILLIAMS, F.R.C.S.,

Assistant-Surgeon to the Norfolk and Norwich Hospital.

THE specimen which I have the pleasure to exhibit to you represents an enlarged middle lobe of the prostate gland, accidentally removed from a gentleman on whom I performed the operation of lithotomy.

The patient was a tall thin man, aged 72, living about ten miles from Norfolk. He had had symptoms of stone in the bladder for upwards of twelve months. A few months before I visited him, he had passed, on one or two occasions, a large quantity of blood in his urine. Of late, he had suffered much from the presence of the stone. He had been greatly disturbed during the night, and had become low-spirited. His urine was found to be quite healthy and free from albumen. His feet were in nowise oedematous; and he could eat freely. There was a loud systolic *bruit* heard over an extended area of the chest, giving rise to no inconvenience. Five years previously, he fractured the neck of his right thigh-bone; ankylosis of the hip-joint resulted from the injury, and he now walks with a perfectly straight and stiff, but shortened, limb.

On July 6th, with the assistance of Messrs. Morton, surgeons, of

* Read before the Norfolk and Norwich Medico-Chirurgical Society.

Aylsham (under whose care this patient had been), I performed the usual lateral operation, and removed a single stone, of an oval flattened shape, weighing five drachms, of uric acid formation. An enlarged middle lobe of the prostate became engaged between the blades of the lithotomy-forceps, anterior to the hinge, and was unconsciously torn off and came away with the stone. There was free arterial hæmorrhage from a deeply seated vessel, which was without much difficulty seen and secured by ligature. A tube was placed in the wound.

On visiting the patient next day, I found him easy and comfortable. There had been no sickness; he had slept fairly well; pulse 64. The wound looked well; the urine was clear, and dropping freely from the tube and abundant in quantity. On the ninth day, he passed the whole of his urine through the penis, and the wound was healing rapidly. Three weeks later, I found him in excellent health, and the wound perfectly healed. He seldom found it necessary to micturate more than once during the night.

REMARKS.—This case presents some points of much interest.

1. The presence of a loud systolic *bruit* is not a pleasant sign in connection with the administration of chloroform, of which my patient inhaled from four to five drachms, and from which he suffered not the slightest inconvenience, either during the operation or subsequently.

2. The fracture of the neck of the right os femoris had resulted in ankylosis of the joint. The limb was immovably fixed in the straight position; therefore it could not be tied up in ordinary lithotomy fashion, but was held by an assistant in a straight direction over my left shoulder. This rendered the performance of the operation somewhat less easy than usual. The parts forming the perinæum were lax instead of being tense, and, in order not to wound the rectum, which was large and flaccid, I passed my left forefinger into the bowel, and retained it until the point of the knife was lodged in the groove of the staff; and, by directing the edge of the knife very obliquely outwards, the rectum escaped injury—an event which, in all probability, would have occurred had not these precautions been adopted. If such an accident had happened, taking into account the age of the patient, I fear the termination of the case would have been unfavourable.

3. The removal of a large portion of the middle lobe of the prostate, though quite accidental, was attended with a happy result. The man was relieved of a trouble which, sooner or later, would have been a source of grievous annoyance to him.

I witnessed the same accident in a case operated on by Mr. Cadge. In the forceps, between the stone and the blades, there came away three masses, which were apparently fibrous outgrowths of the prostate, and which weighed one drachm two scruples. In two months, the wound had healed and the patient was strong and well. Mr. Cadge remarks: "It has happened to me twice before to remove small fibrous tumours of the prostate gland during the operation of lithotomy, and apparently without harm to the patient." (*Transactions of the London Pathological Society*, vol. xiii, 1862.) And he gives the experience of an expert modern lithotomist on this subject, who says: "It has occurred to me, eight or ten times, to bring away portions of the prostate and without noticeable injury to the patient. In more than one instance, it was the prominent third lobe which got between the handles, anterior to the hinge, and was torn off entire; and although I have never known unpleasant results to the patient, and that sometimes he has been benefited in after-life, by having got rid of an useless impediment to a natural function. I would not willingly that such an occurrence should happen, and I try to avoid it by turning the blade of the forceps to the lower angle of the wound as I leave the bladder; but when it does occur, I lay no account by it."

THE POLYURIA OF GRANULAR KIDNEY.

By ROBERT SAUNDEY, M.D. Edin., M.R.C.P. Lond.,
Assistant-Physician to the General Hospital, Birmingham.

DR. GEORGE JOHNSON'S short paper, in the JOURNAL for May 25th, seems to me to call for some response from those who differ from him in the explanation of the facts to which he refers. While admitting the importance of the support Dr. Johnson derives from M. Charcot, in believing the changes in granular kidney to begin in the tubular epithelium, I do not consider M. Charcot's reasoning quite free from objection; and I hope, at some future time, to address myself to that part of the subject. For the present, I am concerned with the latter part of Dr. Johnson's article. Dr. Johnson says: "Dr. Ewald appears to have looked for hypertrophy of the arterioles in the pia mater alone, and therefore his observations are incomplete." "It is probable that the arterioles in other tissues, more especially in the skin, may have been sufficiently hypertrophied to explain the cardiac hypertrophy." Dr. Ewald, in common with most of Dr. Johnson's readers, did not imagine

that it was the part of his theory to exclude certain areas from the "stop-cock" function; but he shall speak for himself. He says: "I have restricted myself to this part (the pia mater of the pons) for many reasons: first, the vessels there are under the same conditions as all the other capillaries of the body which do not lie directly between the heart and the kidneys, so that the changes here found, as far as they are of an universal nature, must affect all the other vessels in the same degree. Secondly, because Gull and Sutton, and Johnson, have found the same changes in the vessels of the skin and intestines as they originally found in the cerebral vessels; so that if I could verify their results on one or the other side, in a limited region, the data would rightly hold for the whole vascular area. Finally, the vessels of the pia mater, as has been said, give the best preparations, and are besides more investigated and studied under pathological conditions, so that it is easier to distinguish the process in question from accidental or different pathological changes." (Virchow's *Archiv*, Band lxxi, Heft 4, page 458). In the second place, Ewald's argument, that "the absence of cardiac hypertrophy in amyloid and atheromatous thickening of the arterioles is against the vascular changes as causes of the heart-affection", must be taken as rather directed against the views of Gull and Sutton than against those of Dr. Johnson. Dr. Johnson goes on to say that "it has been suggested that the polyuria of granular kidney is the result of increased pressure in the Malpighian capillaries, consequent on obstruction in front". The existence of obstruction in front of the Malpighian tufts is proved by Thoma's researches. He found, by making careful coloured injections, that the fluid ran well into the tufts, but beyond them the capillary network had undergone destruction, and the efferent vessels were often obliterated (Virchow's *Archiv*, Band lxxi, Heft 3 and 4). Dr. Johnson says: "Increased pressure on the Malpighian capillaries would cause, not a copious secretion of urine, but an abundant transudation of albumen"; this is scarcely a fair assertion, as the transudation of albumen is the result of the high pressure being carried to an excessive degree. It is a generally accepted physiological fact, that the secretion of urinary water is in direct proportion to the pressure in the glomeruli. (Foster's *Text-Book of Physiology*, page 278, *et seq.*) He then enforces this statement by telling us that, "when, as a result of valvular disease of the heart, the return of venous blood from the kidney is impeded, the increased pressure on the Malpighian capillaries is associated with a scanty secretion of highly concentrated urine, which, too, is often copiously albuminous". In this he overlooks altogether the fact that the rate of flow through the renal vessels is much diminished in cardiac disease; while it is at least more than probable that the blood accumulates, not in the capillaries of the tufts, but in the venous plexuses on the farther side of them. It is not pretended that the blood-pressure in the renal glomeruli is the sole cause of the polyuria of the granular kidney; for while, on the one hand, it is impossible to believe that active secretion could be going on from a gland the secreting part of which was in a state of anæmia, the experiments of Heidenhain, Ustimowitsch, and Grützner have proved the influence which urea, urates, etc., circulating in the blood, have upon the renal function, a fact which Dr. Johnson most properly regards as an important factor in the production of polyuria; but which the experiments of the last quoted observer prove to be totally opposed to Dr. Johnson's view, that the arterioles of the kidney are firmly contracted.* Grützner (Pflüger's *Archiv*, Band xi) found that, when he injected saltpetre into the blood, the renal nerves on one side only being divided, copious urinary secretion followed equally from both kidneys; but, when the general blood-pressure was raised by suspension of the respiration (with contraction of the arterioles, of course, throughout the body), the secretion of urine sank at once in the kidney the nerves of which were undivided; proving that the contraction of the renal arterioles, imagined by Dr. Johnson, is altogether inconsistent with the copious diuresis characteristic of this malady.

There is still one more anatomical point to which I must refer, and that is the increased permeability of the renal vessels which Thoma observed. This change was not susceptible of anatomical demonstration, but was very marked, even in parts of the organ apparently little affected by the degenerative process. The observations of Thoma and Ewald seem to weigh equally against the theories of Dr. Johnson and of Gull and Sutton; for their very careful measurements prove that the small vessels of the kidney have their lumina generally widened. If it could be proved, by careful injection, that there is anything approaching the nature of capillary atrophy present throughout the body, it would be a satisfactory solution of the problem; at present, I do not believe we have any precise knowledge of the nature of the general obstruction which leads to cardiac hypertrophy and increased

* "There is evidence that the renal arterioles in these cases are more firmly contracted and more decidedly hypertrophied than those of any other organ or tissue." *Lumleian Lectures on the Muscular Arterioles*, p. 44.)

blood-pressure; but I think it is proved that, so far as the kidney is concerned, there is no shutting off of the blood from the glomeruli; and it is probable that, throughout the body, the obstruction is really in the capillary network, though whether that depends on structural alterations in the vessels or altered relations of osmosis between the intravascular and extravascular fluids, I will not attempt to decide, although the latter seems to me, in the absence of any anatomical facts, to offer a plausible explanation.

SOME INDICATIONS FOR THE DIAGNOSIS AND TREATMENT OF AORTIC ANEURISM.*

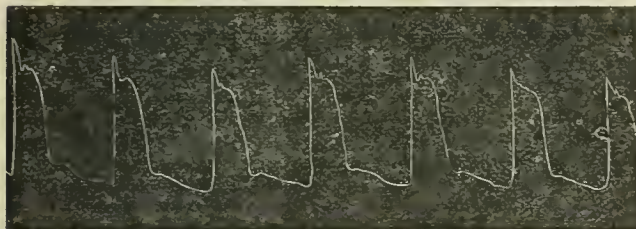
By F. A. MAHOMED, M.D.,

Medical Registrar to Guy's Hospital; Assistant-Physician to the London Fever Hospital; etc.

[Concluded from page 817 of last number.]

So far, two classes of cases have been considered: one in which both pulses were affected by the aneurism; the other in which the right was alone or chiefly concerned. A third class remains, that in which the right is unaffected while the left presents aneurismal characters; these cases are due to aneurism of the transverse arch or about the root or in the course of the left subclavian. Fig. x illustrates the

FIGURE X.—Aneurism of Transverse Aorta, slightly involving Orifice of Innominate (Mr. C. Heath).



1. Right. Pressure, 3 ounces. Indicates Hypertrophied Heart and very Degenerate Arteries.

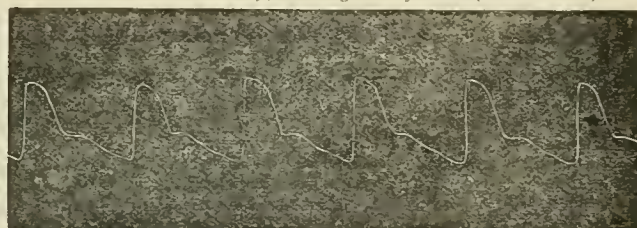


2. Left. Pressure, 1 ounce. Upstroke rather sloping. Percussion almost disappeared. Signs of Aneurism.

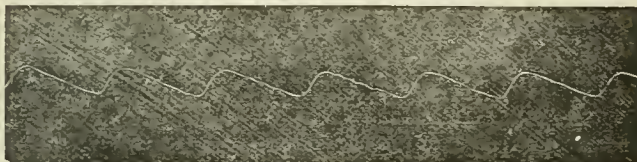
tracings obtained from a patient under the care of Mr. Heath with aneurism of the transverse part of the arch, which also slightly involved the orifice of the innominate. The chief disease, however, was situated in the transverse arch. The right radial tracing has no characters imparted to it by the aneurism, except a slight vibration or thrill imparted to it and visible on the summit of the tidal wave. The well-marked percussion, the height of the upstroke, the sustained and square-topped tidal wave, and the sudden collapse of this wave—all indicate an hypertrophied heart and a very degenerate and almost aneurismally dilated aorta, conditions which were found at the *post mortem* examination to have been present. The left pulse has many modifications produced in it by the aneurism; the upstroke is slightly sloping, percussion has disappeared, and all the waves are less distinct. The tracings would have indicated, had the question of distal ligature been raised, that the vessels on the left side of the arch should be tied if any operation were undertaken, which, however, the signs of general arterial disease exhibited by the right pulse rather contraindicated. In this case, the indication thus afforded, though correct, inasmuch as the chief sac of the aneurism was beyond the innominate and involved the transverse arch, still practically, as the innominate actually arose from immediately within the opening of the aneurismal sac, it would have been probably better to promote coagulation in this vessel, which might have extended into the sac, with which it was directly continuous.

A better illustration of the manner in which the left pulse may be

FIGURE XI.—Illustrates the Typical Effect of Aneurism on the Pulse. Aneurism of Left Subclavian Artery, involving Arch of Aorta (Dr. Broadbent).



1. Right. Pressure, 3 ounces. Indicates a somewhat Hypertrophied Heart and Degenerate Vessels.

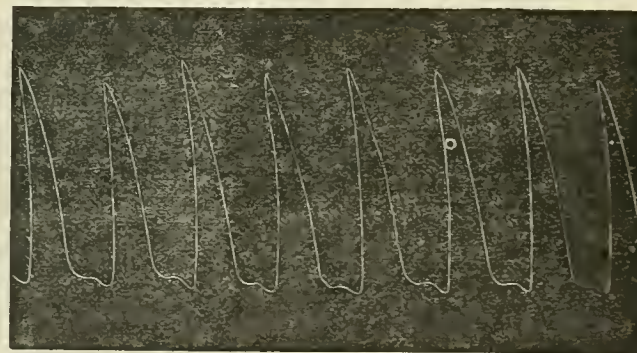


2. Left. Pressure, 2 ounces. Shows obliteration of all the Waves, sloping Upstroke, and uninterrupted Downstroke; the result of Aneurism directly in the course of the Vessel.

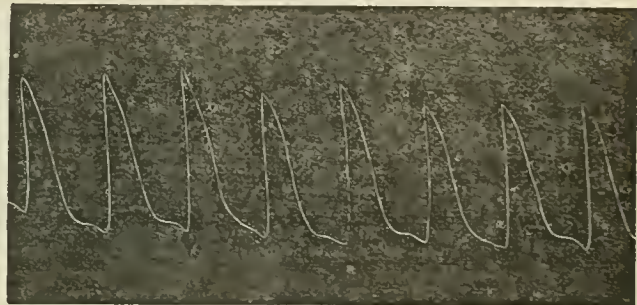
affected is seen in fig. XI, obtained from a patient under the care of Dr. Broadbent, but who subsequently died in St. George's Hospital. The physical signs in this case were those of an aneurism of the descending part of the arch, which, indeed, was the seat of the disease; but it extended as high as, and involved the origin of, the left subclavian; the only indication of this was afforded by the pulse, which is seen to be typically aneurismal on this side.

Occasionally, the mere proximity of an aneurism will affect the blood-stream, although it may not actually pass through the sac; so was it in a case, under the care of Dr. Broadbent, from whom the tracings in fig. XII were obtained. This was a case of aneurism

FIGURE XII.—Aneurism of Descending Arch of Aorta (Dr. Broadbent.)



1. Right. Pressure, 2 ounces. Merely indicates a Large and Hypertrophied Heart, with Aortic Regurgitation.



2. Left. Pressure, 7 ounces. Shows a considerable diminution in size of Pulse and of all the Waves.

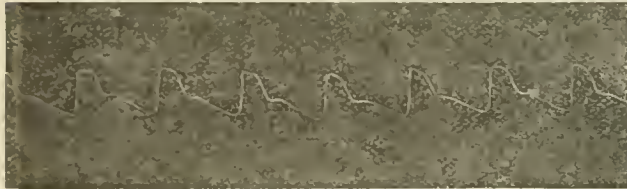
of the descending part of the arch, beyond the origin of the left subclavian. The left pulse is, however, distinctly affected by the aneurism, which appears to have partially diverted the stream from the left subclavian; the upstroke is shorter, the percussion-wave much diminished,

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

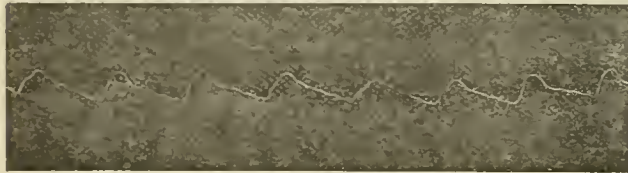
and the dicrotic recoil less marked than in the right pulse, which is that of aortic regurgitation with hypertrophied heart. These tracings might have been misleading, as they would rather indicate an aneurism before the origin of the left subclavian, but the physical signs negatived this.

The tracings represented in fig. XIII were obtained from a very remarkable case lately in Guy's Hospital under the care of Dr. Hilton Fagge. In this patient, the only physical signs were those of pressure on the left bronchus, and it was impossible to say whether this was due to

FIGURE XIII.—Aneurism of Descending Arch, affecting Left Pulse.



1. Right. Pressure, 2 ounces.



2. Left. Pressure, 3 ounces.

aneurism or to some other cause. Under these circumstances, the tracings of the pulse afforded actually the only guide on which to found a diagnosis; they were characteristic of aneurism. Neither pulsation, tumour, *bruit*, or area of dulness could be detected, and the general symptoms were only cough and pleurodynia. The sphygmographic diagnosis was confirmed three months afterwards by a *post mortem* examination in which an aneurism of the descending part of the arch was found projecting forwards and compressing the left bronchus. That an aneurism in this position should have so greatly interfered with the left pulse appears at first unlikely, but a careful search failed to detect any other cause for its diminution, and a consideration of the experimental results illustrated by fig. IV explains it; moreover, I have met with other similar cases.

In aneurism of the lower thoracic or abdominal aorta, the sphygmograph will not aid the diagnosis beyond affording a very valuable indication of the amount of general arterial disease and cardiac hypertrophy. In a recent discussion at the Clinical Society on the method of treating aneurism of the aorta by distal ligature of one or other of the large vessels taking origin from the arch, two points were especially commended to the attention of physicians: first, the importance of an accurate diagnosis of the exact position of the aneurism, and its relation to the great vessels; second, the necessity of ascertaining the extent to which general arterial disease exists. The preceding cases will, perhaps, permit a judgment to be formed as to how much the sphygmograph may assist in forming a conclusion on these points in any case. It is an assistance that we cannot afford to neglect. Physical signs are all alike liable to mislead in some cases; there is not one infallible; nor can the sphygmograph be considered so. In a few cases, it will give little or no help; in others, it will rather mislead; but in by far the larger proportion it proves useful of the greatest value. It may be well if a few instances of fallacy in a sphygmographic diagnosis be given.

FIGURE XIV.—Fallacy in Diagnosis from Deposit of Fibrin in Aneurism. Aneurism of Innominate Artery, nearly full of Clot, producing scarcely any alteration in Right Radial Pulse (Mr. Cooper Forster).



1. Right. Pressure, 1 ounce. A very slight diminution of Percussion and Tidal Waves.



2. Left. Pressure, 1 1/2 ounces. Indicates Hypertrophy of the Heart (which weighed 25 ounces).

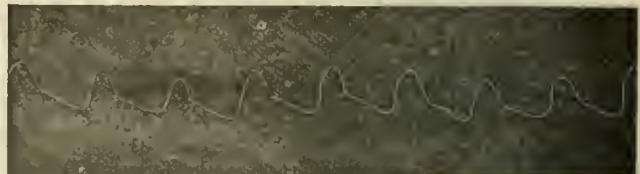
Fig. XIV illustrates one, which, however, under some circumstances may rather be taken as a most valuable indication. It proves that the presence of a large quantity of clot in an aneurismal sac may remove all indications of aneurism from the pulse. This is exactly what might be anticipated on theoretical grounds. The aneurismal pulse obtains its character from the presence of a more or less elastic sac, which diverts the blood-stream and absorbs the head-wave. Let this sac be filled up with firm clot, or its walls be even greatly thickened, and it must cease to produce the same effect on the stream. If, then, a pulse have been aneurismal, and gradually return to the normal, we are fairly entitled to assume that a deposit of fibrin is taking place in the sac. The tracings in fig. XIV were obtained from a patient under the care of Mr. Cooper Forster, who died shortly afterwards. A large aneurism of the innominate was found, having an opening into the aorta the size of a five-shilling piece. It involved half an inch of the carotid, but none of the subclavian. It was nearly full of old laminated clot, resembling soaked brown paper. The aorta was very bad, rough, and much calcified. There was great hypertrophy of the left ventricle, the heart weighing twenty-five ounces. In this case, the tracings from the two radials are almost exactly similar; that from the right being very slightly the smaller of the two, and having its percussion-wave a little diminished, but scarcely enough to found a diagnosis upon. Doubtless this pulse had presented much more marked aneurismal characters before the deposit of fibrin had taken place; but the patient was not then under observation.

Another fallacy occurs from the pressure of the aneurismal sac upon a vessel not itself affected. This is seen in the tracings in fig. XV,

FIGURE XV.—Fallacy in Diagnosis from Pressure of Tumour on Adjacent Vessel. Aneurism of Transverse Arch pressing upon Innominate, which was itself dilated (Mr. C. Heath).



1. Right. Pressure, 1 ounce. Highly Aneurismal, and smaller than left, suggesting Aneurism of Innominate as chief lesion.

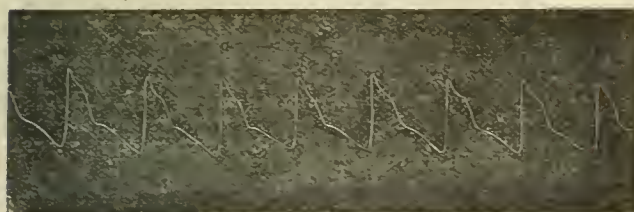


2. Left. Pressure, 1 ounce. Also highly Aneurismal from Aneurism of Transverse Arch.

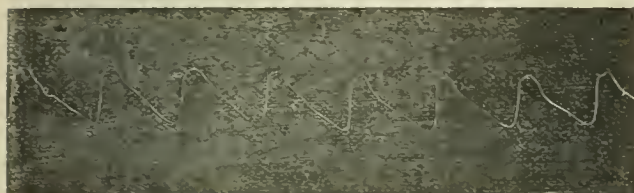
obtained from a patient under the care of Mr. Heath. The tracings from both radials are highly aneurismal in their characters, that from the right being most so. A diagnosis was made of aneurism of the innominate involving the arch. At the *post mortem* examination, however, an aneurism of the transverse arch was discovered, compressing the innominate, which ran in its posterior wall, but was not itself aneurismal.

Again, the accidental plugging of a vessel beyond the aneurism may lead to error. The tracings exhibited in fig. XVI were obtained from a case in St. George's Hospital under the care of Mr. Rouse. The

FIGURE XVI.—Fallacy in Diagnosis from Accidental Plugging of a Vessel beyond the Aneurism (1). Case of Aneurism of Root of Right Common Carotid (Mr. Rouse).



1. Right. Pressure, 3 ounces.



2. Left. Pressure, 3 ounces. The Left Tracing is much the more Aneurismal; but this is probably due to plugging of the Left Subclavian Artery, as there is no pulsation in the Brachial.

physical signs in this case—that of a young woman aged 18—indicated aneurism of the right common carotid. The tracings show a great diminution in, and aneurismal character of, the left radial pulse, which, if taken alone, would have led to a diagnosis of aneurism of the transverse arch, or about the origin of the left subclavian. No pulsation was discoverable, however, in the left brachial; and it is probable that this vessel had become plugged by an embolic clot. There does not appear any probability of an opportunity of examining the actual condition in this case; which, therefore, cannot be considered as altogether certain.

Diminution in calibre of a vessel, due either to endarteritic occlusion or to a tumour outside the vessel, may cause a diminution in the radial pulse resembling that produced by aneurism. Fig. XVII illustrates the radial pulses in a case of this description under the care of

FIGURE XVII.—Arteritis partially closing Subclavian Artery and simulating Aneurism. Left Subclavian Contracted to size of Radial (Dr. Moxon).



1. Right. Pressure, 3 ounces.



2. Left. Pressure, 3 ounces. Showing diminished Pulse-waves, especially percussion.

Dr. Moxon—one which I have already quoted in a former paper on this subject. The tracings, together with a *bruit* heard over the origin of the left subclavian, led to a suspicion of aneurism. Dr. Moxon nevertheless always regarded the case as one of angina pectoris, with aortitis: a diagnosis which proved to be correct, the difference in the radial pulses being well explained by endarteritic thickening found about the origin of the left subclavian, which reduced its lumen to that of the radial.

Other causes of fallacy might be enumerated. Among them are certain nervous conditions, affecting the vaso-motor nerves of one side and often accompanying hemiplegia. Anatomical abnormalities in the vessels of a limb are frequent causes for a diminution in the size of a radial pulse; but these can generally be detected by careful examination. By far the most abundant cause of error will be found, by the inexperienced, to be inaccuracy of observation from an imperfect application of the instrument. This practice alone can prevent; and that, combined with patience, will reduce it to an extremely rare mistake.

Time will permit but few remarks to be made on the indications for treatment afforded by the sphygmograph. If the relation of the condition of arterial tension to aneurism be considered, the value of the sphygmograph, which is undoubtedly the best and surest gauge we possess of this condition, cannot be overlooked. The amount of fullness or distension of the arterial system is necessarily of the first importance in the treatment of aneurism. Our aim should always be to reduce it as much as possible: in other words, to reduce the arterial tension. This is, in fact, the practical result of the admirable treatment laid down by Mr. Tuffnell. By tracings taken at intervals during the treatment of a case, it is possible to estimate the effect of our treatment in this direction with an exactness not often obtainable in medicine.

The methods which prove most efficacious in reducing tension under all conditions are as follows: a carefully regulated and but slightly nitrogenous diet; free purgation; free sweating by hot-air baths and other means; in some cases diuretics; and, under all circumstances, rest. Certain drugs, such as jaborandi, nitrite of amyl, and chloroform, have the property of reducing arterial tension. They do not, however, act in the same manner as the methods just mentioned, which actually reduce the volume and alter the character of the blood. These drugs act in a more or less temporary manner by relaxing the muscular coat of the arteries, and thus reduce their fullness by making more room for the blood they contain. Such remedies as these are especially indicated when temporary relief from an exacerbation of pain is required. Sudden reduction of tension is a certain method of relieving this, the most severe pain of aneurism, as surely as a sudden increase of tension, from exposure to cold or partaking of a heavy meal, will produce it. Other drugs are employed in the treatment of aneurism from their action on the circulatory system. Of these, aconite and veratrum may occasionally be employed with advantage to diminish the force of the cardiac pulsations. This is an effect which can be well demonstrated by the aid of the sphygmograph; but I have been unable to detect any effect on arterial tension produced by them. On the other hand, certain other drugs sometimes employed as vascular depressants are, I believe, fraught with the greatest danger, from the great increase of arterial tension produced by them; such especially are ergot and digitalis. Ergot, by contracting the muscular coat of the arteries, increases the tension as surely as others already mentioned decrease it; while digitalis not only increases the tension in a similar manner, but also so greatly increases the force of the cardiac contractions that an aneurism with thin walls might very readily be ruptured by its use. I have seen a pulse not only greatly increased in tension, but actually doubled in volume, by this drug. It is true that, when pressed rapidly to produce its extreme effect, the heart may be greatly slowed, and reduced pressure on the sac be possibly obtained; but I think the experiment too dangerous to be often justifiable. The drug which appears to produce beneficial effect in many cases of aneurism—I mean iodide of potassium—does not produce, as far as I have observed, any effect on the circulation appreciable by the sphygmograph; but there can be no doubt that it is most likely to act with advantage when the arterial tension has been reduced as low as possible. There appears to me, therefore, but little doubt that the most hopeful and rational treatment of aneurism is first to reduce arterial tension; to enforce absolute rest; and then to employ iodide of potassium with a view of causing contraction of, and therefore coagulation in, the sac. If these methods be not successful, appeal must then be made to the surgeon, and the questions of galvano-puncture and distal ligation be discussed.

Since this paper was written, I have employed another aid to the sphygmographic diagnosis of aneurism, which will, I think, prove of very great value. I have long desired a simple and effectual method of obtaining simultaneous tracings of the heart and pulse, by which it would be possible to measure "delay" in transmission of the pulse wave. Mr. Garrod, some years ago, made an ingenious modification of the sphygmograph, by which it was possible to obtain such tracings for physiological purposes; but, owing to the constrained position of the arm and for other reasons, his method was not well adapted for clinical observations. Dr. Burdon Sanderson has lately had constructed a miniature tambour, exactly similar to that which Marey employs for his polygraph; this can be attached to the frame of the sphygmograph, and made to record the movements of its lever on the slide immediately above those of the sphygmographic lever. The tambour is connected by a piece of India-rubber tubing with one of Dr. Sanderson's cardiographic air-pads, which is applied over the point of cardiac impulse and transmits the cardiac movements to the writing lever of the tambour. By this means, very excellent simultaneous tracings of the heart and pulse can be obtained.

Frequently, in cases of aneurism, the pulse is so slightly affected that it is impossible to state with any degree of certainty that its characters are due to the presence of an aneurismal sac, or that it has in any way been modified by it. If, however, we can demonstrate a greater delay occurring in the transmission of the pulse-wave on one side than on the other, it will go far towards establishing a diagnosis of aneurism.

There are several other interesting points in cardiac pathology upon which I have already obtained fresh light by this means; an account of these, however, I must reserve for a future occasion, that they may meanwhile be confirmed by further observations.

CLINICAL MEMORANDA.

MICROSCOPIC ORGANISMS IN MEASLES AND OTHER DISEASES.

IN reference to Dr. Braidwood's interesting paper on the microscopic characters found in tissues affected by measles, I wish to state that I observed bodies probably similar to those which he describes in the aqueous vapour of the breath of two cases of measles, and the same organism, which I called a "small-celled conferva", in the breath of a case of whooping-cough. A straight-celled confervous growth was also found in the breath of a case of diphtheria. These bodies were described in a paper "On the Organic Matter of Human Breath", read before the Literary and Physiological Society of Manchester in the year 1869, and published in their *Transactions* for that year. The paper was also published in the *Journal of Anatomy and Physiology* for May 1870. I did not venture to assert that there was anything specific in these organisms; but Dr. Braidwood's discovery of similar bodies in the lungs and liver would tend to prove that they have some important relation to the diseases in question.

ARTHUR RANSOME, M.D., Manchester.

CHOLECYSTOTOMY.

IN the BRITISH MEDICAL JOURNAL of June 8th is the record of a remarkable case in which Dr. J. Marion Sims performed an operation for the relief of an obstructed gall-bladder. Dr. Marion Sims says, in his report of the case: "The question of surgical interference has more than once been raised, and recently Dr. Handfield Jones has revived the question in the *Medical Times and Gazette*, March 9th, 1878, page 247." It will interest Dr. Sims to know that "the advisability of an operation for the removal of gall-stones" was raised in the case of a lady seen by Mr. Maunder, in consultation with me, in October 1875, a full account of which will be found in the *Transactions of the Clinical Society of London*, vol. x, 1877, in a paper by me, which Mr. Maunder communicated on this very subject. Mr. Maunder had, previously to seeing the patient, practised the operation on the dead subject after the method which he had some time previously made known to the profession under the name of gastroenterotomy, or artificial anus in the small intestine. On the occasion upon which Mr. Maunder saw the patient with me, no tumour could be found in the region of the gall-bladder; and he, therefore, declined to operate at that time. I had frequently felt the gall-bladder in this case, containing some large hard substance—the stone found after death; but, on the day of Mr. Maunder's visit, it could not be felt. Others besides myself had felt it. To those interested in this subject, the whole history of my case, the *post-mortem* examination, the description of his proposed operation by Mr. Maunder, and the discussion upon it at the Clinical Society, will be found at length in the BRITISH MEDICAL JOURNAL of November 4th, 1876, page 604.

I think it is only fair to add that, from the above dates, the original idea of giving this operation a practical form is evidently due to Mr. Maunder.

FREDERICK H. DALY, M.D., Dalston.

OBSTETRIC MEMORANDA.

PREGNANCY WITH UNRUPTURED HYMEN.

I WAS summoned by a midwife the other night to see a case of protracted labour. She informed me that she could not feel the presentation, though she had been in attendance nearly twelve hours, and the pains were frequent and active. The patient was a strongly built, very stout woman, aged 29, in labour with her first child. I found the vulva unusually small, and the vagina was closed at a short distance by a dense concave membrane, with a central opening just large enough to

admit the point of the finger. By steady pressure, which caused considerable pain, I passed first one and then two fingers through the opening, and so reached the os uteri, which was high up and only slightly dilated, with the head presenting. It was some time before I realised the fact that this septum was the hymen, so firm and ligamentous was its texture, and its central perforation so small and rigid. I decided to wait and see how far the natural efforts would succeed in overcoming the unusual obstacle; and I had the satisfaction of learning that the labour terminated in eight hours after my visit, the septum having yielded rapidly before the advancing head.

HENRY TAYLOR, Guildford.

NOTE ON PASSING THE UTERINE SOUND.

I HAVE seen certain cases in which it was remarked to me that "the uterine cavity was directed to the left side, and that the sound would not pass". In most instances, the difficulty has disappeared when I have turned the patient over upon her right side. Where the cavity is directed forwards, the woman is, of course, placed upon her back. This little manoeuvre has succeeded sometimes when I failed to restore the normal position by raising the fundus by my fingers in the vagina.

I think the practical bearings of this note, as regards both diagnosis and treatment, are obvious.

J. HICKINBOTHAM, M.D., M.R.C.P.Ed.,
Physician to the Birmingham and Midland Hospital for Women.

COMPLETE INVERSION OF THE UTERUS FOLLOWED BY PUERPERAL HYSTERITIS.

ON Tuesday, May 21st, I was called to Mrs. T., aged 23, multipara. She had been delivered on May 19th by a midwife of a living child. There was *post partum* hemorrhage, which was controlled by the midwife. The patient complained of great pain until May 21st, up to which date the bowels had not acted, and the urine had only passed in small quantities. She said "something wanted to come away". On Thursday afternoon, whilst at stool, she felt something come down; the midwife, taking it for a dead child, tried to pull it away. Failing in this, she sent for me. I found the patient apparently moribund and quite blanched. On examination, I found the uterus inverted and extruded beyond the vulva. I attempted reduction, but failed. A few hours later, at a subsequent visit, after having got the vagina well on the stretch, I succeeded in effecting the reduction. I gave a grain of morphia hypodermically, and left. During the next four days, the temperature rose to 104 deg., there was great pain in the region of the bladder, and an extremely offensive discharge from the vagina. The patient is now doing well.

W. H. WRIGHT, L.K.Q.C.P.I.

SURGICAL MEMORANDA.

AURAL FURUNCULI.

THERE is a sign connected with boils in the meatus auditorius externus which, though very distinctive and highly important in a medico-legal point of view, has never, to my knowledge, been sufficiently dwelt upon by any writer upon ear-diseases, although every one conversant with these affections must have noticed it. I allude to the peculiar stain left upon the pillow-case by the thickened and comparatively scanty discharge that in some measure characterises a furunculus from an abscess. I have noticed it especially in children. The appearance presented by a pillow, the morning after a boil in the meatus has burst, is sufficiently characteristic to enable one to divine the nature of the affection from which the patient has suffered, for the pillow-case will be found studded over with stains so closely resembling linen-covered buttons, such as are worn on night-shirts, as to deceive, at a distance, the most clear-sighted. The thickened drop of discharge falls entire from the meatus upon the cover of the pillow, upon which the more liquid portion of the discharge spreads, leaving in the centre the more inspissated; this dries, and in drying gives, at a distance, an almost exact image of the shank of a button, the disposition of the surrounding stain rendering the appearance still more delusive. The subjects of the affection being rather restless in their sleep, roll their heads upon the pillow, so that by the morning it often happens that no two of the markings run together, but each one is separate, thereby rendering the resemblance to buttons additionally striking.

These umbilicated markings, especially if there be many of them, are a positive characteristic of the affection in question.

ROBERT T. COOPER, M.D.Dub.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

GUY'S HOSPITAL.

THREE CASES OF MALIGNANT PUSTULE OR CHARBON.

(Under the care of Mr. DAVIES-COLLEY.)

CASE I. (Reported by Mr. P. JACKSON.)—E. M., aged 43, a waterside labourer, was admitted into hospital on November 22nd, 1873, with the following history. He had never drank hard, and had been for two years a total abstainer. He had always enjoyed good health. For the last two or three months, he had lived badly. One week ago, he noticed a small pimple behind the left angle of the lower jaw. Four days ago, he began to feel ill. His appetite failed; he could not sleep; and his neck swelled rapidly. Two days ago, he began to suffer occasionally from difficulty of breathing.

On admission, the patient was anemic and weakly in appearance. One and a half inches behind the left angle of the lower jaw there was a slightly elevated patch of indurated tissue, and in the centre of this there was a thin dark scab, bordered by a purplish-red zone, around which the skin was of a pale yellowish tint. From ear to ear, beneath the chin, there was uniform swelling. The skin over it was somewhat reddened. There was no superficial œdema, and no separately enlarged glands could be felt. Œdema and a semi-fluctuating condition extended as low as the axillæ and nipples. The pulse was 110, very weak; the temperature 100.5 deg.; the tongue dry. A mixture containing iron and quinine was ordered him, with brandy and plenty of fluid nourishment.

November 23rd. He had had a very bad night, suffering constantly from vomiting. The swelling was extending to the face. Respiration was again troubled. The pulse was quick and hardly perceptible; the temperature 99.1 deg.; the extremities were cold.

November 24th. Respiration was very difficult. Tracheotomy was performed, which gave him for a time considerable relief. At 3 P.M., he died.

At the *post mortem* examination, which was made by Dr. Hilton Fagge, the starting-point of the disease was still marked as a purple patch, about the size of a penny, a little behind the left angle of the jaw. On cutting through this, the tissues beneath were found to be brawny and hard, and infiltrated with inflammatory products, but not in a greater degree than the rest of the neck and the upper part of the chest. Nowhere was there any tendency to suppuration. The muscles beneath were softer than normal. The facial and jugular veins were healthy and free from clot. The œdema extended probably along the planes of the cervical fascia, so as to reach the base of the tongue, the tonsillar and faucial regions, all of which were extremely œdematous. The entrance of the larynx was also very much swollen, and the tissues in the ventricles of the larynx were likewise œdematous, bulging above the vocal cords, which were free. The viscera were healthy, with the exception of the heart, in which there was some wasting of the musculi papillares.

CASE II. (Reported by Mr. ROWBOTHAM.)—J. F., aged 33, a worker in the tanyards amongst the hides, was admitted into hospital on December 20th, 1873. His health had always been good. For six years he had been an abstainer from alcoholic drinks. He had fed well, and worked until the day of admission among dry hides, which were often very offensive. Five days before admission, he felt an itching sensation on his chin. He scratched the place, and soon afterwards the swelling came, which gradually enlarged, without producing any constitutional disturbance.

On admission, he was well nourished, but somewhat anemic. In the middle of the tip of the chin there was a roundish black scab, and around this a crop of pearly vesicles. The adjacent skin was red and firm to about an inch from the edge of the central scab. The indurated tissue was somewhat elevated above the surrounding skin, but without any definite boundary. There was no evidence of suppuration or glandular infection. The temperature was 98.5 deg., and the general health good. Chloroform was administered, and nitric acid applied to the scab. As this produced little effect upon the indurated tissues, Mr. Davies Colley proceeded to excise the whole patch. No pus was found. The wound was then filled with chloride of zinc paste. No constitutional disturbance followed the operation. In a week, an eschar came

away; the wound granulated up rapidly, and, on January 8th, the patient went out well.

CASE III. (Reported by Mr. EWEN.)—G. J., aged 27, wharf-labourer, was admitted into hospital on April 7th, 1875. He had always enjoyed good health. On April 1st, he was landing some hides on a wharf, when he noticed a pimple upon his left cheek, which pained him. He scratched it, and the next day the pimple became larger. He went to a druggist, who gave him some ointment to rub into it. On the 4th, it became worse, and he again applied to the chemist, who strapped it up, and gave him some more ointment to rub in. On the 5th, when he awoke, the left side of his face was very much swollen. Fresh pimples had formed, and the glands under the jaw were painful and enlarged. He still went to work. The pimples turned black, and fresh ones appeared. The pain increased and extended to the back of his head.

On admission, his general health was good. There was a slightly elevated black scab on his left cheek, surrounded by small vesicles with red indurated bases. The skin around was red and infiltrated. There was no constitutional disturbance. Mr. Davies-Colley at once excised the whole of the indurated tissue, and filled up the wound with chloride of zinc paste. The patient would not have chloroform. Lint, soaked in carbolic oil, was then applied, and ten grains of quinine were ordered to be taken three times a day. On the 9th, the swelling of the glands had somewhat subsided. On the 13th, the slough separated, leaving a healthy granulating surface two inches in diameter. The swelling of the glands was diminished. He went out on the 30th, with a granulating wound of the size of a shilling; otherwise well. This patient stated that similar affections had occurred before among his fellow-workmen, and had been rapidly fatal.

Mr. Davies-Colley is indebted to his friend and colleague Mr. Jackson, who was at that time house-surgeon, for part of the reports of two of the cases.

REMARKS.—The disease, of which these three cases are examples, appears to be very rare in this country. Mr. Davies-Colley has, however, seen several other instances of it among the surgical out-patients at Guy's Hospital. This is probably due to the neighbourhood of the great leather-works in Bermondsey. In two of the cases described, there was a history of the patient having recently handled hides. The third was not improbably due to the same cause; but, unfortunately, the history only states that he had been working at one of the adjacent wharves. All the cases are very different from facial carbuncle, with which the disease has been often confounded. The absence of suppuration, and of the numerous openings characteristic of carbuncle, together with the presence of the black central scab, enable the surgeon to distinguish it readily from this affection. Occasionally, a primary syphilitic sore on the face may produce great swelling and induration, with a dark-coloured central scab. In such cases, also, there is very extensive enlargement of the submaxillary lymphatic glands. The rapidity, however, with which the charbon appears and grows, the history of infection with hides, and the great constitutional disturbance, prevent any confusion with syphilitic disease. In the first case, the swelling was too general and the patient too prostrate for any relief to be expected from excision of the focus of disease. The two other cases furnish examples of the efficacy of early removal, even when the œdema has begun to affect the surrounding healthy structures.

CORK SOUTH INFIRMARY AND COUNTY HOSPITAL.

CASES ILLUSTRATING ANTISEPTIC TREATMENT.

(Under the care of Mr. JAMES G. CURTIS.)

Chronic Abscess of the Thigh.—Mr. T. C., aged 79, of healthy appearance and no constitutional disturbance, was admitted into hospital on August 10th, 1877. He had noticed that, for about a year, a swelling had been coming on gradually in his thigh, reaching from the groin to the knee and encircling the limb for that distance; there was distinct fluctuation all over it. On the day after admission, Mr. Curtis aspirated the swelling and drew off seven pints of thin pus. He bandaged the limb gently. On the fourth day afterwards, in consequence of its filling again and that constitutional disturbance had set in, he made a free incision, about three inches, along the outer and depending portion of the thigh; evacuated all the pus, about four pints; and syringed well the entire cavity with carbolic lotion (1 in 40). This was all done under the carbolic spray. He put in two drainage-tubes, and dressed it antiseptically. This was continued daily for about six weeks, when the patient returned to his home cured.

Compound Fracture of the Femur.—E. M., female, aged 68, was admitted into hospital on November 12th, 1877. She fell from a cart the previous evening some distance in the country. On examination, Mr. Curtis

found the fibula broken about an inch and a half from its lower end, the internal malleolus protruding through the skin for about an inch and a quarter, the skin being drawn very tight around the bone. The foot was everted, and almost at right angles to the limb. Reduction had been tried before coming to hospital, without effect. Using the carbolic spray, he sawed off the protruding portion of the malleoli and replaced the bones easily. The wound was dressed antiseptically and put up in a McIntyre's splint. This treatment was continued for two months, when she left the hospital with an useful limb, partly ankylosed. The temperature during the entire treatment never exceeded $99\frac{1}{4}$ deg.

Amputation of the Arm.—J. M., aged 14, was admitted to hospital in October 1877. He had his right arm torn completely away, from about two inches above the elbow-joint, by a threshing-machine. Believing that, to have a case thoroughly antiseptic, the skin and tissues cut through in the operation must be healthy, Mr. Curtis operated, under the spray, about two inches above the wound, in healthy structures, and dressed it antiseptically. He again dressed it on the following day; and not again till the fourth day. On the fifth day after the operation, the little boy was up and out in the grounds. The wound required no dressing after the twelfth day, as it was perfectly cured. No pus whatever appeared during the treatment.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 21ST, 1878.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

French Millstone-Makers' or Builders' Phthisis.—Dr. PEACOCK showed siliceous matter found in the lungs. The specimen was removed from the body of a man who died of this form of disease in the Victoria Park Hospital. The following are the particulars of the case. J. G., aged 29, was admitted into the Victoria Park Hospital under the care of Dr. Peacock on December 7th, 1877. He stated that he had been apprenticed to the trade of a French millstone-maker or builder at the age of 15, and had worked at it ever since. He had never had any serious illness before the commencement of the existing attack, nine months before his admission into the hospital. He said that he had always been a steady man, but subsequent information made the correctness of this report doubtful. He ascribed his illness to having taken cold from working in wet clothes. Five months before admission, he spat a single clot of blood; and four months before, he lost his voice, and had never recovered it. His appetite was defective, and he had sickness after food, and suffered from troublesome cough with much expectoration, and the face and extremities were livid. There was dulness on percussion at the upper parts of the chest, with bronchial or cavernous respiration, and rhonchus in all parts. There was also dulness and bronchial respiration in the right dorsal region. On the 17th, without any obvious cause, he had a severe attack of dyspnoea, during which he was very livid, and he became much exhausted after it, and died on the 20th. On *post mortem* examination, there were firm adhesions between the lungs and the parietes at the upper parts of the chest on both sides; and there were numerous cavities in the lungs, and especially a large one at the right apex. The lower part of the middle lobe of the right lung was in the state of grey consolidation, and was so firm as to be with difficulty broken down. The bronchial mucous membrane was reddened and villous. Some of the bronchial glands were much enlarged and very hard. The right vocal cord was entirely destroyed. The heart was large, weighing twelve ounces and a half; there was no valvular disease, but its cavities were dilated. The kidneys were healthy; the liver somewhat small. Portions of the indurated lung-tissue were examined by Dr. Bernays in the Chemical Laboratory at St. Thomas's Hospital. The ash was found to contain 0.406 per cent. of silica. Dr. Sharkey also examined portions under the microscope, and found it to have extensively undergone the fibroid change. Attention was first attracted to the frequency of pulmonary disease in the men engaged in millstone-making or building by Dr. Peacock in a paper in the *British and Foreign Medico-Chirurgical Review* in 1860; and the cases which he then reported are very similar to the present one and others since placed on record. The men employed in the trade state that, if they begin the work in early life, they seldom live for more than a few years; and, if they take to it later in life, they rarely survive beyond forty years of age; and this is confirmed by Dr. Peacock's observations. The ages of the two patients whose cases are related in his first paper were twenty-three and thirty-seven. The subject of the present case was twenty-nine; and, of twenty-eight

men whom he then found at work in different yards who had been apprenticed to the trade, the oldest was only thirty-eight years of age. A patient, whose case was related in a former volume of the *Pathological Transactions*, was forty-eight; and one who died some little time ago in the Victoria Park Hospital under Dr. Andrew, and whose case is referred to by Dr. A. Shepherd in his Goulstonian Lectures, was forty-five; but in some instances, when the men find their health beginning to fail, they leave the trade and work as engineers in corn-mills, where they are only occasionally employed in dressing the stones, and so their lives are prolonged. The appearance of the lung to the naked eye is well shown in the eleventh plate of Dr. Shepherd's lectures, and the microscopical appearances in the twelfth plate. The drawing taken from the case which occurred at the Victoria Park Hospital under Dr. Andrew.—Dr. DOUGLAS POWELL asked if this form of phthisis gave any hereditary taint. In dust-phthisical patients, the parents often entered the trade late in life; while their children, being put to the trade early, die young.—Dr. PEACOCK replied that he could not say exactly; and, in answer to a question put by Dr. C. T. Williams as to the morbid appearances, said that there were no cavities in the lungs, but hard masses. It was really fibroid phthisis, and was not rapidly fatal.—Dr. LEARED said he had seen a case with a sac in the lung.

Carcinoma (Fourteen Years after Removal) of Orbit.—Mr. NETTLESHIP related the particulars of a case where an encephaloid cancer of the orbit had been removed by Mr. Lawrence fourteen years ago, and where the patient had recently come under his care. She was free from symptoms for four years, and then a small encapsulated tumour of the skin formed, which was removed. A growth recently showed itself at the seat of the original tumour, which was removed in consequence of the pain it caused. It was adherent to the orbit, and displaced the eyeball. There was a little tumour near it. The contents of the orbit were removed, and chloride of zinc paste applied. The case did well. Carcinoma of the orbit was rare; and in this case the interval was very long. The two masses were adherent to the bone. It was a carcinoma, like scirrhus of the breast, and the cells were larger than those of a healthy lacrymal gland.

Tumour of the Sclerotic.—Mr. NETTLESHIP said that some time ago he removed a tumour of the sclerotic. Afterwards, the thyroid gland enlarged, and tumours grew elsewhere, and the patient died.

Cerebral Embolism.—Dr. CAYLEY described a case in a woman aged 52, who had chronic bronchitis, and became unconscious suddenly. She was not paralysed, but had difficulty in speaking afterwards. There was no facial paralysis. The right foot twitched outwards, the great toe being most affected. The heart was enlarged, and its action irregular; while its sounds were rough. The twitching of the right foot grew less. Then there was great pain in the legs, which became gangrenous. Then, erysipelas set in, and the patient sank. There was found at the necropsy an old thrombus in the left auricle. Both femoral arteries were blocked by clot; and there was a patch of red softening in the inferior left parietal convolution. There was mitral stenosis.—Dr. DOUGLAS POWELL said that mitral stenosis often ended in embolism.

Anatomy of Dysidrosis.—Dr. TILBURY FOX exhibited some sections from a case of dysidrosis in its initial stages. He said there was no eczematous inflammation. It was an affection of the sweat-apparatus. There was tumefaction of the skin; and the mouths of the sweat-glands were open. The sweat-ducts were large; the "sago-grains" were in the line of the sweat-ducts, and were globular dilatations. As to the deeper changes, the glands were thickened and stuffed with epithelial cells.—Dr. F. TAYLOR asked if there were inflammation or obstruction of the sweat-ducts. The fluid being alkaline and albuminous, pointed to inflammation.—Dr. FOX said it had been described as an inflammation.

Elongated Cavity in Spinal Cord.—Dr. F. TAYLOR exhibited a spinal cord from a child which suffered from chronic hydrocephalus, where there was a cavity which was not a dilatation of the central canal. It occurred in the dorsal region. It was two inches and a half long, irregular in shape, and in the posterior portion of the cord. It was independent of the central canal in places. It only had epithelium lining in patches. The tissues of the cord around were fibrillated. There was another small cavity near. The origin of these cavities was doubtful. They were not due to inflammation, and there was no tumour. They seemed rather due to some degenerative changes.

Ovarian Cysts from Bodies of Twin Infants.—Dr. LEARED gave an account of ovarian cysts in twins, the offspring of a healthy mother. They did not thrive, though healthy-looking when born. One had cough, and was jaundiced from birth. It had white stools. It was found that the gall-bladder did not open into the bowel. In one ovary was a cyst of the size of a filbert; in the other ovary was a lesser cyst.

The other child died of pneumonia. A cyst of the size of a pea was found in each of its ovaries. These cysts were congenital.—Dr. S. WEST had also seen a case where there were cysts in both ovaries.—The PRESIDENT inquired if there was any history of syphilis.—A negative answer was returned.

Spontaneous Rupture of Oesophagus.—Mr. W. ADAMS (of Harrington Square) exhibited an oesophagus from a gouty gentleman aged 53, who was subject to dyspepsia and vomiting. He was well on the day of his death, and ate a hearty lunch of beef-steak. After awhile, he was faint, and retched, then shrieked, turned pale, and complained of acute pain in the left side. He became collapsed, and his breathing was hurried. He died in seven hours. At the *post mortem* examination, a rupture of the oesophagus above the diaphragm was discovered, and the contents of the stomach were found in the left pleural cavity before the abdomen was opened. Amidst the contents of the stomach, was a large piece of gristle, which probably was the cause of the rupture. The pyloric end of the stomach was thickened.—In answer to questions, Mr. ADAMS said there was no disease of the stomach, no *post mortem* digestion, and no hæmorrhage.—The PRESIDENT said it would be well to submit the oesophagus to a Committee to investigate the condition of its tissues.—This was done.

Aneurism of Pulmonary Artery.—Dr. S. WEST exhibited a specimen. It came from a woman aged 46, who was found dead in a pool of blood. She had previously had slight hæmoptysis. On *post mortem* examination, the left lung was found normal, except some pleuritic adhesions. The right lung had merely two patches of induration in it; one at the apex, the other at the base, the latter being of the size of an orange. They consisted of connective tissue. Each contained cavities, those of the basal mass being largest. In one of these, the size of a walnut, was found blood and an aneurismal sac connected with a large artery.—In answer to Dr. H. GREEN, Dr. WEST said such a condition was rare; and, to a remark by Dr. POWELL, that the cavity was larger than the aneurism.—Drs. CROCKER and C. T. WILLIAMS spoke of the occurrence of aneurisms in lung-cavities; several such aneurisms being at times found in the same subject.

Filarious Disease.—The PRESIDENT laid before the Society, for Dr. BANCROFT, the discoverer of the *filaria sanguinis*, a pamphlet giving an account of thirty-one cases of disease caused by these filaria. There were cases of chyluria, hæmaturia, inflammation of the lymphatics, elastic tumour, and other diseases in the list.

Elephantiasis of Clitoris.—The PRESIDENT exhibited, for Dr. LONDON of Carlsbad, an enlarged clitoris, weighing two pounds, which had been successfully removed.

Polypus from Nose, Antrum, and Orbit.—Dr. POWELL, for Mr. SPENCER WATSON, described a round-celled sarcoma from a man aged 59. The left nostril was obstructed, and the left eyeball displaced. It had grown in six months. Previously to this, the patient had excellent health. There was no history of injury. It was partially removed; but the patient died.

Colloid Cancer of the Breast.—Dr. POWELL, for Mr. WATSON, described a tumour which had existed for fourteen years in the breast of a woman of florid complexion. It remained long and quiescent, and then grew and became painful. In January 1877, it was of the size of a hen's egg. It was removed, and there was no return of it so far. Colloid cancer of the breast was rare.

The meeting then adjourned till the next session.

The PRESIDENT said he hoped those members who had not sent in their papers to the Secretaries would do so without delay, in order that the *Transactions* might be proceeded with.

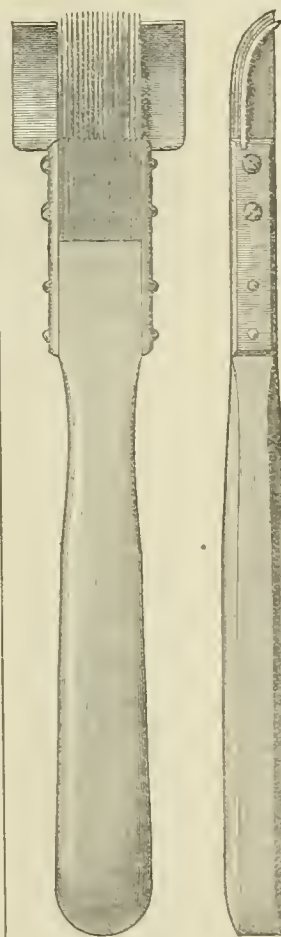
MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 18TH, 1878.

ERASMUS WILSON, F.R.S., President, in the Chair.

Two Cases of Port-wine Mark Treated with a View to Obliterating the Mark without Scar.—Mr. BALMANNO SQUIRE reported these cases. One case was that of a man aged 30; the other that of a woman aged 55. In the last case, the port-wine mark was confined to its usual situation, namely, the right half of the face, the greater part of the front of which it occupied. In neither case did the patient continue under treatment sufficiently long to allow the obliteration of the whole of the port-wine mark; but in each a considerable portion of the mark was eventually completely obliterated without the production of any scar. The means adopted was the scarification of the flat nævus by means of parallel incisions effected with a frozen scalpel, the skin also being frozen by means of the ether-spray. The parallel incisions carried as deep as the entire thickness of the skin proper were spaced as close together as the sixteenth of an inch. As soon as these had

(within three or four days) completely healed, a second set of parallel incisions was made, the direction of the second set of incisions being made obliquely to the direction of the first set; and so on with a series of operations. In this manner, after about ten sets had been made, the port-wine mark had become permanently and considerably fainter, and yet without any trace remaining of the numerous incisions that had been made. The portions of the mark operated on were eventually completely obliterated without scar. Mr. Squire exhibited water-colour



drawings of the two cases thus operated on, and also pen and ink sketches of an instrument he had devised (made for him by Messrs. Weiss) for executing a series of incisions at one stroke. This instrument was like an ordinary scalpel, only that it had sixteen parallel blades instead of one. These blades were so thin, and placed together so closely that eighteen of them measured only half-an-inch across. Mr. Squire also described an apparatus consisting of a number of parallel needles fixed in a plaster-of-Paris handle, so that the handle contained thirty-six needle-points in the half-inch square. If these were heated red-hot and thrust into the skin, they produced complete sloughing of the entire area operated on. But, if they were heated to only black heat and their introduction into the skin was effected only momentarily, they produced only a stippling of minute punctiform scars. His experience was, on the whole, in favour of the multiple parallel linear scarifications made with chilled steel, as first described, rather than of the multiple punctiform operation with black-hot steel.—The PRESIDENT said that the operation was obviously as yet only in its infancy, but that the process of linear scarification as proposed by Mr. Squire appeared to promise good results. Certainly no other satisfactory mode of dealing with port-wine mark had as yet been proposed.—Dr. MORRIS had attempted an operation on a port-wine mark with the single scalpel as at first advocated by Mr. Squire, but had found difficulty in executing the incisions with the requisite nicety. He had accordingly devised a multiple scarifier, which he exhibited (made for him by Mr. Hawksley). He had tried this instrument also on lupus erythematosus, and also on cases of acne rosacea. His experi-

ence, so far as it had gone, confirmed the researches of Mr. Squire.—Mr. WORDSWORTH agreed with Mr. Squire in preferring a black heat to a red heat in operating by the needle process. He had long employed in cases of port-wine mark a solitary needle bearing a ball of steel around the needle placed at about three-sixteenths of an inch from the point, so as to retain heat; this ball enabled a rapid series of punctures to be effected with the needle without loss of its heat.—Mr. DAVY had treated a case of port-wine mark with some success on Mr. Wordsworth's plan.—Mr. B. SQUIRE replied that, in order to succeed in effecting neatly close parallel incisions, some practice in pencil or in pen-and-ink drawing was a considerable advantage, and that those practitioners who happened to have this kind of training would find but little difficulty in the matter. However, the multiple scarifier he had devised would dispense with the necessity of that kind of accomplishment. He had tried multiple linear scarification in lupus erythematosus, but preferred the results he had obtained in that disease by erosion with a minute sharp steel spoon. The spoon in such cases had also been tried with good results by Dr. Auspitz and by Dr. Hebra junior. In the "teleangiectasis" which often accompanies acne rosacea, he had often employed linear scarification as proposed by himself with better results than the multiple punctiform scarification recommended in such cases by Hebra senior. Professor Vidal of Paris had recently adopted Mr. Squire's method of linear scarification in cases of lupus vulgaris with apparently excellent results. Dr. Dubini (of Italy), and after him Dr. Volkmann (of Halle) had proposed multiple punctiform

scarification in cases of lupus vulgaris; but no one, so far as could be ascertained, had proposed the bolder method of linear scarification in lesions of the skin, and this was more uniform and more thorough in its effect. Moreover, scarification of any kind, as applied to port-wine mark, was, he believed, as yet untrodden ground.

BRITISH MEDICAL ASSOCIATION.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, APRIL 3RD, 1878.

FRANCIS OGSTON, M.D., President, in the Chair.

Calculi.—Dr. HIRSCHFELD (Banff) showed several specimens of urinary calculi which he had removed. In one case, the patient, a man aged 73, suffered from intense itching. As soon as he recovered from the chloroform after operation, the itching was found to be entirely gone, and did not return. He made a good recovery. He had never taken morphia.

Gangrene.—Dr. HIRSCHFELD showed part of the foot of a man aged 37, which he had amputated for gangrene.

Fibroid Polypus of Uterus.—Dr. HIRSCHFELD showed a specimen of fibroid polypus from the uterus of a woman whose chief symptom was profuse hæmorrhage, which was completely relieved by the removal of the polypus.

Tumour of the Head.—Dr. HIRSCHFELD showed a tumour which he had removed from the head of a lad aged 19. The tumour, which covered the head like a Scotch bonnet, was congenital, but had increased very much lately. It was supposed to be fatty, but was really hypertrophied tissue. A large elliptical portion was cut out, leaving sufficient skin to cover the scalp. An opening in the skull existed posteriorly, through which pulsation was seen and felt. The case was doing well.

Chrysophanic Acid in Psoriasis.—Dr. OGILVIE WILL read a paper on the use of chrysophanic acid in psoriasis, with notes of six cases in which it had been employed by him. Five of the cases had been treated in the Royal Infirmary, and one was a private patient.—Case I. was that of a boy aged 14, who had different forms of psoriasis over the greater part of his body, including his scalp. He was ordered the chrysophanic acid ointment (fifteen grains to an ounce of hot lard) night and morning; and in about ten or twelve days a cure was effected. As during his residence in hospital the back on one occasion looked suspicious, one application was made after this, but no further eruption took place. He was kept under observation six weeks, and was directed to take Fowler's solution for some weeks after leaving hospital.—Case II. A lad aged 17 was seen after the psoriasis had existed eighteen months over the greater part of the body. The corium in this case was not so much thickened as usual. On the sixth day after the application of the acid, most of the scales were gone; and on the eighth all had disappeared; and, after less than three weeks, all trace of disease was lost. He had a warm bath after the first eight days.—Case III. A girl aged 17 had psoriasis of six months' standing, and specially affecting the limbs, where there was excessive thickening of the corium. After four days of the acid, the scales began to fall off; and in about a fortnight the infiltration had greatly lessened, even in the larger patches; and in about a month there was none of the eruption to be seen. After the first fortnight, this patient had a warm bath, and the strength of the ointment was increased to twenty grains to the ounce.—Case IV. A female aged 12 was treated by the acid for psoriasis on the legs, knees, and arms, the duration of which was unknown. After ten days' treatment, the disease completely disappeared.—Case V. A girl aged 13 was admitted with well marked psoriasis of six weeks' standing. The eruption affected, to a considerable extent, the whole body, but was chiefly conspicuous on the knees and elbows, where infiltration was considerable. At the end of a week, all the scales had gone; and at the end of three weeks she was dismissed perfectly cured.—Case VI. A young man aged 22 had had psoriasis of many years' standing, affecting particularly the front of legs, chest, and forearms, with much thickening and but little redness. The ointment (twenty grains to the ounce) was used; but, after application for ten days, heat and tingling set in in various parts, particularly in the axillæ. A warm bath, and avoiding the irritated parts till the inflammation subsided, with a more limited use of the ointment in other parts, caused the irritation to subside in a few days, and the epidermis of the inflamed parts to peel off; and at the end of three weeks nearly every part was sound. When last seen, he was well, except over the scalp, where, owing to his leaving for a voyage and not being able to shave the head, the ointment had not been applied. He was ordered Fowler's solution at his last visit. The author concluded by calling attention to the

rapidity and satisfactory nature of the cure in the cases. He directed attention to the strength of the ointment used as being important, not only for economy, but on account of the irritating character of the strong ointments. As to the permanence of the cure, he was rather doubtful if any remedy could be relied on as producing permanent results in the disease. He was with this remedy able to promise at least temporary relief in a very short time; and he thought the disease might be kept from returning by small doses of arsenic. The objections to the mode of treatment, he stated, were: 1. The irritation caused; 2. The staining of the skin; 3. The staining of the clothing and bedclothes. In respect to the first, enough had been already said to show how that disadvantage could be overcome; the second was only a matter of time, as, after the shedding of the epidermis (not a long process), the skin was purer than before treatment; and, as to the third, bleaching powder carefully used removed all stains from clothing or bedclothes without injuring them.—Dr. A. OGSTON did not think the return of the disease any real objection, for under every remedy the disease returned. He had tried the remedy, and had been struck with its effects. He had not given any internal medicine when using the acid, but had used it alone. He had failed with it in a case of chronic eczema of the head, but considered that this was owing to not having continued the remedy sufficiently long. He had tried a much stronger ointment than fifteen grains to the ounce in a case of pityriasis versicolor; and, although the irritation produced was excessive, there was a complete cure after warm baths had been employed. His ointment in this case had contained two drachms to the ounce.—Dr. URQUIHART corroborated the author's statements as to the success of the remedy, so far as he had seen it tried.—Dr. STEPHENSON asked if the skin where the patches had been was always white, or became purple from the use of the remedy.—Dr. WILL, in reply, said he had found salicylic acid to cure eczema capitis very quickly; and that oleate of mercury was in his hands very successful in cases of pityriasis versicolor. Replying to Dr. Stephenson, he stated that the patches of skin under where the psoriasis spots had been were not stained but were white; it was the surrounding skin which was stained. He mentioned that benzole on blotting paper appeared to remove chrysophanic acid stains from the fingers. He had cured tinea tonsurans in a fortnight with chrysophanic acid.

BRITISH MEDICAL ASSOCIATION.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

FRIDAY, MAY 24TH, 1878.

N. P. BLAKER, Esq., in the Chair.

Orbital Tumour.—Mr. PENFOLD of Brighton showed a photograph of a tumour in the left orbit occurring in a married woman, and related its history and treatment. It commenced to grow six or more years ago, and caused but little failure of sight, health, local pain, or inflammation until very recently, when vision became slightly dim, and she suffered at times from considerable frontal pain. In June 1877, when he first saw her, the growth was increasing in size and pushing the eye outwards. A grooved needle introduced deeply into the substance of the former proved it to be solid. The tumour, together with the eyeball, was subsequently removed, and the former was found to spring by a broad base from the periosteum at the bottom of the orbital cavity. The muscles were involved in the growth, and the latter could not have been removed without sacrificing the eye. The woman soon recovered from the immediate effects of the operation; and when he saw her in April last, eleven months ago, he observed no outward or visible sign of any return of the disease. Portions of the removed morbid growth being afterwards carefully examined, showed that it had a delicate investing capsule, and that its structure was fibroid.

Hemiplegia and Apoplexy from Embolism.—Dr. WITHERS MOORE related a case of hemiplegia and subsequent apoplexy from embolism, which occurred in his practice at the Sussex County Hospital. The patient, a married woman aged 35, had always enjoyed good health—save being subject at times to rheumatism—until about two months before the present illness, when she began to fail, complaining of giddiness and inability to sit up to do anything for any length of time. Six days before admission, she for some hours wandered in her ideas; but there were no paralytic symptoms. Two days later, she felt better and more cheerful; but in the evening, whilst walking across the road, she fell down, but did not lose consciousness; picking herself up immediately, she walked home to bed, and very soon afterwards told her husband that she had had a fit. The left extremities were powerless and stiff; the mouth was drawn to the right side, and speech was less plain than usual; the tongue also had been bitten during the fit. On admission, it was ascertained that she had always been a steady woman.

She was fairly intelligent, though memory was slightly defective. There was loss of motion and rigidity in the left arm and leg; sensation also was impaired. The left side of the face was paralysed, and the tongue protruded towards the left side. Deglutition was difficult. Temperature 99 deg. The heart-sounds were normal. Pulse 90, regular. The catamenia were present. Micturition was involuntary; the urine was of specific gravity 1026, acid, with no albumen. She continued in much the same state, taking food fairly, until the twelfth day of her residence in the hospital. The limbs were then as powerless as before, but less rigid, and she complained of pain when she was moved. The left arm was very sensitive. She was very complaining, obstinate, and manifestly weak in intellect. She slept better with the chloral draught. Pulse 92. The appetite was good; the bodily functions regular; but she passed her urine involuntarily. On the evening of the same day, whilst the nurse was turning her over for the night, she resisted as usual, and suddenly became unconscious, breathing stertorously. There were no convulsions. When seen by the house-surgeon, Mr. H. Smith, the eyes and face were turned to the left side; the pupils were rather dilated, but equal and active; the face and neck were rather flushed. She could feel when pinched on the right side, moving the limbs slightly; but the right arm was now rigid and flexed across the chest like the left, and was almost powerless. There were occasional twitchings of the muscles of the face. On the morrow, all these symptoms were intensified, the pulse going up to 154, and the temperature to 101.4 deg. Next day, the pulse was 182, and almost imperceptible. The face was livid; the pupils were fixed; the respiration gasping; the limbs were relaxed. The temperature in the axilla was 108.2 deg., going up in an hour to 108.9 deg., when death ensued. A *post mortem* examination was made twenty-four hours after death. The pia mater was slightly injected, with here and there some small patches of capillary congestion. The basilar artery contained a little hard white fibrinous clot; the right carotid at the base of the brain contained a similar but more elongated clot. The left carotid, middle cerebral, and posterior communicating arteries contained several firm decolorised fibrinous coagula. In several parts, the coats of these arteries were thickened. The surface of the brain was soft; the deeper part of the grey matter of some convolutions of the right anterior lobe had a decidedly yellow tint. The right centrum ovale minus appeared of a purple or pinkish colour from congestion of puncta vasculosa; and at one spot of the middle lobe close to the longitudinal fissure was a patch of capillary ecchymoses. The consistence of the cerebral substance, except at the surface, was normal. On the under surface of the cerebellum, close to the fourth ventricle, were two small granular masses. There was nothing calling for remark in the other organs, save that there was slight thickening and opacity of the anterior flap of the mitral valve, and the endocardium was puckered and stained from decomposition. In this case, the left side of the face and tongue being affected, as well as the corresponding side of the body, indicated that the seat of disease was above the pons Varolii. The age of the patient and the fact of the first attack occurring without loss of consciousness, merely confusion being present, pointed to embolism rather than to hæmorrhage. The slight pyrexia and contraction of the affected side implied that an attempt was being made to establish the collateral circulation, congestion resulting. The most notable points in the second attack, two days before death, were: the conjugate deviation of eyes and turning of the head towards the paralysed side; the activity of the pupils; and the disproportionate rapidity of the pulse—this last pointing to some paralyzing lesion near the origin of the vagus. The rigidity at the time of attack was important, as confirming the present view of its being a sign only of some extensive injury to the brain, and not necessarily of hæmorrhage into the ventricles. The great rise of temperature in the last hours of life was remarkable, and must be attributed to increased nutritive changes due to vaso-motor paralysis allowing active dilatation of the arterioles, and not, as some would say, to paralysis of the hypothetical thermal centre. The accord of the symptoms during life with the *post mortem* appearances was duly noticed, as also the powerlessness of any treatment save a supporting one in such cases.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, MARCH 6TH, 1878.

SAMUEL GORDON, M.D., President, in the Chair.

On the Distribution of Cholera in Dublin in 1866, and its Relation to the Geological Formation of the Dublin District.—Dr. GRIMSHAW read a paper on this subject. In May 1875, when reading Dr. Himes's translation of Professor Pettenkofer's observations on cholera, it occurred to him that a careful investigation of the relations between the

distribution of cholera in Dublin and the geological structure of the site upon which Dublin stands might tend to throw some light on the promoting causes of cholera, and serve also as a test of the truth of some of the views put forward by Dr. Pettenkofer. Munich, where Pettenkofer's views were tested, is situated on a porous gravel-bed permeated by air and water. The spaces between the gravel in such a bed afford opportunities for the accumulation of foul air and foul water derived from excrementitious or decomposing matters cast upon the surface. Comparing Dublin with Munich, it is found that in Dublin these conditions are fulfilled, although in a somewhat different manner. Some short time ago, it was considered that the whole of the Dublin district—namely, the city and its immediate suburbs—consisted of boulder-clay resting on limestone. Hence, when Dr. Grimshaw first investigated the question, it appeared to him that, as this boulder-clay is an impervious stratum, the experience of Dublin was at direct variance with that of Munich. On further inquiry, however, by the kindness of Mr. Hull and Mr. Cruise of the Geological Survey of Ireland, he found that recent observations had shown that this is not true, but that a considerable portion of the district is situated on gravel which is superimposed on the stratum of clay previously mentioned. This gravel-bed was once the bottom of the sea, and consists of a raised sea-beach which extends along a considerable portion of the east coast of Ireland. The parts of Dublin and of its vicinity which rest on this "littoral" gravel-bed having been described, Dr. Grimshaw proceeded to analyse—1. The number of deaths, and the rate of mortality per 10,000 living, from cholera; 2. The proportion of the inhabited area situated on gravel; and 3. The estimated population of each of the registration districts in the city of Dublin and its suburbs in 1866, the year of the last epidemic of cholera. It appeared from this analysis that the greatest number of cholera deaths occurred either on pervious strata (the gravel-bed), or close to the old river-courses. In his paper, the author held that cholera is a contagious disease, and that it will spread if suitable conditions—of traffic, place, time (season), and individual, as laid down by Pettenkofer—are provided. In conclusion, Dr. Grimshaw considered that the result of his inquiry confirmed, to a great extent, the observations of Pettenkofer, and pointed to the dangerous ground upon which a large portion of the city of Dublin and its suburbs stands. This dangerous ground is steadily becoming more dangerous as the saturation of the gravel with sewage increases. It is, therefore, essential to the health of the people of Dublin that sewage should be kept out of the gravel-bed, and further that all communication between the poisonous atmosphere contained in the interstices of the gravel and that of the houses built thereon should be cut off. It was not the author's duty to point out the remedies, but he ventured to remark that any system of main-drainage for Dublin which does not effectually prevent the admission of sewage to the gravel-bed, will fail materially to improve the health of the inhabitants of the Dublin district.—Dr. LALOR thought that the paper omitted a most important factor in the spread of cholera—namely, contagion. As to cholera taking the course of old river-beds, he objected to any general conclusion on that point drawn from the experience of the outbreak of 1866; he also objected to any conclusion being founded on a vague use of the term "gravel", and, above all, to any conclusion as to the propagation of cholera by water-courses without account being taken as to whether the water-course was a real river or a sewer, like the Liffey or the Dodder.—Dr. H. KENNEDY would be slow to accept the contagion theory with respect to cholera; and would refer to the frequent simultaneous existence of epizootics and of epidemics.—Dr. DARBY believed that cholera was non-contagious.—Dr. J. W. MOORE held that there was an analogy between the contagion and etiology of cholera and of typhoid fever. There could be little doubt, that when the virus of cholera was discharged into gravel-beds, it underwent a process which rendered it fertile and caused it to spread through the neighbourhood. If that were true, the theory of Pettenkofer strongly supported the theory of contagion.—Dr. GRIMSHAW said one of the points assumed in his paper was that cholera was contagious. If it were not contagious, the theory of Pettenkofer could not be valid in any shape. The only theory of contagion with respect to cholera held anywhere was that the discharge from the patient's bowels was capable of reproduction or development, and that the introduction either of the matter discharged or of the product of it into the bodies of other persons propagated the disease. As to the disease following river-courses, it was admitted that it did so in so far as a river afforded means of transit or traffic, like a railroad, an ordinary road, or the sea. That was what was generally meant by cholera following a river-course. The Geological Survey had mapped the gravel-bed of Dublin only within the last twelve months; and, until he (Dr. Grimshaw) asked for the information, the map was not drawn. He had seen the Dublin gravel-beds opened in a great many places, and more particularly in a gigantic way near the King's Bridge by Messrs.

Guinness, in order to obtain lime for their new buildings; and the gravel-stones so obtained were burned and yielded very good lime. It was his intention at a future day to compare the paths of cholera in the country districts with the geological maps, when the Geological Surveys were sufficiently complete for the purpose. It had been shown by the reports of Cunningham and Lewis in India, that those points were of considerable importance. Those gentlemen were still pursuing their inquiries. He believed that Pettenkofer had shown good grounds for his theory, and that it had been very much borne out by their experience in Dublin.

BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 15TH, 1878.

THE TWO MEDICAL ACT AMENDMENT BILLS.

"THE Medical Act, 1858, Amendment Bill (No. 2)" is now before the House of Commons, endorsed by Mr. Arthur Mills (Member for Exeter), Mr. Childers, and Mr. Goldney. Mr. Arthur Mills and Mr. Goldney are influential supporters of the Government, while Mr. Childers is second to none in authority in the councils of the Opposition. It is matter of congratulation, and indeed striking evidence of the weight of the Association, that it has been so fortunate as to secure the approval of such supporters; and the profession as well as the members of the Association cannot but feel assured that their interests, in as far as they harmonise with those of the public, will be perfectly safe in their hands. Medical Bill No. 2, launched under their auspices, is removed from the sphere of party, and affords a good opportunity for arranging a compromise with the Government. The promoters are not of those who would obstruct the progress of medical reform, and most decidedly would not lend themselves to any factious opposition.

The measure thus introduced—"Bill No. 2"—was settled by the Medical Reform Committee, in conjunction with the late Mr. Headlam, in 1873, on the principles repeatedly affirmed by the British Medical Association, and provided:

1. Direct representation of the profession in the General Medical Council; and
2. The establishment of a Conjoint Examining Board in each division of the kingdom, under the sanction and supervision of the General Medical Council, as the only portal of admission to the profession, on the principle of equal fees and uniform examination.

The delay which has occurred in pressing forward this Bill has been due to a desire not to embarrass the English medical authorities in their laudable efforts to combine in the formation of a conjoint scheme of examination for their division of the kingdom. Each year in passing, it was supposed the scheme would be completed; and so year after year the Bill of the Association remained simply suspended over hesitating and vacillating corporations. This delay was sanctioned and approved by the British Medical Association at each succeeding annual meeting. It was felt that the success of the English authorities in this respect would strengthen the position of the Association, in compelling the authorities in the two remaining divisions of the kingdom to do likewise.

In 1877, the conjoint scheme in England seemed on the verge of completion, when a resolution to admit women to the degrees of the University of London again jeopardised it. Under these circumstances, the Medical Reform Committee, strengthened by the efforts of the English authorities, which had met with nothing but approval from all quarters, felt that the time had again come for the Association to resume the struggle. The state of the position as regarded medical reform was laid before several members of the legislature, but particularly before Mr. Childers and Mr. Mills. This was done in anticipa-

tion of the assembling of Parliament. The principles embodied in the Bill of the Association had been previously reduced to writing by Mr. Goldney, and received his approval. Regard being had to the difficulties besetting all attempts at legislation where large private, corporate, and public interests are involved, and the impossibility of success attending them when in the hands of private members, it was suggested that the best mode of dealing with so important a subject would be to ask for a Committee of the House upon the whole question, before which a thorough investigation of all the points at issue might be carried out during the present session, preparatory to legislation during the ensuing year. The bases of medical reform being thus settled in Committee, the difficulties inherent to so complicated a subject would be smoothed over, and legislation be comparatively easy and certain. This advice was submitted to the Medical Reform Committee of the Association during a meeting held in London on February 7th, and instructions were then given to the chairman authorising the application for a Select Committee in the manner indicated. During the negotiations which followed, it soon transpired that the Government had already a Bill drafted on the same subject. This information necessarily prevented the intended application for a Committee in the House of Commons.

After no long time, the Bill of the Government was introduced in the House of Lords, and the action of the Medical Reform Committee with respect to it has been recorded. On April 1st, as soon after the introduction of the Bill as possible, a deputation from the Committee had an interview with the Lord President, when the deepest regret was expressed at the utter inefficiency of the manner in which the conjoint scheme was dealt with, and urgent representations were made that so strong a government might well undertake to establish it in all its integrity. The demand for the reform of the General Medical Council was also placed before his Grace as a point insisted on by the great body of the profession.

On May 18th, the Lord President again most courteously received a deputation from the Committee, when the result of the answers received to the queries of the Committee respecting the conjoint scheme and direct representation, addressed to the profession, was laid before his Grace, proving, as far as they went, something like unanimity of the profession on both points. The Lord President on this occasion expressed his consent to concessions to the extent of enforcing conjunction on the corporations in Scotland and in Ireland, but insisted on leaving the universities free. Further than this, his Grace stated he could not go.

Under these circumstances, in consequence of the Lord President's Bill not enforcing the conjunction of the universities with the corporations, and not including direct representation, the Medical Reform Committee decided that the Bill of the Association—"Medical Acts, 1858, Amendment Bill (No. 2)"—should be introduced in the House of Commons, which was accordingly done on May 29th. At the time when the decision was formed, the further concessions of the Lord President, by which the conjoint scheme was enforced alike on the universities and corporations in each division of the kingdom, were not known to the Committee.

In the final passage of the Lord President's Bill through the House of Lords on June 4th, it was still more closely assimilated to the Bill of the Association by the introduction of an important amendment proposed by the Marquis of Ripon.

Clause 4 made it necessary for a person who has passed the joint board examination to obtain a medical diploma from one of the existing medical authorities before he could be placed on the *Medical Register*. The Marquis of Ripon moved an amendment to make such diploma unnecessary for the purposes of registration. This amendment was accepted, and, as a consequence, the examination by the Conjoint Board will be the absolute portal to the profession. It will be no

longer incumbent on anyone entering the profession to be affiliated to any of the corporations. The passing of the examination of one of the conjoint boards will entitle the candidate to be placed on the *Medical Register* a regularly qualified medical practitioner. There can be no doubt that the great majority of medical men will be content with this qualification, and, as a consequence, the mass of the profession, having passed the testing ordeal of an examination in all branches of their art, will be unconnected with any of the colleges. As regards the Apothecaries' Society of London, it has played its highly useful part; few will in the future seek to be enrolled amongst its licentiates, and it seems not unlikely to become little more than a trading company. The same must be the case with the Apothecaries' Hall of Ireland: both are apparently destined to speedy extinction as medical authorities, though both, under the present constitution of the Medical Council, will still have their representatives in it.

We will not dilate at greater length on this distasteful theme. Sufficient hints have been thrown out to indicate the retribution for opportunities lost, which is likely to fall on corporations which neglected to avail themselves of the opportunities afforded them, since the Medical Act of 1858, to shape the medical education of the country by treating the question of medical reform on a broad basis, and not with an eye to the narrow and selfish interests of individual corporations.

The destruction looming in the future as the probable fate of some of the corporations will doubtless stir up an opposition to the Lord President's Bill, which it will not be easy to master. The Scotch and the Irish corporations are fully alive to their perilous position, and exercise a far greater influence in the House of Commons than even the Royal College of Surgeons with its 13,000 members and 700 fellows. There are, however, other matters which demand careful consideration. It is unfortunate that the Bill underwent no discussion worthy of the name in the House of Lords. The admission of women to the ranks of the profession, which, whether reasonably or unreasonably, caused such commotion in the ranks of the profession that the presence of two educated ladies in the Association caused the secession of more than one distinguished member, passed in the House of Lords without a murmur. The granting of privileges in the way of registration to the possessors of foreign and colonial degrees, which are not accorded to the degrees of the best of our own universities, did not even excite observation. When the Marquis of Ripon's amendments were accepted, and it became clear that the rank and file of the profession would, in consequence, have no connection with any corporation, the question of discipline as regards them was not once considered. Again, there is a very remarkable circumstance which has not received the attention it merits. The coveted distinction of the title of Doctor is one that perhaps more than any other attracts the general practitioner; and it is not at all impossible that, under the state of things which the Lord President's Bill would create, the Queen's University of Ireland, notwithstanding the determined hostility of its representative to the conjoint scheme, may yet find its advantage in the demand for a doctorate awarded on cheaper terms than by any other university.

The absence of discussion on these and other points leaves much to be done in the Commons. Amendments are inevitable; their discussion demands time, and time is wanting. Had the Medical Council numbered in its ranks the proportion of direct representatives which the profession seeks to infuse into it, these questions would have received the consideration they demand, and the difficulties they present would have been solved. So diffident is the Council as to the questions it should discuss, owing probably to the nature of its component parts, that it is positively afraid to undertake the additional duties imposed by the Lord President's Bill.

Clause 14 provides that the Medical Council *shall* make examination-rules for "regulating the examinations" of persons desiring to obtain qualifications within the meaning of the Act.

The Medical Council remark on this clause—"That the duties of the Medical Council, in relation to the various medical authorities (whether in separate or in joint action), should not be extended to the initiation of the examination-rules under which qualifications are to be granted, but should in general be restricted, as now, to duties of superintendence and control, with power of making representation to the Privy Council in cases of default."

The duties and power referred to in the above observation are conferred by Section xx of the Medical Act of 1858, which provides that the Medical Council may report defects in education and examination to the Privy Council; and Clause xxi provides that the Privy Council may suspend the right of registration of the diplomas issued by the body whose curriculum or examinations the Medical Council has complained of.

The Association is irrevocably pledged to direct representation, and the consequent strengthening of the General Medical Council in the estimation of the profession. With this view, Medical Bill No. 2 was introduced, as well as to realise the conjoint scheme. Medical Bill No. 2, as was stated in the interview with the Medical Council, is open to amendment. Unfortunately, the Lord President would not concede direct representation: had he done so, the undivided weight of the Association would probably have been exerted in his behalf; but, even then, amendments in the Government Bill would have been inevitable. As it is, both Bills will be before the legislature. In this manner, a compromise may possibly be arranged, or both Bills may be referred to a Select Committee, and thus a more carefully considered and more thoroughly matured measure than either may be the result, and become law in the ensuing year.

THE GLYCOGENIC FUNCTION OF THE LIVER.

THE fate of the hepatic glycogen is one of the most disputed points of physiology. Is it a reserve store of carbo-hydrate material? Is it converted directly into fat? Does a reconversion of glycogen into sugar occur during life? To one and all of these questions very conflicting answers have been given. We have Bernard and his supporters, on the one hand, affirming that normally the liver, continually or at intervals, is changing its glycogen into sugar, and discharging it into the hepatic veins; Pavy and his followers, on the other hand, asserting that during life, under ordinary circumstances, there is little or no difference in the amount of sugar contained in the portal and hepatic venous blood, and therefore no conversion of glycogen into sugar at all.

We shall not here discuss the question of the direct change of glycogen into fat, as it is now considered on good authority that albumen is the chief, if not the only source of the fat in the body, except, of course, that derived from the fat ingested as such; but confine our attention entirely to the primary and more important question as to whether or not there is reliable evidence that glycogen is changed into sugar, normally and during life. This resolves itself into whether the blood of the hepatic vein contains or does not contain in life more sugar than that of the portal vein. Bernard takes the affirmative, Pavy the negative. Both have comparatively recently contributed the latest results of their experiments, Bernard to the French Academy of Sciences, and Pavy to the Royal Society. As they have arrived at their conclusions by employing different methods, we must examine these in detail, sketching briefly, at the same time, the results themselves.

Bernard's latest conclusions may be thus summed up. The existence of sugar in the blood is not an accident dependent on the food, but a physiological phenomenon as constant and permanent in the organism as all the other phenomena of nutrition, of which, indeed, it is a direct expression. Whatever the nature of the food, in herbivora as well as in

carnivora, during digestion, during abstinence, even during fever, the blood always contains nearly the same proportion of sugar; and there exists in the living organism a glycogenic function which maintains and regulates this proportion, thus rendering it independent of the variable conditions of digestion. In the arterial system, the proportion is sensibly equal everywhere; but in the venous system it is variable, and always inferior to that of the arterial blood, the only exception being in the hepatic veins, the blood of which is richer in sugar. The amount in the arteries varies between 1 *gramme* and 1.5 per 1,000, between .06 and .08 in the vena portæ, and between 3 and 7 *grammes* in the hepatic vein. An augmentation occurs every time the animal is bled; which cannot be explained by the condition of alimentation, for it supervenes in dogs when starving or when fed with meat. The blood is therefore deprived of sugar in its passage through the organs of the body, but is enriched again by traversing the liver. To avoid the state of local superactivity in the circulation and absorption of fluids produced by the opening of a vessel in the living animal, Bernard generally draws the blood from a large vessel by means of a catheter, the vessel being ligatured so that the movement of the blood at the point operated upon is neither notably accelerated nor retarded. By this mode of catheterisation, either from above by the right jugular vein, or from below by the femoral vein, the hepatic blood is extracted. By operating in this way, it can be shown that the superior cava is poor in sugar; and that the inferior cava in the pelvis contains less sugar than the corresponding arterial blood, less also at the level of the renal veins, but is suddenly enriched at the liver by the entrance of the hepatic blood. As this blood, rich in sugar, is mixed with the blood of the inferior and superior cavæ, which is poor in sugar, there results a dilution that leads to the proportion of sugar in the right ventricle approaching closely that of the blood in the left ventricle, thus showing that there is a less sensible destruction of sugar in the pulmonary than in the systemic capillaries.

So much for Bernard's results. Now for his method of quantitative analysis. The blood is received in a tared capsule, accurately weighed; an equal weight of sulphate of soda in small crystals is added to it, as well as a few drops of acetic acid; it is boiled briskly, stirred, and expressed hot, the loss of weight by evaporation being made good by adding water. The filtrate, which contains the sugar, is then titrated with Fehling's solution; but, on account of the small amount of sugar present, only one cubic *centimètre* of Fehling's solution, with twenty to twenty-five cubic *centimètres* of concentrated solution of potash added, is acted upon.

Bernard has assured himself that in blood so treated by sodic sulphate there exists no substance other than sugar which can reduce the cupric oxide; and, by a method of control, he has shown that both his proceeding and the formula used by him give a great exactitude (close upon 1-10000th). All the analyses must be made as soon as possible, as sugar disappears rapidly from the blood after death: if the death be sudden, from ten to twelve hours are required; if slow, with a gradual destruction of the glycogenic function, fifteen minutes may suffice.

In his communication to the Royal Society, Dr. Pavy points out that the very rapid changes which take place in blood under altered conditions of the system render it essentially necessary that the greatest precaution should be observed in order to obtain blood in its natural condition. If the blood be taken from the living animal, the latter must be perfectly tranquil, as violent muscular action or embarrassment of the respiration will occasion a conversion in the liver of glycogen into sugar; and it should be procured as instantaneously as possible after the death of the animal, so as to be unaffected by the *post mortem* production of sugar that occurs in the liver. He concludes from his experiments that the amount of sugar contained in the blood of sheep and bullocks is about 0.5 per 1,000, and in dogs 0.75 per 1,000, showing a remarkable uniformity in the amount of sugar contained in the respec-

tive animals. No material difference, he maintains, exists between the amount of sugar contained in arterial and in venous blood. As one of the effects of anæsthetics on animals is to occasion an abnormal amount of sugar in the blood, to attain accuracy the blood must be taken when the animal is not under their influence. The blood of a dog killed by pithing gave—crural artery, .795 (in 1,000); jugular vein, .792. In another animal, the vessels were exposed under chloroform, and, when the effects of the anæsthetic had passed off, the exposed vessels were drawn forward and opened: (1) carotid artery, .811, jugular vein, .798; (2) carotid artery, .863, jugular vein, .879. It is also held by Pavy that the blood in the hepatic veins, if care be taken to keep the animal in a perfectly normal condition, contains no more sugar than does the blood of the right auricle or of the portal vein; in his present communication, however, he makes no fresh reference to this subject.

Dr. Pavy has obtained his results by means of a new gravimetric process of analysis, in which he adopts the use of a galvanic battery for effecting the deposition in a weighable form of the copper that has been reduced by the sugar. [A somewhat similar process was previously followed by Abeles.] This is his method. A certain volume of blood, about twenty cubic *centimètres*, is taken, accurately weighed, mixed with twice its weight of sodic sulphate, thirty cubic *centimètres* of hot concentrated solution of sodic sulphate added, and the whole heated till a coagulum is formed; filtration is then performed, and the clot washed to remove all traces of sugar. The filtrate must be boiled and refiltered to remove the turbidity, again boiled, and, after the addition of ten cubic *centimètres* or more of Fehling's solution, so as to have the copper salt in excess, kept boiling for at least a minute. The resulting suboxide of copper is next separated by filtration through glass wool, washed from excess of copper salt, and dissolved in a few drops of nitric acid. A mercury bichromate battery is now brought into operation, the positive pole of which is formed by a platinum spiral coil; around this, and forming the negative pole, is a cylinder of platinum foil, and upon it the copper is slowly deposited in a pure metallic state, a period of about twenty-four hours being required. Before weighing the platinum cylinder, it is first washed in distilled water, then in alcohol, and finally dried. The increase in weight of the cylinder gives the copper. Five atoms of cupric oxide are reduced by one atom of glucose; therefore 317 copper represent the equivalent of one part of glucose, or 1 copper = 0.5678 glucose: that is, weight of copper \times .5678 = weight of sugar.

Thus far Pavy. His results, we see, are opposed to those of Bernard. What are we to say when the testimonies are so conflicting? In case the same methods had been employed by both, we should be guided by what we may call the "authority" of the experimenter; and, as a physiologist and experimentalist of standing and repute, we should be forced to give the precedence to Bernard. But the methods are not alike; and Dr. Pavy alleges that his gravimetric process of the electrolytic separation of copper is far more reliable and more accurate than the volumetric one adopted by Bernard. Moreover, he states that Bernard's entire system is based on errors. We confess our inability to see that Pavy has offered sufficient proof of this. Pavy follows almost the same proceeding as Bernard for the separation of the sugar from the blood, and the reduction of the copper, except that he does not employ an excess of caustic potash. He adds, it is true, more sodic sulphate, and an excess of copper salt. Bernard finds the amount of suboxide by a volumetric process; Pavy, by electrolytically separating the reduced copper on platinum and weighing it: here, it seems to us, the chief difference lies. Now, that the excess of caustic potash added by Bernard should vitiate his whole process, would require more proof than Pavy has offered. That it has not prevented the deposition of the suboxide is shown, we think, by Bernard's numbers always being higher than Pavy's. On the other hand, we know that in Trommer's test an excess of cupric salt interferes materially

with the reduction of the copper to the state of suboxide, which, however, is not hindered in any way if the excess be on the side of the caustic potash. We certainly agree with Pavy that exception may be taken to Bernard's assumption as to the relation between the weight of the mixture of sulphate of soda and blood and the volume of liquid obtained; but this assumption has introduced no serious error, for, in his method of control, Bernard added known quantities of sugar to samples of blood in which the amount of sugar present had been previously ascertained, and he found almost exactly the amounts added, as the following numbers prove: (1) by calculation, 1.26 sugar per 1,000, found by experiment, 1.23; (2) by calculation, 1.10, by experiment, 1.10; (3) by calculation, 1.58, by experiment, 1.56. Such a degree of accuracy is hardly consistent with "an entire system based on errors". Dr. Pavy directs attention to the greater uniformity of his results when compared with Bernard's. This must be granted him; but, at the same time, it may be observed that a considerable discrepancy exists among his numbers also. In bullocks' blood, the sugar varied from .456 to .703; in sheep it was as low as .470; in dogs as high as .921. In two bullocks, the sugar varied from 1.053 to 1.094; but here Dr. Pavy says he had reason to believe some little time had elapsed between the felling of the bullocks and the opening of the vessels. Again, his results on the disappearance of sugar from the blood after death show that in *one* hour the proportion disappearing varied from .015 to four times that amount (in 1,000).

The reduced suboxide of copper has a great tendency to become re-oxidised; and it is very likely that, unless the filtering and washing be commenced at once and executed expeditiously, a certain loss will occur. Dr. Pavy's process is certainly a beautiful one; and, although we do not think with him that there is much room for error of judgment with a practised chemist in determining the final stage of the volumetric process, yet we agree with him that, once all sources of error are eliminated from his method, it will be decidedly preferable in point of accuracy; but the same result might be arrived at by a less complicated process. We have obtained most exactly the quantity of copper contained in a cupric salt of that metal by supersaturating the solution of the salt with ammonia and immersing in it an exactly weighed blade of pure copper. A wide-necked flask, well-stoppered, is used, which is filled up with boiled water and immediately closed after the introduction of the blade of copper. When the quantity of copper is small, a day or two will suffice for the complete decolorisation of the liquor, in consequence of the reduction of the cupric salt into the cuprous condition. The blade is then weighed, after having been washed and dried. From its loss of weight, the amount of copper that existed in the solution can readily be calculated, since cuprous oxide contains twice as much copper as cupric oxide. We suggest this simple and easy method to Dr. Pavy's notice.

In the last number of Pflüger's *Archiv für Physiologie*, there is a paper by Professor Worm Müller on the titration of grape-sugar, in which he very strongly advocates Knapp's process, which consists in the reduction of mercuric cyanide. The chief difficulty in Fehling's test certainly lies in determining sharply the termination of the reaction; and whether this be judged of by the loss of colour, or by testing a portion of the fluid after filtration with potassic ferrocyanide, there is always a tendency to error unless in practised hands. Now, in Knapp's process, according to Professor Müller, in addition to the terminal reaction being capable of exact determination, there are also these advantages: the test-fluid is easy to prepare, is not liable to alteration by keeping, and is much more accurate and delicate than Fehling's solution, as it gives indications of sugar in fluids where it has been undetected by this solution; the mercury also, when once reduced, is not redissolved, as is the case with the reduced suboxide of copper.

All these processes, however, as Professor W. Müller himself points

out, are founded upon the reducing action exerted by sugar on certain metallic salts. But this action is not proper to sugar alone, as it is also possessed by certain other organic bodies existing in animal fluids. Moreover, there is reason to believe that there are other bodies present in the blood besides albumen, capable of hindering this reducing action. In Bernard's process, the albumen is removed, but the other bodies may still remain. When the determinations concern decimal percentages, every source of error must be taken into consideration and eliminated, otherwise the results can only at best be regarded as comparative. A quotation here from Professor Worm Müller's article will not be out of place. "Urine not only contains bodies that reduce cupric oxide, but also others that hinder its precipitation, so that part of it may pass through the filter as finely divided or dissolved cupric hydrate. Every brain, lung, or muscle extract of a diabetic patient contains a large proportion of such substances; consequently, it is very probable that animal fluids, such as blood and chyle, even when deprived of their albumen, usually contain substances of a similar kind." With regard to Pavy's process, he goes on to say he feels assured that the precipitate collected on the glass-wool filter does not represent the whole of the reduced oxide; and that to attain accuracy by the method is impossible, inasmuch as Fehling's solution being added in excess, the filtrate must contain copper. "In other words, from the physiological standpoint, this modification of Fehling's method can in no respect be regarded as possessing any real advantage whatever in point of accuracy."

In every case, therefore, the possibility of other reducing agents besides sugar being present must be borne in mind. It is not enough to get phenomena of decoloration or reduction. We must assure ourselves of the character of the body producing the changes. What is wanted is the power to isolate the sugar, and differentially distinguish it; if we cannot isolate it, let us at least make sure of its presence.

After all, however, even should we accept Dr. Pavy's figures, it does not follow, because his experiments indicate no material difference in the amount of sugar in venous and arterial blood, that no such difference exists. This difference might be so slight as to fall within the limits of the errors of experiment; and yet, when the rapidity of the circulation is taken into account, it is easy to see that over a comparatively short period of time great additions and subtractions might occur in the circulating fluid which were incapable of being recognised at any given moment by the means at our present disposal.

Notwithstanding, therefore, our respect for Dr. Pavy—and the good work he has done entitles him to be heard with attention—we still hold by the old opinion advocated by Bernard. It has not yet been clearly disproved, and till it is it shall form part of our physiological faith. There is every reason, we think, for believing that a certain percentage of sugar is necessary for the maintenance of the average composition of the blood; and it is not an unnatural assumption that most of the tissues remove some of it for their nutrition, and that this constant demand is supplied by a conversion of the glycogen stored up in the liver, a store upon which the organism can always make a call when the need for it arises. And this assumption does not bind us to maintain that all the hepatic glycogen is thus disposed of.

THE President and Fellows of the Royal College of Physicians of London have issued cards for a *conversazione* on Wednesday evening, July 3rd, at nine o'clock.

IT is intended, we learn, with the assent of Mr. Erasmus Wilson, to widen the scope of his professorial endowment of the College of Surgeons, which he at first limited to dermatology, and of which he was the first incumbent. In future, it is proposed, that a wider range of surgery and pathology be included within the selection of subjects.

DR. BURDON SANDERSON will deliver the Harveian Oration at the Royal College of Physicians at five o'clock, on Wednesday, June 26th.

A CAREFUL series of experiments on *Drosera Rotundifolia* by Mr. F. Darwin and two German observers, reported in *Nature* (June 6th), leave no doubt that *drosera* plants profit largely by an animal diet.

IN the Russian army in the neighbourhood of Constantinople, 25,000 men are down with typhoid, typhus, and other diseases. Heavy rains fell last week. The heat is great, and a further increase of sickness is expected.

PROFESSOR H. C. WOOD, junior, has, according to the *New York Hospital Gazette*, analysed the seeds of *Sophora Speciosa*, a native plant of Texas, and has detected a new alkaloid, which he names *Sophoria*. Half of one of the seeds is said to be sufficient to produce delicious exhilaration, followed by a sleep lasting one or two days.

PROFESSOR AND MRS. FLOWER received a large party of friends in the splendid museum of the College of Surgeons, Lincoln's Inn Fields, on Saturday afternoon, to meet the Chinese Minister. Mr. Flower loses no opportunity of inviting London celebrities, and the flower of the scientifically minded members of London society to visit this splendid collection; and his social courtesies have done much to reinforce the scientific labours by which he has added lustre and popularity to the Hunterian Museum.

I. VON LENHOSSÉK has, it is reported, constructed an apparatus which permits no fewer than sixty microscopical preparations to be observed in immediate succession, without the trouble of changing the slides and readjustment of the object-glass. Its construction is similar in principle to that of the well-known revolving stereoscope. The inventor has given the new apparatus the name of "polymicroscope".

MR. SPENCER WELLS commenced his course of lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours, in the theatre of the Royal College of Surgeons on Monday last, and will bring the same to a close on Friday, the 21st inst. He will be succeeded on the 24th inst. by Mr. B. T. Lowne, F.R.C.S., who will deliver three lectures on the Physiology of Nerve-Stimulation. After this, the annual and interesting exhibition of preparations, etc., about to be added to the museum, will take place, but must be closed on July 5th (immediately after the annual election of Fellows into the Council) in order to carry on the primary examinations for the diploma of membership.

MM. BOCHÉFONTAINE and Tiriakin, in investigating the physiological properties of conine, have arrived, according to *Nature* (to whose valuable notes of foreign societies we are often much indebted) at the following conclusions. Conine pure, or bromhydrate of conine, is not a very formidable poison, and not to be compared with hydrocyanic acid (as has been supposed). Sixty-five centigrammes of pure conine, introduced under the skin of a dog weighing seven kilogrammes, killed it in a little over twelve hours; fifty centigrammes sufficed for a similar dog when introduced into the stomach. The chlorhydrate and bromhydrate are always more active than the pure conine. M. Mourrut has separated from the conine furnished as pure in shops a resinoid matter, which, like curare, paralyses the motor nerves.

MR. G. JACKSON of Plymouth recalls attention to a subject formerly much discussed, that of voting by proxy at the election of members of Council of the College of Surgeons. It was, at one time, a sort of battle-cry at College-elections. It might be advisable that this question should be thoroughly ventilated in an official manner, either by provincial or other members of the Council. It is obvious that at present a large proportion of the Fellows are practically disfranchised by their distance from the place of election.

M. VULPIAN reported to the Académie des Sciences on May 27th some researches on the action of anesthetics on the respiratory centre and cardiac ganglia. In chloralised dogs, faradisation of the upper cephalic segments of the cut vagi stops the respiratory movements just as in dogs not anesthetised; but whereas, in the latter, the respiration in general easily and spontaneously commences again, in spite of the electrification being continued, it is not so with the former, and the animals die unless electrification be stopped and artificial respiration be produced, aided, it may be, by energetic faradisation of the trunk. The heart, too, may finally stop in such a case. M. Vulpian thinks this explains certain accidents in clinical anaesthesia.

M. CHARPENTIER, reporting to the same learned body on the production of the luminous sensation, states that where we find less red substance in the retina we observe a less luminous sensibility, and wherever the red appears in excess this sensibility is exaggerated. It is concluded that the luminous sensibility, defined as the simple and original reaction of the visual apparatus to all luminous excitations of whatever nature, is in relation to the degree of photo-chemical action exercised on the red of the retina by all the luminous rays.

THE *Pharmaceutical Journal* of June 1st contains a very long *verbatim* report of the case "The Society of Apothecaries v. Wiggin", to which we last week referred, in which the Medical Alliance Association, originated by Mr. R. H. S. Carpenter, recovered multiple penalties against a chemist for practising medicine. The report occupies nearly the whole of the space of that journal, and thus evidence is afforded of the importance attached to the question by the general body of dispensing chemists. The result, as we have stated, was eminently satisfactory. There are some special features of interest in the elaborate summing up of Mr. Justice Field; but the whole report is well worth reading. It was admitted on all hands that the chemist and druggist is expressly excluded from acting in the character of an apothecary.

ON the question, What is an apothecary? which governs the whole of these cases, Mr. Justice Field laid down the law as follows.

"Now, I have before me the definition of an apothecary, as I find it laid down by those who have gone before me. 'I should tell you that the duty of an apothecary is, that he is a person who professes to judge of internal disease' (but internal here merely means as distinguished from surgical; it is not intended to mean one particular part of the body)—to distinguish ailments such as fevers. It would be difficult to find one word which expresses it all; but you know the meaning of that, 'to judge of internal disease by its symptoms, and applies himself to cure the disease by medicine'. That is the definition laid down by a very learned judge, Mr. Justice Cresswell, in a case he left to the jury as far back as 1845; and I adopt that, and tell you that is the law. I take his language, adopt that language, and tell you that a person practises as an apothecary if he does what Mr. Justice Cresswell here says: if he professes to judge of internal disease by its symptoms, and applies himself to cure that disease by medicines. I should ask you to keep that definition in your minds when I come to read you the evidence, and to see whether or not what the defendant did here falls within that. Then I find another definition some years before, in which the learned Lord Chief Justice of the Queen's Bench of that day was of opinion that a man who kept no shop, but advised patients and made up and sold to them medicines which he himself ordered, did act as an apothecary in the ordinary sense of the term; and that it made no difference if he prescribed as well as prepared the medicines; he was still acting as an apothecary. I give you these two decisions of two very learned judges, and I adopt them as the law which I lay down to you to-day."

THE Apothecaries' Society must feel rather uncomfortable under the censure implied in the ill-founded compliments addressed to them by their counsel, Mr. Morgan Howard, Q.C. "I am sure," he said, "you will think that the Apothecaries' Company are only doing their duty, which they are bound to discharge for the protection of society, in bringing this matter before you for your determination to-day." The fact is, that the Apothecaries' Company have entirely neglected their

duty to society and the profession in this matter. They have done nothing to protect the poor from the abuse now pointed out, or the profession and their licentiates from the encroachment on their privileges. So long continued, so systematic have been this abuse and the neglect on the part of the Apothecaries' Company to define and to enforce the rights of which they are the legal depositaries and representatives, that the judge in this case very naturally and fairly prefaced his summing up by observing to the jury that "the defendant was not to blame in any way; no doubt he has done that which he for many years and a great many other respectable people have been in the habit of doing". Moreover, although these proceedings are taken in the name of the Apothecaries' Society, *stat nominis umbra*, they are represented only by the shadow of their name. The expenses, trouble, and responsibility of the score of proceedings which have been so successfully adopted have rested wholly upon a few private general practitioners, who, without any public position or official responsibility, have combined to fight a public question of great magnitude and importance, foremost amongst whom must always be mentioned Mr. R. H. S. Carpenter, Mr. G. Brown, and Mr. Nelson Hardy. It was with the greatest difficulty that they succeeded in rescuing from the hands of the Apothecaries' Society the penalties recovered in the first cases.

ANOTHER member of the "Peculiar People" sect has been committed for manslaughter, on the charge of having omitted to procure medical advice for an infant, whose death was by this neglect accelerated.

THE DEATH OF MR. EDWARD SPENDER.

THE lamentable death of Mr. Edward Spender and his sons by drowning at Whitsand Bay should quicken the sense of responsibility of those who have any authority in the charge of such dangerous shores. It appears that this is a locally well-known quicksand, where bathing is dangerous. That knowledge visitors cannot be expected to share; and Caution Boards in such places may save valuable lives. Mr. Spender's was a valuable life. He had done good work in many a cause of local reform, notably in that of temperance. The Phoenix Coffee Tavern in the Harrow Road was started by him; and he was working for good ends up to the day of his death. Only three days before that sad event, we had personally communications and help from him towards extending the coffee-tavern movement in the neighbourhood of King's Cross. Modest, sincere, gentle-hearted, and quietly but resolutely energetic in good social work, he has left among his friends the affectionate and respectful memory of a very noble nature and very sincere striving for usefulness to his fellows.

THE BRISTOL MEDICAL SCHOOL.

AT a meeting of the Council of the Royal College of Surgeons of England on Thursday last, the following motion was carried: "That, as recommended by the Court of Examiners, for the present the recognition by this College of the Bristol Medical School be not withdrawn, in the expectation that the proposed improvements of the arrangements for teaching in that School will be carried out, and on the understanding that a report will be furnished by the Honorary Secretaries of the School at the end of the winter session 1878-79, respecting the progress which shall have then been made in effecting those improvements."

INSANITY BEFORE THE COURTS.

THE Criminal Code Bill, now before Parliament, proposes to deal, among other important subjects, with the acknowledged defects of the law at present in respect to the legal definitions of insanity, and the responsibility of persons of unsound mind. This it does in accordance with principles laid down by Sir J. Fitzjames Stephen. The proposed enactment is as follows:

"No act shall be an offence if the person who does it is at the time when it is done prevented, either by defective mental power or by any

disease affecting his mind, (a) from knowing the nature of his act; or (b) from knowing either that the act is forbidden by law or that it is morally wrong; or (c) if such person was at the time when the act was done, by reason of any such cause as aforesaid, in such a state that he would not have been prevented from doing that act by knowing that if he did do it the greatest punishment permitted by law for such an offence would be instantly inflicted upon him, provided that this provision shall not apply to any person in whom such a state of mind has been produced by his own default. An act may be an offence although the mind of the person who does it is affected by disease or is deficient in power, if such disease or deficiency does not in fact produce one or other of the effects above mentioned in reference to that act."

It would be interesting to hear the opinions of some of our leading alienist physicians and medical jurists upon this section, which has been drawn by one of the ablest jurists and most competent in such matters.

A MUSEUM OF HYGIENE.

THE Clothworkers' Company have contributed a sum of twenty guineas towards the sustentation fund of the hygienic museum founded in memory of Dr. Parkes at University College. At a meeting of the subscribers to the Parkes Memorial Fund lately held at University College, Sir William Jenner, Dr. Sieveking, and Dr. Poore were appointed trustees to the fund; and we believe it is intended to invest £600 to form a nucleus for the adequate endowment of the museum, without which its permanent success is obviously impossible. A museum is necessarily a thing of gradual growth; but already the Parkes Museum is becoming worthy of the name. The food collection, which has been enriched by many contributions from South Kensington, Kew, and the private collection of Thomas Twining, Esq., has already assumed considerable proportions; and the War Office and Admiralty have sent many articles illustrative of naval and military hygiene. The library already contains between three and four hundred volumes of books on sanitary subjects, and the executive committee are striving to make the museum a centre of information for all matters connected with hygiene in its widest sense. It is, we believe, in contemplation to exhibit a fully equipped field-ambulance, which would at the present time be highly instructive. All persons interested in hygiene will be welcome to the museum, which is intended to benefit not one school alone, but the public at large.

A REFORMER IN THE TREATMENT OF LUNACY.

WE have to record with regret the death of Dr. Robert Gardiner Hill, whose name will always be identified with the abolition of those rougher and more barbarous methods of treatment of lunatics which prevailed till the beginning of the present century, when medical research prevailed over bequeathed monkish and metaphysical error, and the lunatic was recognised as a person the subject of physical brain-disease, and requiring medical treatment rather than cruel restraint, stripes, and chains. Dr. Hill took an early and prominent part in the abolition of mechanical restraint in the treatment of lunatics, and in 1851 he received a public testimonial in recognition of his distinguished services in this humane and enlightened work. He was one of the first to recognise that, in the management of insanity, to quote his own words, "moral treatment was all and everything". So early as 1836, he advocated the disuse of instruments of restraint; and in the following year, in the Report of the Lincoln Asylum, he asserted his belief, which was based upon his own practical experience, that an asylum for the insane might be conducted "without having recourse to the employment of any instruments of restraint whatsoever". It was not till 1839 that Dr. Conolly undertook the management of Hanwell Asylum and finally abolished the employment there of mechanical restraint for lunatics. In his early days, Dr. Hill contributed largely to contemporary psychological literature. Amongst other writings, he published *A Concise History of the Entire Abolition of Mechanical Restraint in Treatment of the Insane*. He was much esteemed by a wide circle of professional friends, and he earned a very large amount of success as a practitioner.

PHYSIOLOGICAL PHYSICS.

THE following passage from the Rede Lecture delivered by Professor Clerk Maxwell lately at Cambridge is, we think, of especial interest, as indicating the applications which our physiologists are likely to make of such instruments as the telephone, phonograph, and microphone, in a line of research which may prove ultimately not less valuable to practical medicine than to the physiological institutes of medicine.

"Among all the recent steps in the progress of science, I know none of which the truly scientific or science-producing consequences are likely to be so influential as the rise of a school of physiologists who investigate the conditions of our sensations by producing on the external senses impressions the physical conditions of which can be measured with precision, and then recording the verdict of consciousness as to the similarity or difference of the resulting sensations. Professor Helmholtz, in his recent address as Rector of the University of Berlin, lays great stress on that personal interaction between living minds which I have already spoken of as essential to the life of an university. 'I appreciate', he says, 'at its full value this last advantage, when, looking back, I recall my student-days and the impression made upon us by a man like Johannes Müller the physiologist. When one finds himself in contact with a man of the first order, the entire scale of one's intellectual conceptions is modified for life. Contact with such a man is, perhaps, the most interesting thing life may have to offer.' Now, the form in which Johannes Müller stated what we may regard as the germ which fertilised the physiology of the senses is this, that the difference in the sensations due to different senses does not depend upon the actions which excite them, but upon the various nervous arrangements which receive them."

THE SUCCOUR OF THE WOUNDED.

THE Women's Society for Succouring the Sick and Wounded, established in Germany under the protection and patronage of the Empress Augusta, recently held its second meeting in Dresden. The assembly was attended by one hundred and seventy-one delegates, of whom one hundred and twenty-four were ladies and forty-seven gentlemen, from Dresden, Berlin, Leipzig, Magdeburg, Würzburg, and other German towns; and also by the Empress herself and by the Queen of Saxony, the founder of the Albert Society established in Dresden. A paper was read on the occasion by the surgeon-general of the Saxon Army Corps, on the working of voluntary societies for tending the sick, in which it was mentioned that during the Franco-German war of 1870-71, 54,000,000 marks were spent by these societies, and that 149,000 sick and wounded passed through the station at Nancy. An account was then given of the work done during the late Turco-Russian war, in Constantinople and Bucharest, by the members of the Saxon Albert Society; the speaker declaring, according to the report of the proceedings, with much animation and eloquence, that it was thanks to the kindly zeal, untiring energy, and careful forethought of Her Majesty Queen Carola that it had been possible for the Society to carry out its Christian and philanthropic work on the shores of the distant Bosphorus. At the close of the proceedings, the Empress, in the name of the German Society, thanked the Queen for the invitation to meet at Dresden, and for the interest she had manifested in its welfare.

CONTROL OF DIPSOMANIACS.

THE first Annual Report of the Society for Promoting Legislation for the Control and Cure of Habitual Drunkards shows excellent progress in a short space of time. The society has been actively and influentially supported, and has a goodly list of vice-presidents, as well as an active executive committee. Its treasurer is Dr. Alfred Carpenter of Croydon, and its honorary secretary Mr. Stephen S. Alford, two members of our Association (members of the Committee on the Cure and Treatment of Habitual Drunkards), whose earnestness in this cause is well known. The society was only organised in September last, Dr. A. Carpenter in the chair. Already they are able to report that, taking for their guidance the Report of the Committee of the House of Commons (1872) on Habitual Drunkards, the late Mr. Donald Dalrymple's Bill founded on that report, and the various Acts

already in operation in America and Australia, after considerable labour and expense, with the assistance of counsel, a Bill has been framed. Provision is made in this measure for receiving habitual drunkards into retreats, upon request, to be attested by a justice of the peace or a commissioner for affidavits; or upon an order of justices on the application of friends in a proper case. A Bill with such provision was introduced by Dr. Cameron, M.P., last session, but too late for the second reading. This year, Dr. Cameron has again introduced a Bill, and has secured July 3rd for the second reading. It is the first on the list for that day. The Committee hopes that all interested in this important question will do their utmost to urge upon all members of Parliament within their influence the necessity for such legislation. Petitions have been presented to both Houses of Parliament in favour of this legislation; namely, eighty-five to the House of Lords, containing 5,512 signatures; and one hundred and three to the House of Commons, containing 7,008 signatures, including numerous church dignitaries, medical men, jail authorities, clergy, and members of various temperance societies. Petitions have also been presented by other bodies. In the House of Commons, such a measure will find much sympathy; such, indeed, as it must fairly claim from all enlightened persons, and especially from those who know how largely the jails are filled with habitual drunkards, as well as the workhouses and hospitals. We must expect also to hear "the liberty of the subject" paraded against any and every such measure; but, if some middle way can be found in this Bill to help us in arresting the downward course of the habitual drunkard, without shocking the lawyers too much, it would be a most beneficent and quite invaluable legislative enactment.

SCOTLAND.

ON Saturday last, the premises of the Glasgow Apothecaries' Company were almost entirely destroyed by fire. The loss is estimated to reach nearly £30,000, the greater part of which is covered by insurance. The cause of the fire has not been made out.

THE annual report of the Dundee Royal Infirmary has just been issued. During the past year, 1,686 patients were treated, being 112 more than in the previous year. Of these, 1,412 recovered or were relieved, 134 died, and 140 remained under treatment.

A SHOCK of earthquake was felt at Comrie in Perthshire, at half-past four o'clock on Sunday morning; it was accompanied by a loud report, described by one of the inhabitants "as if two very powerful pieces of ordnance had been discharged far under ground". The shock was the most severe experienced for many years, and was felt all over the upper valley of the Earn, from Lochearnside on the west to within a few miles of Crieff. The vibration, as usual, came from the south-west, and proceeded in a north-easterly direction. It is noteworthy that the shocks came, as has frequently been noticed on former occasions, after two or three days of incessant rain.

DRAINAGE OF NAIRN.

THE Nairn Police Commissioners have resolved to submit to the Board of Supervision for consideration the drainage and irrigation scheme prepared by their engineer, and to ascertain whether the Board is willing to recommend the Loan Commissioners to grant a loan of £60,000 and also a sum of £3,600 to complete and extend the works.

SCIENCE AS APPLIED TO AGRICULTURE.

SIX months ago, the Highland and Agricultural Society determined to try some experiments as to the effects of different substances applied in the form of manure to growing crops. In his report giving account of the work being carried on at the experimental stations, the Society's chemist, Dr. Aitken, says: "The manures have been made up with the utmost care, and applied to the soil with great precision, the seed

has been sown, and, under favourable circumstances, will be branding in a few days. The crop at both stations is for this season turnips. The general character of the experiments is easily comprehended. It is a series of about forty experiments to determine how far the *form* in which a manure is applied affects its efficacy as a crop-producer. Of the forty rood-plots into which each station is divided, thirty-five are taken up with this inquiry. To these have been applied the various forms of phosphatic manures, nitrogenous manures, potash-manures, guanos, and superphosphates. That is wherein they differ; but they all agree in this, that the manure of each plot contains 40 lbs. phosphoric acid, 30 lbs. potash, and 10 lbs. nitrogen. Hence, whatever differences may be observed in the amount or character of the crop on the various plots must be due not to the amount of plant-food supplied to them, but solely to the special form in which it has been applied. Care has been also taken to regulate, as far as possible, the amounts of the other important constituents of plant-food—viz., lime, magnesia, and sulphuric acid. The remaining five plots have been used for making separate experiments with other crops." The result of these valuable experiments will be watched with interest.

SCOTCH PRISONS.

THE seventeenth annual report of the managers appointed under the Prisons (Scotland) Act, 1860, has just been issued. In the Criminal Lunatic Department of the General Prison at Perth, 57 prisoners were in custody at the beginning of the year—41 males and 16 females; 4 were admitted and 6 disposed of during the year, leaving 55—39 males and 16 females—at the close; while the daily average was 56. Want of proper accommodation in the Lunatic Department is still complained of. Sense is expressed of the loss sustained by the department during the year through the retirement of Sir R. Christison from the position of visiting physician to the General Prison; and it is stated that Professor Douglas Maclagan has acted as temporary visiting physician in his room. It is recorded that a new hospital for male prisoners has been completed and brought into occupation during the year. Two cases of suicide are reported as having occurred in prisons during the year; in neither instance did blame attach to a prison-officer.

BATHGATE WATER-SUPPLY.

FOR some years past, the inhabitants of Bathgate have suffered much in the dry season from want of water; and since the opening of many public works in the district, the want has become very urgent. About twelve months ago, it was determined to construct a large reservoir about half a mile from the town, and at a height of seven hundred and ten feet above sea-level. The work was one of great difficulty, but it has been at length successfully accomplished. The reservoir will be supplied from the Well Burns and Petershill bore, along with about one hundred acres of watershed, and is capable of containing 12,000,000 gallons. It is calculated that this, in addition to the present supply, which is obtained from springs and bores about the burgh, will satisfy the requirements of the population for a long time to come. Several filters have been placed at a point nearer the town. The cost of the operations will not exceed the original estimate of £6,000. The ceremony of turning on the new supply was performed on June 7th by the wife of Mr. Maclagan, M.P.

IRELAND.

FOUR deaths from small-pox were recorded last week in Belfast, being the highest number registered during the previous six weeks.

THE Mountmellick Board of Guardians have voted a retiring allowance of £86 *per annum* to Dr. Wilkinson of that Union, being two-thirds of his late salary.

At a meeting of the Ballinasloe Board of Guardians, last week, the medical officer reported an outbreak of small-pox in the Workhouse, introduced by a tramp from the King's county.

DR. MCCLINTOCK, ex-Master of the Rotunda Lying-in Hospital, and Mr. Chaplin, Surgeon to the County Kildare Infirmary, have intimated their intention of seeking election to the Vice-Presidency of the Royal College of Surgeons in Ireland next June.

QUEEN'S UNIVERSITY IN IRELAND.

THE examinations in the Faculty of Medicine of the University commenced in Dublin last Monday week, and concluded yesterday (Friday). Nearly seventy candidates presented themselves in the subjects for the first and second University examinations in medicine. A meeting of the University to confer degrees will be held on Monday next.

MEDICAL WITNESSES.

A CIRCULAR from Dublin Castle has been recently forwarded to the magistrates throughout Ireland, which states that the attention of the Government has been called to the great and unnecessary expense of medical witnesses at Assizes and Quarter Sessions, and impressing upon them the necessity of exercising great caution in the matter of summoning and binding witnesses to appear unless in important cases, or where it can be satisfactorily shown that such evidence is indispensable for rightly disposing of the case.

IRISH MEDICAL ASSOCIATION.

THE first meeting of the Council, since its election at the recent annual general meeting of this Association, was held in the Royal College of Surgeons in Ireland, on Tuesday last. The President, Dr. Robert McDonnell, occupied the chair. The following members were elected on the Committee of Council for the ensuing year: Dr. Thomas Purcell (*Chairman*), Dr. Minchin (*Honorary Treasurer*), Dr. J. W. Moore (*Honorary Secretary to Council*), Dr. Chapman (*Honorary Secretary*), Dr. Grimshaw, Dr. A. H. Jacob, Dr. Mayne, Dr. Pollock, and Dr. Speedy. Dr. Chaplin of Kildare was appointed a member of Council. In consequence of the increasing clerical work devolving upon the Honorary Secretary, it was resolved that a salaried assistant-secretary be appointed.

THE CASE OF DR. MEEHAN.

ON the 5th instant, the Guardians of Limerick Union received a letter from the Local Government Board, in reference to the recent removal of Dr. Meehan from the office of visiting medical officer to the Workhouse by sealed order. The Board stated that the Chief Secretary of the Lord-Lieutenant was in communication with Mr. Butt, M.P. for Limerick, on the subject; and that he is desirous that nothing further should be done in the case, until he has had a full opportunity of making to him any further statement which he may have in view, although at present the Chief Secretary has no reason to question the correctness of the decision arrived at in Dr. Meehan's case. After considerable discussion, the guardians decided, by a large majority, to postpone the election of a resident medical officer and a resident apothecary, pending the inquiry which is being held.

PRESENTATION TO DR. KINKEAD.

AN address and testimonial has been presented to this gentleman, on the occasion of his leaving Tuam, where he practised for the past ten years, consequent upon being appointed to one of the professorial chairs in Queen's College, Galway. The address stated, that his friends and well-wishers could not permit those social ties which bound him and them together to be severed without expressing their appreciation of his valued services, and offering their hearty congratulations on his well-merited promotion. Whilst they rejoice that he has been chosen to fill one of the chairs in the Queen's University in Ireland—a post which his high literary and scientific attainments eminently qualify him to occupy, and which will be congenial to his tastes and pursuits—the consciousness of losing, not only so genial and sincere a friend, but also so skilled and gifted a physician, causes heartfelt regret to mingle with their pleasure.

THE DENTAL PRACTITIONERS' BILL.

THE following remarks were made by Mr. Tomes, F.R.S., and Mr. Donald Napier in the discussion of the Dental Surgeons' Bill at the recent meeting of the Parliamentary Bills Committee (see JOURNAL of June 8th, page 386).

Mr. TOMES drew the attention of the meeting to the fact that dental surgeon and surgeon-dentist were terms in constant use from the early part of the last century, during which period the latter term had been used by dental practitioners without interruption. In the case of Ladd v. Gould, it was decided by the Court of Queen's Bench that the Medical Act of 1858 had no authority over the above usage. It was decided that the term surgeon-dentist does not mean surgeon and dentist, and a rehearing of the case was refused. The Licentiate in dental surgery of the College of Surgeons uses the title of dental surgeon by the same right that a Member or Fellow of the College uses that of surgeon; namely, that the one is, by a board of examiners in dental surgery organised in conformity with a Royal Charter, pronounced competent to practise dental surgery, and the other surgery. The title given to the former is Licentiate in Dental Surgery; to the latter, Member or Fellow of the College of Surgeons. The Dental Practitioners' Bill proposes that, for the future, all dental practitioners shall become licentiates; and that they shall as such be registered; but it does not legislate for the past. Persons at present in practice will, unless they hold a recognised qualification, be entered upon the Register as in practice before the passing of the Act, and they amount to about four-fifths of the whole number of dentists. As they die off, their places will be occupied by qualified practitioners. There are at present in the *Medical Register*, under the letter B, nine persons who are entered as in practice before 1815; that is, they have no recognised medical qualification. The powers given by the Dental Charter were permissive only, and the success which has attended its administration has led the way to compulsory legislation. But it would not be consistent with justice to deprive persons of privileges exercised through several generations without infraction of the law, by the creation of a new law; and the Licentiates in Dental Surgery would not consent that the meaning of the term dental surgeon should be changed, in order that they may be deprived of its use. All the surgical corporations of the United Kingdom have approved of the Bill, and the principles of the Bill have been approved by the General Medical Council. Sixty-eight dental practitioners who hold registered medical qualifications have petitioned in favour of the Bill, and we do not know of more than ninety persons so qualified. Taking dentists generally, upwards of twelve hundred, or two thirds, have petitioned Parliament in favour of Sir John Lubbock's Bill, the total number of dental practitioners being estimated at a little below two thousand.

Mr. W. DONALD NAPIER said that he dissented entirely from the views expressed by Mr. Tomes; but he wished it, at the same time, to be understood that he did so in no unfriendly spirit. The question before the Committee was one that affected the rights of the medical profession as a body, not those of one class of specialists only. It must be remembered that the framers of the Dental Practitioners' Bill had resolved upon the prohibition of duly qualified medical practitioners from practising dental surgery by right of the diploma that empowered them to treat, medically or surgically, every part of the human body; and, although this absurd clause had been eliminated from the amended form, the fact that it had been inserted remained to prove the aim and intention of those who drew up and promoted the Bill: to wit, the monopoly of a specialty. Failing that, they would fain secure to those who own merely a licence from the College of Surgeons permitting them to practise dental surgery, and—to go further—to those possessed of no qualification whatever, beyond that which they owe to a large brain-plate announcing the nature of their calling, the right to style themselves "surgeon-dentists" or "dental surgeons", as their taste may suggest. It seemed to him (Mr. Napier) that the time had arrived for the medical profession to enter a strong protest against the assumption of any titles calculated to mislead the public. The Medical Act of 1858, though preventing unqualified persons from assuming the title of physician or surgeon alone, failed to debar them from appropriating it in conjunction with another word, as, for example, surgeon-accoucheur, surgeon-audist, surgeon-dentist, surgeon-culicist, and the like. It was, therefore, of grave importance that this loophole should be closed; and the presentation of the Dental Practitioners' Bill, and the Medical Act Amendments Bill, afforded opportunities that should not be lost of remedying an existing abuse. With regard to Mr. Tomes's assertion, that candidates for the membership of the College of Surgeons are not examined in the anatomy of the jaw, he could only say that his inform-

ation, derived from several of the examiners, was not in agreement with it; and, in reply to another remark from the same gentleman, to the effect that, whereas a mechanic might become a good dentist, an ordinary medical practitioner never could, or was unlikely to do so, he begged to express an entirely different opinion, believing that the educated medical practitioner could perfect himself in this, as in any other specialty of surgery, by devoting himself for a time to its study, and that the result would prove him to be the better dentist of the two. Mr. Napier concluded by expressing his regret that the subject of dental surgery did not meet with more attention than at present from the young men who joined the College as members, as, either in the army or navy, or in civil practice, the time might come when greater proficiency in this special branch might be found by them to be both useful and remunerative.

THE HARVEY TERCENTENARY MEMORIAL FUND.

THE meeting of London subscribers which was to have been held on Wednesday last did not, in consequence of a resolution passed by the London Executive Committee, take place. Instead of it, there is to be a meeting of all the subscribers at the Royal College of Physicians, Pall Mall East, on Tuesday next, the 18th instant, at 5 P.M. The business of the meeting will be the following. 1. To receive a report from the London Executive Committee; 2. To receive a report from the auditors; and 3. To consider other important matters in connection with the objects of the subscribers. Further subscriptions are still required, and will be thankfully received by Sir George Burrows, Bart., or Mr. Prescott Hewett, the honorary treasurers; by Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W.; or Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone, the honorary secretaries; or they may be paid in to the account of the Fund at the Western Branch of the Bank of England, Burlington Gardens, London, W.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE PLYMOUTH PUBLIC DISPENSARY.

WE have on former occasions referred to the proposal which has been made to introduce the provident system into the Plymouth Public Dispensary. That there should be difficulties in carrying out such a proposal is only what was to be expected. We are glad, however, to learn that these difficulties have been overcome, and that a provident department has been engrafted on the Free Dispensary. At the same time, the Committee of Investigation—which was created by the original rules of the institution, but had fallen into abeyance—has been revived, and will watch over the interests of both the free and the provident departments. On the one hand, it will prevent, as far as possible, letters of recommendation from being used for improper persons; while, on the other hand, it will endeavour to promote the provident system. It is obvious, therefore, that everything will depend upon the activity of the Committee of Investigation. If it be strict and vigilant, the reforms now introduced into the Plymouth Dispensary will not only prove a great advantage to the town, but may also serve as a model to many other places.

THE LEAMINGTON PROVIDENT DISPENSARY.

THE ninth annual report of the Leamington Provident Dispensary, which we have lately received, congratulates "the supporters of the institution upon its increasing popularity and usefulness amongst that class of the community for whose benefit it was established. The number of provident members has considerably increased, and the work has been carried on in every respect satisfactorily during the year." There is a decrease of £14 in the benevolent contributions, while the provident payments have increased by £46. If this indicate that there is any falling off of interest on the part of the public in this institution, we sincerely regret it; but, on the other hand, the more provident dispensaries become self-supporting, the better will they fulfil their object. There are now about four thousand enrolled members in this dispensary; and last year £387 13s. 9d. was divided among the four medical officers.

THE CITY PROVIDENT DISPENSARY.

WE are glad to learn that a provident dispensary has been established in the heart of the city. It would be well if some of the older dispensaries in this quarter would reform themselves upon this model. The basis upon which this new institution stands has been so often

recommended by us, that we need not say we approve of it. It is, however, distinguished from others in having a "Surgical Appliance Branch" attached to it, from which the patients can obtain trusses, elastic stockings, etc., on favourable terms and by easy instalments; but we are sorry to observe, that for the more expensive instruments, the system of requiring "Governors' cards" has been adopted. We trust these "Governors' cards" are dispensed by the Committee, and that poor cripples have not to go round the town begging for them. The surgeons, who undertake to attend and see patients every day from 10 to 11 A.M., from 1 to 2 P.M., and again from 6 to 7 P.M., are perhaps a little liberal of their services. To require medical men to give evening attendance at public institutions is to lay a heavy burden upon the profession.

CORRESPONDENCE.

VOTING FOR COUNCILLORS.

SIR,—I perceive you are publishing various letters on the question as to who are the proper persons to be elected members of the Council of the Royal College of Surgeons of England. It appears to me that one very important fact, in connection with that election, has been overlooked by the various writers on the subject, viz.: that, practically, the greater number of Fellows are disfranchised by the fact that it is necessary to be personally present at the election in order to vote. I should like to ask the intending candidates for the honour of the position of members of the Council of the College, whether they would be prepared to vote in favour of an alteration of that law: to allow, as is the case in many other elections, voting by voting-papers, sent round to the Fellows beforehand. If it would be in order, I should be happy to attend at the meeting for the election, in order to support any influential Fellow who would move a resolution to recommend an alteration of the by-laws, to that effect, to the Council.

I remain yours obediently,

GEORGE JACKSON, F.R.C.S. Eng. (Exam.)

Plymouth, June 10th, 1878.

THE METROPOLITAN COUNTIES BRANCH AND ASSOCIATION VOTING.

SIR,—A careful perusal of the laws of the Association and of its Metropolitan Counties Branch will, I think, convince your readers that there is absolutely no reason why the administrative action of the Executive should ever be seriously embarrassed by any supposed conflict of written papers with the vote of members in meeting assembled, which latter alone, as you point out, has official weight; the former, however valuable as a means of obtaining an expression of opinion from individual members of the profession, not being the mode in which, as members of the Association, they have agreed to record their votes, and the Executive, whatever their personal feelings or sympathies may be, being bound to carry out the legally expressed wishes of the members.

In the case of the late meeting of the Metropolitan Counties Branch, moreover, I contend that there has not been any contradiction (much less an official contradiction) between the so-called written votes of metropolitan members and the regularly obtained vote of the Branch.

This will at once be evident if we put together in the form of question and answer the queries to which the individual members replied, and a part of the resolutions passed by the Branch. Thus: Q. Are you of opinion that the medical profession should be directly represented in the General Medical Council?—A. It is desirable that the voice of the profession should be expressed in the Council by means of direct representation (4th Resolution).—Q. Are you of opinion that the establishment of a conjoint board for the granting of licences to practise all branches of the profession should be made compulsory in each of the three divisions of the kingdom?—A. It is desirable that the formation of conjoint examining boards should be made compulsory in each division of the kingdom (2nd Resolution).

Had it been desired to obtain an expression of opinion on the point really at issue between those who support and us who oppose the action of the Medical Reform Committee, a third query ought, I think, to have been added, something like this: Are you of opinion that we should repeat the policy pursued by us in 1870, and, like the Irish obstructives, oppose all medical legislation that does not provide for direct representation? and, put in that form, I have little doubt that the answer given in the written papers would have been substantially the same as that given by vote of the Branch—No, certainly not!

However this may be, it is, I think, very desirable that the amended

Bill should be brought under the consideration of the Branch at the earliest possible moment. My friend Mr. R. H. S. Carpenter, to whom the profession is more indebted than to any other man in England for the enforcement of the law against quacks, tells me that the amended Bill will leave the profession in a worse position as regards these gentlemen, and also as regards practising chemists, than it is already, since it proposes to repeal the sections of the Apothecaries' Act, under which most of the successful prosecutions have been carried on, and to give nothing satisfactory in its place. The change also which has been made in the Bill while passing through Committee in the House of Lords, by which those who pass the conjoint boards will be able to register without connecting themselves with any of the corporations, is open to the objection urged by Dr. Quain with reference to colonial and foreign practitioners, that there would then be no check upon their professional conduct.

The title, too, which is to be conferred by this qualifying certificate system is open to discussion. One of your contemporaries has well pointed out that "medical practitioner" when shortened to M.P. would create confusion, and that Q.C. would also be liable to be misunderstood.

The Bill has passed rapidly through the Upper House; and, unless action be taken by our Branch at once, these and other important points may not receive sufficient attention in the House of Commons.—Faithfully yours,

H. NELSON HARDY.

IS ALCOHOL FOOD?

SIR,—A family bereavement has prevented an earlier reply to the letter of Dr. Markham, and is my apology to the members of the Association for not having taken an earlier notice of that communication.

Dr. Markham calls in question the truth of a certain statement which I made in my address on Alcoholic Drinks, viz., that every medical man (in extensive practice) must have seen cases which now and then have fallen to my lot to witness, in which life had been prolonged by the stimulants which the patients would alone consume. Dr. Markham omitted one very important and qualifying part of the statement. I said "every medical man in extensive practice"; I should also have said in extensive family practice. If Dr. Markham is excessively interested in this fact, I will show him a case which is now under my care, and which I have carefully watched for some years. The patient existed for some months entirely on stimulants, and during more than three months she did not take two ounces of any other kind of food. There was no deception in the case. The parents and sisters who attended upon her, and who tried all kinds of methods of getting other food taken, entirely failed to do so. It is true she became, and still is, a skeleton; but the fact remains that absolutely no other food was taken for a length of time than that which I have mentioned.

When I delivered the oration, I had also two other cases in my mind in which two old ladies lived on stimulants alone for several weeks before death, and I have no reason to suppose that I was deceived by the attendants. Almost every large private lunatic asylum will probably contain cases which are of a similar character.

I might have declined to answer Dr. Markham; I do not think he is quite aware of the offensive style in which he has put his question. I will, however, pass that by, and simply remark that, on asking for the grounds on which an argument is founded, it is not necessary to charge your antagonist with falsehood.—I am, sir, your obedient servant,

Croydon, June 10th, 1878.

ALFRED CARPENTER.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 10th day of July next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., June 12th, 1878.

EDINBURGH BRANCH.

THE annual general meeting of the above Branch will be held at 5, St. Andrew's Square, Edinburgh, on Tuesday, June 18th, at 4 P.M.: Sir ROBERT CHRISTISON, Bart., President, in the Chair.

CHARLES E. UNDERHILL, *Honorary Secretary.*

Edinburgh, June 4th, 1878.

CAMBRIDGE AND HUNTINGDON, EAST ANGLIAN, AND SOUTH MIDLAND BRANCHES.

A CONJOINT meeting of these Branches will be held at Peterborough, on Friday, June 21st; T. J. WALKER, M.D., President-elect.

PROGRAMME OF PROCEEDINGS.

11.45 A.M. Each Branch will meet separately at the Peterborough Infirmary, to transact Branch business.

12.30 P.M. Morning general meeting: President's address, etc.

1.15 P.M. Luncheon at residence of President-elect.

2.15 P.M. General meeting for the reading and discussion of papers, etc.

5.0 P.M. H. M. Townsend, Esq., architect, will conduct a party over the Cathedral and surrounding buildings.

6.0. Dinner at Great Northern Hotel. Tickets 15s. each, wine inclusive.

The President-elect will be obliged if those members who propose to attend the dinner will communicate their intention to him not later than Monday, the 17th instant.

The following papers have been promised.

1. J. B. Bradbury, M.D., Cambridge: Notes of two Cases of Obscure Disease of the Liver: with Remarks.

2. F. Buszard, M.D., Northampton: A Case of Pseudo-hypertrophic Paralysis.

3. W. Cadge, Esq., Norwich: The Diagnosis and Complications of Diabetes.

4. Peter Eade, M.D., Norwich: Case of Chronic Dysentery treated by Milk only.

5. A. Haveland, Esq., Northampton: The Distribution of Zymotic Diseases from Epidemic Centres.

6. G. M. Humphry, M.D., F.R.S., Cambridge: 1. Hospital Practice in Norway, Sweden, and Russia; 2. Case of Recovery after Removal of a Fungous Growth in the Bladder.

7. John Lowe, M.D., Lynn: Lithotomy in a Case of large Phosphatic Calculus, the Nucleus being a Bone Penholder, which had been two years in the Bladder.

8. W. Newman, M.D., Stamford: The 'Antiseptic Dressing of Wounds.

9. C. E. Prior, M.D., Bedford: Five years' Experience of Enteric Fever by a Medical Officer of Health.

10. W. Thomson, M.D., Peterborough: Notes on Gastrotomy in a Case of Stricture of the Oesophagus: with Report of a Successful Case.

11. Job Watson, Esq., St. Ives: A Case of Severe Gunshot Wound of the Skull terminating in Complete Recovery.

12. George Wherry, B.A., Cambridge: On the Disadvantages and Disorders of Hypermetropic Eyes.

Dr. T. S. Walker will be glad to arrange for the reception for the night, by himself or his friends, of members from a distance, for whose return there is no late evening train.

All qualified members of the profession residing in the neighbourhood are invited to attend the meeting, even if not members of the Association.

WM. A. ELLISTON, M.D., Ipswich,

J. B. PITT, M.D., Norwich,

BUSHELL ANNINGSON, M.D., Cambridge,

G. F. KIRBY SMITH, Northampton,

} *Honorary Secretaries.*

LANCASHIRE AND CHESHIRE BRANCH.

THE forty-second annual meeting of this Branch will take place at Bailey's Hotel, Blackpool, on Friday, June 28th, 1878, at 1 P.M.; Dr. STEELE (Liverpool) President.

The following communications have been promised.

1. Mr. Reginald Harrison: On the Use of Filiform Bougies with Tunnelled Instruments (Gouley's) in the Treatment of Stricture of the Urethra.

2. Dr. Haddon: 1. Two Cases of Ulcerating Endocarditis, with Temperature Charts and Sphygmographic Tracings; 2. An Easy Way of Noting Cases in General Practice.

3. Dr. Howie: The Grape-Cure in Bilious Nausea and Early Pregnancy.

4. The Report of the Duration of Infection Committee will be read, and a summary of the results obtained will be given.

The members will dine together at Bailey's Hotel, at five o'clock. Charge 7s. 6d., exclusive of wine. Gentlemen intending to be present at the dinner are requested to forward their names to Dr. Leslie Jones, Blackpool, not later than June 24th.

D. J. LEECH, M.D., *Honorary Secretary.*

Manchester, June 13th, 1878.

BATH AND BRISTOL BRANCH.

THE annual meeting of the Branch will be held at the Mineral Water Hospital, Bath, on Wednesday, June 26th, at 4.30 P.M., when H. MARSHALL, M.D., will resign the Chair to H. HENSLEY, M.D. The members will afterwards dine together at the York House.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, June 4th, 1878.

MIDLAND BRANCH.

THE annual meeting of this Branch will be held at Lincoln, on Thursday, June 27th: President—C. H. MARRIOTT, M.D.; President-elect, A. MERCER ADAM, M.D.

Members desirous of reading papers are requested to communicate with C. HARRISON, M.D., *Honorary Secretary.*

Lincoln, May 14th, 1878.

SOUTH-WESTERN BRANCH.

THE annual meeting of this Branch will be held at the Imperial Hotel, Torquay, on Thursday, June 20th, at 1.50 P.M.

Luncheon (provided by Dr. Radclyffe Hall, President-elect) will be from 11.30 A.M. to 1 P.M.; and dinner (7s. 6d., exclusive of wine) at 5.15 P.M.: both at the Imperial Hotel.

Gentlemen wishing to read papers, or to dine, are requested to give notice to the Secretary on or before the 18th instant.

LOUIS H. TOSSWILL, M.B., *Honorary Secretary.*

Exeter, June 12th, 1878.

NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held at Hartlepool, on Thursday, July 25th, at 3 P.M.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, June 8th, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, July 2nd. The Chair will be taken by the President, SAMPSON GAMGEE, Esq., at 3 P.M.

An address will be delivered by the President-elect, Dr. TINNITS, of Warwick.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner tickets, exclusive of wine, 7s. 6d. each.

JAMES SAWYER, M.D., } *Hon. Secretaries.*
EDWARD MALINS, M.D., }

Birmingham, June 11th, 1878.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE annual meeting of this Branch will be held at Neath, on Thursday, July 11th: J. TALFOURD JONES, M.B., President; JOHN RUSSELL, Esq. (Neath), President-elect.

Any members desirous of reading papers, etc., are requested to communicate the titles to either of the Honorary Secretaries.

ANDREW DAVIES, M.D., } *Honorary Secretaries.*
ALFRED SHEEN, M.D., }

June 12th, 1878.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

A MEETING of this district was held at the Star Hotel, Lewes, on Friday, May 24th; N. P. BLAKER, Esq., of Brighton, in the chair. Sixteen members and visitors were present.

Communications.—The following communications were made.

1. Mr. PENFOLD of Brighton showed a Photograph of a Tumour in the Left Orbit occurring in a married woman, and related its history and treatment.

2. Mr. BLAKER read particulars of three cases of Visceral Syphilis; viz., *a.* Large Gummata of Liver, one situated in the Lobus Spigelii causing Obstruction of the Portal Veins and Dropsy; *b.* Syphilitic Deposit in Liver and Head of Pancreas obstructing the Ductus Communis Choledochus; *c.* Syphilitic Disease of the Dura Mater producing Epileptic Fits, the second fit being fatal.

3. Dr. W. WITHERS MOORE related a case of Hemiplegia and Subsequent Apoplexy from Embolism.

Deaths of Members.—Mr. BLAKER moved, Mr. GRAVELY seconded, and it was carried: "That this meeting cannot separate without expressing their deep regret at the lamented death of the late Dr. Cunningham of Hailsham, one of the Vice-Presidents of this Branch; and also of Mr. Whitefield of Eastbourne."

The Dinner took place at the Star; Mr. Blaker in the chair.

The Next Meeting is to be held at Hayward's Heath in September; and Dr. Braid was nominated to fill the chair.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE HOLLINGBOURN BOARD OF GUARDIANS AND OUTDOOR MEDICAL RELIEF.

THE guardians of this rural union some time since appointed a Committee to consider the question of outdoor relief. Their report, signed by the chairman, J. Paine, is before us; from that and other official sources we will proceed to lay before our readers certain facts well worthy of consideration.

The Hollingbourn Union, Kent, comprising an area of 60,555 acres, contains a population of 14,047. This area and population are distributed into six medical relief districts, which vary remarkably in extent and population. In the year 1876-77, the cost of gross relief was £7,115, being at the rate of 10s. 1½d. per head of population; medical relief amounting to only £345 10s., inclusive of extras, which were £29 10s. From the return furnished at the instance of Dr. Lush, we learn that this board has paid no heed to the recommendation of the Select Committee on Poor Relief, 1864, which reported in favour of boards of guardians providing all expensive medicines; for this board supplies none—not even cod-liver oil for the consumptive and scrofulous sick. The importance of efficient medical relief in diminishing the duration, and therefore the costliness, of sickness when occurring among the wage-earning classes, has evidently never dawned on their minds, or we should not find in the rules and regulations which this board has drawn up the following. Able-bodied men eligible for relief, belonging to any club and falling sick, first, in all cases, to have medical relief on application; secondly, in all cases where the club-pay exceeds fourteen shillings a week, no relief to be given beyond the medical order; which, being interpreted, means that the guardians will not sanction the grant of any relief which is to cost the board anything, but that they will not object to saddling their ill-paid medical officers with the charges for visiting and the provision of medicines and appliances. The heavy poor-relief outlay, the smallness of pay and general insufficiency of the medical relief arrangements, prove conclusively that it is to the starvation of the latter that the excessive amount of the former is due. What inducement can there be for frequent visits or liberality in prescribing, on the part of medical officers serving such a parsimonious board? These rules and regulations for limiting outdoor relief are conceived in a very illiberal spirit, and show that such boards as this of Hollingbourn have erroneous notions of the manner in which they should deal with the arrangements which relate to the medical care of the poor committed to their charge. We are satisfied that they will fail in securing the end the board is striving to obtain; viz., the diminution of the charges on poor-relief.

MILITARY AND NAVAL MEDICAL SERVICES.

NETLEY TRAINING.

THE *Army and Navy Gazette* publishes the following paragraph.

"In referring three weeks since to the call upon the medical profession to provide candidates for immediate entry as naval surgeons, we pointed out the objection felt by many qualified practitioners to pass the required examination and to go through the course at Netley. Our remarks have called forth the approval of one of very high standing in the profession, who, from his position, should be able to gauge the feeling of would-be candidates, and he remarks that 'for the Netley staff to presume to test the qualifications of men whose names are on the official register is a piece of presumption without a parallel, and the great stumbling-block to obtaining a sufficient supply of medical candidates for the public service'. We trust their lordships will not let this opinion pass unnoticed."

We can assure our contemporary that, however high be the standing of the gentleman in question, the information with which he has furnished

does not accord with the general feeling in the civil profession, in the service, or in the medical schools, but can represent the crotchet only of very few. We believe, indeed, that such a statement is not only unfounded, but the exact and complete reverse of the fact. The immense advantages of a course of Netley training to the army medical officer has long been recognised; and the boon lately secured to the navy of participating in the advantages of that course is very generally and largely appreciated. No doubt, the incapable, the indolent, and the frivolous, who see in the medical services of the army and navy only a chance of idling or masquerading on a secured pittance, or of securing a living which imperfect attainments and constitutional indolence make doubtful in the competition of home life—such men shrink from the further labour of the Netley course and the tests of increasing and special proficiency which it provides. But the army and the navy have great cause to remember with gratitude those who founded and those who carry on that admirable school of special technical training for the services. A proof, moreover, that the fear of Netley is not the cause of the dearth of candidates is afforded in this particular instance, when the special announcement that the Netley course would be omitted, the implied indication that examination-tests would be specially lenient, and the spirit-stirring prospect of early active service, failed to secure even the limited number of candidates required. The fact is, that the conditions of service require to be further improved in the direction already long since laid before the Admiralty by impartial and well-informed persons, of which a summary was formally presented to the First Lord by the Parliamentary Bills Committee of the British Medical Association.

OBITUARY.

ROBERT GARDINER HILL, L.R.C.P.E., F.S.A.

ROBERT GARDINER HILL died suddenly, of apoplexy, at his residence, Earl's Court House, Old Brompton, on May 30th. He was born in Louth in 1811, was educated at Guy's and St. Thomas's Hospitals, and qualified as M.R.C.S. and L.S.A. in 1834. He became L.R.C.P.E. in 1859. In 1834, he was appointed house-surgeon to the General Dispensary at Lincoln; in the following year, he was elected medical superintendent to the Lincoln Lunatic Hospital, which office he held for five years. He afterwards practised at Lincoln, and became proprietor of Eastgate House, a private asylum for the insane. He was very popular in Lincoln, and was chosen mayor of the town in 1852. He subsequently removed to London, and became proprietor of Earl's Court House, a private lunatic asylum, and once the house of John Hunter. Of Mr. Hill's services in the improved treatment of the insane, we speak in another column.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College, having undergone the necessary examinations for the Fellowship at the half-yearly meetings terminating on the 3rd instant, were reported to have acquitted themselves to the satisfaction of the Court of Examiners; and, at a meeting of the Council on the 13th instant, were admitted Fellows of the College.

Messrs. Charles Firth, Norwich, diploma of membership dated November 18th, 1873; Charles E. Harrison, Army, January 21st, 1874; Harold B. Boulter, Hull, July 27th, 1874; George H. Hames, Leicester, April 20th, 1875; Frederick S. Edwards, St. Peter's Park, W., November 17th, 1875; and Robert H. A. Schofield, Cambridge Gardens, May 23rd, 1877 (Students of St. Bartholomew's Hospital); Edward F. Brockman, Addison Gardens, November 14th, 1865; and William A. Frost, Ladbroke Square, July 22nd, 1874 (of St. George's Hospital); George E. Williamson, North Shields, April 21st, 1874 (of the London Hospital); Francis R. Cross, Bristol, January 25th, 1871 (of King's College); Rhinalt N. ap J. Pughe, Liverpool, April 22nd, 1873 (of the Liverpool School); Frank T. Paul, Liverpool, July 22nd, 1873; George A. Wright, Romford, April 26th, 1877 (of Guy's Hospital); Bernard M. S. Roth, Wimpole Street, July 26th, 1874 (of University College); Horace Manders, Marlborough, November 18th, 1875 (of St. Mary's Hospital); and Gerald F. Yeo, Albemarle Street, not a member (of the Dublin, Paris, Berlin, and Vienna Schools).

Five candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months.

At the same meeting of the Council, the following members were elected Fellows of the College.

Messrs. J. Hyde Houghton, Dudley, diploma of membership dated April 2nd, 1838; R. James Mann, Wandsworth, June 26th, 1840; and W. Berry Kellock, Stamford Hill, May 5th, 1843.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 6th, 1878.

Hine, Alfred Leonard, Oakley Street, Chelsea
Prince, Herbert Francis, Park Street, Taunton
Stewart, John McDougall, 12, Cambridge Gardens, N.W.
Taylor, Richard Stanley, Friar Gate, Derby

The following gentleman also on the same day passed his primary professional examination.

Livy, Frederic Young, Manchester Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

BIRMINGHAM GENERAL HOSPITAL—Assistant-Physician. Salary, £100 per annum. Applications to be made on or before the 24th instant.

BRIGHTON HOSPITAL FOR SICK CHILDREN—House Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing.

EAST RIDING LUNATIC ASYLUM—Medical Superintendent. Salary £350 per annum, with furnished house, coals, and gas. Applications to be made on or before the 24th instant.

GREAT NORTHERN HOSPITAL—Surgeon to the Out-Patients' Department. Applications to be made on or before July 2nd.

HOSPITAL FOR SICK CHILDREN, MANCHESTER Junior Resident Medical Officer. Salary, £20 per annum, with board and residence. Applications to be made on or before the 25th instant.

KENMARE UNION—Medical Officer to Kenmare Dispensary District. Salary, £100 a year, with £25 as Sanitary Officer, and the usual Registration and Vaccination Fees. Applications on or before the 26th instant.

KENT and CANTERBURY HOSPITAL—Physician. Applications to be made on or before the 28th instant.

LIMERICK UNION—Apothecary to Workhouse. Salary, £100 a year, with apartments, fuel, and light; but applications will be received for the post at £100 a year with permission to reside in Limerick. Election will take place on the 19th instant.

LONDON LIVER HOSPITAL—Resident Medical Officer. Salary, £200 per annum, with residence, coals, gas, and attendance.

MANCHESTER ROYAL INFIRMARY, DISPENSARY, and LUNATIC HOSPITAL—Ophthalmic Surgeon. Applications to be made on or before the 29th instant.

MIDDLESEX HOSPITAL—Assistant-Physician. Applications to be made on or before July 2nd.

RAMSGATE and ST. LAWRENCE ROYAL DISPENSARY and SEAMEN'S INFIRMARY—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, gas, firing, and attendance. Applications to be made on or before July 1st.

ROYAL HOSPITAL OF BETHLEHEM—Assistant Medical Officer. Salary, £300 per annum, with furnished apartments. Applications to be made on or before the 20th instant.

ST. MARYLEBONE GENERAL DISPENSARY—Honorary Physician. Applications to be made on or before July 1st.

SEAMEN'S HOSPITAL, GREENWICH—House-Physician. Salary, £75 per annum; and House-Surgeon, salary, £50 per annum, with board and lodging in each case. Applications to be made on or before the 27th instant.

SOMERSET COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum, with board, residence, and washing.

SOUTH DEVON and EAST CORNWALL HOSPITAL—House-Surgeon. Salary, £60 per annum, with board. Applications to be made on or before July 8th.

TOWNSHIP OF MANCHESTER—Assistant Medical Officer. Salary, £140 per annum, with furnished apartments, washing, attendance, etc. Applications to be made on or before the 19th instant.

WESTBOURNE PROVIDENT DISPENSARY—Surgeon. Applications to be made on or before the 20th instant.

WEST BROMWICH DISTRICT HOSPITAL—House-Surgeon. Salary, £80 per annum, with board, residence, and washing. Applications to be made on or before the 26th instant.

WOLVERHAMPTON and STAFFORDSHIRE GENERAL HOSPITAL—House-Physician. Salary, £100 per annum, with board, washing, and apartments.—House-Surgeon. Salary, £100 per annum, with board, washing, and apartments.—Honorary Physician. Applications to be made on or before the 24th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

DR TATHAM, H. M.D., appointed Obstetric Physician to the Jamsetjee Jeebhoy Hospital, and Professor of Midwifery in the Grant Medical College, Bombay.

GREENE, Richard, L.R.C.P.Ed. (Medical Superintendent of the East Riding Asylum, Beverley), appointed Medical Superintendent of the Northampton County Asylum, *via* G. Millson, L.R.C.P., resigned.

***MORTON, A. Stanford, M.B., C.M.**, appointed Assistant Surgeon at the Royal South London Ophthalmic Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGES.

PIERCE—PLATT.—On June 6th, at Platt Unitarian Chapel, Rusholme, by the Rev. C. Beard, B.A., uncle of the bride, *Frederick Morrish Pierce, M.D., L.R.C.P.Lond., of Manchester, to Hannah Sophia (Sophie), only daughter of John Pearson, J.P., of Heald Grove, Rusholme, late of Staleybridge.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, 4 P.M. Mr. T. Spencer Wells, "Lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours". Lecture IV: Details of Different Steps in the Operation of Ovariectomy—Position of Patient—Incision—Adhesions—Opening and Emptying of Cyst—its Removal—Treatment of Pedicle—Closure of Wound—Dressing and After-Treatment.

WEDNESDAY.—Royal College of Surgeons of England, 4 P.M. Mr. T. Spencer Wells, "Lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours". Lecture V: Results of the Operation—History of Recovered Patients—Proportion of Incomplete Operations, and the Results—Cases of Recurrence and Second Operation—Successive Changes in the Mode of Operating and After-Treatment.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. Mr. T. Spencer Wells, "Lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours". Lecture VI: Antiseptics in Abdominal Surgery; Surgical Treatment of Uterine Tumours.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE TITLE OF DOCTOR.

We have received again a very large number of letters on the subject of medical titles. Speaking generally, members in possession of an University M.D. of Scotland or Ireland are astonished at the puerility of those who claim the title of Doctor without possessing the University diploma. The opposite opinion prevails among correspondents who have been educated in England, where the facilities of a complete medical education are great, but opportunities for graduation as M.D. are denied to all but a very small minority of medical students. We cannot publish all these letters, or even a small proportion of them; and, indeed, although their number, and the frequency with which the correspondence is renewed, show that a very strong feeling prevails, we cannot say that they add anything to arguments already advanced. Persistence and number, however, constitute an argument in themselves; and, as we have already said, we can but recognise the fact, that, while the title of Doctor is denied to all but University graduates, completely educated English medical men labour under a plain disadvantage in comparison with graduates who, with no higher education, but with local advantages of title, settle alongside of them in practice.

ERRATUM.—A. H. T. C. was last week informed that the title of Mr. Birkett's work is *Diseases of the Heart, and their Treatment*; it should have been *Diseases of the Breast, and their Treatment*.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

SPELLING REFORM.

SIR,—The columns of the **BRITISH MEDICAL JOURNAL** are scarcely a suitable place for discussing the reform in the spelling of English, proposed by Dr. G. Harley, and exemplified in his paper published in the **JOURNAL** of June 8th. Nevertheless, as, if called on to adopt Dr. Harley's orthography, I should feel some strong pricks in my etymological conscience—and I do not think that they would be simply "needles"—I must beg leave to say a word or two on the subject.

In his ejection of the "needless" duplicated consonants, Dr. Harley seems to ignore certain well known phonetic tendencies of the English language. Again, the omission of the second consonant in many words is liable to give rise to ambiguity, which may partake more or less of the ridiculous. Would Dr. Harley, in describing a *post mortem* examination, write that the parts were "mated" together by adhesive lymph? Would he speak of the "anals" of physiology, or surgery, or any other science? And are we to "felo" his plan so far as to describe him and many other eminent and most respected men as "*Felo* of the Royal College of Physicians," "*Felo* of the Royal College of Surgeons," or "*Felo* of the Royal Society"?—I am, etc., H. A.

SIR,—I was much interested and pleased with Dr. Harley's new method of spelling, for he has had the courage to put into practice ideas I have entertained for some time. Although Mr. Pitman's system is phonetically and philosophically correct, it makes no progress towards general adoption, because it is a *revolution* of the present system of spelling rather than a *reform*. Dr. Harley's method is a continuation of the alterations in spelling which have been slowly going on since the time of Chaucer, but arrested during the present century by the fixidity given to the English language by the adoption of standard lexicons. From these arbitrary standards writers and printers dare not depart, for fear of being charged with ignorance. Now, ours being considered one of the learned professions, its members need not fear the imputation of ignorance; therefore, if there could be a general agreement amongst us that we should in our correspondence and publications adopt Dr. Harley's method, the public would soon follow our example, and a spelling reform be accomplished. I would suggest that some influential members of our Association give notice that they will, at the next meeting, move that the **JOURNAL** in future be printed after the new method.—I am, etc., R. E.

P.S.—Dr. Harley's pamphlet should be advertised in the **JOURNAL**.

MR. P. MOSTYN WILLIAMS's letter reached the office on Thursday, and therefore too late for insertion this week; but it shall appear next week.

VACCINATION IN CHINA.

SIR,—As the benefits derived from vaccination, although fully established, seem still to be doubted by a few persons, through some isolated instances of unsuccess, it may perhaps not be out of place to state how rapidly vaccination is gaining ground among the "black-haired" race to whom small-pox has always been so great a scourge. In the spring, and occasionally the winter months, when the weather is milder than usual, small-pox makes sad havoc among the Chinese, to mitigate which, beside making burnt offerings to the Goddess of Small-pox, they for hundreds of years have resorted to a practice once adopted extensively by us, although differently from the Chinese—viz., inoculation. Small-pox is called by the Chinese "heaven's flowers", and inoculation "cultivating heaven's flowers". The latter appellation is likewise applied to vaccination. Inoculation is practised as follows. A lucky day is selected for the operation: this by the Chinese is held to be of great importance, as likewise choosing a lucky spot to deposit a coffin containing a dead body. They never bury their dead, nor have they cemeteries or burial-grounds. China may justly be said to be one vast mortuary, coffins being deposited anywhere and everywhere. Scabs are taken from a small-pox patient, pulverised, and blown up the nostrils of the child; the right nostril in the case of a female child, the left in that of a boy. Another method is to put the clothing of a patient with small-pox upon the child. A third method I have seen extensively practised, both at Ningpo and Wenchow, as follows. Children's nostrils are plugged with scabs and raw cotton, rammed in so tightly as to cause the ale to bulge out and blood to stream into the mouth. No particular rules are observed in selecting the matter, except that they always take it from a mild case of the disease. They take care at the time of inoculation that the child is in good health. They say they prefer inducing the disease at an early age, as by this means they prevent the child from scratching the pustules and causing pitting, and also that it is impossible to foretell whether the disease will be severe or not. Some years the mortality is much the same as from small-pox; in others, there are few if any deaths.

On the introduction of vaccination to China, it was considered by these intensely superstitious people to be some evil device of the foreigners. However, seeing the protection it gave to us, they were induced to try it, and for some years past it has been gradually gaining favour; but the Chinese will not submit to vaccination, unfortunately, during the winter months. So much benefit have the people of the far East derived from vaccination, that natives are rapidly taking up the practice, and according to the last Chinese Customs' Medical Report, Dr. Somerville of Foochow states that a curious document was posted on the walls in the neighbourhood, which, translated, is as follows.

"Vaccination was introduced hither from Europe. It is practised by 'planting' three 'seeds' of virus in a spot upon the left and right arms above the elbows. This spot is called the cold-dispelling pool, and upon it is formed the virus and a scab, there being no eruption upon the body generally. The result is effected in ten days, and no failure can possibly take place, whilst security is obtained from any natural and original attack of small-pox, or from a second attack, if the patient have already had it. Children vaccinated in this way need not be afraid of exposure to cold, thunder, chills, heat, etc.; nor need they take any medicine, whatever, or avoid any particular kinds of nourishment, but may play about just as usual. Persons wishing vaccination, should come to the house of the undersigned and make an appointment for the operation. Vaccination will commence on the 1st of November, 1877."

As Dr. Somerville writes, it is amusing to note the droll mixture of practical science from the West with the transcendentalism of the Chinese system of medicine. However, I think these few remarks will go far to prove the benefits that this nation must have derived from vaccination, which is so proverbially slow to adopt any Western ideas on any subject.—Truly yours, GEO. CHAS. COLES.

"**BRAIN**" asks whether any good memoir of the late eminent physician and metaphysician, Dr. John Abercrombie of Edinburgh, is in print.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATER IN MAY 1878.

The following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen used to Oxidise Organic Matter.	Nitrogen As Nitrates, &c.	Ammonia		Hardness. (Clarke's Scale.)	
				Saline.	Organic	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	19.40	0.066	0.120	0.000	0.009	13.2	2.8
West Middlesex ..	19.20	0.084	0.120	0.000	0.010	13.2	3.3
Southwark and Vauxhall	19.00	0.077	0.135	0.000	0.009	13.2	3.3
Chelsea	18.40	0.056	0.135	0.000	0.017	12.6	3.7
Lambeth	20.60	0.063	0.156	0.000	0.008	13.7	2.8
<i>Other Companies.</i>							
Kent	32.00	0.001	0.450	0.000	0.001	20.6	7.5
New River	17.60	0.024	0.141	0.000	0.005	12.6	3.7
East London	18.10	0.049	0.135	0.000	0.007	12.1	3.3

Note.—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be clear and nearly colourless in all cases.

MUSCÆ VOLITANTES.

SIR,—Allow me to remind your correspondents of the work of Donders, *On the Accommodation and Refraction of the Eye*, published by the New Sydenham Society. They will there find that this subject has received not only the attention of some of the highest authorities on optics, as Sir D. Brewster, but also the closest investigation of the best oculists of this age, as Listing, Liebreich, Doncan, and others. As the subject is fully gone into in the above admirable work, I will not presume to offer more than one or two remarks which have occurred to me. Muscæ appear at all times and in all shapes, in children as well as in adults; nor am I aware that any of the diseases named by Dr. Holland are at all necessary for their existence. They also appear at all distances, from the focal to three and two inches, immediately on the eye and within the orbit. Fixed muscæ are seen with the eyelids closed, because light is still transmitted; but if the eyes be darkened so effectually as to admit no light, the spots are not seen. Some years ago, I obtained a number of opaque lenses, extracted by Mr. Bader of Guy's Hospital, as I conceived that bile, or some of its constituents, was the cause of the opacity, and not blood. I took these to Dr. Letheby, and explained to him my reasons. He said, "If it is bile, we shall have a violet colour." The test was applied, and the violet colour was apparent to both of us. Upon this, I felt I was right in my opinion as to the cause of opacity in the lens. About the same time, I saw in a patient of Mr. Crichton, at Moorfields, the anterior chamber of both eyes filled with cholesteroline crystals, giving somewhat the appearance of the liqueur called "gold-wasser". The play of light on the crystals was remarkably beautiful. Now, what was the chemistry that separates these crystals from the bile in the aqueous humour? If cholesteroline crystals can be thus separated, why not some of the other innumerable constituents of the bile by the same wonderful chemical means, of which the microscope can give us no information? Why does the physician look at the conjunctiva for the yellow tinge, and then prescribe a blue pill and black draught, which sends all these phantoms spectra to the winds? I therefore contend that bile, or some of its products, is the cause of the majority of muscæ; that all the tissues of the eye may be stained permanently or transiently, as fixed or fleeting muscæ. Even the retina, optic nerve, and brain are invaded by this subtle element, producing in the latter organ melancholia and symptoms of insanity. Donders says that in the vitreous humour of every one small microscopic bodies float; also for seventeen years a pearly string had existed in his right eye. He also talks of "coherent groups of little circles of various sizes—some pale, some dark; and membranes which terminate in irregular points—some torn off in rays, plaits, pearl-spots, etc.; groups of scotomata, ordinary corpuscles, too small to be ophthalmoscopically visible". Does not all this give the idea of a crystalline formation too microscopic for our senses? I think in the bile Dr. Holland will find the "material archetype" for these formations. I cannot agree with him that true muscæ never spontaneously disappear; I had such in my right eye for twenty years. On leaving off wine, beer, and spirits, as well as pickles, cheese, and pastry, for a period of eighteen months, my permanent friends have taken their departure, but will rehabilitate themselves on a return to former habits. I think if "Medicus" will take this hint, and not resort to a slyful evacuation of the aqueous humour, he will find the suggestion he asks for.—I am, sir, yours truly, May 25th, 1878.

W. STORV.

SIR,—Having demonstrated in a former letter my theory of the formation of muscæ volitantes proper, will you allow me to call attention to what I believe are phenomena either directly dependent or consequent on the above affection. They consist of numerous specks—some dark-coloured, others bright, like the sparks produced in the discharging of a Leyden jar, which I become conscious of under exactly the same circumstances as the muscæ proper. I have been induced to consider them as a part of muscæ by their appearing always under exactly the same circumstances, and because they are seldom (in my case at least) long separated the one from the other. My explanation is this: they are produced from distension of the more minute capillaries of the retina by blood; and my reason for arriving at this conclusion is, that they generally appear in great numbers after exertion, or when the heart is strongly acting.

Any better explanation of their origin would greatly oblige yours, etc.,

F. R. GREENWOOD, M.R.C.S.

St. Bartholomew's Hospital, May 27th, 1878.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

UNQUALIFIED ASSISTANTS.

SIR,—It was with much interest that I read the letter of "Undergraduate" in the JOURNAL of May 18th, as I believe he represents one of a comparatively select few of the great mass of unqualified assistants. These last are a class of men for whom, as a rule, I have little or no sympathy, many of them being students who have at one time been more or less brought up with every advantage, have perhaps finished their curriculum, and had every opportunity for studying, so as to enable them to qualify and become members of an honourable profession; but they have chosen to throw them away, have neglected their studies, lectures, and work generally. Here and there, indeed, you may find one who retraces his steps, and, by a fixed determination to amend, under favourable circumstances passes the portal and enters the profession a sadder but wiser man. Again, there are some men who never intend to qualify, who never work with that view. With such I have nothing to do; they deserve whatever fate befalls them; and should they some day find that the law causes their vocation to be gone, it is only what they can expect. All these are the men who bring discredit on the calling of the medical assistant, together with those medical men who willingly delegate their duties to them. But that the unqualified assistant should be condemned entirely, is, to say the least, as uncharitable as it is inconsistent. There are exceptions, of whom, I hope and believe, "Undergraduate" is a type, who are worthy of the utmost consideration and sympathy—men for whom we should have the keenest desire to see helped and encouraged in their path, beset with many difficulties of no ordinary degree—men who have been diligent pupils, doing their best to obtain a sound knowledge of their profession, but who find themselves unexpectedly, by force of circumstances, misfortune, or some calamity, thrown upon life's battle before they have finished their curriculum, or enabled to pass all or any of their examinations. With these should be classed those students who are friendless and without means, who have never had the opportunity to qualify, but, wishing to enter the profession, and having no help but their own exertions, are undergoing many privations, endeavouring step by step to reach the goal and enter the portal by sheer hard work, extending over a long time. All honour due to such men, who often turn out our brightest and most learned examples, but, too often, at great cost of time and health. All these are men who make assistants of undoubted value, as they possess those qualities most to be desired in an assistant. They are not unqualified because they wish it, but by virtue of their inability to obtain the necessary means; and all sensible well thinking people could not be so unjust and cruel as to wish to deprive them of the only means they have of getting a living. There are few men, perhaps, that have less sympathy for the mass of unqualified assistants than myself; but there are exceptions, such as I have pointed out, for whom I have the warmest good wishes. I believe much might be done for the good of such men as "Undergraduate" and others, were the matter taken up by some eminent members of our profession.

I am afraid I have trespassed too much on your valuable space, but I trust and believe that you will, in common justice to the deserving unqualified assistants, give publication to this letter, as my object has been to show that they are not all such unworthy dogs as some would have us think.—I am, sir, yours obediently,
May 18th, 1878. ANTI-HUMBUG.

J. W. E. Y.—The address of Mr. Wickham Barnes, Honorary Secretary of the Poor-law Medical Officers' Association, is No. 3, Bolt Court, Fleet Street.

SUPERSTITION.

SIR,—There are sundry superstitions still abroad which, as they adversely influence some patients and their attendants, may deserve notice in the JOURNAL, with a view to giving medical men a cue for their abolition. That to which I especially now allude is the superstition relative to the "death-watch". Scientific men commonly affirm that the sound is caused by a beetle; but as it is sometimes heard where there are no beetles, people remain of their old opinion as to its supernatural origin.

About a fortnight ago, I heard a distinct ticking sound, exactly like that of a watch, and perfectly regular. It took some hunting to discover the cause, and at last I succeeded. A stone-jar of the usual pattern, with cork at one side and near the end, had been filled with very hot water the night before, and was in the morning standing on its end, nearly cold. There was, of course, a partial vacuum inside, and minute bubbles of air passing the cork and leaping through the water behind it caused the sound. It had been going on for fully half-an-hour, and stopped instantly on shifting the cork. To-day the same phenomenon occurred, and I called the servant's attention to it, and showed her how it stopped when the cork was moved. Now, if it happened that any one died in the house after a sound of this nature was heard, superstition would have been confirmed in the minds of the ignorant, who do not investigate causes; and in this instance it is not improbable, humanly speaking, that there might be a coincidence, since there are two invalids in the house, one suffering from a disorder about the heart. Hot-water bottles are so common in sick rooms, that I think the circumstance deserves noting.—Yours faithfully, C. L. B.

COMPULSORY VACCINATION.

MR. JOHN BRIGHT has been visited rather severely by the medical journals for having, as they say, expressed himself in favour of selling indulgences to propagate small-pox. He holds that the payment of the first fine of twenty shillings should procure a recalcitrant parent immunity from further prosecution; "in other words, that every father should be at liberty to sacrifice the life of his children by omitting to protect them from the infection of small-pox, and to set up the foci of a dangerous and infectious disease on payment of twenty shillings". In calling this a most "pernicious and surprising doctrine", the BRITISH MEDICAL JOURNAL does not go one whit beyond the mark. Of two things one: either vaccination is useless, and then it ought not to be enforced by any fine at all, or it is a prophylactic against a most perilous and loathsome disease, and then it ought to be enforced even by imprisonment, just as one would enforce the law against the indiscriminate sale of poisonous or explosive. To pass a law and then to contend that it may be broken for a sovereign, is to bring legislation and the legislature into contempt. There is no need to do that at a time when we are losing in London alone about eight lives a day through small-pox.—Western Morning News.

OPEN SURGERIES.

SIR, Given an old established practice, together with a fairly remunerative open retail, I should be glad if any professional brother, who has had practical experience in a similar case, would kindly give me an estimate of the probable result, financially, to a practitioner of average ability, of closing the latter.—I am, sir, yours respectfully, MEDICUS.

REMOVAL OF THE TONGUE BY LIGATURE.

SIR,—May I ask Mr. Fearnley, through the medium of the JOURNAL, to explain a paragraph in his letter of the 25th instant, in which he describes his mode of removing a tongue by immediate ligation? He says: "I have laterally transfixed the tongue with a blanket-pin, beginning at the right angle of the mouth and bringing it out at the left, and by this means carried the pin immediately in front of the epiglottis; I then placed a single loop of stout whipcord around the tongue, behind the pin," &c. What I wish to have explained here is, "the transfixion of the tongue with a blanket-pin". Why was this done? and will Mr. Fearnley also kindly tell me what a "blanket-pin" is? as I must confess to never having heard the term before.—Yours faithfully, A MEMBER.

UTERINE HÆMORRHAGE.

SIR,—In the last JOURNAL (June 1st) I find a communication from Dr. D. Christie, describing his method of instantaneously arresting uterine hæmorrhage, than which nothing gives more anxiety to the medical attendant. After an active professional life extending over more than forty years, I must confess my ideas in connection with physics have become somewhat hazy; but before admitting the safety of the plan recommended, will Dr. Christie kindly state the cubical contents of the bag he introduces into the uterus, and the diameter of the seven-and-half feet tube connected with it?—Yours truly, G. H. FOSBROKE, Sen.
Biford, June 5th, 1878.

THE publication of the letter of "A Medical Sufferer" would lead to a theological controversy.

PROFESSIONAL ADVERTISING.

SIR,—I beg to draw the attention of yourself and of the members of the British Medical Association to the enclosed circular, which has been extensively distributed in this neighbourhood. I observe Mr. James Kennedy is a member of the Association, and wish to have the opinion of his co-members regarding the production.—I am, etc., M. B.

Fraserburgh, N.B., June 1878.

"Mr. James Kennedy, Surgeon, desires to intimate to the inhabitants of this town and surrounding districts, that, at the suggestions of many friends and others, he will attend, professionally, families who pay him a yearly sum of ten shillings each—lying-in cases and medicines excepted. Lying-in cases from ten shillings and sixpence to one guinea each, according to the circumstances of families. Professional visits in town to non-subscribers, one shilling each visit. These terms shall hold good up to two miles from Surgeon Kennedy's residence; and beyond two miles, and up to four miles, lying-in cases attended for one to two guineas each, according to agreement. Country patients attended at moderate rates.—Roseheart, by Fraserburgh, Aberdeen, May 10th, 1878."

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courant; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelson Chronicle; The Fifeshire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

. We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. T. Spencer Wells, London; Dr. J. G. McKendrick, Glasgow; Dr. George Johnson, London; Mr. H. Brown, Northallerton; Dr. H. H. Vernon, Southampton; Dr. Wickham Legg, London; Dr. J. B. Walker, Golcar; Mr. G. Jackson, Plymouth; Dr. Joseph Rogers, London; Mr. Greene, Birmingham; Mr. Owen, Manchester; Dr. Sawyer, Birmingham; Dr. D. H. Tuke, London; Mr. Cay, Tunbridge Wells; Dr. Daly, Dalston; Mr. Richard Greene, Beverley; Mr. J. H. Palmer, Birmingham; Mr. C. Williams, Norwich; Dr. Levinge, Stapleton, Bristol; Dr. Smith, Pershore; Mr. Grant, Birmingham; Mr. W. E. W. Vaughan, Crewe; Mr. W. E. Hyde, Leominster; Mr. J. Startin, London; A. G. B.; Mr. Noble Smith, Paddockhurst; Medicus; Dr. J. W. Hamill, Manchester; Dr. A. Ransome, Manchester; C. L. B.; Mr. MacDonogh, Clapham; The Secretary of Apothecaries' Hall; M.D.; Dr. J. Macpherson, London; Dr. G. H. Philipson, Newcastle-upon-Tyne; The Secretary of the Medical Society of London; Dr. J. Milner Fothergill, London; The Registrar-General of England; Mr. Wilson, Plymouth; Dr. Edis, London; The Registrar-General of Ireland; Dr. Ferrier, London; Mr. A. S. Morton, London; Dr. Sawyer, Birmingham; Dr. Poore, London; Brain; Dr. Waters, Chester; Dr. A. Carpenter, Croydon; M.D. Ed.; Dr. E. C. Seaton, London; Mr. Power, Dartmoor; Dr. W. A. Sturge, London; Dr. Fairlie Clarke, Southborough; Dr. Coats, Glasgow; Our Edinburgh Correspondent; Mr. J. Taylor, Titchhurst; Our Dublin Correspondent; Mr. Laffan, Cashel; Mr. Leslie, Hampstead; W.; Mr. Tosswill, Exeter; Mr. H. Taylor, Guildford; Dr. K. L. Patterbury, Berkhamstead; Dr. Lauder Lindsay, Perth; Mr. F. Manby, East Rudham; Mr. Nelson Hardy, London; Dr. Leech, Manchester; Mr. P. Mostyn Williams, Rhyl; Mr. Kirby Smith, Northampton; Mr. Gaime, Bath; Dr. Wardell, Tunbridge Wells; Mr. V. Jackson, Wolverhampton; Mr. T. M. Stone, London; Mr. W. K. Curtis, Canterbury; Mr. Vacher, Birkenhead; Mr. Lawson Tait, Birmingham; Dr. McLaren, Carlisle; Dr. A. Davies, Swansea; Dr. F. H. Parsons, Hastings; Mr. C. W. Martindale, Leamington; Surgeon-Major C. J. Johnston, Plymouth; etc.

BOOKS, ETC., RECEIVED.

Transactions of the New York Pathological Society. Vols. i and ii. By John C. Peters, M.D. New York: Wm. Wood and Co. 1877.
A Practical Guide to Diseases of the Throat. By Lennox Browne, F.R.C.S. London: Baillière, Tindall, and Cox. 1878.

LECTURES ON THE DIAGNOSIS AND SURGICAL TREATMENT OF ABDOMINAL TUMOURS.

Delivered at the Royal College of Surgeons of England.

BY

T. SPENCER WELLS, F.R.C.S.,

Professor of Surgery and Pathology in the College; and Consulting Surgeon to the Samaritan Hospital.

LECTURE II—June 12th, 1878.

Semisolid Abdominal Tumours; Different Kinds of Ovarian Tumours—their Diagnosis—Complications with Pregnancy; Extra-uterine Pregnancy—Specimens illustrating various other Conditions resembling Ovarian Tumours; Fibroid and Fibro-cystic Uterine Tumours; Tumours of Abdominal Wall; Tumours of Omentum and Mesentery, of Liver, Spleen, Kidney, and Mesenteric Glands; Cancer and Tubercle; Aneurism; Hematocoele and Pelvic Abscess; Faecal Accumulation; Phantom Tumours.

AT the lecture on Monday, I was speaking about the chemical qualities of the fluid removed in tapping ovarian cysts; and yesterday, I had an opportunity of removing from a young lady sixteen pints of fluid, of which this is a portion. You will see that it is very nearly of the colour of distilled water. Through this green bottle, there is a little tint visible; but if it be put into a white glass jar, there is no colour to be seen, only the very slightest opalescence. The specific gravity is 1006, which is a little more than we occasionally find in these fluids removed from simple cysts. Then the albumen which it contains is not true albumen, but the form I have described to you as being the coagulum which, formed by heat, is redissolved upon the addition of boiling acetic acid; so that the albumen is not true albumen but paralbumen. On examining the deposit, there is nothing whatever to be seen, and the fluid may be looked upon as a very fair or typical specimen of that from a simple or single ovarian cyst, or of an extra-ovarian cyst—a cyst formed in the broad ligament near one or other ovary. Yesterday, also, I had the opportunity of removing a single ovarian cyst; and thinking it might interest you to see it, I have brought it here. You will see what a very thin-walled cyst it is, completely single, absolutely free from all adhesions, and the only opening in it is that made by the trocar in emptying the fluid from it, in order that the empty cyst might follow the fluid removed. The case very well bears out what I was saying about the difficulty occasionally met with in ascertaining whether the fluid in a large cyst is really in a cyst or whether it is free in the peritoneal cavity. The lady was fifty-seven years of age. Last summer, the abdomen began to increase in size. She consulted two or three physicians, who all told her she had liver-disease and dropsy, but whether the dropsy depended on cancer or tubercle, they did not seem very well to know. Then Dr. Risdon Bennett, the President of the College of Physicians, saw her. He had no doubt at all about the fluid being encysted, and advised the patient to see me. I at once advised that she should be tapped, seeing that the cyst was a single cyst, and possibly it might be one of those cases in which the fluid would not re-form after tapping. I tapped it last October, and eighteen pints of fluid were removed. The lady improved very much in health, and went to Brighton. Last March, it was again tapped, about the same quantity of fluid being removed. It is a curious instance of the different reports one gets about the quantity of fluid removed. The surgeon who tapped her wrote to me that he removed "seven gallons of fluid". I thought it very strange, and on questioning the patient, I found instead of being seven gallons it was seven quarts. That is the kind of mistake one sometimes meets with inadvertently made in the reports of cases. After the second tapping, the cyst refilled; and as it seemed a case in which mere tapping would be of very little use, it was arranged I should remove the cyst yesterday, which I did, and here it is. It is a thin transparent cyst, which yesterday contained eighteen pints of fluid, and which came out through a very small opening as soon as it was emptied. As the fluid escaped, so the empty cyst came out. There is nothing more to be said, except that the patient is perfectly free from fever, and in all probability will do very well.

Then I was going on, at the close of the last lecture, to speak about the microscopical examination of the fluids removed by tapping, and I was about to show you some of these diagrams, which show the last additions to our knowledge on this question. Long ago, Dr. Hughes Bennett of Edinburgh described certain cells, which are extremely well figured in his little book—cells which he considered to be quite distinctive of the fluid removed from ovarian cysts. He believed that when those cells were found in fluid, it could come only from an ovarian cyst, and from nothing else. This examination was afterwards carried on, and in my own book on *Diseases of the Ovaries*, which I formerly mentioned to you, there are about one hundred figures, embracing nearly everything which had been described up to that time as having been found in cysts of various kinds. Mr. Nunn had previously described some of the same sort of granular cells or epithelial cells and granules; and then, in America, Dr. Drysdale, the son-in-law of Dr. Atlee of Philadelphia, having the opportunity of examining nearly all the cysts removed by Dr. Atlee, carried on this investigation, and described, as "ovarian granule-cells", the cells which are pretty well shown on this diagram—that sort of cell which differs very little from the cell which Dr. Bennett described years before as characteristic of the fluid of ovarian dropsy. I have also drawn here some ordinary red blood-corpuscles, in order that you might make the comparison of the size in which these things appear as compared with a blood-corpuscle under the field of the microscope. (Figs. 1 and 2.) We



Fig. 1.



Fig. 2.

suppose these to be simply the nuclei of the epithelial cells which line the interior of the cyst. The scales are thrown off, the cell-wall breaks down, and the nucleus remains.

After a good deal of controversy as to the exact meaning and value of these things, whether they are found in ovarian cysts only, or in the kidney, or the spleen, Mr. Knowsley Thornton, who for some time past has examined a great many of the tumours which I have removed, made a great addition to our knowledge in pointing out that, in addition to these cells of Drysdale, which are common only in simple or innocent ovarian tumours, in malignant tumours you have these very characteristic groups of cells of different sizes. He describes them as large numbers of characteristic groups of large pear-shaped, round, or oval cells, containing a granular material with one or several large clear nuclei, with nucleoli and a number of transparent globules or vacuoles. The cells composing the groups are many of them very large, but the great variety in size and shape is the marked feature of the group. If you will bear these different forms in mind, and these different cells, I believe you will find that they are characteristic, and of great value in the examination of these fluids, putting us on our guard when we have to deal with tumours doubtfully malignant. If these large groups of cells be seen, one may be pretty certain the tumour is malignant of some kind; or if they be found in fluid removed from the peritoneal cavity, probably a sort of infecting process has been going on in the peritoneum from the rupture of an ovarian cyst of a malignant character; these cells may have planted themselves upon some part of the peritoneum and multiplied.

Fig. 3.

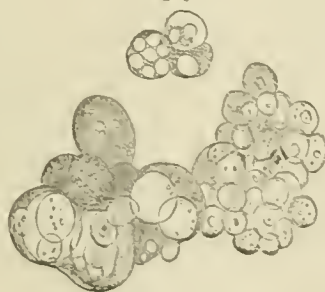


Fig. 4.

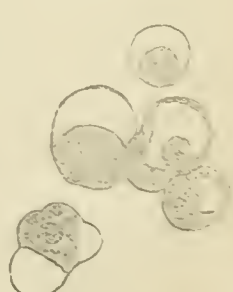


Fig. 5.

Fig. 3 is a group of vacuolating cells from ovarian fluid (rare). Fig. 4 is a group of cells from peritoneal fluid in a case of cancer

the pancreas, omentum, etc., freshly drawn and no reagents used. In fig. 5 are single cells and groups from the sediment of peritoneal fluid treated with nitric acid and logwood. The single cells show the vacuole substance (colloid) pressed to the outer surface by the action of the reagents. The centre cell in the group shows the colloid substance shrivelled from the same cause. The case was one of slow-growing sarcoma of the ovary. Figs. 6, 7, and 8 represent cell-groups



Fig. 6.



Fig. 7.



Fig. 8.

and a single cell from the same fluid as No. 4, but treated with nitrate of silver. There are vacuoles both in the cells and nuclei; in the cells pressed to the circumference by the action of the reagent. The single cell has the characteristic balloon shape, and shows a curious row of nuclei. Fig. 9 gives a view of a group of cells from peritoneal

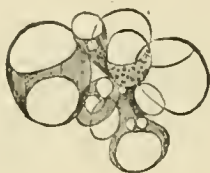


Fig. 9.

fluid (fresh, no reagent used) in a case of rapidly growing sarcoma of ovaries and uterus. The nuclei have all disappeared, and the cells are almost destroyed by vacuolation. All these drawings were made for me by Mr. Thornton himself.

This last drawing (fig. 10) shows Dr. Drysdale's sketch of the fluid

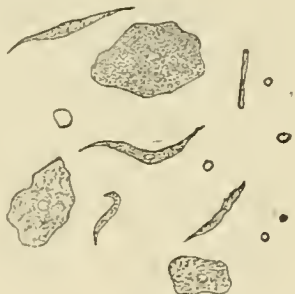


Fig. 10.

removed in a case of fibro-cystic tumour of the uterus, with what he calls "fibre-cells". I need not say more now about the microscopical appearances found in these fluids. The work of Dr. Atlee, with Dr. Drysdale's own illustrations, is very well known, and may be found in the library.

I think, before passing on to speak of the different varieties of semi-solid tumours, ovarian tumours and others, I will just draw attention to this very large cyst of the left kidney which I removed during life; and close beside it is the uterus from the same patient, showing the ligature which has been placed on one of the ureters, and also showing that in the cavity of the uterus there is a polypus. That is one of the points in which we were led wrong in the diagnosis of the case. The patient was a woman 29 years of age, the wife of an agricultural labourer. She was sent to me from Yorkshire, and was stated to have had an ovarian tumour for some years, and to have been tapped several times. I found that there were cicatrices of the tapping punctures in front of the abdomen, and that the abdomen was distended by this very large cyst. The uterus was large, and it was difficult to make out what the exact connection between the tumour and the uterus was. I do not think anybody who saw the case had any doubt that it was an ovarian cyst; the only question in the case was whether or not the woman was pregnant, and I proceeded to the operation without the faintest shadow of a doubt that I was going to remove an ovarian cyst. But, as soon

as the abdominal wall was divided, I found I was coming upon something peculiar. I could not find the peritoneum as one generally does, but came rather upon the cyst-wall covered with a loose layer of cellular tissue, and I then began to think I was dealing with an extra ovarian cyst, the sort of cyst one often finds covered by an expansion of one or other of the broad ligaments; so I emptied the cyst, expecting to be able to separate it more easily. When it was empty, I began to try to separate the adhesions. I found the uterus and both ovaries quite healthy, and then, of course, came the question of what should be done. I was disposed to leave it alone, and see what drainage would effect; but so many adhesions had been separated, that that seemed to be rather hazardous; and, although I perceived it was a kidney-cyst, I thought I had better remove it, and so I did. I tied the vessels, and the operation seemed to have been completed satisfactorily. The tumour was removed, and there was no very great loss of blood. The patient was put to bed, and for some time looked as if she were likely to go on pretty well; but, on the fourth day, she died, without any very characteristic symptoms having been observed. There was nothing peculiar in the urine, and nothing more than one commonly sees in cases of ovariectomy where the patient gets some amount of fever after the operation. On examining the tumour, it is seen very distinctly that the kidney has been expanded, as it were, into that large cyst. I thought it might be interesting to bring this specimen under your notice, as showing that we may get very large single cysts simulating ovarian cysts; and that, when they are associated with a large uterus and with a history of ovarian fluid having been removed at previous tapplings, it would take a great deal of care indeed to avoid this sort of error.

The case leads me to speak of another which was somewhat similar, in which we did not make a mistake in diagnosis. A certain amount of pointing in the right loin led to a more careful examination of the state of the case, and making an opening into the loin, introducing a drainage-tube, and treating it antiseptically, keeping the end of the tube covered with a sponge wetted with carbolic acid and occasionally injecting, that patient was completely cured. I do not think the tumour was so large as the first, but still it did contain a very large quantity of fluid, and fluid which, singularly enough, had a great deal of cholesterine in it. I do not think this has been previously noticed in renal cysts. I will not say more about renal cysts at present, and will proceed in the order which I have laid down in the printed prospectus of these lectures to speak of the semisolid abdominal tumours which one may meet with in great variety. Of these we have several specimens on the table.

Here are four very good specimens of encysted tumours. I will just say a word about the different kinds of ovarian tumour, passing on from the simple single kind which is there. Here is a very good specimen of the multilocular form, which has been very well injected, showing the arrangement of the vessels of the walls of the cyst; and here is an interesting specimen of a cyst in the ovary from a child only five weeks old. Oddly enough, there were twins; one died at five weeks and one at seven weeks, and they both had ovarian cysts. There was nothing wrong about the mother, who was a healthy woman.

Solid tumours in the ovary are much more rare than semisolid ones, but here is a good specimen of a solid tumour which I removed some years ago from a young lady nineteen or twenty years of age, a patient of Mr. Prescott Hewett—a case of perfectly characteristic soft cancer of the ovary. She went on well at first; but, a day or two after the stitches were removed, there was a partial reopening of the wound, accidentally caused by coughing; peritonitis followed, and death. I do not suppose the patient would have ultimately recovered after such a character of growth as that; but still there would have been a temporary recovery, had it not been for that accidental occurrence.

The different kinds of ovarian tumours and the diagnosis of adhesion may be made out by some little attention in the examination of a patient. We can ascertain with a little care whether a cyst is a single cyst with limpid contents, or whether the contents are likely to be viscid, and this will assist us in forming some opinion as to whether one should be content with tapping and drainage, or whether it would probably be ultimately necessary to resort to ovariectomy. The reasons which would induce us to suppose that the cyst is single, and that it probably may be cured by tapping, are that it may have existed for many years without any great effect upon the general health of the patient; or, on the other hand, that it has formed with such extreme rapidity that it is almost certainly mistaken for ascites. You see a young woman whose abdomen has rapidly enlarged (one may sometimes see this one's self, but it is more frequently reported); but I saw it in the case of a young lady I examined many years ago with Dr. Rigby. Neither Dr. Rigby nor I was at first certain that we could

discover anything in the abdomen; we thought we could make out a little dulness and doubtful fluctuation, but there was no enlargement, and yet, in three weeks, that cyst was as large as an adult head. It rapidly increased, and had to be removed in three weeks after the first examination. That is a very rare and exceptional case. When you get this very rapid formation of a cyst, it is pretty certain the cyst is a single one; and so also if the cyst have existed a good many years, and the patient have not suffered much from it, it is probably single; and these are cases in which tapping alone may not only afford temporary relief to the patient, as it does, but may possibly complete the cure; the fluid may never re-form. In such a case as this, one can detect no hardening of the cyst wall, no nodules, and the surface is so smooth one can make up one's mind that there are no groups of secondary cysts about it, and that it is practically unilocular. When you get resistance to the wave of fluctuation in different directions, then you may also be pretty certain that there are septa dividing the cyst into different portions, and that it is of a multilocular character, and in that case tapping would be of no use; although one compartment might be emptied, the others would remain full. Supposing we find cartilaginous or hard bony projections, or nodules, in different parts of the cyst, then the probability is strong that the tumour is one of the forms of dermoid tumour, in which we may find cartilage, bone, fat, hair, teeth, and other things, of which we have some good specimens in the museum. Occasionally one begins to doubt whether both ovaries are affected or not. We may meet with a sulcus going immediately down the abdomen, and, if we find intestine there, in that case it is extremely probable both ovaries are affected. Sometimes this is deceptive. I have seen a very large sulcus on the surface of one ovarian tumour, made by the Fallopian tube pressing it in the centre, so that there was a very distinct bulge on either side, and we felt almost certain that both ovaries were affected, whereas only one was diseased. The belief of Boinet, that one can foretell before tapping the character and colour and consistence of the fluid, has a certain amount of foundation. The progress of the disease, the more or less acute pain complained of, the other signs of inflammation more or less rapid, and the state of the general health of the patient, will lead to suspicion probably that one has some purulent fluid, or mixture of blood and serum, or pus in a cyst; if there have been a rise of temperature at night, loss of appetite, and other signs of fever, you may be pretty certain there has been some inflammatory change going on in the substance of the tumour or cyst, which will lead to changes in the condition and character of the fluid.

The solid tumours I need not say anything more about, except that they do not fluctuate; they are solid. These are much rarer than cases where one finds a portion of the tumour solid and a portion of it fluctuating.

Then with regard to the diagnosis of adhesions, it used to be thought a matter of very great consequence to determine, before undertaking to remove an ovarian tumour, whether it was adherent or not; and, in the early days of ovariectomy, great trouble used to be taken by Dr. Frederic Bird and others to ascertain, if they could, whether the tumour was free. They would tap and watch carefully the way the cannula moved as the cyst emptied, and Dr. Bird used to put needles through the abdominal wall into the cyst, to see the way in which the ends of the needles were deflected, and, if there were signs that the cyst was adherent, then it was not considered a case in which ovariectomy ought to be attempted. When I commenced practice in this particular department of surgery, I soon began to doubt whether this was a point of much consequence, and, when one began to number cases by hundreds, there seemed to be very little difference in result between cases of adhesion and of non-adhesion, so that I do not think we need give more time or attention to this point, but it is as well to remind you of it.

I have here some specimens of bone and teeth, from cysts which I removed, prepared by Dr. Junker, who for five years was in Japan teaching the Japanese surgery, establishing a surgical school there, and carrying the benefits of our surgical knowledge to the Japanese. They illustrate extremely well the forms of bone-like matter which one occasionally meets with in dermoid cysts of the ovary.

To revert for a moment to the subject of diagnosis of adhesions: practically, I think, the question of extent of adhesion to the abdominal wall is not of much consequence. The result is pretty much the same, so far as the adhesions go, to the patient; but the amount and intimacy of pelvic adhesions are matters of very much greater moment. Supposing an ovarian cyst is adherent low down in the pelvis, between the uterus and rectum or the uterus and bladder, or on either side, the attempt to separate it is necessarily a dangerous one. If any blood-vessels be torn, it is difficult to find them. Although by artificial means one can occasionally throw a strong ray of light to the bottom of the pelvis and secure a bleeding vessel, yet it is troublesome and difficult to do; and the results of these cases are by no means so satis-

factory as when there are only adhesions to the abdominal wall. One can pretty well ascertain if there be such adhesions as these, by a careful examination of the pelvis by the vagina, whether the uterus is fixed to a portion of the tumour. You find that they do not move with the position of the patient; they do not move when she coughs; they do not move when the shoulders are lowered and the hips raised; and it is impossible, either with the uterine sound or in any other way, to separate the uterus from these pelvic portions of the adherent tumours. Occasionally there will be an ovarian tumour low down in the pelvis which does move, from which the uterus can be separated, and need not interfere at all with ovariectomy; and in such cases it is sometimes quite curious to hear the rush of air into the bottom of the pelvis when the lower portion of the cyst is separated from the hollow of the sacrum. Air rushes down with a gurgle, the tumour is easily brought up, and there is no more difficulty than in an ordinary case. It occasionally becomes very doubtful whether an ovarian tumour is simply jammed down into the pelvis, or whether it is fixed there by strong adhesion; but still I think this can be made out by care—ascertaining whether the uterus is movable; ascertaining whether the lower portion of the cyst moves in different positions of the patient; and, if it really be firmly fixed, whether the sensation to the finger is that it has been absolutely glued down to the bottom of the pelvis. If there be this intimate adhesion pretty low down, as a rule I think the operation is not one that is likely to succeed.

The specimens on the table illustrate extremely well a number of conditions which may be mistaken for ovarian tumours, and which frequently are mistaken for them. The fibroid and fibro-cystic uterine tumours are those which are most commonly mistaken, and there will be other specimens of this kind brought down at the last lecture; but there is one here which is a specimen of a case of very great interest, in which Mr. Adams removed an extra-uterine foetus from the abdomen. Here is another, in which a foetus was retained for fifty-two years in the abdomen. I do not suppose either of these cases would have been mistaken for an ovarian tumour; but still, in calculating what one may meet with, it is well to bear in mind that that sort of thing may exist. In the last lecture, we will have other specimens of fibroid and fibro-cystic tumours of the uterus brought down, to show how closely some of them resemble ovarian tumours and what a large size some of them attain. Here is a very beautiful specimen of melanosis of the ovary—a specimen not often seen. Here are tumours of the spleen. This is a spleen which I removed during the life of the patient; it weighed nine pounds, and the patient lived seven days. The case I need not go into further. In two other cases, I removed the spleen just about the same size; but in neither of the three did the patient survive. There was only one that died from hemorrhage; in the other two, there was no hemorrhage, nor much peritonitis; but there was a quantity of white clot on the right side of the heart, which seemed to be the cause of death. The diagnosis was made out with great ease in those cases. One was a case of Sir William Jenner's, in which he made out disease of the spleen as having existed some long time before. There was some alteration in the white blood-corpuscles; but Sir William Jenner thought it was a case in which one might very fairly and reasonably remove the spleen, and the patient seemed to be extremely likely to recover. She went on well for seven days; and at the end of the seventh day, without any reason that one could see, she died quite suddenly. But the reason was manifest after death: there was a very large clot on the right side of the heart.

Here are numerous cases of cancer in different parts of the abdomen; and these varieties of malignant disease in the abdomen lead very often to mistakes with regard to ovarian tumours. There have been a great many cases of attempted ovariectomy where no ovarian disease at all has been found, but the tumour has proved to be cancer of some one or other of the organs of the abdomen—the liver, for instance. Here are cases of liver-disease and disease of the omentum which have led to distinct mistakes. Here is a case of disease of a portion of the omentum which was mistaken for pregnancy. After death, it was found out that there was disease of the omentum, of which this is a portion. Here is a case of enlarged liver. Here is a case of dropsy of the gall-bladder; this of course, if larger, would make a considerable tumour; and many of you will, perhaps, read with interest next week the continuation of a paper begun by Dr. Marion Sims last week in the BRITISH MEDICAL JOURNAL, in which he relates how he opened the gall-bladder, sewed the opening to the wound in the abdominal wall, and turned out a very large number of gall-stones. I once had an operation considered in consultation about a patient in Kentish Town who had a very large tumour, and the great probability was that there were gall-stones; but there was also evidence that there was malignant disease of the liver, and nothing was done. I am afraid to say the number of gall-stones that were found after her death, but I

think one thousand eight hundred; and beside that the gall-bladder was very much thickened by cancer. Here is a specimen of cancer of the liver which would have made a very large tumour; there is one of melanosis of the liver. Here is one of tubercle of the liver—a very rare specimen; and here is one of hydatid of the spleen. These hydatid cysts occasionally lead to mistakes. In my work on *Diseases of the Ovaries*, there is a picture of a woman taken from a photograph, from whom I removed successfully a very large hydatid cyst which we had correctly diagnosed after tapping. The limpid fluid removed at once attracted attention. I examined the deposit, and found it characteristic of hydatid disease; so, after a time, as the woman seemed to be likely to die, I removed the hydatid cyst. She completely recovered.

Aneurism occasionally may be met with. Here are one or two good specimens of aneurism of the aorta. It is not likely that aneurism of the abdominal aorta will be mistaken for an ovarian tumour, but still it is well to bear this in mind. I know of one case in which an aneurism of the aorta lay down, just where it bifurcates, was tapped through the vagina, believing it to be a pelvic abscess. That lady died upon the table in a very few minutes. So it is just as well to remember that these large aneurisms of the abdominal aorta should be considered in forming one's diagnosis.

With regard to hæmatocele and pelvic abscess, I need not say much here, except to put younger men upon their guard to remember these do form occasionally of so large a size as to be mistaken for ovarian or other tumours. I have seen a hæmatocele extend considerably above the level of the umbilicus, and a pelvic abscess almost as large.

Fæcal accumulation, too, but rarely leads to error. Occasionally one is called in to cases where accumulations of large quantities of fæces do lead to mistake, and the supposed tumour disappears after their removal.

Then, a word as to those resonant enlargements of the abdomen which have been called phantom tumours. There is now in the Samaritan Hospital a young woman with an apparently manifest abdominal tumour. The abdomen was prominent, and felt hard; but, on percussion, was distinctly resonant everywhere. She looked in perfectly good health, and, on putting her under the influence of chloroform, the swelling entirely disappeared. There has been a certain amount of doubt as to the exact pathology of these things, whether it is that the diaphragm is pressed downwards, the liver pressed forwards, and a certain amount of distension of the intestines accompanies the arching forwards of the recti; but certainly occasionally they do look very much like tumours which disappear entirely when the patient is deeply narcotised. I have seen the same thing in a man. I remember a soldier came down to Smyrna from the Crimea with a tumour which excited a good deal of attention amongst the surgeons at Smyrna, but, on putting the man under the influence of chloroform, it entirely disappeared.

With regard to pregnancy, the ordinary signs of pregnancy, of course, should be borne in mind in any case of abdominal tumour in a woman. Whether the woman is single, or married, or a widow, this complication may arise. I need not enter into the different signs of pregnancy; but I wish you to bear in mind that not only may pregnancy be mistaken for ovarian disease, or uterine disease, or the converse, but that in many cases pregnancy does complicate ovarian disease. A woman may have a large ovarian tumour, and then she may become pregnant; and the question of the treatment of a woman who has an ovarian tumour and is also pregnant is one I shall have to speak of when I have said something about ovariectomy.

I do not think there is a specimen here, I doubt whether there is in the Museum, of what is called "movable kidney". I believe there have been only one or two such specimens shown after death at the Pathological Society, but I have occasionally seen tumours in the abdomen which appeared, as far as one could tell, to be instances of movable kidneys, either enlarged or of their natural size. One case was such a remarkable one that I will detain you a moment to tell you about it. A lady came to me believing she had, or having been told she had, a movable right kidney. I saw her with Dr. Wilson Fox, and we both agreed that was the nature of the disease. For some years it went on, and I saw her occasionally, under the impression that she was suffering from a movable kidney. Then she became pregnant, and pregnancy went on to its natural termination, and a healthy child was born. Soon afterwards, she began to suffer from an ovarian cyst on the left side, the movable kidney still being on the right side; and the ovarian cyst increased so much that it was decided I should perform ovariectomy, which I did. I said at the time "I will see what that movable kidney is now"; and, after I had removed the ovarian cyst on the left side, I felt what the supposed kidney was, and took it out; and then I found it was the right ovary, but it was attached by a pedicle

fully a foot long. It had been held up under the right false ribs by the merest little film of adhesion. Quite a small patch of adhesion kept this right ovary, which was about the size of my fist and very much of the shape of a kidney, just in the position of a movable kidney. The patient recovered, and remained in good health.

Then, as to cancer of the ovary. Here are some specimens. Here is cancer of the ovary; and here is cancer of the kidney. There is a specimen also of a tumour of the abdominal wall. This illustrates a mistake occasionally made in practice: in the treatment of a supposed abdominal tumour, it is found that the tumour is not of the abdomen at all, but is simply a tumour of the abdominal wall. I remember years ago being called to see a patient, who came from Portugal, supposed to have ovarian tumour, and I expressed a strong opinion that it was not ovarian, but simply a tumour of the abdominal wall, and decided that it should be left alone; but Mr. Baker Brown afterwards saw the patient, and removed it. He removed a very large portion of the abdominal wall with it. He removed a bit of the peritoneum as large as the palm of my hand, and yet the patient made a most complete recovery. The tumour was a fibro-plastic tumour of the abdominal wall of a considerable size, and the portion of the abdominal wall removed with it was two or three inches in breadth and three or four in length. Yet the abdominal wall, which was brought together without much tension, healed up, and the woman recovered almost as well as if the operation had been one of the most simple character.

THE POLYURIA OF GRANULAR KIDNEY.

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Professor of Clinical Medicine; Senior Physician to King's College Hospital; etc.

HAVING neither time nor inclination for a controversy on the above subject, I am nevertheless anxious not to be misunderstood. In my paper in the JOURNAL of May 25th, I expressed my dissent from the theory which assumes that the copious secretion of urine by a granular kidney is the result of increased pressure on the Malpighian capillaries consequent on obstruction in the intertubular capillaries. I maintain that this theory is utterly inadequate to explain the phenomena, and that the attempt to give them this merely mechanical explanation tends to mislead and retard the progress of actual knowledge. I believe, too, that the results of the impeded renal circulation consequent on cardiac disease are fairly comparable with those which would follow upon an intertubular capillary obstruction. The results in both cases would be, of course, a general diminution of the blood-current through the kidney, a gradual increase of pressure on the Malpighian capillaries, a scanty secretion of water, and ultimately a more or less copious transudation of albumen into the uriniferous tubes. These are the phenomena which are commonly observed in cases of large Bright's kidney, when the swollen uriniferous tubes compress the intertubular plexus, and thus cause a backward strain upon the Malpighian capillaries.

It is to be borne in mind that there is no relation whatever between increased pressure on the Malpighian capillaries consequent on an obstruction in front and such increase of pressure as may result from relaxation of the afferent arterioles. It is to the latter phenomenon that reference is made by Dr. M. Foster in the chapter of his *Text-Book of Physiology* to which Dr. Saundby directs attention, and this phenomenon is not now in question. While I believe that no trustworthy inference can be drawn from such an experiment as that of Dr. Grützner to which Dr. Saundby refers, I feel called upon to correct the erroneous assumption that the contraction of the hypertrophied muscular arterioles must render the kidney anemic. Dr. Saundby, in raising this objection, overlooks the fact that the resistance offered by the arterioles is more or less completely counterbalanced by the increased injecting force of the hypertrophied left ventricle. And, again, it is not to be supposed that the renal arterioles are in a constant state of extreme contraction, or that their muscular walls, even in the advanced stages of a granular kidney, are beyond the control of the vaso-motor nervous influence by which circulation and secretion are co-ordinated. We may reasonably suppose that, while the regulating influence of the hypertrophied afferent arterioles prevents undue strain upon the Malpighian capillaries from the injecting force of the strong left ventricle, "there is no shutting off of the blood from the glomeruli", but the blood-supply to the gland is sufficient for the purposes of secretion to any amount.

ON THE WORKING OF THE VACCINATION LAWS.*

By EDWARD CATOR SEATON, M.D., F.R.C.P.,
Medical Officer to the Local Government Board, etc.

THE subject on which, Mr. President, you have requested me to speak this evening is the Working of the Vaccination Laws; and to that subject I shall strictly confine myself.

Compulsory vaccination in England dates from a quarter of a century ago, and the law has in that time passed, if I may so say, through three stages. The first Act, passed in 1853, directed, under penalty, the vaccination of infants at an early age; without, however, designating the local authorities who should put the law in force or the sources from which the expenses of so doing were to come, and without providing any adequate machinery of registration. By a short Act, passed in 1861, power was given to boards of guardians to pay out of the poor-rates for prosecutions undertaken under the Act of 1853, and to appoint persons to prosecute; otherwise the law underwent no considerable change till 1867. It was in that year enacted that boards of guardians not only *might*, but *must*, see the law enforced; the power, however, to employ officers specially for the purpose being still left permissive. A workable machinery for the registration of successful vaccination was then for the first time provided. In 1871, the law took its present shape. The employment of vaccination officers in every union was then made obligatory, and these officers were subjected to instructions to be issued by the Local Government Board. Further improvements were made in the machinery for registering vaccination and in other details.

Each of these measures was attended with a great degree of success. The Act of 1853 produced immediately a considerable increase in the amount of vaccination done in the kingdom, though, from want of a proper registration machinery, it is impossible to say exactly *what* increase; and it produced also this most important result—that, whereas before its enactment the vaccination of children had been left as often as not till they were above a year old, vaccination from that time forth was, and has continued to be, habitually performed in early infancy. It was to the representations of the Epidemiological Society, who insisted on the serious consequences arising from procrastination, and who called prominent attention to the fact that one-fourth of all the deaths from small-pox in England which occurred at that time were in children under one year old, that this great improvement was chiefly due. Systematic practical working of the compulsory law, however, only began with the Act of 1867; and the results of the power—which had been given, indeed, in 1861, but which had only come practically into use under the Act of 1867—to local authorities to appoint special officers for the purpose of this working, were soon seen so remarkably in the places where these appointments had been made, that the Parliamentary Committee, which sat in 1871 to inquire into the operation of the Act of 1867, did not hesitate to recommend that the appointment of such officers be made universal throughout the kingdom. This was done in the Act (passed in 1871) on that Committee's Report.

Since this last Act has come into operation, we have been able to know exactly how we stand with regard to the vaccination of our infantile population. From the beginning of January 1872—*i.e.*, for the last six years and upwards—there has been a regular registration of the vaccination of all infants whose births had been registered, and the result is put annually before you in the Report of the Local Government Board, showing that all registered births are within 5 per cent. accounted for, and finally accounted for, in respect of vaccination; more than 95 per cent. being entered in the registers either as having been successfully vaccinated or as having died in infancy without vaccination. The 5 per cent. which remains includes the temporary entries in the vaccination-register as of the children whose vaccination was, at the time of the return, postponed on medical certificate; it must include many cases actually vaccinated, though the vaccination certificate has not been transmitted to the vaccination officer; it must include many who have died in districts other than those in which the births had been registered, the death not having been notified to the vaccination officer of the district last named. The proportion, therefore, remaining alive and actually unvaccinated, and endangering the community by their want of vaccination, must be very much smaller than the 5 per cent. here indicated.

This account must surely be regarded as highly satisfactory. But is it wholly so? By no means; for the result I have been giving you is the result for the *kingdom at large*—the average of all the districts,

good, bad, or indifferent, as the case may be. There are whole counties, and there are large and important towns, which account for all their births within 2 per cent. or less; there are others where the deficiencies are 6 and 7 per cent. There is this vast metropolis, which, if we take it as a whole, is simply, I am sorry to say, the worst in England, the deficiencies amounting to 8.8 per cent. There is, therefore, a task remaining to be accomplished; viz., to bring up the bad districts to the standard of the good. Not that it is possible to have the same standard for all classes of districts. To expect it would be most unfair. It is not for a moment to be supposed that, in towns like London or Birmingham, children can be traced as easily as they can in, say Hertfordshire or Bedfordshire; or that even large towns may not present important differences one from the other, specially as to the migratoriness of their respective populations; but differences so considerable as those to which I have had to refer as existing between London and some of our large towns, as, for example, Leeds and many of the large and populous towns of Lancashire, in which the proportion of births annually unaccounted for is brought within 2 per cent., are not to be accounted for by mere difference in the habits of the population. In London itself, the results in different unions have been found to differ greatly. The great facility of passing from district to district in the metropolis interposes unusual obstacles, indeed, to the ready working of the Vaccination Acts, and necessitates an extraordinary degree of promptitude and vigilance on the part of the vaccination officers; and of these officers personally there is, I believe, in general, little or nothing to complain. Some of them are, I know, officers of great excellence; but I fear there are not enough of them for the vast amount of work to be done. There are in London but thirty-six officers altogether—a force which, relatively to the amount of births to be looked after, is, even apart from the existence of special difficulties, when compared with the force employed in the rest of the kingdom, very small. Hence the requirements of the instructions given to the vaccination officers to look up each case in default *as soon as the default arises*—*i.e.*, as soon as a child has passed three months of age without vaccination—cannot in London be fully carried out. Frequently children are not inquired about till they are six or seven months old, and thus the mass of unvaccinated children is unduly swollen. Moreover, in the interval, it not unfrequently happens that removal has taken place and the children cannot be found at all. Such defects, then, and others which may exist in particular districts, require correction before we can be completely satisfied with the present working of the law. They are, so far as they occur, defects, not of the law itself, but of its local administration.

And now with regard to the extent to which we may expect that these compulsory provisions of the law, properly carried out, will give us protection, present and future, against small-pox. It is of great importance that these expectations should not be exaggerated. In the first place, it will be seen that the law does not make vaccination universal; it cannot do so. Children are born every day, and I do not believe that any attempt to diminish the time allowed them for primary vaccination would be tolerated. There must always, then, be a stock, which even in large towns would be at the least a three months' stock, and in rural districts a larger proportional stock, of unprotected babies inevitably on hand; for, if many infants are vaccinated, as we know they are, *before* the expiration of the legal period of delay, there are more who are allowed to go somewhat beyond that period before the vaccination is performed. Besides these, we must have, as endangering us for the while, the postponed cases. Then we have, as a more permanent danger, the cases called insusceptible (quite unprotected, as I need not say, against small-pox), happily not many, and, so far as they exist at all, an opprobrium to us. And, lastly, we have the cases—destined, I hope, to become fewer and fewer every year, but of which we must always have some—who escape our notice altogether. The actual number of births hitherto unaccounted for annually in England and Wales has been about thirty-five thousand, of which no fewer than nine thousand have been in London alone. These are by no means, as I have explained, all living and unvaccinated; but there are more than enough of them who are so, fully to account for the six hundred deaths and upwards from small-pox which have occurred between one and five years of age in the present epidemic of that disease in the metropolis.

As to actual protection at the present moment of the population of England by vaccination, we must remember that we have no exact knowledge of that portion of them which is over six years of age.

Second only in importance to the necessity for the vaccination of all children at as early an age as can be effected, as a safeguard to the country against small-pox, is that of having them all thoroughly vaccinated. This is a point on which, I cannot doubt, all here present are agreed. The "due and efficient" performance of the vaccination

* Read before the Metropolitan Counties Branch.

was a cardinal point with Jenner, insisted on by him throughout his writings; but researches made and experience acquired since his time have extended the meaning of these words beyond that which Jenner attached to them, and have given us a standard of success which we must be careful to observe. I cannot but think it a great cause for gratitude, that the magnificent and till lately quite unique resources of the London Small-pox Hospital should have fallen into the hands of a man so able to appreciate the uses (beyond those of the mere treatment of disease) to which they might be put as our late lamented friend James Furness Marson. His retiring habits kept him much from the world; but he has left behind him work entitling him to the gratitude of all mankind. The task he set himself to perform, in determining the influence on the course of small-pox which vaccination, and different degrees and kinds of vaccination, had on persons who, after having undergone the process, had still the misfortune to contract small-pox, was one which called for qualities which he pre-eminently possessed. The most painstaking accuracy of observation, perfect exactness in recording, a power of weighing facts and not merely counting them, sagacity in deduction, with ingrained habits of caution, were all his; and by the steady application of these qualities to the examination of several thousand cases of small-pox in sixteen years, during which there was scarcely one day without recorded observation, he was able to arrive at conclusions on the subject of his studies which he felt he might safely put forward as unassailable. Another sixteen years' observations of the same kind did but confirm those conclusions. The standard which he thus established must ever be our test when we use the words "successful vaccination". Vague applications of that term (such as, I am sorry to say, I see even now, and not unfrequently) can no longer be tolerated.

The extensive official inquiry into the state of vaccination in England which was made in 1860-64, disclosed the very imperfect way in which, according to this standard, vaccination had been performed; and it disclosed also that, notwithstanding that several years had elapsed since Marson's observations had been given to the medical profession, its adoption was but very slowly finding its way into practice, whether public or private. The arrangements, too, under which public vaccination was performed were not found to be such as were most conducive to its successful performance. Under the Act of 1867, therefore, power was taken to regulate public vaccination with special reference to its quality; and regulations were issued—(1) for reconstituting the arrangements for its performance so as to obviate to the utmost the necessity for the use of dry or otherwise preserved lymph, and to secure its habitual performance from child to child under the best conditions of selection of lymph; (2) for requiring of all public vaccinators such performance of the operation as was necessary to the attainment of the required standard; and (3) for making a part of the payment for public vaccination dependent on the quality of the vaccination done. The effect of these regulations has certainly been to produce a most remarkable change in the efficiency of the vaccination now publicly administered.

The time for testing this vaccination in its influence over small-pox epidemics has not yet come. The vaccinated persons who died from small-pox during the epidemic of 1871, and also those who have died during the recent, or I should rather say the present, metropolitan epidemic, have been almost without exception persons above fifteen years of age, and whose vaccination dates long anterior to the changes of which I have been speaking. It is the past, not the present, vaccination which has been on its trial: the vaccination such as was described in the Reports of the Medical Officers of the Privy Council, 1860-64.

The public vaccinators of England have for some years now been subjected to systematic inspection, and from this we are able to affirm that great improvement to which I have referred as having taken place within the last eight or ten years in the quality of the vaccination so done. The genuineness of the vesicles habitually produced, their sufficient number, their regular course, and their characteristic cicatrices, are attested. It is certain that our defences against small-pox, as dependent on the quality of vaccination, are much in advance of what they were; and, as time goes on, the proportion of the population not merely vaccinated, but thoroughly vaccinated, must be a constantly increasing proportion. Imperfections in individual cases there must sometimes necessarily be. The best vaccinator, operating under the best conditions, may in particular cases fail to produce the full effect he desires; and, when the conditions of working are inferior, when preserved lymph has to be used instead of lymph from the arm (as in rural districts must in many cases be), then cases of comparative failure will, of course, be more common. The assertion is not of the universally, but of the generally, satisfactory result. In estimating, however, the effects of these improvements on the protection of the population at large, we must bear in mind that one-third of the primary vaccination

of England is not public vaccination, and that of this third we can give no account. So far as concerns personal carefulness and a knowledge up to the science of the day, we have no right to suppose that the vaccination of private practitioners would, as a rule, be found behind the public work; but, in regard to the arrangements most conducive to the success of vaccination, private practitioners must necessarily stand at a disadvantage. I am afraid this disadvantage sometimes is very considerable and of serious effect. I will give one illustration. In 1874, there were certified in this metropolis two hundred and fifty-one cases as legally insusceptible of vaccination. They had been vaccinated three times without success; but they remain quite unprotected against small-pox. I will undertake to say that none of these cases had been vaccinated at a public station. There is one further drawback to which I must allude, operating still, I fear, in particular places in some parts of the kingdom, in which a certain class of practitioners make vaccination easy by performing it at a low fee inefficiently—*i. e.*, by one or two punctures only.

These sources of occasional imperfection—wherever they occur—render more urgent the application of that process of further security which I do not think should be omitted even in the most perfectly vaccinated, to the importance of which the profession are becoming more and more alive, and which they are more and more advocating every day: the process of revaccination—revaccination not practised spasmodically, if I may so say, at times of present alarm, but revaccination practised regularly and systematically on each person as he grows up.

Revaccination of the general population is not in England compulsory, nor do I know that it would be wise to require it; but there are many ways in which it might with great advantage be made so indirectly. In the military and naval services, and also, I believe, in some branches of the civil service, it is an essential condition for employment. It should be made so throughout the whole civil service, and in all factories, workshops, and establishments under any degree of public control. Large employers of labour have great opportunities (the exercise of which is, I need not say, entirely voluntary) of assisting in this way; and these it is especially desirable they should use constantly and regularly, though it is usually only in times of panic that they are willing to use them at all. Even for this we must for the present be thankful; but what we want above all things is to get systematic revaccination established—to get it to be looked for as regularly at fifteen or sixteen years of age as the primary vaccination of an infant is at three months. The law provides for every individual a right to a gratuitous primary vaccination, and to a gratuitous revaccination at the public cost; and it is of the utmost importance that the two kinds of vaccination should proceed regularly together, dependent as revaccination must always be on a supply of primary lymph.

In proportion as we shall succeed in getting the foregoing systematic measures adopted (and we are already, as regards most of them, marking distinguished success), so shall we be free from alarms consequent on epidemics of small-pox. I do not say that we shall get rid of epidemics altogether, for an universally protected population I can hardly conceive; but we shall be taking away from them the pabulum necessary to their extensive diffusion.

The laws which determine the intensity of particular epidemics of disease, whether of small-pox, scarlatina, measles, or other diseases of like kind, are to a great extent unknown to us. We know not why towards the end of the seventeenth century (there was no inoculation then to account for it) small-pox should have been so much more fatal than at the earlier part of the century. Inoculation doubtless had its part in causing the small-pox mortality of the latter part of the eighteenth century to be greater than that of the earlier part; but I doubt if that will account for the whole difference. And now, towards the end of the nineteenth century, we witnessed lately an extraordinary and world-wide extension of the disease, exceeding in intensity anything known since vaccination was introduced. Why was this? We know not; the matter is not within our control. *But what is within our control is our defences.* On looking back at the history of that epidemic, to draw what lesson we can from it, we find that where these defences were perfect, according to the rules I have laid down, they stood us in perfect stead. The intensity of the epidemic, the disproportionate number of malignant cases, caused the death-rate, indeed, in proportion to cases, to rise beyond the average in all persons attacked, whether the unvaccinated, the badly vaccinated, or the well vaccinated, but the *relative proportion* was preserved. The deaths among the well vaccinated were very few indeed; and among the successfully revaccinated, as far as we have any opportunity of knowing, scarcely any at all. The serious mortality in that epidemic in the vaccinated, or so-called vaccinated, was the simple result of our vaccination having been left to take care of itself, and, therefore, of our defences not having been in proper working order. So, also, as far as I have been able to learn,

with regard to the vaccinated in the present epidemic in London, which has manifested the same malignant character as that of 1871, but which has been attended, however, with much smaller mortality, doubtless because the prior epidemic had caused so large a number of the susceptible to become secure against future infection, either in having then contracted small pox or obtained revaccination.

The gist of these observations has, you will perceive, been to induce you mainly to rely on a continuance of the system now in progress, with such improvements in administration as may be shown to be necessary, as our best security against future small-pox. The task we have before us is to build up a properly protected population. Epidemics of small-pox may be looked for, and perhaps for some time to come epidemics which may cause some considerable mortality; but severely fatal epidemics should by-and-bye be made to cease from amongst us. We are in possession of the means, if we rightly use them; not, perhaps, that we shall ever make such perfect use of them as to leave nothing to be specially done when an epidemic arises; but that special work will be brought within reasonable limits—limits such as will render its performance of easy attainment. Special provision with regard to vaccination, at times when small-pox is epidemic, is, I need not remind you, within the regulations issued under the Acts now in force.

ANIMAL VACCINATION.*

By JOHN GREENE, L.R.C.P.Ed., Friday Bridge, Birmingham.

By the courteous invitation of this the Metropolitan Counties Branch of the British Medical Association, I possess the valued privilege of expressing before you in a brief manner my opinions and views upon the subject of animal vaccination. My experience has not been very limited. I commenced the practice shortly after its introduction into this country by Dr. Blanc, and continued it more or less assiduously for eight years, during which time I either inoculated or experimented upon about four hundred animals chiefly with Belgian lymph.

I approach the matter to-night in the character of one having a profound conviction of the value to mankind of the great discovery of Jenner, and with an equally strong conviction that we have not yet reached perfection in its administrative application. I desire that a fierce light should shine on this new movement of animal vaccination that shall make manifest alike its weakness and its strength. Since the passing of the first Vaccination Act, it seems to me that the profession have ceased to exercise that high interest and activity in the matter which characterised the early years of vaccination, and have rested securely cradled in the thought of departmental infallibility; but, at the present time, a new desire has arisen, shared in by the present eminent adviser of Her Majesty's Government, to examine the subject afresh, to mark defect, and find a remedy. It may be hoped that such a spirit may lead to the capitulation of the anti-vaccinators by punishing them with a famine of reasons.

I hold the opinion that, if it can be found possible to improve a little further our present arrangements, we shall be enabled almost wholly to banish small-pox from the land. In the considerations which will here arise, the question of lymph-supply goes at once to the root.

If it be proposed by anyone that animals should be made to afford a large portion of this supply, and that a considerable percentage of the population should be protected by direct inoculation, I would immediately reply in the negative; it would be cumbersome, expensive, and, in fact, impracticable for many reasons. I feel sure this position does not require elucidating in this room; but, as used in a limited manner and for a special purpose, I desire to advocate the supply of lymph from animals. I allude to the advantages the method presents of an ever-flowing fountain of lymph of a relatively high standard of activity for the renewal of stocks at any time, when opinion or accident makes it requisite. Now, passing over for a moment certain important matters involved in this proposition, I think it possible that the detail could be so arranged that, whilst fulfilling the above splendid duty, it would at the same time discourage any wide tendency on the part of the public to have recourse to it in a too frequent or unnecessary manner, which would soon result in the destruction of the chief function warranting its existence. For instance, by limiting the production of cow-pox to one establishment for the whole kingdom, the undesirability of adopting that lymph for general vaccination would be proclaimed of itself; that a few sought and obtained vaccination in this manner would be merely a necessary incident, and careful restrictions might be trusted to prevent any excess in the number without impairing the liberty of those whose minds were set upon it, or

who entertained a fanciful or conscientious objection to hominal lymph. This is a matter of administrative detail not at present in discussion.

To proceed: the question of having occasional recourse to new stocks divides itself into two parts: 1. Whether science tells us as a fact that it is necessary for the preservation of power; 2. Whether, on any other grounds, it is expedient. To answer the first in the negative would not necessarily nullify the latter, whilst to answer it in the affirmative would involve it. To attempt to decide the leading question is to enter upon an endless struggle of argument and statistics out of which can proceed no definite issue which should stand spotless from doubt. Dogma is a poor refuge from this dilemma; the evidence thereon is, like the cow-pox itself, having an effect which is the mean between inoculability and receptivity, and so will perpetually vary with us individually.

It would be an uncongenial task for me to compile or tabulate the various facts I have read, or to quote opinions; all these are public property. I will not weary you with a twice-told tale; for the same reason, I will not again go over the ground taken by myself in the pamphlet I wrote in 1870, on *Good Vaccine Lymph*; still I must make a few remarks upon the point.

It is a fact that a number of authorities, each equally reliable, industrious, and trustworthy, have investigated the subject of lymph-degeneration, and have come to diametrically opposite conclusions. Now, many of these conclusions do not admit of an easy explanation in an adverse sense, or of a matter-of-fact explanation at all; so that we are bound to the logical inference that there are circumstances influencing the history of contagium (be it dead or living) of which we are ignorant—a truism you will say. Yes! But in argument we are apt to forget it, and build a house on sand. We have yet to learn the mysterious agency which decides the advent of an epidemic of small-pox, measles, or scarlet fever, or influences their disappearance or decline. Of the causes of their varying malignancy at different epochs, and eccentricity of incidence, we know little beyond certain subsidiary facts of local hygiene. It is not more certain that the amount of that peculiar material in the human organisation upon which variola thrives differs in individuals at all times than that it does in populations at diverse times, and, as the intensity of the effect of an inoculation of cow-pox must be the means of the exciting power of the contagium and the receptivity, it follows that, during periods when the latter is low, successive and frequent inoculations of the same lymph must result in an average reduction or degradation. Careful selection doubtless will diminish the rate of, but cannot extinguish, the process. This slow alteration may be going on in one district and not in another; or all over the kingdom imperceptibly at one time and not at another. Thus only is it possible to account for conflicting evidence where no other explanation is obvious. Thus will it seem easy to produce a vaccinoid affection bearing the same hastened relation to fresh Jennerian cow-pox as varioloid affections have to typical variola. Jenner himself has stated that a bad inoculation of variolous matter itself will not protect from variola. How much less, then, must a mere vaccinoid inoculation! In this way do I account for the large number of persons found badly protected at this late date in the history of the prophylactic.

But, if we remove the vexed question of renewal from the ground of personal conviction to that of balanced evidence, we reach the neutral zone of doubt; and here I venture to think that common sense may and will come to the rescue of perplexed science, and answer the second part of my proposition as to the expediency of renewal in the affirmative, assuming that we have the power to obtain the right article. This expediency is demonstrated by the fact that hundreds of medical men whose opinions have been formed by their own meditations and experience earnestly desire this renewal, and also thousands of the instructed part of the community at large. That there are no means available for doing so, is a plausible ground for complaint in very wide circles. It is not imperative to examine the varied reasons upon which the demand is founded; but it exists, and I affirm it can be met.

We will pass over the history of animal vaccination, from its origin in Naples and importation into France, to its development in Belgium and the United States of America. Suffice it to say that it is known that, with a sufficient capital and assiduous care, a continuous supply of animal vaccine may be afforded. It is in the character of a witness as to the qualities of this virus that I have the honour to be present to-night. In the first place, however marked are the differences between children vaccinated by the same lymph, the differences in calves are greater. Here lies the difficulty of lymph-cultivation upon the animal. It is the most care-compelling pursuit I can think of, requiring, in addition, capital and every material convenience. Looking, then, to the fact that its perfect cultivation is dependent upon human judgment and circumstance, and not upon a natural process, I cannot conceive how the assertion can be justified that cow-pox on calves, being on its own natural soil, can never change. As for the argument of "natural soil",

* Read before the Metropolitan Counties Branch.

where is this? Is it not acknowledged, in this country at least, that the juices of the cow have converted human variola into something else, different though allied. It is, then, a domesticated alien in the bovine species, and more, not less, liable to degenerate than the same taken back to man, where, though changed, it would be less alien. As a matter of fact, the same gentlemen who proclaim the "natural soil" theory are loud in praise of the calves reducing by repeated inoculation the too active qualities of original cow-pox. They suppose this process to cease at an arbitrary line. This is a dogma of a faith that shall have no martyrs: a sort of limited liability in logic. But, in saying thus much, I desire to apportion the full value to experience and judgment in cultivation. If this be united with favourable climatic and general circumstances, I can understand how years might elapse without any particular change. A case in point is the successful propagation of the Beaujeney cow-pox by Dr. H. A. Martin of Boston, United States. It appears that this stock has been passed through eight hundred and thirty-four animals, and that Dr. Martin cannot find the smallest diminution in its effective qualities. There is no occasion to mistrust the enthusiasm of Dr. Martin. It must be avowed that this gentleman has exhibited a remarkable skill in cultivation and energy in carrying out his object. In his latest "report," published this year, he writes as follows.

"During the six years and nine months since I introduced animal vaccination, I have vaccinated and superintended the vaccination of five hundred and eighty animals, besides some forty more in my earlier experiments. From these animals over eight hundred thousand charged points, and an uncounted but very large number of crusts and tubes of fluid-lymph—many thousands—have been issued. This virus has been consumed by nearly nine thousand physicians, whose names are in my register, besides a very large number whose names are not recorded. I have supplied virus to vaccinate many cities and other municipalities, great and small, to a very large number with quantities of from five hundred to eighty-four thousand points. Many of these have been supplied with aggregates of from five thousand to fifteen thousand points each. I have supplied the Departments of War and of the Interior with large quantities of virus, principally in the form of crusts, for the vaccination of troops, frontiersmen, and Indians, and, in one instance, supplied three thousand points for the arrest of a variolous epidemic which threatened the annihilation of an Icelandic colony in British America."

The figures given here constitute a big thing even for America, and it must be remembered that Dr. Martin is an Englishman born; but, unfortunately, he fails to give even an approximate estimate of the success with which this lymph has been used. Now, I will acknowledge that Dr. Martin may be cleverer than myself, but of this I am sure: that, had I sent out virus in this wholesale way, success would have been very mixed and the result pernicious. In my humble opinion, such a wide attempted application of the method of animal vaccination is an outstepping of its true function in a rash manner; one that is likely to end in mischief and mistrust of the method, perhaps involving with it the real good that is in it. Still, according to Dr. Martin's report, the conditions of success have been much improved of late, but that will not shake the opinion I have given. Be this as it may, Dr. Martin must by this time have discovered the best practical method of procedure to a greater extent, I am inclined to believe, than any one else. Therefore, I wish that Government would send out a commissioner to ascertain from Dr. Martin many points of interest; for, whatever may be the limit which ripened judgment may place upon animal vaccination, if it be ever used in this country officially and only for the purpose of renovation, skill in cultivation would be essential.*

I have argued just now that degeneration of lymph takes place alike on the calves as on man. I will go further, and state that my own observations on the animals have convinced me that such is the fact. Therefore is it that calf-vaccination is not a *ne plus ultra*, but only a link in the chain of our desires mounting to the fountain-head, that Jennerian modification of the old inoculation, the small-pox of the cow: "variola vaccinae". The animal is an useful intermediary by which we may multiply the primary virus *ad libitum* and deprive it of the too violent action that Estlin and others found so objectionable.

Before I consider what means we possess of having recourse to this primary virus, I will bear witness as to its qualities when transmitted through the heifer. My experience of stocks of primary lymph has been confined to those in use in Belgium. The Esneaux stock was discovered by M. Pétry in August 1868, and substituted at once for the Beaujeney virus, then actually in use on the Belgian calves. This stock I had in constant use for nearly two years in the same manner.

* Since writing the above, I have seen a series of coloured photographs of vesicles raised by Mr. Ceely from Dr. Martin's lymph. They are admirable, and will bear comparison with those obtained from the Esneaux lymph.

The animals chosen for inoculation were from four to six months old, of no particular breed, colour, or sex, but well conditioned and with clean and blooming skins. They underwent a short preparation, according to the previous circumstances of each animal. A multitude of difficulties arose at first, which were never wholly removed in my case, because I did not desire that the subject should monopolise either my attention or my capital: a condition imperative to full success, whether it be intended to thrust calf-vaccination into what I would call an undue position before the public, or only to its rightful place before the profession; but these difficulties and mistakes of the early days need not recur in future, now that there is a large accumulation of experience in different countries to learn from.

The manner in which the animals are controlled for inoculation, the part in which this is done, and the method, are known. Of the subsequent treatment, little more is needed than a good clean warm stable, the same diet to which the animals have been accustomed in their preparation, that they shall be prevented from licking the part, and have the society of their fellows.

Of the effect of the Esneaux stock upon the calf, I cannot do better than show you these photographs, taken for Dr. Blanc in 1868, and kindly lent to me by Mr. Ceely. These exhibit in perfection the vesicles on the heifer. The lymph of this stock was very infective, the smallest merely accidental scratch was sure to "take"; good clear lymph was obtainable on the fifth and sixth days. The vesicles then rapidly matured, and the crusts of such as were left undisturbed fell about the twelfth day.

There is one point of discrepancy in the evidence of others and myself. It has been stated that disease does not cause any suffering or disturbance in the average state of health of the animal. Now, with the Esneaux lymph, which in every way I judge to have been a model stock, a marked alteration on the fourth day was nearly always observable: the animal ceased from food, and became dull in appearance; if it had been restless before, it was now quiet; and if it gave voice at all, it was a very low poorly sound indeed. This condition was, however, only transitory; in a few hours, all was right again.

We next have to consider the effect of this transmitted primary cow-pox upon the human subject; and it is this that I desire most to impress in view of the course of the affection which we are accustomed to see, from long humanised lymph whose pedigree has been uncrossed, or indeed, if it be possible, with lymph of the Esneaux source itself, at this date. Concerning these differences, I may mention that, when quite a young practitioner in 1859, I had scarcely a single idea of the literature of vaccination; yet, by reading a stray copy of Jenner's *Instructions*, which had descended to me, I had become dissatisfied with the lymph then in use. I ignorantly tried to improve it by vaccinating two storks with human lymph, which appropriately failed. I only mention this to show the impression made upon me by Jenner's description, and to suggest how pleased I was when I first saw the effect of the Esneaux lymph in 1869. In all my experience, I had never seen anything like it. The vesicles developed very slowly; on the eighth day, in the larger number of cases, there was not even a commencing areola; they were very firm and clean-looking, standing vigorously up from the skin. The areola came on the tenth day, sometimes on the ninth. The vesicles continued to increase until the twelfth day, sometimes attaining a development nearly equal in size to a three-penny-piece, always finer than those got from the old lymph for the same scale of insertion. The crusts were hard and black, and fell about the twentieth or twenty-second day. A common remark made by mothers on the eighth day was: "Why, doctor, this is a poor effect to what it was in the other children." This desire for brilliancy was fully gratified in a day or two. Now, this course tallies exactly with the descriptions of Jenner, Willan, and others; and I do not think it possible for any person in this country to produce, at the present time, a stock that shall equal it, on an average result, in the above particulars.

There are yet more important differences to mention: those of constitutional action. These were decidedly more marked than with the old lymph; not a single child escaped entirely; all were made manifestly poorly, restless, and feverish—sometimes so markedly that the parent has afterwards stated that she thought she would have had to send for me.

The secondary dermoid affections, of which I had had little or no experience with the old vaccinations, were now brought under my notice quite frequently: vaccine lichen coming on about the fourteenth day (I think this must be the secondary eruption delineated by Willan), a rash like measles, and also the fac simile of one I have noticed in small-pox just before the eruptive stage.

I made acquaintance now, for the first time, with genuine eruptive supernumerary vesicles. This happened five or six times during my use of the Esneaux lymph, and on each occasion only *one*; several of

them occupied places where it was impossible they should have been accidental inoculations; once in a most unusual position, the very top of the head in a child with little hair. Since the Esneaux stock was lost, I have never seen a supernumerary vesicle, while the chances of accidental inoculation have remained the same.

A great deal has been said about the uncertainty of animal lymph. I acknowledge there is some truth in this allegation; but I never found this very troublesome. Care goes a long way to rectify it. I believe that this objection would be of no consequence with a good stock, with skill and judgment in cultivation, and with the limitations of the method I have already advocated. I found that, with the lymph from some animals and the avoidance of hurry in its transference, it was equally as certain as human lymph. That this obtains with some calves, seems to carry the inference that it is a matter of judgment in selection. Of course, in any case, I assume that only the finest vesicles are used.

In revaccination, my success was good; by counting in every mere approach to a vesicle, it exceeded the percentage obtained in Belgium, namely, 63.2; but these of mine were always done direct. Two or three times, I saw troublesome ulcerations follow on each occasion in pale-looking patients, who fainted from the operation. In all cases that succeeded, the febrile symptoms were well marked; in many, rather severely; in several, so much so as to confine them to bed, the measly rash appearing and the axillary glands being much swollen. With these few exceptions, I was quite satisfied with the use of this virus for revaccination.

Through all my experience of animal vaccination in primary cases, I have not once had cause for regret; at first, several gentlemen to whom I supplied it, and who used it with the same amount of insertion to which they had been accustomed with old lymph, were rather alarmed with its severity, and no wonder. In this connection, I should like to refer to a letter of Mr. John Pearson, Surgeon to the Lock Hospital, published in the appendix to Willan's *Vaccine Inoculation*, 1805. He says: "When the inoculator makes several parallel and transverse incisions in the same place, the inoculated part inflames violently at the period of efflorescence, and the inflammation often extends from the shoulder to the elbow. The child becomes extremely ill, large erythematous appearances take place on the arm, forearm, the neck, the side, and even on the lower extremity; a fortnight or three weeks will sometimes elapse before the child can be considered free from all danger." He further somewhat superfluously characterises this as an improper vaccination. I have seen this precisely as Mr. Pearson describes from using the new lymph like the old. What is more common now-a-days than this method of insertion which he condemns? The virus of the first human remove from the calf, singularly enough, produces more intense local effect than that from the animal, but this is lost in the subsequent removes. On one occasion, a very remarkable thing happened in the practice of a neighbouring surgeon, to whom I had supplied some of this Esneaux stock. He vaccinated a clergyman's child, six or seven months old, with lymph from the first human remove; the vaccinifer was healthy. I was desired to see the case on the twelfth day, and found a very much inflamed and swollen arm, with a series of from twenty to thirty full sized vesicles exactly like small-pox, grouped irregularly upon the upper arm, lying thickest about the seat of insertion. No other vesicles appeared on any other part, and the case did well ultimately.

Of the lymph-stock of Vauves, which in 1870 superseded that of Esneaux, I have little to say. It was at first pretty much the same as the latter, but after a time it ceased to possess those active qualities that have here drawn my praise. I became dissatisfied with it; it no longer had the brilliancy and power of the Esneaux lymph, nor its infective qualities. The particular advantages to which I have referred, as manifested by the former alike on the calf as on the human subject, were categorically absent in degree. I was of opinion that it no longer accomplished the great *raison d'être* of animal vaccination—namely, the supply of a lymph of as high a standard relatively to variola as judiciousness and safety would permit. The grounds for my dissatisfaction I found to exist alike, whether I cultivated the virus from calf to calf, as I had hitherto successfully done, or inoculated the animals each time with a fresh supply from Belgium. I therefore, about fourteen months ago, discontinued to reproduce the lymph on my own calves; but I have always held that the advantage which calf-vaccination gives to overcome the strong dread in some people of the transmission of diathetic diseases by human lymph, was worthy of attention in a subsidiary or collateral way. For this reason, I still continued to procure and use Belgian lymph when it was requested, and because, although it would not bear comparison with the Esneaux virus, it did give a fair result, equalling good human stocks, minus, however, their certainty. The present lymph in use in Belgium has been derived from Milan. My knowledge of it is limited to its action

on the human subject, and from tubes alone. It would be unfair, therefore, to base any strict comparison upon this, but I am fully able to state that I am satisfied with the course and appearance of the vesicles raised from it, and with the signs of constitutional action; but, no matter how good the present stock may be, it does not affect the argument of my paper, nor is it possible that this should be neutralised by any matter-of-fact explanation.

Now, having arrived at this point, let me, in the briefest possible way, consider what is the prospect of finding a remedy for this precarious nature of the virus. I appeal to the Government to institute systematic efforts to discover fresh cases of cow-pox, and, when found, to take the lymph and experiment for themselves. Are they not morally bound to seek the truth by investigations that shall take cognisance of all well-advanced assertion; and, if it should be found that animal vaccination is either pernicious *per se*, or likely to become so by mismanagement to a greater degree than by mismanagement of merely human vaccination, which I affirm is true, then, is it not imperative that the practice of the new method in private hands should be forbidden by enactment? On the contrary, if it be found advantageous, must they not adopt it, to some extent, as one of their resources, on the same principle as that on which the Vaccination Act itself stands?

It is with very great pleasure that I hear the authorities have determined to repeat the experiments of that distinguished member of the Association, Mr. Robert Ceely, upon the artificial production of cow-pox, for it is this that should form the real basis of effort in the direction of new lymph-supply. Naturally, a fresh case of cow-pox could not always be forthcoming just when it was wanted.

I am one of the few who have been successful in producing artificial cow-pox; and, though I have tried many times, have not again succeeded. It is tempting to enter upon this question fully, but time will not allow. I hear that the first set of experiments conducted by the authorities have failed; no doubt, they will try again till they do succeed. I should look hopefully to increased experience to remove the difficulties attending this operation. Were I again engaged in this attempt, I should select new milch-cows with their first or second calf, in the very highest condition of health possible, with their skins full of the juices of the rich summer grass. I should select amongst the number several white cows and Alderneys. I would do the inoculation by deep incision with variolous lymph of not too late a stage, and from a sample mixed from several cases. I should use it with and without glycerine; the air of the stables I would have rather warm and very moist. I think premature desiccation is one of the difficulties.

In the case in which I was successful, I did not wait till the vesicle had quite formed, but took matter from the most prominent of the tubercles, passed it consecutively through two calves, and then on to two children, obtaining in one of them two magnificent cow-pox vesicles, and nothing more.

Gentlemen, we are in the presence of a crisis in the history of vaccination. Nations, dissatisfied with the spread of small-pox, yet still trusting in the kindly prophylactic, turn their eyes towards the new manner of direct inoculation. Now, more than ever, must our noble profession guide our country wisely. This favoured land, that first received the fairy gift through the wisdom of Jenner, must not lose it through the folly of his successors. We must refuse to adopt this Neapolitan practice to the extent advocated; it is cumbrous, precarious, and far more liable to mismanagement than is our present system. Let us rather take a lesson from the practical botanist, who, shaking fresh pollen into his old bloom, produces a more vigorous specimen. Let us find means, through the calf, to renew our old stocks at will from the "variole vaccine". That lymph which gives the greatest constitutional affection of the right kind for the smallest number of insertions will give the greatest local beauty, and well-nigh absolute security from variola.

ERYSIPELAS AND VACCINATION.*

By SAMUEL LODGE, M.R.C.S., Bowling, Bradford.

It is with some diffidence that one approaches the subject of erysipelas here, in this hospital and in the presence of such a number of distinguished practitioners: nevertheless it may be that the disease, considered as a result of septicæmia in connection with vaccination, and treated by what I have always designated the Leeds method, could not be more appropriately discussed by any society than by the West Riding Medico-Chirurgical. Mentioning to my friend Mr. F. Hall

* Read before the West Riding Medico-Chirurgical Society.

last year—who had spoken to me of one or two cases of erysipelas following vaccination in Leeds—that I always used the tincture of perchloride of iron, I think he replied that *it had been tried* in the cases alluded to without effect. At the first glance, this answer looked discouraging enough; but I question if further observation and experiment do not enable us, as vaccinators, to look upon the disorder with confidence and serenity, rather than with apprehension and dread. I have seen two cases of fatal erysipelas in children, and the treatment by iron was resorted to in both. I make no difficulty in admitting that, whatever had been done for those unfortunate creatures by way of remedies taken or used, the result would have been the same. The cellular parts of the bodies seemed disorganised precisely as we have all observed them in deep burns—the connecting tissues rotted away; but in neither of these cases was anything suspected as traceable to vaccination. They were purely idiopathic; they occurred at different periods, in different places, and did not appear at all contagious.

It is now proper to notice one particular direction of the vaccination authorities. We are “not to use virus from vesicles surrounded by inflamed areolæ”. Why? Because the inflammation may be erysipelas, probably. There seems to be some mistake here. Observation has taught me that the inflamed areola, as ordinarily seen, is not erysipelas; and that, if it be only brushed over with a weak solution of iron, it will certainly subside without further trouble. Of course, it is not to be inferred that the red ring now spoken of will end in erysipelas if let alone. On the contrary, the contention is, that this distinguishing mark of keen virus and active circulation will, in most cases, return to the natural condition as the vaccine disorder exhausts itself. But, to make the matter perfectly safe, it is only necessary, after puncturing the vesicles, to treat the inflammation in the manner above described. A step further takes us into a more doubtful and dangerous region. If, after vaccination, beyond the inflamed surface—say near the elbow-joint, but divided from the vesicular inflammation by a circular line of raised hard pale skin—there should appear a patch of dull red colour, that is quite another matter, and I should not recommend that lymph from such an arm should be used.

The erysipelatous circles or spots, or whatever shaped discoloration the skin may assume, must be treated with the iron at once; and wherever the diseased patches may extend, to them must its application be continued.

I have seen erysipelas as the result of vaccination in three cases, and in one of them almost every part was attacked and painted over. The three cases referred to occurred in our own practice about four years ago. There was nothing uncommon about the appearance of the vesicles; in two of them, the cow-pox inflammation was but slight. I did not see the third until afterwards. Finally, they all recovered. From that time, I have always applied the tincture of perchloride of iron to any suspicious-looking arm; and since having found every painted case to do well, I now use it in all without distinction. In fact, mothers and nurses would not contentedly take their charges away if the treatment were omitted.

Mention has already been made of one particular direction by the vaccination authorities to public vaccinators, and we now proceed with due humility to remark upon another.

It is somewhat unquestionable how far the Hunterian dogma is correct, that two disorders having similar characteristics cannot exist at the same time in one person; but it is difficult to divest one's mind of long-conceived impressions, and perhaps the following case may be interesting to some practitioners who, like myself, do not entertain the belief of all that is old being false and all that is new true. Small-pox was raging in a part of our district, and we were engaged in revaccinating the people. The grown-up daughter of a man who was lying ill of the disease came to be vaccinated. She had not been vaccinated in early life. I made the usual light scarifications, scarcely drawing blood, when the woman, without any apparent suffering, suddenly fell down in a swoon. It was thought that a fine strong young woman should not faint from so slight a cause; and, when she recovered, such answers were obtained as convinced us of her having been ill before coming to the station. This actually proved to be the case, for in a few days a regular crop of small-pox pustules appeared. The disorder ran through its stages, and the woman recovered well. I need hardly say that I anxiously watched for the advent of the cow-pox; but it never came.

It is possible that two analogous diseases may exist in the same person at the same time; but it does not seem easy to believe it. Then what are we to think of this direction to public vaccinators: “You are to be careful not to convey the blood of the patient you are operating upon back to the vesicle of the child from whose arm you are taking the lymph”? Water, a cloth, etc., are always to be used—and by me always are used—to purify the lancet after every time it touches the

new patient, in order that the blood of a child suffering from cow-pox at its greatest height may not be contaminated. Now, bearing in mind that the surface to which the lancet is applied for lymph is not an absorbing, but a rapidly exuding one, I venture to suggest that the government theory is physiologically incorrect. Right or wrong, however, this direction cannot do harm; and at any rate it necessitates caution.

My friend Mr. Parkinson of Bradford assures me that he now vaccinates with the same lancet that he has used for thirty years, and that he has never met with a case of disease consequent upon vaccination performed by himself or anybody else. Dr. Foster of Leeds, who has been a vaccinator over forty years, declares that he, in all his experience, has never seen a bad result from vaccination, nor even any approach to such a thing.

I have sometimes operated, according to the instructions of Dr. Stephens, by a number of small scarifications; at other times, by the tattoo dots of Dr. Willshire; and very often by the long line of the oldest practitioners; and, I am bound to say, with a like good result in all, so far as the prevention of small-pox has been concerned. In short, I may say that I have never known that terrible disorder occur to a patient that I have effectively vaccinated.

Fearing that I may be misunderstood, let me add that I have treated small-pox through three epidemics; that I have known pregnant women to suffer from it, the lives of both themselves and their offspring being sacrificed; and, finally, that I have attended one patient who died of a second confluent attack.

ABSTRACT OF A PAPER ON VACCINATION AND REVACCINATION.*

By F. P. ATKINSON, M.D., Kingston-on-Thames.

DR. ATKINSON said it was now generally acknowledged—

1. That vaccination lessens the chances of taking small-pox, though it does not render the reception of it in after-years altogether impossible.

2. That vaccination, in most cases, greatly modifies the character of the eruption and lessens the severity of the attack.

3. That revaccination gives an almost absolute immunity from small-pox, provided it is efficiently performed after fifteen years of age.

The following evidence was then produced in proof of the correctness of the views held.

In the Punjab, with a population of 18,000,000, the deaths from small-pox, according to the statement of Dr. A. C. C. De Renzy, sanitary commissioner in the province, are never less than 20,000 a year. In 1869, they numbered 53,195. In England, the average annual mortality does not exceed five thousand, though, previously to the introduction of vaccination, it was quite as high as in the Punjab. Dr. Brett, Medical Officer of the Watford Rural Sanitary Authority, states that, in 1877, small-pox visited a family, nine in number, residing at Bushey; three had been vaccinated, six had not. All the six unvaccinated persons took the disease, and four died; while the three that had been vaccinated escaped altogether, one of the three being a child at the breast, fed by its mother within two hours of her death.

Dr. Schwarzgruber of Harland, in the *Medicinisches Chirurgisches Centralblatt*, 1877, shows the marked efficacy of vaccination in the epidemic of small-pox which appeared in August of that year. The first patient was a girl aged 5, who had not been vaccinated. She had the disease in a severe form, and, after ten days' illness, died. In the same house was another family with four children; two vaccinated and two unvaccinated. The two unvaccinated—a girl aged 13 and a boy aged 2½—took the disease and died; the two vaccinated children escaped. A third family was visited by the disease; in it also were four children—two vaccinated and two unvaccinated. The two latter had small-pox, and one died; while the two vaccinated escaped, though constantly exposed to the infection. In a fourth family, an unvaccinated girl aged 9 had a dangerously severe attack of small-pox, but escaped with the loss of an eye. A vaccinated boy aged 4, in the same family, had the disease in a very mild form. In a fifth family of eight children, of whom seven were vaccinated, six of the vaccinated had mild attacks of small-pox (four not being confined to bed); while, in the unvaccinated child, the disease proved fatal.

The course of events in other families was similar. In all, there were thirty cases of small-pox among vaccinated persons, with only one death, which may be attributed to the patient having gone, while scantily clothed, from a warm room into the cold air. Of the non-

* Read before the Thames Valley Branch.

vaccinated (the only ones in the place), eight had small-pox; of these, seven died and one recovered with the loss of an eye.

That efficient revaccination gives an almost absolute immunity from small-pox was shown by the following evidence. Drs. Meigs and Pepper say that, in the terrible American epidemic of 1871-72, they did not see so much as a case of varioloid after successful revaccination even in those exposed. Dr. Welch, of the Philadelphia Municipal Small-Pox Hospital, states that not one of those connected with the hospital who have been revaccinated has taken the small-pox; while three or four of the nurses, who had previously had the small-pox, took the disease a second time. Again, from the report of Dr. William Gayton, Medical Superintendent of the Metropolitan Asylum Small-Pox Hospital, it would appear that only one of the large number (three hundred and sixty-seven) of nurses and others who have been employed at this establishment since its opening (nearly seven years ago) has contracted small-pox, and in this case revaccination had been omitted.

Dr. Atkinson next took up the question whether syphilis could be conveyed by vaccination, and said it would appear, from the cases brought forward by Mr. Hutchinson, that a syphilitic lancet, or blood taken up with lymph from a syphilitic infant, might be the means of transmitting it; though it must be admitted that the experiments of Cullerier and others with mixtures of syphilitic matter and vaccine, and vaccine taken from persons suffering from constitutional syphilis, are most powerful arguments against the idea; and it must also be remembered that, in 1857, Mr. Simon addressed a series of questions upon this very subject to a large number of medical men both in this and other countries, and received answers from no less than five hundred and thirty-nine, with scarcely an exception, entirely in the negative. They declared that syphilis could not be conveyed by means of true vaccination; while, at the same time, they pointed out that, by gross carelessness, it might be inoculated instead of vaccine. One thing is certain: two poisons cannot be present in a true Jennerian vesicle; for lymph may be taken from a vesicle developed in a person who has been vaccinated too late to prevent small-pox and used without the slightest hesitation for vaccinating another child. He next referred to the experiments of M. Taupin of the Children's Hospital, Paris. This gentleman vaccinated a large number of children with virus taken from subjects affected with scabies, scarlatina, rubella, varicella, varioloid, variola, rachitis, scrofula, tuberculosis, chronic eruptions of the scalp, darts, etc., without communicating to the patient any of these affections, either those of acknowledged contagious or non-contagious nature.

When skin-eruptions follow vaccination, the fault is by no means necessarily with the lymph, but often with the constitution of the child vaccinated. If it cannot bear the slight disturbance of vaccination with impunity, it is clear how utterly unfitted it would be to bear the serious disturbance of small-pox, which is the almost certain alternative. It has been asserted, he said, by some that vaccine loses its effect by constant transmission; but, if this be correct, then, for the same reason, the poison of fever ought to become less virulent and infectious each succeeding year; but this is not the case, and though, owing to altered atmospheric influence, prevailing epidemics may for a time die out, they soon return when the conditions are again favourable, with all their former activity. Besides, Jenner, after careful observation for upwards of twenty years, came to the conclusion that the vaccine underwent no change whatever; and, in addition to this, Marson, Ceely, and others of great experience, have proved, so far as is possible, that vaccine matter does not lose any of its prophylactic power by continued transit through successive subjects.

After this, Dr. Atkinson gave the evidence of some of those who have experimented with lymph taken directly from the heifer. During the siege of Paris, Dr. Quinquand had all successful cases with the human lymph, but only a third with heifers'. Dr. Thevenot, with calf-vaccine, had only two successful cases out of twenty-one. Of thirty-two surgeons in Paris who sent in their reports, one said that vaccine from the calf became better after passing through the systems of three or four different children, though bad and difficult to introduce for the first time. The rest (thirty-one) agreed that vaccination from the calf was provokingly unsuccessful, succeeding at the very utmost in only a fourth of the children vaccinated directly, and much less from calf virus tubes or glasses. Of sixteen others who tried the calf-virus, thirteen failed completely. Dr. Gaillard, who succeeded one hundred and seventy times out of two hundred and eighty-three with calf-vaccine, was successful two thousand seven hundred and forty times out of two thousand eight hundred and fifty-six with Jennerian vaccine. After various remarks upon other points, Dr. Atkinson concluded his paper by suggesting that the public should have as much information given them upon the subject as possible, and that every medical man should be particularly careful in the performance of the operation, since it was

clear that small-pox was capable of being banished from our shores, and it was only by these means that the looked-for result could be accomplished.

EXCISION OF THE RIGHT WRIST-JOINT FOR CARIES.

By J. H. PORTER, L.R.C.S.I., Surgeon-Major,
Assistant-Professor of Military Surgery, Army Medical School, Netley.

THE utility of excision of the wrist-joint for disease not being altogether accepted by some of the most distinguished surgeons, it may be of importance placing on record the result of one's experience, however limited. The following case I am disposed to consider of interest, as showing that, notwithstanding many adverse circumstances, the operation may be followed by most satisfactory results. In this case, there was well-marked strumous diathesis, extensive scrofulous bone-disease of the joint and soft parts at the back of the hand. The hand and fingers were almost powerless before the operation. There was free exposure of the flexor tendons during the operation. Hæmorrhage occurred twice after the operation, necessitating opening of wounds; and during subsequent treatment, the cicatrices reopened and formed into unhealthy ulcers.

J. H., 12th Brigade Royal Artillery, aged 21, had no hereditary history of scrofula, though he presented all the characteristic features of such a diathesis. He had suffered from primary venereal disease, but not from secondaries. He served two years and a half at Malta; and, while stationed there in September 1876, experienced dull aching pain in the right wrist-joint, attributable, he states, to a jar received while endeavouring to move a gun shears. The joint became much swollen; and in November, an abscess formed, which was opened and discharged a small quantity of pus. Notwithstanding free incisions and the introduction of setons, the joint itself became seriously implicated, his appetite failed him, he lost flesh, felt generally unwell, other abscesses formed in the joint, and he was invalided to Netley, where he arrived on May 27th, 1877, having somewhat improved during the voyage. His state on arrival was as follows.

There was a large ulcer on the left arm above the elbow connected with a sinus, at least six inches in length, extending up the arm; and a second ulcer over the elbow, both discharging freely. The right wrist was much swollen; the fingers and thumbs were extended, and with the exception of the forefinger and thumb, which had very slight power, he had no power of flexion or extension, the tendons being apparently adherent to their sheaths; the wrist-joint was fixed, and he had no power of either pronation or supination. Several openings of sinuses existed, one being over and in connection with the fifth metacarpal bone, another on the opposite side of the hand, and three in front of the wrist, all in connection with diseased bone.

Measures were at once adopted to recruit his health. The sinuses in the left arm were laid open, and the wounds treated with salicylic acid lotion. The wrist was treated by free incisions, rest, and the use of the warm arm-bath twice a day, from which he derived great ease and comfort.

Towards the end of October, the ulcers on the left arm had completely healed, he had increased in weight, his health had improved, but the wrist being hopelessly diseased, I decided to excise the joint, and accordingly, on October 31st, performed that operation by Mr. Lister's method, the patient being under the influence of ether, and the limb rendered bloodless. The fingers and thumb were forcibly flexed, and adhesions were broken down immediately before the operation was commenced. There was considerable difficulty experienced during the operation in removing the carpal bones, which were so extensively diseased and softened that it was found necessary to dissect them out one by one, the slightest pressure or force causing them to break down. The radial artery, being much enlarged, required care to avoid it in making the radial incision, and to keep it out of the way and protect it when extirpating the trapezium. The pisiform bone, being much enlarged and diseased, was entirely removed. One small vessel near the bed of the pisiform bone was secured, and the wound was washed with a solution of chloride of zinc, thirty grains to the ounce of glycerine. The large cavity whence the carpal bones were removed was filled up with strips of lint, and Mr. Lister's splint was applied in the usual manner. Hæmorrhage occurred in the form of oozing, in about two hours after the operation, and again on the morning of November 2nd; necessitating, on both occasions, the opening of the wounds and application of compresses and perchloride of iron. No vessels could be detected as a source of the bleeding. The wrist and hand now looked in anything but a promising condition, being much swollen,

black, and very offensive; matters, however, progressed most satisfactorily, the compresses came away in the copious discharge, which was absorbed and deodorised by the application of sawdust pads.

By November 13th, he was able to be up and about, but was much annoyed by a painful ulcer over the internal condyle, which soon healed when a hole was cut in the splint opposite to it so as to relieve the pressure.

On December 5th, Mr. Lister's splint was replaced by a light gutta-percha splint, moulded to the lower end of the forearm and hand, which gave more freedom of action for his fingers, which had been flexed daily since date of operation. He commenced using a weight suspended over a pulley on December 11th; which exercise greatly improved the condition of the muscles of the forearm and the power of slightly flexing, extending, pronating, and supinating the wrist.

On December 14th, he commenced writing exercises with a large handled pen, which he has continued daily, and now says he can write a letter hand than before the operation.

By the end of January 1878, the wounds had almost healed, when from some unaccountable cause, the cicatrices took an unhealthy action and reopened into most indolent and irritable ulcers, with diffuse swelling and induration of the fingers, hand, and forearm. By change to another ward, alteration of diet, aperient medicine, and warm applications, the parts again took a healthy action, and with the exception of small superficial abscesses forming on the fingers or near the seat of operation, he has progressed most satisfactorily, and is now (June 1st, seven months since date of operation), in the following condition. The wounds of the operation are healed; the wrist has become consolidated; and he is able to brush his hair, sweep the floor, lift a "Windsor chair", and carry a box of coal of 38 lbs. weight. There is fair power of grasping with the hand, which he can slightly pronate and supinate. He is able to flex and extend the thumb, fore and middle fingers, but the power over the ring and little fingers is impaired. He can write with an ordinary pen, pick up a pin, or use a needle in sewing. He has quite given up wearing a splint or sling, and altogether has an useful hand, which no doubt will further improve, should his circumstances in life admit of his maintaining his health at a proper standard.



The illustration represents the bones of the right wrist (natural size), including the articulating ends of the radius and ulna, with portions of the metacarpal bones, kindly drawn by Surgeon P. G. Radstock Young, A.M.D.

ABDOMINAL TUMOURS AND THE MICROPHONE.

By CLEMENT DUKES, M.D., B.S.Lond., M.R.C.P.,
Physician to Rugby School and Rugby Cottage Hospital.

THE following negative evidence of the use of the microphone in the isolation of pregnancy, when we have an unknown abdominal tumour, may be of interest to some members of the profession.

Mrs. L., aged 38, residing in Rugby, called on me on June 11th, 1878, saying that she was afraid she had a tumour in her abdomen. She had had one child ten years ago, which died, and she was so extremely anxious to have another child, that I rather suspected to find a phantom tumour. I arranged to see her next day in bed; and, on examination, immediately heard the placental murmur, and presently the foetal heart. Thinking that I should only have a phantom tumour, it had occurred to me whether the microphone could give me any assistance in diagnosis; having, however, found all I needed with my stethoscope, I was not to be deterred from trying to see if the microphone

could aid me still further, and so be of use in the diagnosis of doubtful tumour cases.

Accordingly, on the evening of June 17th, 1878, my friend Mr. G. M. Seabroke accompanied me to my patient with his microphone, which we applied, with this result.

1. We heard distinctly the placental murmur.

2. We could not hear the foetal heart, owing to the movement of the abdomen in respiration making too much sound in the microphone; and, even when the breath was held, it was still disguised, I believe, by the muscular contractions necessary to fix the abdominal walls.

3. On applying the microphone over the heart and to the radial artery, we heard them distinctly.

To-day Mr. Seabroke very kindly made an exquisitely sensitive modification of the microphone, which resembled the end of the stethoscope, and could be placed in any position, horizontally or vertically, and which could, therefore, be much more easily manipulated and applied accurately to the abdomen; still, we were unable to hear the foetal heart owing to the sounds caused by respiration, though it could be well heard with the stethoscope.

THERAPEUTIC MEMORANDA.

ALCOHOL AS FOOD.

HAVING read with interest the correspondence upon the above subject, I beg to quote a case that has lately occurred in my practice, which, in my opinion, proves that alcohol is a food. On March 1st, 1878, I was called to see a gentleman, a distinguished officer, who had seen much active service, and found him in a very weak and low state. I was assured by his friends that the only food he had taken, for nearly a year, had been one egg *per diem*, beaten up with sherry. I was sent for in consequence of his refusal to take the egg any longer, or any food, with the exception of alcohol. I persuaded him to take milk, which he did, but only half a pint a day, for three weeks; after which time until the day of his death, on June 2nd, he took nothing but alcohol in various forms. He was nursed throughout by a skilled nurse, in whom I have every confidence.

R. FEATHERSTONE PHIBBS, L.R.C.P. Ed.,
St. John's Wood, N.W.

SURGICAL MEMORANDA.

AVULSION OF A MUSCLE OF THE EYEBALL.

A VERY unusual case of accident came under my notice some time since in practice, and, as I have never seen or read of a similar one, perhaps it may be worthy of record. The case was one of injury to the eye, and happened as follows. One of the rests for supporting the globe of an ordinary gas-bracket entered the orbit of my patient, a young girl, pierced through the conjunctiva, and, being hooked or bent at the extremity, was entangled in one of the muscles at the external surface of the eyeball. This it tore from its attachment to the bone, and the belly of the muscle lay down the cheek when the girl came to me; the insertion of the muscle into the globe remaining intact. Of course, nothing could be done but cut the muscle as close to its insertion as possible; this was done, rest to the eye was enjoined, and evaporating lotions were applied to the orbit.

The muscle torn away must have been either the inferior oblique or the external rectus, as both are attached close together, at the outer aspect of the eyeball and near the cornea. From the structure of the muscle at its extremity, I should infer that it was the inferior oblique, as its origin was tendinous and by a single head, an arrangement very different from that obtaining in the case of the external rectus, which arises by muscular fibres and is biventral. As the patient did not return, nothing could be gathered as to which muscle it was, from the loss of motion and strabismus which would inevitably result as a consequence of the destruction of the muscle. It may be assumed that no serious inflammatory action or loss of function resulted in the eye as a consequence of the injury; and this is rather surprising, as the force exerted must have been very considerable, and one would have expected that very serious consequences would have ensued to the delicate tissues of the eye. The very serious and unique character of the accident, and the minimum result of injury to the eyeball, have induced me to record this brief note of the case.

J. WILSON HAMILL, M.D., Higher Broughton, Manchester.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

COMPOUND FRACTURE OF LEFT ILIUM: PARENCHYMATOUS SUP-
PURATION OF BOTH PAROTID GLANDS: DEATH.

(Under the care of Mr. BERKELEY HILL.)

FOR report of the following case we are indebted to Mr. A. J. PEPPER, Surgical Registrar.

J. S., aged 56, was working near a railroad and had occasion to cross the line, when a passing train struck him. Immediately afterwards, he was conveyed to the hospital (March 26th, 1878).

On admission, near the left anterior superior iliac spine was a small wound appearing punctured. A probe passed from it downwards and backwards outside the crest for three inches, and struck exposed bone in its course, though whether this was fractured was not ascertained. There was no sign of injury to the thoracic or abdominal viscera; no hæmaturia. There was ecchymosis of the left eye and cheek, but no fracture of cranial or facial bones, and no paralysis.

Two days after the accident, the temperature was 103.2 deg. Fahr., and he complained of severe pain at the seat of injury. The tongue was dry; the teeth covered with sordes. There was acute inflammation around the wound. On the next day (March 29th), the patient's condition was very bad. He had general symptoms of the typhoid state. A counter-incision was made where passage of the probe was arrested over the ilium, and a drainage-tube was introduced. The inflammatory swelling extended for eight inches down the thigh and buttock, and also over the groin. His bowels were open. There was no evidence of peritonitis. Hot fomentations and belladonna were applied to the injured part since his admission, and a stimulating and supporting plan of treatment adopted.

April 2nd. Extensive sloughing had taken place at the seat of injury and over the lower part of the abdominal wall, and extending beyond this was a wide-spread erythematous blush. He had twitchings of the whole body, low delirium, and a vacant fatuous expression. Temperature 100. Bronchitic *râles* were heard over the front of the chest.

April 4th. Some improvement was observed in his general state; the wound was healthier. Temperature 99.2; pulse 112; respirations 32.

April 9th. The extensive wound caused by the sloughing looked clean, but the skin around was still congested. Over the region of the left parotid, and at the contiguous upper part of the neck, was a puffy swelling gradually subsiding to the level of the healthy parts. There was no fluctuation, but diffuse redness over and around it. Bronchitis was more marked. Temperature at 7 P.M., 102 deg. Fahr. Mr. Hill made an exploratory incision into the swelling, but no pus could be found. The wound was dressed with carbolic oil.

April 11th. The right side of the neck and face presented the same appearance as the left, which was much in the same condition as on the 9th. The abdominal wound was clean. Mean temperature 101.6.

April 13th. Mr. Hill removed a small piece of detached bone from near the iliac crest.

April 15th. The patient gradually became more exhausted, and had constant low muttering delirium till his death at 6 P.M. The swellings connected with the parotids and the abdominal wound had remained very much as described on the 11th.

POST MORTEM EXAMINATION, forty-eight hours after death.—There was no fracture of cranial bones. The membranes of the brain were healthy. The brain weighed thirty-six ounces, and showed no sign of laceration or hæmorrhage. The basilar artery was atheromatous. With the exception of slight submucous capillary extravasation of the lower part of the ileum, the intestines presented nothing abnormal. There was no peritonitis. The liver was fatty and somewhat softened; it contained a few small biliary calculi in the ducts, imbedded in the liver-substance near the surface. The weight of the organ was forty-nine ounces. The spleen was small and soft. The kidneys showed fibroid substitution; each weighed three ounces. The lungs were emphysematous. There was commencing hepatisation of the base of the left lung. All the cavities of the heart were filled with soft clot. The muscular substance was fatty. The whole of the acinose element of the parotid glands was in an advanced state of sup-

uration, the softened and purulent foci mapping out the glandular arrangement perfectly. The interacinose tissue was semigelatinous; the boundary line between this and the secreting structure was marked by a bright red zone of hyperæmia. The tissue outside the capsule of the glands was oedematous. There was no thrombosis of the jugular veins nor of their tributaries. Portions of the crest of the left iliac bone, torn away, were still adherent to the gluteus maximus and medius. A fracture running from the centre of the crest two-thirds across the iliac fossa, backwards and outwards from this through the posterior superior spine, was found. The V-shaped piece of bone included could be moved slightly to and fro. Both surfaces of the iliac bone were bathed by dirty purulent matter. There was wide-spread extravasation among the abdominal muscles at the region of injury.

REMARKS.—In this case was well shown the extensive injury caused by so called "buffer accidents". On admission, only a small wound existed over the anterior superior iliac spine; this, however, communicating with bare bone. The gravity of the state of affairs was made manifest during the progress of the case and at the *post mortem* examination. Extensive extravasation was followed by sloughing of the tissues; and the drain on the system caused by this and the consecutive absorption of infective material explained the asthenic typhoid condition of the patient. The most interesting fact was the occurrence of a marked double parenchymatous suppurative parotitis, which pointed clearly to a blood-poisoned state, as no anatomical explanation could be given to connect it with the primary injury. It was clearly not embolic; and the nature of the changes in the abdominal viscera and heart, which were softened, but free from infarction or abscess, bears out the theory of its septicæmic character. There was no rigor, nor fever-curves. It may be remarked how severe an injury may be inflicted on the abdominal wall without subsequent peritonitis, so long as the serous membrane remains intact.

SIR PATRICK DUN'S HOSPITAL, DUBLIN.

CASES UNDER THE CARE OF DR. E. H. BENNETT.

Operation for Restoration of the Nose.—We have recently seen in this hospital three cases exhibiting some points of interest in reference to this operation. In the first case, a man aged 24, the operation had been performed on January 17th, 1878; in the second, a boy aged 15, in October 1877; in the third, a middle-aged man, the operation had been performed six years ago by the late Mr. Hamilton. In all three, the disease which had destroyed the nose was lupus; and in all, the disease had been for some time arrested, at least in the part involved by the operation. The method of operation was the same in all, the flap being taken from the forehead. In the management of these cases, Dr. Bennett maintains a slight silver splint beneath the flap, for as long a time as possible, to control the tendency to contraction of the flap and flattening of the new nose. The splint is borne in place until it begins to set up irritation around its edges, in consequence of the pressure of the contracting flap. In the patient operated on by Mr. Hamilton, the columna nasi had been united to the lip, and two nasal openings had been formed; but, in consequence of the contraction, although the nose was fairly good in appearance, the nostrils had been completely obliterated, and the upper lip had been elevated so far as to expose the entire gum; the patient had, in fact, come into hospital to have these defects remedied, particularly that of the lip. In the cases operated on by Dr. Bennett, an attempt to unite the columna was made, but failed, in consequence of the motion of the lip; the feature of the columna was sufficiently formed, but the nostrils communicated beneath it, and an open passage was preserved, without any danger of complete occlusion. The most interesting feature of these two cases was the fact that sensation, at first entirely lost in the flap, was restored in both cases at a remarkably early period. In the case of the boy, a fortnight after the operation; in the man, in the interval between the morning of the eighth and tenth days. Dr. Bennett observed that, in these and in previous cases on which he had operated, the return of sensation occurred suddenly and, as above stated, very early. In the last case, which was the earliest observed by him, in the interval between the eighth and tenth days. It will be noticed that the restoration of sensation in these cases occurred as early as those recorded by Schiff and others, in the direct union of divided nerves; while it is plain that no attempt to attain such exact nerve-adjustment could be made further than such as may follow by an accurate adjustment of the transplanted flap. Division of the neck of the flap, which was made several weeks after the operation, made no change of the sensation-power of the surface of the transplanted flap, even immediately after its section.

Suppuration of an Ovarian Tumour.—The patient, a woman aged 35, the mother of four children, was prematurely delivered of twins on the

1st day of 1877, the gestation having reached about the fifth month. After this, the abdomen remained large and was constantly painful. On admission to hospital on February 18th, 1878, the diagnosis of multilocular ovarian cyst was readily made, the tumour being of moderate size. Extensive adhesions of the cyst to the walls of the abdomen and to the viscera of the right hypochondrium were diagnosed, and also a confused solid mass in the left iliac region, in which the body of the uterus could be recognised by examination with the uterine sound. The woman appeared to be in a condition too weakly for operation, and had a constant elevation of temperature, rising slightly in the evening and never falling much below 100 deg. Fahr. in the morning. Operation was declined for the time, and attempts to improve the health were made. The patient was removed to the country for a fortnight, and returned much improved in every respect. A further stay in the country was advised, and again the patient left hospital. In two days' time, she returned with a fresh and more violent attack of pain all over the abdomen. The tumour was observed to have altered in shape, one large compartment of the cyst having become conical near the umbilicus. From this red lines, marking the path of the lymphatics from the umbilicus to the groin on each side, were evident; and it appeared clear from these signs, combined with a marked rise of pulse and temperature, with occasional rigors, that suppuration of part or of the entire cyst had occurred. In the morning of April 16th, the patient got out of bed and suddenly became faint, profound collapse followed, and she died before the following night in great pain from distension of the abdomen. At the *post mortem* examination, the abdomen was found to be distended by purulent matter; the largest cyst of the tumour had burst into the cavity, whilst it was also clearly pointing as an abscess beside the umbilicus. The adhesions diagnosed during life were verified; viz., to the colon and liver, to the abdominal wall in front, and also the adhesion of the omentum and left uterine appendage, and of the uterus in the mass at the left iliac fossa.

Typhoid Fever simulating Hip-Disease.—This case illustrates the tendency that typhoid fever has, in its early stages, to assume the characters of very distinct diseases; in this instance, of acute morbus coxae. A girl aged 15 was admitted to the surgical wards under the impression that she was suffering from disease of the hip. She had had violent pain in the hip and thigh for two days, with a hot skin and other features of inflammatory fever. She walked lame, and maintained the limb slightly flexed on the pelvis, resisting any attempt to move the joint. The pain was seated behind the trochanter, and was not complained of when the capsule was pressed in front. Dr. Bennett noticed that, in walking, she brought the heel of the lame limb down to the ground. The exceptional character of the gait and the seat of pain caused doubt as to the disease being acute arthritis. A few leeches relieved the pain, which changed its position to the sacral region. In a few days more, the features of typhoid fever gradually replaced those of hip-disease. The bowels, which had been obstinately confined, being emptied of a large mass of feces, the pain, in a great measure, ceased. The case terminated fatally in the fifth week by hæmorrhage from the bowel.

TUNBRIDGE WELLS INFIRMARY.

TUMOUR OF THE BRAIN.

(Under the care of Dr. WARDELL.)

FOR the report of the following cases we are indebted to Mr. J. BULKLEY FOOTNER, House-Surgeon.

A. B., aged 38, a greengrocer by trade, was admitted into Tunbridge Wells Infirmary on March 5th, 1878, suffering from severe pain in the back of the head and neck. Twelve years ago, the patient had syphilis, but had been a fairly healthy man; he was married, and had several healthy children. Two years and a half ago, he fell downstairs, pitching on his shoulder and the side of his head; but he was not stunned, and sustained no scalp-wound.

His illness began two years ago with pain at the back of the head and neck. He felt weak, and had restless nights. These symptoms became worse, and, six months later, he complained of his tongue feeling "too large for his mouth", and was unable to protrude it as far as formerly. He also spoke, as his friends expressed it, as if "his mouth were full of plums".

The secretion of saliva was also greatly increased, necessitating frequent spitting. Nine months ago, he began to suffer from diplopia, due to paralysis of the left external rectus muscle of the eyeball. As he got no better, he was admitted into Tunbridge Wells Infirmary. On admission, he was seen to be an emaciated man, looking older than his years warranted. He complained of a severe pain situated at the back of the head and radiating down the back of the neck to both shoulder-

blades. This pain was seldom absent, but was aggravated at night, and greatly increased by the recumbent posture.

There was complete paralysis of the left external rectus muscle of the eyeball, and slight ptosis of the same eyelid. The velum pendulum palati was paralysed and drooped on the left side, and the uvula was deflected to the right. The tongue was exceedingly soft and flabby, and the patient could not protrude it beyond the teeth. The mouth was full of a viscid saliva. He was unable to turn his head without moving his body at the same time; nor could he raise his right arm above his head. A tumour, some deposit, or thickening at the base of the brain was diagnosed, and, as it was suspected to be of a syphilitic character, iodide of potassium was administered in fifteen-grain doses, without, however, any beneficial effect. Sedatives were also given to allay pain.

The patient remained in the infirmary about one month, and then, as he was no better, went home to his family. While there, the pain became more intense and unbearable, and the patient's tendency was suicidal. He suffered from cough and dyspnoea during this time. Five days after leaving the infirmary, he suddenly complained of a suffocating sensation in his chest, and asked his wife for a mustard poultice. She went out of the room to get it, and, when she returned, he was dead.

Post Mortem Examination.—On opening the head, the walls of the skull were found to be enormously thickened—nearly half an inch in thickness. The dura mater was very adherent. There was a quantity of serous fluid in the cavity of the arachnoid and ventricles of the brain. The brain-substance was healthy. On its removal, there was seen to be a tumour of the shape of a horse-chestnut, and double that size, situated beneath the dura mater, on the anterior and left lateral margins of the foramen magnum, projecting upwards into the cavity of the skull, and extending down the vertebral canal. By its pressure, the upper part of the spinal cord and medulla oblongata was flattened and pushed to one side. On cutting into it, the contents were found to be grey curdy pus, with several sequestra lying loose in the cavity of the abscess. The largest of these sequestra measured one inch long and half an inch broad. The bone round the cavity of the abscess was soft and carious. Neither the cavity of the thorax nor the abdomen was examined.

REVIEWS AND NOTICES.

FIVE YEARS' SURGICAL WORK IN THE MANCHESTER ROYAL INFIRMARY. By EDWARD LUND, F.R.C.S. London: Simpkin, Marshall, and Co.

IN this little work, Mr. LUND has presented to the profession five years' surgical work in the Manchester Royal Infirmary.

The author justly merits the reward due to honest labour and perseverance—labour which can only be estimated when we state that the subject matter contained is deduced from the notes, fully and accurately taken, of over thirteen hundred cases. The author has classed the different subjects under eight different heads, and has formed other classes by dividing and subdividing according to the different facts which they tend to establish.

Some of the subjects considered by Mr. Lund are of great importance in a surgical point of view, and would demand more than a passing notice; and it is almost to be regretted that their association with statistics may deter some readers from their perusal. Statistics require a singular genius to make them interesting; and yet it is in this respect the author is so happy, for, without obvious servitude to a numerical system, the cases are arranged on a plan convenient for practical suggestions and comprehensive deductions.

It is a glaring defect in any hospital, and much to be regretted, that it should devolve on any member of the honorary staff to compile statistics—a duty, it would appear, which ought undoubtedly to be conducted by one whose province does not in any way make him responsible for the treatment of the cases; but, in the absence of such provision, Mr. Lund leaves nothing to be desired in the example he has laid before the profession.

If it were possible to obtain from every hospital surgeon an equal number of statistics as valuable and as available, we should soon possess a great mass of useful matter; whereas it appears to be rather the exception than the rule for surgeons personally to garner the results of their labours, and consequently they leave not wholly accomplished their duty to themselves and to those to whom they owe their position. It is more particularly on this account that we would congratulate Mr. Lund, as he confesses that such feelings largely influenced him in the publication of his work.

ON ASTHMA: ITS PATHOLOGY AND TREATMENT. By I. B. BERKART, M.D., Assistant-Physician to the City of London Hospital for Diseases of the Chest, etc. Pp. 264. London: J. and A. Churchill. 1878.

THIS work is a valuable addition to the literature of asthma, and will be widely read at the present time as an earnest and erudite protest against the validness of the long prevalent theory that asthma is a nervous affection, and in particular a bronchial spasm. Dr. BERKART adds the weight of his reasoning and experience to the view that the asthmatic seizure is due to other and deeper causes than bronchial spasm, e.g., to emphysema with bronchial accumulations, to inflammatory thickening of a portion of the lung, etc.

The history of the literature of asthma is, as may be seen in the interesting early pages of Dr. Berkart's work, an alternate affirmation and denial of the proposition that the malady is one of disordered innervation. Laennec, in the light of whose great discovery all chest-diseases were reconsidered, accepted purely spasmodic asthma as one of the several varieties of the disease, the other forms being those recognised pulmonary affections, in the course of which paroxysmal dyspnoea was of common occurrence. The absence of physical signs and of adequate *post mortem* evidence of pulmonary disease in cases—and most particularly in one case—of fatal dyspnoea, led Laennec and Andral to the admission that asthma arose in certain instances solely from deranged innervation of the lungs and bronchi. The subsequent demonstration by Dr. C. J. B. Williams of the muscular irritability of the bronchial walls to the electrical current, and the further observation of Longet that irritation of the pneumogastric nerve would also cause the bronchial tubes to contract, gave strong support to the muscular spasm theory. And this theory, notwithstanding many counter-experiments and denials, has, on the whole, firmly prevailed to the present day. In his endeavour to disprove this view and to place the disease on a wider and more distinctly pathological basis, Dr. Berkart shows great ingenuity of argument and extended reading. According to Dr. Berkart's definition, "the antecedents and sequelæ of asthma manifest themselves as one continuous though protracted pathological process". Hence, "asthma is only one link in a chain of quasi-independent affections, which commences with inflammatory changes of the pulmonary tissue, and terminates with emphysema and bronchitis". The antecedent disease is, in the majority of instances (80 per cent.), a bronchitis or catarrhal pneumonia, commonly consequent upon measles or whooping-cough. The sequelæ of asthma are bronchitis and emphysema. Asthma itself is, the author maintains, but a symptom dependent upon pulmonary lesions the result of past inflammatory attacks, or upon more insidious changes of a prematurely senile or degenerative kind. The constitutional condition most favourable to the production of asthma is the rickety. Such we gather to be the author's view of the pathological position of asthma.

The immediate causes calling forth the attacks are numerous and of various kinds; but, whether by pulmonary hyperæmia, bronchitis, or direct blocking, they are all productive of the same result—obstruction of the bronchi.

Respecting the morbid anatomy of the disease, the author has necessarily very little to say that is strictly in point. Death from asthma is the rarest of occurrences, and no *post mortem* examination of a simple and genuine case seems to have been as yet recorded. The case of fatal dyspnoea which served to convince two such accurate observers as Andral and Laennec of the occurrence of purely spasmodic asthma is—we think somewhat rashly—set aside by the author as in all probability one of embolism of the pulmonary artery. A small portion of the base of one lung was, it is true, described by Andral as in a state of pneumatic consolidation, and the clinical history of the case might favour the diagnosis of embolism; but when such an observer as Andral emphatically states that the lungs were with this exception healthy and crepitant throughout, one must conclude that some other condition was present during life to account for the severe and sustained dyspnoea which yet left no trace behind. And, in denying altogether the operation of a nervous agency in asthma, lies, we think, the weak point in Dr. Berkart's argument. He forces us strictly to compare the symptoms during life with what we know or may conjecture of the morbid conditions actually present. In doing this, we are confronted with the fact—difficult to understand from the point of view which altogether excludes perverted nervous agency—that the paroxysms of dyspnoea are quite as severe at the early as in the later periods of asthma, whereas coincidentally and keeping pace with the development of those recognisable lesions of the lungs and heart to which the patient finally succumbs, we get persistent and ingravescent symptoms of a definite kind. And the prognosis of the disease—at least, in its typical varieties—is more favourable than one

could hope for in a degenerative disease of a vital organ. Dr. Berkart truly observes, p. 204, that "the prognosis as to life is in general favourable", especially in the atrophic or emphysematous form, in which the patient may live to an advanced age. Must not the lungs be in at least an average degree of textural integrity in the first instance in such cases to withstand the repeated strain of the asthmatic paroxysm for so long a period? In the "hypertrophic form of the disease", on the other hand, in which interstitial pneumonia of an insidiously progressive kind is the lesion, the symptoms of phthisis soon appear and destroy the patient.

The author strikes the first key-note of all treatment at the same time that he would seem to exclude the asthmatic seizure from being necessarily dependent upon molecular or inflammatory changes in the lungs, when he remarks that, "upon the whole, it may be said that every asthmatic seizure is more or less a preventable accident, so that an efficient and suitable prophylaxis is almost tantamount to a cure".

We must, in conclusion, express our strong approbation of this book as a good honest piece of work. In every page, we find evidence of extensive reading; and, although, as we have very imperfectly pointed out, we cannot admit that the author has yet quite demolished the nervous theory of asthma, he has nevertheless, with great ability and no small success, striven to place the pathology of the disease upon a more material and secure basis, and to render its treatment less haphazard and fanciful.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

TOLERANCE OF OPIUM BY AN INFANT.—Dr. J. L. Little reports (*American Jour. Obstet.*, April 1878) a case where paregoric in small doses was administered to a child three weeks old for the relief of suffering caused by an inflammation of the knee-joint. The child gradually bore larger and larger doses; the paregoric was changed to tincture of opium, and this again to Magendie's solution. Soon the child obtained such a tolerance of this drug that, in a couple of months, from half a drachm to a drachm a day was necessary to quiet it. This state of things continued until the amount consumed by the child, then less than eight months old, was two ounces of Magendie's solution in twenty-four hours. The dose was gradually diminished at the rate of about three drops per day, and, at the time of making the report, but ten drops were given at bedtime. The child's appearance improved very much; it was intelligent, and weighed eighteen pounds.

ABSORPTION OF IODIDE OF POTASSIUM BY THE VAGINAL MUCOUS MEMBRANE.—J. Smolski (*Petersburg. Medicin. Wochenschrift*) finds that iodide of potassium is very rapidly absorbed by the mucous membrane of the vagina, when introduced in large doses in the form of globules with cacao-butter. In twelve hours, of twenty grains, eighteen were absorbed; on the other hand, only two grains and a half out of ten were absorbed. The absorption of a solution in glycerine is slower. Of a solution of twenty grains in about two drachms of glycerine, only two grains and a half were absorbed in twelve hours; and of a ten-grain solution, only one grain and a half in the same time. The rapidity of absorption may be increased by the addition of free iodine.—*Centralblatt für Gynäkologie*, June 8th.

TREATMENT OF CROUPOUS PNEUMONIA BY COLD.—In a paper read before a medical society in Sweden, Dr. P. A. Lewin recommends the local application of cold in croupous pneumonia. He published a memoir on the subject in the *Hygiea* in 1862. Among the numerous advantages of the plan, he signals the immediate cessation of the oppression and shortness of breath, which may become aggravated under the internal use of antipyretics. The most suitable way of applying cold is, according to the author, the following. A small—and preferably a torn—soft handkerchief is dipped in water at a temperature of 8 to 12 R. (50 to 59 Fahr.), and is then squeezed (not wrung) until the water no longer runs from it when held up; it is then folded up six-fold and laid on the front of the chest—a coarser handkerchief being placed below it to prevent the water from running over the body. The application is removed at intervals varying from eight to twelve or twenty minutes. Water of a lower temperature than that above mentioned must not be used; the handkerchief must be changed or entirely removed whenever a rigor is felt, and not reapplied until the rise in temperature demands it. This method of applying cold renders unnecessary the use of general baths in pneumonia.—*Allgemein. Medicin. Central-Zeitung*, April 6th.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 22ND, 1878.

THE TWO MEDICAL ACT AMENDMENT BILLS.

THE present and succeeding weeks will probably mark an important epoch in medical legislation. Two Bills to amend the Medical Act of 1858 are now before the House of Commons. The first was introduced into the House of Commons by Mr. A. Mills, Mr. Childers, and Mr. Goldney, and ordered to be printed on May 29th. The second was brought from the House of Lords on June 7th, 1878, and ordered to be printed by the House of Commons on June 13th. The latter is the Bill of the Lord President. This Bill has been much modified in its passage through the Lords. It was introduced into the House of Lords and ordered to be printed on March 19th. This Bill, as it then stood, was objected to by the British Medical Association on the ground of its not enforcing compulsory conjunction for examination of all the medical authorities in Scotland and in Ireland, and thereby placing the English medical authorities at a disadvantage which must have proved injurious to them. It also omitted to provide for the representation of the profession in the General Medical Council. Under these circumstances, the Medical Reform Committee expressed their determination to oppose the Bill. They canvassed the profession; and on May 18th they again waited on the Lord President, and informed his Grace that the result of 5,227 replies was:

	AYE.	NO.
Direct Representation	5,075	121
Conjoint Scheme	4,910	264

Replies have continued to come in since the above result was announced, and have only yielded one additional No; the Ayes, with that exception, being unfailling. On this occasion, the Lord President assented to compulsion as regarded the corporations, but insisted on leaving the universities free. Further than this his Grace declined to go towards the establishment of the long demanded uniformity of qualification. At this stage, the Medical Reform Committee had, therefore, no other alternative than the introduction of the Bill of the Association, which was brought into the House of Commons and ordered to be printed, as already stated, on May 29th. The Lord President, however, further amended his Bill in the House of Lords, and it was ordered to be printed as amended on May 24th. On recommitment, it was again modified and ordered to be printed on June 3rd, five days after the introduction of the Bill of the Association, with a conjoint scheme similar in its effects to that embodied in the Bill of the Association. The Bill of the Lord President, as thus framed, establishes for the first time a conjoint board on the principle contended for by the Association. It also gives the General Medical Council greater powers than it has hitherto possessed, and assigns them the duty of framing examination-rules for the conjoint boards—a duty from which the General Medical Council shrinks, as proved by the resolution quoted in our article in the last number of the JOURNAL (June 15th), to the effect “that the duties of the Medical Council.....should not be extended to the initiation of the examination-rules under which qualifications are to be granted”: a very remarkable resolution for a Council, so called, of Medical Education.

The Bill of the Association (Medical Bill No. 2) would further make the Medical Council more independent of the Privy Council than the Bill of the Lord President; but, before giving it such increased powers, regards its modification so as to make it representative of the profession as well as of the universities and corporations, and of the Government, imperative. This is the cardinal point in which Medical Bill No. 2 differs from that of the Lord President; and it is as representing the approval of the almost united voice of the profession that Medical Bill No. 2 is supported by such numerous petitions, while there are none from the profession against it.

In 1857 and in 1858, it was the British Medical Association and the profession that carried medical reform in the face of opposition from prejudiced and interested corporations; it will, indeed, be strange if, in the present day of representative government, the voice of the profession be disregarded. It is proposed to fix the expense of the election of the representatives of the profession on the funds of the Medical Council. In this respect, it must be borne in mind that the profession has supplied the whole of the funds which have supported the Medical Council and paid the delegates of the rich universities and corporations, while wasting time, year after year, in discussions in which the interests of the universities and corporations they were appointed to represent were alone involved; while, as regarded measures of great public utility, such as the conjoint scheme of examination, their deliberations were inoperative. Had it rested with the representatives of the corporations, the small majority of fourteen to ten by which the resolution in favour of a conjoint scheme was carried during the last session of the Council would have been converted into a majority against it. The votes of the Crown nominees alone turned the balance in its favour.

The opponents of the representation of the profession resort to every device to oppose it. It has been suggested that the number of the Crown nominees should be increased with that object, but this in no way meets the views of the profession. The profession desires that the Council should rest on the widest possible basis; that it should continue to represent the time-honoured Universities and Corporations of the land; that it should represent the Crown; that it should also represent the profession. The Crown nominees must frequently, if not always, be to a great extent the nominees of one man, not improbably of the medical man who, whatever his creed, may happen to possess the ear of him who nominates. The late Emperor of the French held a homœopath in high esteem; and, to come nearer home, it has been reported in the daily papers that the Lord Chancellor of England, notwithstanding his commanding intellect and unsurpassed attainments, presided at a meeting in favour of a homœopathic hospital in this country. With such knowledge at our hands, it is quite conceivable that the medical adviser of the Privy Council may, at some period, hold similar heretical notions; and in such case, it is certain that such influence could only be prejudicial to the scientific development of medicine.

The statement has further been made that all the members of the Medical Council, as at present constituted, represent the profession. How this assertion can be maintained in the face of the fact that for years the profession has demanded the conjoint scheme, and that the majority of the representatives of the corporations on the Council have done their best to refuse it; that the profession has for years demanded representatives elected by the general suffrage of the profession, and the Council has never once seriously discussed the propriety of conceding them—how, under such circumstances, such an assertion can be maintained certainly passes ordinary comprehension; for, instead of representing the profession, the Medical Council has thus persistently placed itself in opposition to its united voice.

What, under these circumstances, has the Medical Council done for that profession which has supplied it with funds to the extent of something like £150,000? It has given the profession the *British Pharmacopœia*,

a publication which, with exclusive right of sale, probably any publisher would gladly have undertaken for £500, certainly for £1,000; and it has compiled a *Medical Register*, which the enterprising publishers of the *Medical Directory* successfully compete with as a private venture. The sooner the General Medical Council, which has received so much and has given so little, is effectually reformed the better. Crown nominees and corporation delegates do not represent the profession; and it is for this reason doubtless that the profession supports Medical Bill No. 2.

MEDICAL EXPERTS AS WITNESSES IN COURTS OF JUSTICE.

UNDER this title, a member of the United States bar has published a paper containing much useful information on the duties of experts or scientists.* Medical and scientific experts are now so frequently summoned to give evidence in our English Courts, that it may be useful to extract for their information some remarks on their duties, liabilities, emoluments, etc. The practice in England and the United States is similar, so that the rules laid down by Mr. Ledergerber are equally applicable to English experts.

The evidence required from experts is that which is based on *opinion*. Certain acts or circumstances are hypothetically stated, and the expert expresses his opinion on the conclusions to which they lead. The sole object of this testimony is to throw light upon the subject of the inquiry, and to aid the jury in coming to a just verdict. Experts are not allowed to take the case from the jury and give an opinion on the point at issue, which the jury alone have to decide. Thus, in a case of stealing an article of value, an expert would not be allowed to state that the taking was an act of insanity. He can only state that, from all the facts, it is his opinion that the accused was probably labouring under a fit of insanity at or about the time of the taking. If the jury believe him, the inference is the same, but the jury only can find the fact and act upon it. In spite of the opinion of the expert, the jury may find that the accused was sane at the taking and responsible for the act.

Experts are the only witnesses who are permitted or compelled to testify in a case, the facts of which are unknown to them, and which they have not heard detailed by other witnesses. Hypothetical cases are put to them, and they are compelled to state their opinions as to the probable result. If an expert give an opinion upon facts witnessed by himself, he must state clearly the facts upon which he bases it. In this case, he becomes an ordinary witness. When a certain state of facts is laid before him, he is not allowed to alter or modify them in any way, but he must deliver his opinion on them as they are put before him by counsel. The facts upon which an opinion is based must be undisputed, and not put in the alternative; for opinions on different states of facts would not assist the jury. This is one cause of conflicting medical evidence at trials. The solicitors for the plaintiff and defendant will often draw up different statements of facts, relating to the same case, and then obtain the opinions of experts, which of course when given at the trial appear irreconcilable. It is for the jury to find the true facts, and then apply the opinions which have been given upon them. No opinion can be given on a part of the facts in the case.

There are some points which it is not in the power of an expert to answer. He may be asked whether a certain wound had been produced by a weapon also produced in evidence. There are so many weapons of a similar kind, adequate to produce a similar wound, that he could not assign it to any one, nor could he say whether a fracture of a skull produced in evidence was from a weapon also produced. There are many cases not proper for an opinion; and, as a rule, that which is evident or comprehensible to persons of ordinary understanding cannot be the subject of an opinion for an expert.

One of the difficulties connected with the evidence of experts in the

English and American Courts is that which relates to partisanship. Lord Hatherley says on this point: An expert who gives an opinion is selected by the litigant, and when so selected, he is expected to express and adhere to that particular opinion which is favourable to the case of the person who summons him. His Lordship observes: "He" (the expert) "honestly entertains it, I doubt not, when first selected; but then it is like a counsel's opinion. The counsel gives his opinion on a statement of facts submitted to him; but perhaps, after hearing the other side, he would find the case wholly altered, and would say so. But the expert, called into court by the plaintiff, is generally expected to support his case in cross-examination, when many views may be suggested that may greatly modify the witness's judgment; but even after facts have been proved that really ought to modify it, the expert frequently holds to his original opinion. Every expert should eschew altogether the notion of partisanship. He should be ready frankly and unreservedly to give his opinion regardless of how it may tell. He is there, not as an advocate, but in order to inform the jury according to the best of his judgment."

Lord Hatherley expresses a doubt whether any evidence of *opinion* (i.e., of experts) should ever be received on oath. The jury would then see that it was opinion only that was given, and deal with it accordingly. This great legal authority would only allow experts to be called by the judge, and not selected as now by either litigant.

Mr. Ledergerber, in dealing with this question of partisanship, observes that, in France and Germany, it has received a solution more satisfactory to Court and counsel than under the English laws relating to evidence and witnesses. In those countries, experts are called by the Court to investigate the subject of inquiry upon which their testimony is required. They are clothed with the authority of the Court during their investigation, and report to the Court only; and unless bias, fraud, or partiality, be shown, the Court adopts their opinion as the rule of law in that case. They cannot well become partisans for one side, for neither side calls them. "Under the English and American systems, it frequently happens that a number of experts are subpoenaed on each side, and, strange as it may seem, a majority give their opinions favourable to the party calling them, and it seldom if ever occurs that one of them will say he is not thoroughly prepared or competent to give an opinion on the question propounded. The tendency of this is to detract from the value of such opinions in the eyes of the juries and the bar. 'Who shall decide when doctors disagree?'"

Opinions of experts are to be received and weighed by the jury, and their credibility considered in the same manner as other evidence.

Any man who has attained a reputation for knowledge in any branch of medicine or science may be summoned to give evidence as an expert, although he may know nothing of the facts of the case, or he may not have been previously consulted. No litigant, however, would act upon this rule, unless he knew, from the published or expressed opinions of the expert, that his testimony would be favourable to his case. By permission of the Court, he may be treated as a hostile witness, and cross-examined by the counsel who summons him.

The late Lord Campbell ruled that an expert, who can give only evidence of *opinion*, should not be subpoenaed, and was not bound to obey a subpoena. If, however, he can testify to any *fact* in the case, he must obey the legal mandate. The safe course for an expert is, however, to obey a subpoena under all circumstances. Then arises the question of fees. Mr. Ledergerber remarks that the German and French Courts award to all experts suitable compensation. This is not the case in England and the United States. Unless an arrangement be made on receiving the subpoena, there is usually great difficulty in procuring reasonable compensation, especially in criminal cases. On these occasions, an expert who can testify to *facts* must obey a subpoena, be sworn, and give the necessary evidence. If, however, he have been summoned only for evidence of *opinion*, he may decline to be sworn or to give this evidence until he has received his proper fees, or a guarantee for their payment; and, as a rule, our Courts will uphold

* Article xxviii, *St. Louis Journal*, by F. T. Ledergerber, Esq.

this conduct on his part. It would seem that the practice in the American Courts is similar. Thus, Mr. Ledergerber tells us, that Dr. Dills and Dr. Buchanan of Fort Wayne, Indiana, were on one occasion fined for refusing to give their professional *opinion* in a criminal case, in Allen County, without having been first paid or promised due compensation. They appealed, and the Supreme Court sustained their objection, and reversed the decision of the Lower Courts. It would, indeed, be a gross piece of injustice to force men, eminent in any department of medicine or science, to give their professional opinions without receiving proper compensation.

IRISH LUNATIC ASYLUMS.

THE *Dublin Daily Express* of May 24th contained an excellent article on the comparative usefulness of visiting as opposed to resident assistant-physicians in the Irish lunatic asylums, and discusses the subject in such an impartial tone, that we recommend its careful perusal to all those interested in the future of lunacy in Ireland. This is not the first occasion on which our contemporary, one of the leading Dublin journals, has manifested its interest in the well-being of the insane of the sister isle, for it quite recently devoted an exhaustive leader to the same subject; almost reiterating, however, much of what has appeared in these pages from time to time, especially in the *JOURNAL* of March 16th, when we wrote: "For the offices of visiting physician and apothecary—offices now almost extinct in the English pauper asylums, and in many cases, we fear, little more than a sinecure in those in Ireland—might very advantageously be substituted that of assistant resident physician." We would now again urge on the authorities the desirability of such a change, which could be secured without additional outlay. We find that the salaries of the former vary from £100 to £160, and upwards, while those of the latter range from £30 to £100 *per annum*; and we are sanguine that an office combining as pay the remuneration of the two in question would secure eligible applicants, and, for many reasons, be most advantageous.

We would ask, how is it possible for the medical chief of an Irish asylum, with his present numerous and varied duties, to keep his case-books with that minuteness of detail as to the past personal and family history of his patients, to record the varying phases of a very variable malady, without which he is to a large extent groping in the dark; or to treat with scientific accuracy a disease which, originating in the most complex, obscure, and hidden organ of the body, may ultimately involve the whole nervous system? The very obscurity of the disease ought to demand and obtain for it the most careful study for its successful treatment, and certainly not such as can be accorded to it in the hurried, irregular, and occasional visit of a consulting physician. How, again, can one already overwrought brain possess the will for the study necessary to keep pace with the enlightened advance in the treatment of the insane of the present time, leisure for that pathological investigation of the disease so highly prized by those alienist physicians who have an opportunity for such, or recreation to ensure him *mens sana in corpore sano*? Till the superintendents of the Irish asylums are relieved of some of their present duties, by the appointments of resident medical colleagues, we cannot expect to see any improvement in the mode of keeping the medical records of those institutions. The Commissioners in Lunacy in this country are very particular, not only as to the full and frequent reporting of the cases, but also as to the performance of *post mortem* examinations, doubtless with the double object of the study of the disease and the discovery of injuries, *e.g.*, fractured ribs, which might otherwise remain latent; and why should there not be a like necessity for such in Ireland?

Such a change as we advocate would also have the tendency to increase the general knowledge of insanity, and bring the lay public to regard it as a distinct disease, requiring, and capable of cure by, early

medical treatment, instead of a loathsome curse to be screened by all means, however barbarous,—an outrage on civilisation,—and till the malady has become chronic. We fully endorse the views of our lay contemporary as to the advisability of having a consulting physician to the larger asylums, so situated that the most skilful advice can be obtained when necessary; but we are of opinion that he should be chosen on account of his general medical and surgical knowledge, with a view to his being consulted in complications arising in the course of insanity, leaving the treatment of the special disease to the specialist. The appointment of such an officer, as also of the assistant-physicians, should be in the hands of the Government. With regard to the argument that the visiting physician is requisite as a means of communication with the outer world, we ask, why more so in Ireland than in England? In both countries, the friends, as visitors, have free and frequent access to their confined relatives; whilst in Ireland, the visits of their spiritual advisers are more numerous; for in that country there are invariably a Protestant, a Roman Catholic, and frequently a Presbyterian chaplain, against the one of the former faith in this. Moreover, the visits of the inspectors to the Irish asylums are much more frequent than those of the Commissioners in Lunacy to their charges.

If this argument be advanced with the object of showing that, from his overworked condition and multifarious duties, the medical superintendent is liable to overlook the restoration to sanity of one of his patients, so that he shall be unjustly incarcerated, then we hold that it strengthens our case; for it is evident that an intelligent resident medical assistant, almost constantly associated with his patients, and thoroughly conversant with their peculiarities and eccentricities, is much more likely to bring to the knowledge of his chief such recovery than would a casual visiting physician. Again, we think such chance would be entirely obviated, if the Boards of Governors would occasionally devote some of their time to visiting the wards of the asylums and conversing with their inmates, rather than in discussions tempered by political and religious excitement.

But if the argument be advanced on the more unwarrantable ground, insinuating connivance at the detention of the insane from personal interest, then we consider it so base and unworthy of its source as not to need refutation.

Finally, in the occasional temporary or more prolonged absence of the medical superintendent from his asylum, whether on leave or on duty, as things exist at present, the institution must frequently be left without a responsible medical head for almost entire days together; and who, with any practical knowledge of insanity or its treatment, will assert that this, from a medical point of view, can be otherwise than highly unsatisfactory and unsafe? For it is well known that in this disease, perhaps more so than most others, various complications may at any moment arise, requiring immediate medical attendance. Again, the responsibility for the general management and control of the discipline of the establishment in that case generally devolves on the matron, who, we think it will be conceded, is scarcely the person to conduct the administration with satisfaction, or to the best advantage either of the patients or of the ratepayers.

THE death of Marshal Baraguay d'Hilliers is announced to have taken place from an error in swallowing a poisonous medicine. Under what circumstances the mistake was made, does not appear.

A NEW Children's Hospital was opened in Dresden on May 31st. It is situated in one of the most elevated parts of the city. The ground-floor is divided into six wards, containing in all thirty beds. The upper floor has eighteen beds, and is intended at present for cases of infectious disease.—A hospital has also been established at Kreuznach for the reception of children. It consists of two large wards, each with thirty beds. There are also a room for meals and a playground.

WE publish this week a series of papers on the subject of vaccination and its methods, of which the capital importance will be at once apparent, and which are opportune at the moment.

A NEW view of the real object of the doctors in supporting compulsory vaccination is set forth in a document which is being widely circulated in London. It is a device for political purposes of despotism, having a Russian origin. This is as reasonable a theory as many others that are set out by Mr. Hume-Rothery and his friends.

IN the House of Commons, on Tuesday night, Mr. Cross replied to Mr. Jacob Bright that he knew nothing of the particular circumstances of the imprisonment of Mr. Clarke of Ironville, Derbyshire, for refusing to vaccinate his child; but when a man was sent to gaol, for whatever offence, he was treated, in respect to receiving letters and communicating with his family, like all other prisoners.

A SUM of about £10,000 has now been promised towards the funds of the Home Hospitals Association. This is the minimum which it was announced at the first meeting of the founders at the Mansion House would be considered adequate to the commencement of active operations. A suitable house is now being selected for the purpose of opening a home hospital for acute surgical and medical cases.

AT this stage, the Honorary Secretary, Mr. H. Burdett, intimates that the time has arrived for proceeding to fill up that further part of the programme which was expressly stated at the outset, and which consists in the provision of "isolation houses" for middle-class convalescents from infectious disease. He points out once more that, at the present time, a member of a middle-class family, after safely battling with fever or other infectious disease, arrives at the stage when disease has ceased and health has to be restored, where can the doctor send him, and without danger to the rest of the community? Under these circumstances, the Home Hospitals Association propose to open convalescent homes for the upper and middle classes, which will combine the comfort of a home and an hotel, in which the cost of residence and attention will be cheapened, and where patients recovering from infectious diseases will be able to procure every requisite accommodation for a reasonable but remunerative payment. Nor is this all, for the association will arrange for the removal of the convalescent from his own home to the seaside; that is to say, they will undertake to send a proper conveyance for his removal to and from the station, and to procure the needful isolation during the railway journey. In this way, it is hoped that good service will be rendered to the public, the medical profession, and the patients themselves. And he adds that, when £5,000 is specially subscribed—many people have written to say they will give to the convalescent branch of the scheme—the Home Hospitals Association will be prepared to open a home or homes for convalescents without further delay. We are inclined to regard this as by no means the least useful part of the work of the association.

A CONFERENCE of representatives of London local sanitary authorities was held on Wednesday at the Cannon Street Hotel, with reference to the proposed provision of hospital accommodation for cases of infectious disease for other than paupers. After some discussion, a resolution was passed setting forth that provision should be made by Act of Parliament for one authority, acting for the whole metropolis, to provide hospital accommodation for non-pauper persons suffering from infectious or contagious diseases.

THE fiftieth anniversary of the opening of University College falls within this year. It is intended to celebrate the occasion by a gathering of members of the corporation, present and past professors and masters, old students of the College and School, and other friends and benefactors of the institution, to be held within the precincts of the College, on Tuesday, July 9th, at 1 o'clock P.M. The Right Hon. Earl Granville, K.G., Chancellor of the University of London, has kindly accepted the invitation of the President, Council, and Senate

to attend and lay the first stone of a further much needed extension of the College buildings, and preside at the luncheon; and the presence is expected of many other persons of distinction, interested in the welfare of the College and in the promotion of university education.

DR. F. T. ROBERTS, the author of the popular *Handbook of Medicine*, and Assistant-Physician at the University College Hospital, has been nominated Professor of Materia Medica and Therapeutics in University College.

A PUBLIC meeting will be held at the Assembly Rooms, Eyre Arms, Hampstead, on Friday evening, June 21st, to consider the question of the present epidemic of diphtheria in the district. Professor Huxley, F.R.S., will take the chair at eight o'clock, supported by the Rev. Canon Duckworth, M.A.

FOUR cases of cholera have occurred in the House of Correction in Marseilles. One has resulted in death; the other three are on the way of recovery. No further case has since been remarked in the whole Department of Bouches-du-Rhône.

ACCORDING to Professor Hedenius of Upsala, there is a remarkable peculiarity in Sweden in regard to the distribution of the forms of tapeworm. In the south of Sweden, the *tenia solium* prevails; while in Norrland and Upland the *bothriocephalus latus* is most frequently met with. The specimens of tapeworm in the anatomical and pathological museum at Upsala, obtained from the town and neighbourhood, are almost exclusively bothriocephali. Dr. Hedenius has found the *tenia mediocandata* only once in Upsala.

IT had been announced that, since the recent determination of the University of London to admit women to graduate in all the faculties, the classes of University College, London, were open to ladies. Mr. Talfour Ely, Secretary, writes from University College, Gower Street, June 18th: "To prevent misunderstanding, I shall feel obliged if you will inform your readers that the admission of women to classes in this College does not apply to the Faculty of Medicine, but only to the Faculties of Arts and Laws and of Science."

SINCE the return of M. Alphonse Guérin to Paris, this eminent surgeon has delivered, at the Académie de Médecine, an address on the treatment of wounds which has produced a marked impression. M. Guérin has, it is well known, long practised an antiseptic method of dressing, which consists in careful and minute cleansing of wounds by a stream of carbolic water (with a strong solution of twenty per cent. of carbolic acid), and their subsequent envelopment in thick masses of fresh cotton-wool: this acts as a filter, excluding septic germs. The method, which precisely accords in plan with Pasteur's first experiments and Tyndall's subsequent verifications, gives admirable results, of which he gives details. M. Guérin gives his impressions of the Listerian method, which have been agreeably modified by his personal inspection of them, and renders full justice to the method, which carries out in perfection the antiseptic principle. He refers also to the good results of Mr. Callender with simple carbolic dressings, applied with great care as to isolation of dressings, absolute cleanliness, and attention to the details of the patient's condition. The answer to the objections to the antiseptic principle in surgery is very complete; and indeed, so thoroughly has the opposition to this method broken down in France, that we may necessarily expect to see a rapid development of Listerism in the French hospitals, and a correspondent decrease in the mortality from pyæmia, abscess, erysipelas, etc., which till lately offered so habitually shocking a spectacle to the surgical visitors to those hospitals.

BEFORE, however, the French hospitals are restored to a level with the hospitals of England, Germany, and America in this capital particular, a great reformation must be made in the system of nursing and dressing. Skilled nursing is rather the exception than the rule, according

to common experience, in the French hospitals. The nursing sisters are very ill trained, or not at all; they are too long absent from the wards; they are too much occupied with religious observances, administrative work, &c. The dirt and neglect of the patients visible in almost every French hospital which we have visited are such as would make the English stand on end of cleanly, well trained, and attentive English nurses. The dressing, too, is much neglected. It is performed irregularly, without due regard to cleanliness, punctuality, and system, and too often with insufficient regard for the comfort of the patient. The inspection of French hospitals, surgical and medical, has often given us a heartache, from the spectacle of the unjustifiable neglect of the patients by the nurses and the badness of the dressings, and the unnecessary sufferings inflicted from these causes and from the want of a proper supply of hospital appliances.

In the following case, it seems clear that life could have been saved by the precaution which we have often urged upon pharmaceutical chemists, of dispensing poisonous medicine and lotions for external application. Some days ago, Mr. W. Codd held an inquest at Falkbourn Hill, near Wisham, on the body of the Rev. W. Bullock. He was busy superintending some packing and other preparations for a visit to London, when he felt fatigued and unwell, and went to a cupboard where he had medicines, intending to take a dose to revive himself. In the cupboard, standing beside his medicine-bottle, was a bottle containing a poisonous lotion, with the label turned towards the wall; and unfortunately he mistook the bottle for his medicine, and swallowed a dose before finding out his mistake. Quickly afterwards, however, he discovered his error, and immediately despatched a messenger for Dr. Tomkin, meanwhile taking emetics to counteract the effects of the poison; but before the doctor arrived Mr. Bullock died. A verdict of "Accidental death" was returned.

MR. RICHARD DAVY has resigned the office of Surgeon to the Surgical Aid Society—a society of which the excellent objects are much impeded, as we have lately several times insisted, by its defective lay administration and the hardships thus inflicted on those who seek its benefits.

APOTHECARIES' SOCIETY v. WIGGINS.

MR. R. H. S. CARPENTER requests us to state that the above case, on the importance of which we commented last week, belongs entirely to the Medical Defence Association, of which its founder, Mr. George Brown, is the indefatigable honorary secretary. The Medical Alliance Association has brought to a termination twenty-seven prosecutions; but it is not entitled to any share of the great credit attaching to the prosecution of this case.

CHOLECYSTOTOMY IN DROPSY OF THE GALL-BLADDER.

A *report* of Dr. Marion Sims's case of cholecystotomy for dropsy of the gall-bladder, published in the JOURNAL of June 8th, Mr. George Brown of Colebrooke Row writes to say that, in January last, he operated in a somewhat similar case; and that the patient, a female, has so far recovered as to be able to walk out and to attend to her household duties. Mr. Brown has promised us further details of the case for publication in an early number.

METROPOLITAN HOSPITAL SUNDAY FUND.

A MEETING of the Council of this Fund was held on Wednesday, in the Venetian Parlour of the Mansion House; Mr. O. E. Coope, M.P., in the chair. After the transaction of the ordinary business, it was resolved, on the motion of Dr. Glover, seconded by Mr. J. Boodle, to ask the Lord Mayor to attend, as heretofore, at St. Paul's and Westminster Abbey on Hospital Sunday. It was then resolved, on the motion of the Rev. Mr. Rowsell, seconded by Professor Marks, to solicit the Lord Mayor to write to the leading journals a day or two before Hospital Sunday, pleading the cause. It was next resolved that the clergy and ministers of the Abbey, cathedrals, churches, and other

places of worship in the metropolis be earnestly requested to allow all the services performed on June 30th to be made available for the general collection on behalf of the Fund, and that the resolution be advertised.

SMALL-POX IN LONDON.

AT the usual fortnightly meeting of the Metropolitan Asylums District Board to-day, the return of the small-pox hospitals showed that there were 562 patients remaining, against 677 at the end of the previous fortnight, being a decrease of 115. In the same period, the number of fever-patients at Stockwell and Homerton was 253, against 252 in the previous fortnight, showing an increase of one patient. Lieutenant-General Sir H. P. De Bathe was appointed a member of the Training-ship Committee until the 25th of March next.

THE VIOLET POWDER POISONING CASE.

AT the last meeting of the Edmonton Local Board of Health, Dr. Reid, the medical officer, reported as follows. "The solicitors to the Treasury have communicated with me on the subject of my previous report as to cases of poisoning in Edmonton by arsenic being mixed with violet powder, and, in the presence of Mr. Roots of the Criminal Investigation Department, Scotland Yard, several packages of violet powder have been more fully tested in my surgery. In one package, I should think arsenic was found in large quantities enough to warrant the suspicion of its constituting half, if not more, of this compound sold as violet powder, and this packet also bore the name of King. I have tested packets purchased at the various chemists' shops at Edmonton, and found the violet powder therein to be pure starch and the ordinary constituents of scented violet powder. During the past fourteen days, I have not seen any fresh cases of poisoning due to violet powder, and the other cases are progressing favourably."

RECIPROCITY OF MEDICAL PRIVILEGES.

M. MARVAISE has reintroduced into the French Assembly the Bill which proposes to prohibit foreign physicians from practising in France, except after passing two examinations conducted in the French language—one upon the science and the other upon the clinical practice of medicine. At present, it is almost impossible for any English physician to obtain permission to practise in France. The Medical Acts Amendment Bill of the Duke of Richmond is far more liberal, since it proposes that a duly qualified foreign or colonial medical man of ten years' standing, and of good character, shall be entitled to registration in the United Kingdom *without examination* at all on payment of the registration fee.

THE PUBLIC HEALTH.

THERE were 2,120 births and 1,300 deaths registered in London last week. Allowing for increase of population, the births were 195, and the deaths 40, below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the three previous weeks had been equal to 20.1, 20.7, and 21.6 per 1,000, declined to 19.1. The deaths from small-pox, which had been 40 and 42 in the two preceding weeks, declined to 24 last week; and were fewer than in any week since the middle of November last. Of these 24 fatal cases, 9 were certified as unvaccinated and 7 as vaccinated; in the remaining 8 cases (of which 7 occurred in private practice) the certifying medical practitioners omitted to give any information as to vaccination. The number of small-pox patients in the Metropolitan Asylum Hospitals, which was 854 on the 20th of April last, has since steadily declined to 529 on Saturday last; the number of new cases admitted to these hospitals, which had been 170, 126, 108, and 84, in the four preceding weeks, rose again to 100 last week. The deaths referred to disease of the respiratory organs, which had steadily increased from 199 to 270 in the four preceding weeks, declined again to 200 last week, but exceeded the corrected weekly average number by 6; 121 resulted from bronchitis, and 54 from pneumonia. There were 20 deaths from measles, 24 from scarlet

fever, 8 from diphtheria, 101 from whooping-cough, 22 from different forms of fever, and 21 from diarrhoea. In the Greater London, 2,606 births and 1,534 deaths were registered, equal to annual rates of 30.6 and 18.0 per 1,000 of the population. In the Outer Ring, two fatal cases of small-pox were registered in West Ham, 1 in Stratford, and 1 in Bromley registration sub-districts. The mean temperature was 55.7 deg., and 2.8 deg. below the average. The coldest day was Saturday, when the mean was only 51.6 deg., and was 7.4 deg. below the average. Rain fell on six days of the week, to the aggregate amount of 1.28 inches. The duration of registered sunshine in the week was 39.8 hours, the sun being above the horizon during 115.4 hours. The recorded duration of sunshine was, therefore, equal to 34 per cent. of its possible duration.

PROFESSIONAL CONFIDENCES.

A LAW protecting physicians from the violation of professional confidences in courts of law has been adopted by many of the States of America. A Philadelphia correspondent of the *Boston Medical Journal* reports that, its wisdom having now been tested by an experience of fifty years in the neighbouring State of New York, the medical societies of the former city have been induced to move in the matter. A concurrent resolution was passed recently by the Philadelphia County Medical Society, the College of Physicians, and the Obstetrical Society, petitioning the legislature for the passage of an Act providing that "no person duly authorised to practise physic or surgery shall be allowed or compelled to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician or to do any act for him as a surgeon". This Act has been duly presented and referred.

THE CONTAGIOUSNESS OF DIPHTHERIA.

THE Massachusetts Board of Health has been studying this subject in connection with recent outbreaks in the State. Dr. Bowditch, in the course of a recent discussion reported in the *Boston Medical Journal*, stated that he could not speak for the State Board of Health; but for himself he had formed decided opinions, especially since studying an epidemic of diphtheria during the past summer at a town adjacent to Vergennes, Vermont. He felt that the course of that epidemic went strongly to support the following views. 1. Diphtheria is *contagious*: numerous instances seem to be accounted for only on that idea. 2. That it is *infectious*, seems strongly indicated by the fate of one family, all the members of which except the father were kept away from the sick persons and houses in which they were lying. The family took every precaution, and seemed for a time successful, when their neighbours were fatally attacked. The father, however, as a neighbourly act, laid out one dead body and attended some funerals, returning home every night. After the disease had apparently subsided, his three children and wife were suddenly seized. The wife was paralysed about the palate, and the children died. 3. Filth appeared to have its effect in making the disease more virulent and destructive. An example, apparently, of this fact was the following, which took place in what, at first glance, seemed a nicely situated and admirably built house. It was the only brick house of those parts; it stood in a broad open field; it had a granite foundation raising it from the ground, while the others were of wood, and resting, as most of our farm-houses do, almost, if not quite, upon the level of the greensward around them. It had, Dr. Bowditch learned, a firmly cemented cellar. Moreover, a drain led from the house, in order to avoid the unsightly appearance of the slops when thrown upon the ground around the house, which custom was universal here save at this house. The drain was untrapped, and ran by a very slight descent into a bog about three hundred feet distant. Its mouth for the reception of slops was close to and directly in front of the kitchen-door; its other opening terminated in the bog of mud and water, in which the cattle stood to cool themselves in the summer, and dropped urine and faecal matter, while their

feet stirred up the mud and these new materials. The wind could enter this opening, carrying the malaria of the bog, the faecal of urine and faecal matter. These, combined with that from the slops, would be easily driven directly into the kitchen-door. In this family, the mother and three children were killed very rapidly. 4. Clearliness seemed to ameliorate the disease, as shown in another house. This was situated on the summit of a dry hill overlooking the whole horizon. The slops, it is true, were thrown from a side porch upon the ground; but they ran rapidly down the slope. Everything about the house was extremely neat. No contaminated air could easily find access to the homestead. One child had undoubted diphtheria, and the rest had mild sore throats. All recovered. Dr. Bowditch could not help thinking that, if the children and mother in the former case had been in a similar situation, it is possible that they too would have escaped death. In conclusion, Dr. Bowditch said that, in his opinion, we ought to consider the disease as contagious and infectious, and govern ourselves accordingly. Physicians should be careful to visit no such cases before seeing other delicate patients—puerperal cases, for example. We should act as we do when called to see a case of erysipelas and a puerperal case the same day, under which latter circumstances we might bring death to the puerperal women if we were not very cautious about our hands and clothing in going from one to the other.

A METROPOLITAN PROVIDENT HOSPITAL.

A VERY important experiment is about being tried in the metropolis, by opening a provident hospital in Battersea Parish, on the verge of Wandsworth Common. Our readers may remember that, about four years ago, the old free dispensary in Battersea was converted into a provident dispensary. The success of this dispensary has led to a demand for an institution where in-patient treatment can be obtained in a somewhat similar manner. In order to meet this want, the Vicar of Battersea, Canon Erskine Clarke, has secured Bolingbroke House, Wandsworth Common, and it will shortly be opened as a provident hospital. As a rule, no one will be admitted without payment, except in the case of accidents; these will be received at any time, on the authority of the medical officers. No letters of admission will be issued. Patients will be admitted in the order of their selection by the staff; but a preference will be given to those who have been for at least six months *members of any provident dispensary*. For such persons, as well as for the servants of governors, a charge will be made of 2s. 6d. a night. Other persons will only be admitted if there be vacancies, and upon terms which shall be specially arranged. We understand that Canon Erskine Clarke and those who are co-operating with him are anxious to start this hospital upon the lines which are deemed the wisest and best by those who have paid special attention to the subject. As far as we can judge by the prospectus and provisional rules, the proposed institution seems likely to meet a want which has often been expressed, and also to set an useful example to some of our older medical charities.

SMALL-POX AND VACCINATION.

BETWEEN the end of May 1876 and February 1877, there were 1,031 cases of small-pox admitted into the Hospital for Infectious Diseases at Mill Road, Liverpool. There were 158 deaths, or 15.5 per cent., of the total number of cases admitted; and of these, 45 deaths, or 6.2 per cent., occurred amongst vaccinated persons; 100, or 45.9 per cent., amongst the unvaccinated; and 13, or 18.1 per cent., among those who had no marks on their arms, but who were reported to have been vaccinated. Dr. Taylor, the Medical Officer of Health, says that, assuming that 4 per cent. of his population were unvaccinated, which is the proportion calculated by Dr. Seaton to be unvaccinated amongst the English population, there would be 21,083 unvaccinated and 506,000 vaccinated persons in Liverpool; and, consequently, 14.4 per 10,000 of the vaccinated population were sent to the hospital, and there were 0.9 deaths per 10,000 amongst them. On the other hand, there were, on this calculation,

lation, 103.4 cases per 10,000 unvaccinated persons sent to the hospital, or about seven times the proportion amongst the vaccinated, and 47.4 deaths per 10,000, which is more than fifty times the mortality amongst the vaccinated. Dr. Taylor is further of opinion that there were probably four times as many cases in the borough as were sent to the hospital; and if so, out "of every 10,000 vaccinated persons, 57.7 had the disease, and 3.6 died; and of every 10,000 unvaccinated persons, 413.6 had the disease, and 189.7 died". In the Homerton Hospital, the statistics were nearly as unfavourable for the unvaccinated, as Dr. Collie says they died at the rate of 53 per cent. on the admitted cases; whilst the tables show that those on whom there were no marks, or who were said to have been vaccinated, gave a mortality of 37.5; the badly vaccinated, 23.5 per cent.; and the fairly vaccinated only 2.3 per cent. Dr. Taylor also states that, out of 5,733 cases admitted in 1871-77, the mortality was as follows, viz., only 3.57 per cent. amongst those having good marks; 11.40 per cent. of those having imperfect marks; 28.98 per cent. of those said to have been vaccinated, but without marks; and 46.17 per cent. of those who were confessedly unvaccinated. The mortality amongst the confessedly unvaccinated at Liverpool and at Homerton, viz., 45.9 and 46.17 per cent. respectively, differs so little as to show that, during an epidemic, this rate may fairly be considered as normal, whilst the well-vaccinated should not give a mortality of above 4 per cent. of the total attacks. When the comparative immunity against an attack is taken into account, it seems incredible that any one can argue against the efficacy of efficient vaccination.

IS THE MOSQUITO THE INTERMEDIARY HOST OF THE FILARIA SANGUINIS HOMINIS?

DR. T. R. LEWIS, who first called attention, about five years ago, to the blood of certain persons in India being infected by minute nematoid parasites—the *Filaria sanguinis hominis*—has recently published some further observations on the subject in the *Proceedings of the Asiatic Society of Bengal*. In the autumn of last year, Dr. Patrick Manson made the interesting discovery that embryo hæmatozoa may be found in the stomachs of mosquitoes that had been feeding on the bodies of persons in whose blood these parasites exist; and it has since been alleged that the mosquito is the intermediary host of the *Filaria sanguinis hominis*, and that residence in this insect is necessary for the completion of the life-cycle of the filaria. Dr. Lewis has, therefore, been making experimental observations to ascertain how far this allegation is correct—whether it is the fact that the filariæ do undergo undoubted developmental changes in the stomach of the mosquito. It is the more important to determine this point with accuracy, as, from the association of filarious blood with some elephantoid forms of disease, this very common insect, the *Culex mosquito*, may act as a disseminator of the blood-parasites in man and the diseased conditions with which they have been observed to be associated. The results of Dr. Lewis's first observations served to throw considerable doubt on the alleged fact that the mosquito serves as the intermediary host to the development of the *Filaria sanguinis hominis* or any other nematoid hæmatozoon; but his later examinations have rather tended to confirm it. The earlier observations were made by removing the alimentary canal with its contents from the other tissues of the insects; and so long as the examinations were thus conducted separately, so long it was found that the hæmatozoa, when present, according to the length of time the insect had been kept before the examination was made, succumbed to the digestive action of the insect's stomach. After the third or fourth day, Dr. Lewis saw no active specimens of these entozoa in the stomach or in any part of the alimentary canal of the mosquito; and, after the fourth or fifth day, it was very rare for any traces of hæmatozoa-like objects to be detected at all. Subsequently, however, the examinations were made under different conditions; and then it was shown that, although the stomach digests a great number of the ingested hæmatozoa, as just mentioned, "others actually perforate the walls of the insect's stomach, pass out, and then undergo developmental stages in its thoracic and abdominal tissues". Dr. Lewis

finally concludes thus: "With regard, however, to the inference that the mosquito is the particular intermediary host of nematoid hæmatozoa, it cannot be said that even these later observations are sufficiently conclusive to warrant a positive statement being made at present; for though, assuming that of the various parasitic forms which have been seen several are actually transitional stages in the development of one and the same entozoon, it is to be noted that even the most advanced stage hitherto observed is still a very immature one—no trace of reproductive organs, for example, being distinguishable; and every attempt hitherto made by myself to obtain a more advanced condition has proved unsuccessful. Further observation, however, may overcome or explain this want of success."

SCOTLAND.

OPERATIONS have commenced for the introduction of water into the village of Kilmalcolm.

A DOMESTIC servant named Webster committed suicide at Letty Crewstee, a village near Aberdeen, on Sunday last, by swallowing a quantity of oxalic acid. No reason is assigned for the act.

AN epidemic of typhoid fever has broken out in the town of Galashiels, in the Hailburton district. Upwards of forty cases have been reported. It is suspected that the water may have been the cause of the outbreak, and samples have been forwarded for analysis.

TYPHUS fever is reported to be spreading to a serious extent in Aberdeen, and has almost assumed the dimensions of an epidemic. On Sunday last, four members of one family were taken to the Infirmary, where there were at that date altogether twenty patients under treatment.

THE COLQUHOUN BEQUEST FOR INCURABLES.

THIS Glasgow Charity relieved last year one hundred and twenty-two persons, the amount allowed to each varying from £3 5s. to £13 *per annum*. The total revenue reached £875 last year. Mr. Colquhoun's trust-deed contemplated the further development of the charity, by the addition to its capital funds of donations or legacies from those who approved of its objects.

ALLEGED ILLEGAL DETENTION OF A LUNATIC.

A CASE was tried in the Court of Session, last week, in which a man named James Gallagher, at present an inmate of the District Asylum at Larbert, and the Inspector of Poor in the parish of Campsie, are pursuers, and the Procurator Fiscal of Stirling is defender, the object being to obtain the release of Gallagher. Gallagher was at one time a labourer on the estate of Glorat, which belongs to Sir Charles Stirling. He declared that he was on one occasion ill-treated by Sir Charles and his gamekeeper; he thereupon wrote several threatening letters to Sir Charles, who complained to the Procurator Fiscal, on whose initiative Gallagher was sent to the asylum. He was subsequently liberated by his father taking his name from the poor-roll. For a time, he left the district and conducted himself well; but recently he returned to Glorat, and again commenced writing threatening letters to Sir Charles Stirling, among other things threatening to blow up Glorat House with dynamite. He was accordingly brought before the Sheriff in March last, when he was sent back to the asylum. He was examined there by three medical men, who all certified him to be insane. It appeared that he laboured under a delusion, which had coloured his life for the last six years and led to fits of excitement. The particular delusions under which he lay were that, for some injury, real or imagined, he had money claims against Sir Charles for many thousands of pounds; that Sir Charles had forfeited his estates, which Gallagher anticipated Her Majesty the Queen would hand over to him; that forty-seven persons whom he named had conspired together to injure him, and to prevent his getting justice; and that, if the law refused his petition, he was entitled to put dynamite

under Glorat House and blow up it and its inmates. There were other symptoms of insanity mentioned in the certificates. After hearing counsel, the Court reserved judgment. Judgment was subsequently given against the lunatic.

DISPOSAL OF GLASGOW SEWAGE.

A COMMITTEE of Glasgow Town Council met, last week, to consider the best means of disposing of the city sewage. It was agreed to recommend to the Council that the sewage should be carried to Dalmuir, about seven miles below Glasgow, where it will undergo a process of filtration before it is allowed to enter the river. The sewage will be intercepted at a certain point in the city, and carried to Dalmuir in a sewer, which will have to be constructed for the purpose. If the Council approve of the scheme, it is more than probable that operations will at once be begun to carry it into effect, as a considerable portion of the ground in the neighbourhood of Dalmuir is already the property of the Corporation of Glasgow. This is in part the scheme of Sir John Hawkshaw, although his proposal was of a more extensive nature, and the point at which the sewage was to enter the Clyde was more distant from the city, Sir John proposing that it should be carried to the Ayrshire coast. It is anticipated that the proposal of the Committee will meet with considerable opposition.

HEALTH OF GLASGOW.

DR. J. B. RUSSELL of Glasgow has just issued his annual statement, giving a return of the deaths in the city during the past year. The population within the municipal boundary is estimated at 546,921, giving a percentage of 91 persons to the acre. In the Brownfield division of the city, the number of persons to the acre is 505; while Monteith Row has only 31. In one district of the city, the death-rate has exceeded that of the births. The total number of deaths from all causes was 13,758, among these being 1,974 persons aged 60 and upwards. These figures give a death-rate of 25.16 per 1,000 of population. In a table dealing with the causes of deaths, it appears that acute diseases of the lungs proved fatal to 3,555 cases, consumption coming next with 1,730. Sixty-two persons died of typhus and 181 of enteric fever. The total number of deaths of persons in Friendly Societies was 5,223, of whom 595 were infants under the age of one year. In one district, that of Bridgegate and the Wynds, the percentage of illegitimate births reached the high figure of 20.20. In Springburn and Maryhill district, it was only 3.40.

IRELAND.

DR. LEWIS MANSERGH RAWSON, medical officer of Baltinglass, Balyore, and Strangford Dispensary District, died at Baltinglass on the 11th instant.

DR. NEALE, medical officer of Clonaslee Dispensary District, met with a severe accident last week. He was thrown violently from his horse, and besides other injuries received a fracture of the left arm.

MR. WRIGLEY GRIMSHAW died at Bray on the 16th instant, at an advanced age. Mr. Grimshaw was a Fellow of the Royal College of Surgeons in Ireland, and formerly practised in Dublin.

At a recent meeting of the Brosna Dispensary Committee, Tralee Union, Dr. O'Sullivan was elected medical officer to No. 1 division of the district, at a salary of £100 *per annum*, with registration and vaccination fees.

THE King and Queen's College of Physicians and the Royal College of Surgeons in Ireland have sent deputations to London to watch the progress of the various Medical Bills, now before the House of Commons, and to bring the views of their respective Colleges under the notice of the honourable members in charge of the Bills.

HEALTH OF DUBLIN.

WE are glad to note an improvement in the death-rate of this city. The deaths registered during the week ending Saturday last represent an annual mortality of 25.8 per 1,000. The mortality from zymotic diseases has fluctuated for some weeks past; but in each, owing to cases of small-pox and whooping-cough, it has been much over the average for the corresponding period in the ten years 1868-77. Last week, 37 deaths from diseases of this class were registered; being 22 less than in the preceding week, but 14 over the average for the twenty-fourth week. The deaths from small-pox are one less than in the week ended 8th instant. The hospital returns show that 97 small-pox patients were admitted during the week (being 11 more than in the preceding week), 59 were discharged, 14 died, and 258 remained under treatment on Saturday.

'CONG DISPENSARY: CHARGE AGAINST DR. MCGUIRE.

At a recent meeting of the Guardians, a communication was received from the Local Government Board in reference to a charge brought against Dr. McGuire by the parish priest for neglect of his duties, in which the Board considered that Dr. McGuire was not free from blame, and cautioned him in future to be more careful, or they would take more serious notice of his neglect than on the present occasion. The Guardians, however, appear to be perfectly satisfied with their medical officer, and passed a resolution, with but one dissentient, expressing their thorough approval of the way in which Dr. McGuire on all occasions attended to his arduous dispensary duties; but, nevertheless, in deference to the Local Government Board, requested him to be more particular in future.

PAYMENT OF MEDICAL SUBSTITUTES.

THE following resolution was unanimously adopted at a recent meeting of the Guardians of Dundalk Union: "That each dispensary medical officer in connection with this Union shall pay, out of his resources, the fees charged by a duly qualified medical man who may act as *locum tenens* or substitute for said medical officer, save and except that said dispensary medical officer is then labouring under a disease caught in the discharge of his professional duties."

LUNATIC ASYLUMS, IRELAND: ANNUAL REPORT.

FROM the twenty-seventh report of the District, Criminal, and Private Lunatic Asylums in Ireland, which has been recently issued, we learn that, on the 31st of last December, there were 12,380 lunatics in these institutions, of whom 3,372 were located in poor-houses, 8,183 in district asylums, and 636 in private asylums. There was an increase in the accommodated insane during the past year of 257, as compared with 1876; whilst regarding the existing census of Ireland as 5,412,000, it would appear that the insane are in the ratio of 1 to 420 in the general population. An important element of consideration in reference to the prevalence of mental affections must not, however, be forgotten; namely, the reputed insane at large, who, from recent returns, amount to 6,626, being composed of 986 lunatics proper, 4,408 idiots and imbeciles, and 1,232 epileptics. At the end of 1876, there were 8,073 patients in district asylums, and last year 2,134 were admitted, or a total of 10,387 under treatment during the past twelve months. Of these, 1,076 were discharged cured and 249 improved, constituting between both categories a total of 1,325, or a percentage of good results on admissions of 57, which is regarded as satisfactory. Forty-nine cases were removed from the district asylums tranquil, but incurable. The deaths during the year came to 821, all from natural causes, except one which was suicidal. Estimated on the total number under treatment, the mortality would be 8 per cent.; the greatest death-rate—almost double that elsewhere—being in the Cork and Dublin asylums, which contained a very large proportion of physically infirm and aged inmates. The admissions were 2,314 during the year, 1,924 being cases of a first attack, and 390 relapses, against 2,344 in the previous year; so that the Commissioners consider that lunacy is not so progressive in Ireland as in other parts of the United Kingdom.

We find that though, in the population, females are in excess by nearly $2\frac{1}{2}$ per cent., this number in lunatic asylums is 8 per cent. less than that of males; also that there is a marked disparity existing between the married and unmarried inmates of Irish asylums, public as well as private; the married and widowed, according to the present returns, amounting between both sexes to only 2,355, the single to 5,491. This discrepancy is totally at variance with what is elsewhere recognised; and if lunacy were a malady of early life, or one prior to puberty, or if marriage in Ireland were an institution of advanced life, some explanation might be available; but facts are the reverse. Intemperance and irregularity of life were referable to 693 cases in district asylums, but it is difficult to say how many can be absolutely attributed to drunkenness; forasmuch as dissipation and a continued indulgence in alcoholic drinks run close'y into one another as cause and effect, both leading from vice to crime. The report speaks favourably of the general condition of the public asylums, but regret is expressed at the unsatisfactory condition of Londonderry district in respect to its insane poor, one not very creditable to so flourishing a locality. The asylum there, built for 112 patients, contains at present 260; and so overcrowded is it, that eight or nine beds are to be found in dormitories scarcely intended for five; whilst there is an absence of an infirmary, chapel, and suitable out-offices. In conclusion, the inspectors observe that, if the utility of public lunatic institutions be estimated by results, the district asylums of Ireland, tested by the number of cures effected in them, by their average low mortality, by their immunity from the recurrence of fatal or serious accidents—one solitary suicide being the only untoward occurrence that took place during the year, in a population of over ten thousand inmates, a large portion of whom were admitted as dangerous,—may fairly compete with the best regulated of kindred establishments in other countries.

CLINICAL INSTRUCTION AT THE BELFAST WORKHOUSE HOSPITALS.

At a meeting of the Belfast Board of Guardians, last week, the admission of medical students to the Union Hospitals for clinical instruction was under consideration. Resolutions in reference to this matter having been adopted by the Board last December on the subject of the proposed arrangements, and forwarded to Dublin Castle, last week the guardians received a communication from Dublin, informing them that the Lords Justices, in compliance with the request contained in their last resolution, have inquired why the students in question have not been permitted to avail themselves of the very valuable information, which would be afforded them of receiving extensive clinical instruction in the medical and surgical wards of the Belfast Workhouse; and learn with regret that the proposal has not been carried into effect, in consequence of the refusal of the Royal Hospital to accept the terms on which the College and the medical officers of the Union considered that an amalgamation might be effected. Dr. Corry, one of the guardians, thought it would be more convenient for students attending at the Queen's College to visit the Workhouse than go to the Royal Hospital, and proposed a resolution to the effect, that the clerk should communicate with the Queen's University in Ireland, and other licensing bodies, requesting them to recognise the certificates of attendance at the infirmary and hospital of the Belfast Union Workhouse, which was adopted unanimously. It is stated that the medical officers of the infirmary and hospital would have extra duties to perform, and therefore requested a portion of the fees paid by the students to the Belfast Royal Hospital should be given them, an arrangement which was objected to by the medical staff of that institution.

DUBLIN SANITARY ASSOCIATION.

THE annual meeting of this useful Association was held on the 13th instant, Lord James Butler in the chair. In alluding to the existence of small-pox in Dublin, the report of the Executive Committee pointed out that, besides neglected vaccination, there are unfortunately other causes for the prevalence of small-pox, which do not require any new enactment for their removal. These are the disgraceful sanitary state

of the city, as evinced by the high death-rate; the want of proper sanitary organisation and supervision; the want of proper means of removing infected persons to hospital; and the want of epidemic hospital accommodation. The latter is a great defect in hospital organisation in Dublin. The report also referred to the ineffectual efforts made by the Association to induce the Government to institute an inquiry into the cause of the great mortality in Dublin, and to other important sanitary matters. The adoption of the report was moved by Mr. C. H. Meldon, M.P., who described the sanitary state of Dublin as being about as bad as bad could be; its mortality exceeding that of any other city in the kingdom.

THE MEDICAL ACT (1858) AMENDMENT BILL.

THE following observations on the Medical Act (1858) Amendment Bill, as passed by the House of Lords, and now standing for second reading in the House of Commons, have been prepared and circulated by the Council of the Irish Medical Association.

The Council of the Irish Medical Association view with satisfaction any attempt at legislation which may tend to improve medical education and medical examinations, and to remove the present unsatisfactory state of the qualifications which entitle their holders to admission to the *Medical Register*. The Council do not think that the present Bill can be considered as sufficiently fulfilling the above objects, for the following reasons.

1. That the constitution of the General Medical Council is not affected by the Bill; the General Medical Council, as at present constituted, only directly represents the Government and the corporations, but scarcely at all the great body of the medical profession. That, while it is owing to the failure of the corporations to adopt conjoint examinations, and the omission of the General Medical Council to enforce uniformity of education and examination, that the proposed legislation has become necessary, yet the regulation of examinations—owing to the absence of direct representation of the members of the profession—is to be almost altogether vested in the representatives of the licensing bodies. The Council of the Irish Medical Association consider that the Bill should provide for the direct representation of the great body of the profession in the General Medical Council, each division of the United Kingdom being duly and separately represented.

2. That the Bill, by providing for admission of persons to the *Medical Register* who have obtained only a qualifying certificate of proficiency in medicine, surgery, and midwifery from the conjoint medical examining board, without having a diploma from any of the existing licensing authorities, must inevitably tend to the gradual extinction of the medical corporations, and eventually, as a consequence thereof, also to the extinction of the conjoint medical examining board itself.

3. The Council are most decidedly of opinion that any measure which threatens the extinction of the Colleges, or even curtails their usefulness, would be most seriously detrimental to the interests of the profession and the public.

Lastly, there are some minor defects in the Bill which the Council believe require amendment; they therefore beg to make the following observations upon the Clauses of the Bill.

Clauses 5, 6, and 7 provide for the registration of certain colonial and foreign qualifications. This appears to be a valuable and just provision, provided it be reciprocated by the colonial and foreign governments.

Clause 2 provides for the erasure from the *Register* of the names of persons guilty of felony or misdemeanour, or of any infamous or disgraceful professional conduct. This clause is approved, but at the end a provision is introduced which exempts from its operation a person who has been guilty of an offence, trivial in its nature, or committed under excusable circumstances. The Council think all such exceptions should be omitted.

Clause 13 makes it incumbent upon the General Medical Council to make rules for the examinations. The Council approve of the sub-clauses, except 2, "which provides that the examination rules shall not require a candidate to adopt, or refrain from adopting, the practice of any particular theory of medicine or surgery". It is manifest that this subclause would give the candidate power to answer questions according to his own views, and obtain credit therefor, quite independently of the opinion of the examiners as to the correctness of the answer.

With reference to the admission of women to the medical profession, the Council, without expressing any opinion as to the advisability thereof, are distinctly of opinion that, if admitted, they should comply with the same conditions as are required of men.

Clause 21 makes more effectual provision against quacks, but does not prohibit the practice of unqualified persons; the Council think that practice for gain by unregistered persons, whether they assume professional titles or not, should be made penal, and desire to point out that in Ireland no such provision as the English Apothecaries' Act exists to prevent unqualified persons from practising for gain. This clause also deprives private persons of their privilege to prosecute unregistered persons, and only makes it permissive for the Medical Council or the corporations to prosecute. There does not seem to be any reason why private persons should be deprived of their present right in this matter.

Clause 22 provides for the examination and registration of dentists. This clause is very objectionable, and contrary to the principle of the Bill, which requires a qualification in medicine and in surgery to admit to general practice; but this clause would permit a person who is not a surgeon, or not in possession of any existing dental diploma, or any qualification whatever, to practise dental surgery, and to be registered as a legally recognised dental practitioner.

Clause 23 provides for the examination and registration of midwives. This is, no doubt, a much required and useful measure; but the Sub-clause 5, which provides for the appointment of local examinations and local registers, is most objectionable; it even provides that local bodies, like town councils, may become the controlling authority in such matters. The licensing of midwives should be confined to properly constituted medical bodies.

Clause 25 permits the General Medical Council to delegate to certain bodies or persons the duty of framing examination rules, which the Council cannot approve, because it would almost certainly tend to frustrate one of the chief objects of the Bill, viz., uniformity of examination.

THOMAS PURCELL, Chairman of Council.

JOHN WILLIAM MOORE, Honorary Secretary to Council.

BRITISH MEDICAL ASSOCIATION: JOINT COMMITTEE ON STATE MEDICINE.

ON Tuesday last, a meeting of the Joint Committee of the British Medical and Social Science Associations on State Medicine and the Administration of the Sanitary Laws was held at the rooms of the latter Association, in the Adelphi; Dr. SHRIMPTON in the Chair. There were present: Mr. Clode, Dr. Corfield, Mr. Ernest Hart, Mr. Baldwin Latham, Mr. John Liddle, Mr. Neison, Dr. Stewart, and Dr. Tyacke. It was reported that, in consequence of the withdrawal of the County Administration Bill by the Government, the presentation of the memorial to the Local Government Board, agreed to at the last meeting of the Committee, was postponed till an early date next session, and, in the meantime, a copy was ordered to be forwarded to Mr. Slater-Booth, with a request that he would give it consideration.

It was resolved, on the motion of Mr. HART, seconded by Dr. TYACKE: "That an inquiry be addressed to the extra-metropolitan medical officers of health, asking (1) whether they report periodically as to the sanitary condition of their districts; (2) if so, how often and in what form; (3) whether such reports are printed, and, if so, whether circulated, and the number published; and asking also for a copy of the last report. That Dr. Stewart, Mr. Michael, Mr. Clode, Mr. Hart, and Mr. Liddle be appointed a subcommittee to report on the answers received."

The draft memorial to the Duke of Richmond, Lord President of the Council, in reference to the institution of a State Medicine qualification, was considered. Communications, agreeing with the memorial, were read from Mr. Michael, Dr. Ransome of Manchester, Dr. Wilson of Cheltenham, Dr. Bond of Gloucester, and Mr. Haviland of Northampton. The memorial, as amended, was agreed to in the following form.

"To the Right Hon. the Duke of Richmond and Gordon, Lord President of the Council.

"The Memorial of the Joint Committee on State Medicine of the British Medical Association and the National Association for the Promotion of Social Science humbly sheweth:

"That it is desirable that opportunities should be given for medical men to obtain registrable qualifications for the performance of certain public duties included under the head of State Medicine.

"That State Medicine differs greatly in its aim from curative medical practice, and involves a special knowledge of certain departments of medical science, such as are needed for the maintenance of a high standard of public health, and for promoting the physical improvement and effective strength of the general population.

"That, under the Public Health Act of 1875, medical officers of

health have been appointed by every local authority throughout the kingdom; but that, at the present time, there exists no recognised law for testing the fitness of candidates for such appointments.

"That, so long ago as the year 1869, the General Medical Council reported in favour of providing a registrable qualification in State Medicine in any amended Bill that might thereafter be prepared for Parliament.

"That, during the last six years, evidence in favour of such a measure has been brought forward in three successive reports by a committee appointed by the British Medical Association to consider the subject of a State Medicine qualification, and such reports have been ratified by the Association.

"That your memorialists, therefore, respectfully beg to recommend that, in the Bill for the Amendment of the Medical Act now before Parliament, clauses shall be inserted providing that the conjoint boards established by that Bill shall examine candidates in the subject of State Medicine, and shall grant certificates of competency, which shall be registrable as qualifications in State Medicine for medical appointments in the public health service. Candidates for examination to be persons who shall be registered under the Medical Act, and who shall have gone through such further courses of study and practical instruction, and attained to such age, as the General Medical Council may require."

Copies of the memorial, as amended, were ordered to be forwarded to the Duke of Richmond and Gordon, Mr. Secretary Cross, Mr. Slater-Booth, and Dr. Aclaud, President of the General Medical Council; and Dr. Stewart, Dr. Tyacke, Dr. Corfield, and Mr. Hart were appointed a subcommittee to confer with ministers and others as to the best means of carrying out the wishes of the Committee in respect to the memorial.

THE HARVEY TERCENTENARY MEMORIAL FUND.

A GENERAL meeting of the subscribers to this fund was held, by permission of the President of the Royal College of Physicians, at the College, on Tuesday, the 18th instant. There were present: Dr. J. Risdon Bennett, the President of the College; Sir George Burrows, Bart.; Mr. Prescott Hewett; Dr. F. J. Fare; Mr. John Fitness (Mayor of Folkestone); Dr. Quain; Dr. Owen Rees; Mr. John Simon, C.B.; Dr. C. J. Hare; Dr. J. G. Glover; Dr. Fincham; Mr. Edwin Saunders; Mr. Allingham; Dr. Esqley; Dr. Norman Kerr; Mr. S. Eastes; Mr. Rushforth; Mr. Darglish; Mr. J. S. Eastes, jun.; Dr. W. H. Haden, etc., and Mr. W. G. S. Harrison and Mr. George Eastes, the Honorary Secretaries. Letters were received from Lord Derby and other subscribers, regretting their inability to be present. Dr. R. Bennett, the President of the College, took the chair.

Mr. G. EASTES, the London Honorary Secretary, read the report of the London Executive Committee, which stated that, early in the present London season, the Committee decided to make an appeal for further funds. An appeal was accordingly sent to various medical corporations and societies, and to the branches of the British Medical Association. The result had been the addition of a sum exceeding £400 to the subscription-list. Another appeal had been made to all classes of the community, which, together with a sum of £30 produced at a lecture generously given at Folkestone, on April 1st, by the Rev. R. C. Jenkins, Rector of Lyminge, on "Harvey and his Claims as a Discoverer", had brought in a further addition of £350 since March last. Altogether, a gross sum of £1,680 had been contributed, of which £1,388 had been received. Subscriptions were still coming in, and the Committee felt that they were now quite justified in advising the subscribers to take steps for the selection of a sculptor to whom the execution of the memorial statue might be entrusted.

The report of the auditors (Dr. C. J. Hare and Dr. J. G. Glover) was read by the former. It stated that the necessary expenses had been £160; and that there was, therefore, in hand at the present time a balance of £1,220—of which £700 were invested in Exchequer Bills, bearing interest, whilst the balance was placed to the credit of the Fund at the Western Branch of the Bank of England. The report also spoke favourably of the accuracy with which the accounts had been kept. The two reports were received.

It was proposed by Sir G. BURROWS, and seconded by Dr. C. J. HARE: "That a subcommittee be appointed, for the purpose of selecting an artist to whom the making of the memorial statue shall be entrusted; and that Mr. E. H. Lushington, Dr. Quain, Mr. Prescott Hewett, Mr. John Simon, Dr. Owen Rees, Mr. J. J. Lonsdale (Recorder of Folkestone), Mr. J. Fitness (Mayor of Folkestone), Mr. W. Bateman, and the Honorary Secretaries (Mr. W. G. S. Harrison and Mr. George Eastes) form the subcommittee; five to be a quorum." Mr. John Simon and Dr. Hare proposed that the name of Sir G. Burrows

should be added to the list of the subcommittee. The two propositions were put together, and carried unanimously.

The Honorary Secretary stated that he had received the following letter from Lord Derby, dated—

"Knowsley, Prescot, June 17th, 1878.

"Sir,—As far as I am able to judge, I entirely approve the steps you are taking in the Harvey Memorial. But I must ask to be excused from serving on the subcommittee which is to be formed. I shall be but little in London during the present year, and should not be able to give effective assistance.

"I remain, your obedient servant, "DERBY."

It was proposed by Mr. EDWIN SAUNDERS, seconded by Dr. FINCHAM, and resolved: "That the subcommittee have full powers to select and arrange with a sculptor in any way that they may think proper; whether by open competition, or by inviting three or four well-known sculptors to send in designs, with a view to the selection of the best; or by the selection of an artist without such competition."

It was proposed by Dr. QUAIN, seconded by Dr. OWEN REES, and resolved: "That the present London and Folkestone Executive Committees be requested to act again in all particulars (except in the selection of, and contracting with, the sculptor) on behalf of the subscribers to the Memorial Fund."

It was proposed by Dr. BEGLEY, seconded by Sir G. BURROWS, and resolved: "That a vote of thanks be given to the Right Honourable the Earl of Radnor, for granting a suitable site for the statue at Folkestone."

It was proposed by Dr. GLOVER, seconded by Mr. SIMON, and resolved: "That the warmest thanks of this meeting and of the subscribers at large are due and are hereby given to the Honorary Secretaries, George Eastes, Esq., M.B., F.R.C.S., and W. G. S. Harrison, Esq., Town Clerk of Folkestone, for the time and care which they have so freely bestowed on the Harvey Tercentenary Memorial Fund, and which have so largely contributed to its success."

It was proposed by Dr. O. REES, seconded by Dr. HADEN, and resolved: "That the best thanks of the subscribers are due and are hereby tendered to the auditors, Dr. C. J. Hare and Dr. J. G. Glover, for their valuable services to the Fund."

It was proposed by Mr. ALLINGHAM, seconded by Dr. HADEN, and resolved: "That the best thanks of the subscribers at large are due and are hereby tendered to the members of the London and Folkestone Executive Committees for their able services to the Fund."

It was proposed by Sir G. BURROWS, Bart., seconded by Dr. QUAIN, and resolved: "That the best thanks of this meeting are due and are hereby given to Dr. Risdon Bennett, both for his kindness in granting the College Library for the purposes of this meeting, and also for presiding on this occasion."

The meeting then closed.

It is computed that about £300 more are required to enable the Committee to carry out the wishes of the subscribers in a perfectly satisfactory manner.

MEDICAL QUESTIONS IN PARLIAMENT.

THE reports published in the daily papers of discussions in the House of Commons on matters affecting medical interests are commonly very much abbreviated, and often in condensation the sense and character of the discussion are much misrepresented. Many matters of great professional interest are altogether omitted, or briefly noticed in a line of passing comment. We have made arrangements for providing our readers with special reports of all such discussions. In another column will be found a full report of the discussion on the Army Medical Service on Thursday, June 13th, which passed almost unnoticed in the political papers.

EXAMINATIONS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following is a record of the results of the examinations during the collegiate year ending July next, to be presented to the next meeting of the Council, viz.: Numbers examined for *primary* membership, 746; of which 477 were approved, and 269 rejected. For *pass* membership, 533 candidates, 411 of whom received their diplomas, and 122 were rejected. For *primary* fellowship, there were 95 candidates, 46 of whom were approved, and 49 rejected. For final examination, there were 44 candidates, 33 being approved, and 11 referred. For the diploma in dental surgery, there were 32 candidates; 24 were successful, and 8 rejected.

THE LOST MEDICAL SCHOOL.

THE following notice appears in the *Oxford University Gazette* of June 18th.

3. *Mathematics and Physical Science*.—Regius Professor of Medicine: Henry W. Acland, D.M. The professor will be ready to receive members of the University who desire information or assistance in respect of the department of medicine on all Mondays in November, at noon, in the medical department of the museum. He will give clinical instruction in the infirmary on Saturdays, at 11.30 A.M., commencing November 2nd. Mr. W. F. Donkin, M.A., as deputy of the professor, will receive pupils in subjects connected with the public health in the sanitary laboratory of the museum. Members of the University who desire to attend any of the above are requested to enter their names in the Radcliffe Library at the museum on or before Saturday, October 26th.

This notice will be read with interest. We have already mentioned the course of things which has led to the extinction of the medical school of Oxford, the erasure of its medical faculty, and the relegation of the nominal relics of medical teaching to the department of mathematics and physical science. May it be hoped that some more practical result than hitherto will result from the stirrings of activity indicated in the notice of "assistance and advice", and "clinical instruction" in medicine, which are here given under the shelter of the heading Mathematics and Physical Science?

Where there is no medical school, however, there are not likely to be any medical students; and, seeing that neither human anatomy and physiology, the principles of therapeutics, medicine, nor surgery are taught at Oxford, notwithstanding the special endowments for the purpose and the great wealth of the University, it is difficult to find any serious purpose under the above solemn but curiously misplaced announcement. We give the notice as it has been forwarded to us; but what are we to read between the lines?

THE EMPEROR OF GERMANY.

IN explanation of the rather despondent bulletin recently issued by the Emperor's surgeons, we have, from an authentic source, some particulars of the very serious injuries inflicted by the dastardly attempt on his life, from which, as it will be seen, speedy recovery cannot be expected, and which must involve further surgical operations for removal of some of the imbedded shots. He is now considered to be, happily, out of danger. There are, however, six pellets of shot in the right forearm (the Emperor was struck while saluting from the left side); and one of these entered the joint of the wrist, where it remains without doing any harm. The other twenty-six grains of shot are in the skin of the neck, left cheek, and left shoulder. The Emperor was saved by wearing a helmet. Two buck-shot struck and perforated the helmet with such force that the brass helmet was fractured and pierced. One of these would have perforated the temporal bone. The Emperor lost much blood, but had no consecutive fever.

The physicians attending the Emperor William have this week issued the following statement.

"The undersigned consider themselves under an obligation to make the following declaration as a complement to the bulletins issued by them respecting the health of the Emperor-King, with a view to counteract various evasive and inaccurate versions of His Majesty's condition. By the merciful help of God, the course taken by the wounds and the entire illness which His Majesty has suffered through this most deplorable occurrence have been satisfactory almost beyond expectation. The various stages of the illness were noted in the bulletins which have been published. From this, it is by many hopefully and joyfully inferred that His Majesty will very shortly be completely restored to health. In present circumstances, the fulfilment of this hope is certainly the desire which animates the hearts of all. But, besides passing moments of pain, His Majesty suffers much from helplessness through being unable to use either arm; and his complete recovery can only be effected after a long time, during which many obstacles may have to be encountered, which, with God's help, we hope may be overcome as happily as those that preceded them, but cannot fail to inflict much pain upon the august patient.—Dr. LAUER, Dr. LANGENBECK, Dr. WILMS."

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:
NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 10th day of July next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., June 12th, 1878.

BRITISH MEDICAL ASSOCIATION:
FORTY-SIXTH ANNUAL MEETING.

THE Forty-Sixth Annual Meeting of the British Medical Association will be held at Bath, on Tuesday, Wednesday, Thursday, and Friday, August 6th, 7th, 8th, and 9th, 1878.

President: M. A. EASON WILKINSON, M.D., F.R.C.P., Senior Physician to the Manchester Royal Infirmary.

President-Elect: R. W. FALCONER, M.D., F.R.C.P., D.C.L., Consulting Physician to the Royal United Hospital, Bath.

An Address in Medicine will be given by HENRY F. A. GOODRIDGE, M.D., F.R.C.P., Bath.

An Address in Surgery will be given by C. G. WHEELHOUSE, F.R.C.S., Leeds.

An Address in Forensic Medicine will be given by DOUGLAS MACLAGAN, M.D., F.R.C.P. Edin.

The business of the Association will be transacted in Five Sections, viz. :—

SECTION A. : MEDICINE.—*President:* T. Grainger Stewart, M.D., F.R.C.P. Edin. *Vice-Presidents:* B. Foster, M.D., F.R.C.P.; Thos. Clifford Allbutt, M.D. *Secretaries:* Thomas Cole, M.D., 17, Paragon, Bath; Chas. Albert Hingston, M.D., 3, Sussex Terrace, Plymouth.

SECTION B. : SURGERY.—*President:* G. W. Callender, F.R.C.S., F.R.S. *Vice-Presidents:* Furneaux Jordan, F.R.C.S.; W. Stokes, M.D. *Secretaries:* J. H. Morgan, F.R.C.S., 12, Chapel Street, Park Lane, London; J. F. Parsons, Esq., Frome.

SECTION C. : OBSTETRIC MEDICINE.—*President:* A. H. McClintock, M.D., LL.D. *Vice-Presidents:* James Watt Black, M.D.; H. Macnaughton Jones, M.D. *Secretaries:* Heywood Smith, M.D., 2, Portugal Street, Grosvenor Square, London; Henry Lawrence, Esq., 5, Unity Street, Bristol.

SECTION D. : PUBLIC MEDICINE.—*President:* J. T. Arlidge, M.D., F.R.C.P. *Vice-Presidents:* D. Davies, Esq.; Francis Thomas Bond, M.D. *Secretaries:* F. Vacher, Esq., 35, Hamilton Square, Birkenhead; W. Harling Sissons, Esq., 3, Priestgate, Barton-on-Humber.

SECTION E. : PHYSIOLOGY.—*President:* John G. McKendrick, M.D., F.R.C.P. Edin. *Vice-Presidents:* Henry Power, F.R.C.S. *Secretaries:* R. Shingleton Smith, M.D., Clifton, Bristol; A. E. W. Fox, M.D., 16, Gay Street, Bath.

Honorary Local Secretary: R. S. FOWLER, Esq., 6, Belmont, Bath.

Tuesday, August 6th.

11 A.M.—Service at the Abbey. Sermon by the Bishop of Bath and Wells.

2 P.M.—Meeting of Committee of Council.

4 P.M.—Meeting of the Council, 1877-78.

8 P.M.—General Meeting.—*President's Address.*—Annual Report of Council, and other business.

Wednesday, August 7th.

9.30 A.M.—Meeting of Council, 1878-79.

11 A.M.—Second General Meeting.

12 A.M.—Address in Medicine.

2 to 5 P.M.—Sectional Meetings.

9 P.M.—Soirée at the Assembly Rooms by the Mayor and citizens of Bath.

Thursday, August 8th.

9 A.M.—Meeting of the Committee of Council.

10 A.M.—Third General Meeting.—Reports of Committees.

11 A.M.—Address in Surgery.

2 to 5 P.M.—Sectional Meetings.

6.30 P.M.—Public Dinner at the Assembly Rooms.

Friday, August 9th.

10 A.M.—Address in Forensic Medicine.

11 A.M.—Sectional Meetings.

2 P.M.—Concluding General Meeting.

EXCURSIONS.

Friday Evening.—Soirée at the Colston Hall, Bristol, by the Bristol members of the Branch.

On Saturday there will be excursions to Longleat, Bowood, Wells and Cheddar, Malmesbury, Berkeley Castle, and (if a sufficient number of excursionists) to the Valley of the Wye.

The Honorary Secretary will endeavour to arrange for gentlemen well acquainted with the locality to accompany the parties on each excursion.

Any information will be given by the Secretary to the Excursion Committee, 6, Belmont, Bath.

Members of the Association will receive cards for the above proceedings, evening meetings, etc., at the Assembly Rooms, Bath.

ANNUAL MUSEUM.

The Tenth Annual Museum of the British Medical Association will be held at the Assembly Rooms, Bath, and will be open daily from 10 A.M. till 6 P.M., on August 6th, 7th, 8th, 9th, for the exhibition of the following objects :—

1. Latest Inventions in Medical and Surgical Instruments and appliances of all kinds.

2. New Chemicals and Apparatus; New Drugs and their preparations; and New Articles of Diet for Invalids.

3. Drawings, Diagrams, or Models illustrating the Ventilation of Hospitals and Private Dwellings.

4. General Pathological Specimens; with Photographic Models, Drawings, etc., illustrating disease; and Microscopic Pathological Specimens.

The following is a list of the Museum Committee, to any member of which communications, etc., may be addressed. Sections 1, 2, and 3: Dr. Spender, 17, Circus, Bath; F. K. Green, Esq., 3, Gay Street, Bath. Section 4: Dr. Cole, 17, Paragon Street, Bath; G. E. Lawrence, Esq., Claverton Street, Bath.

NOTICE TO EXHIBITORS.

Application to be made as soon as possible, at the same time giving a list of objects, and mentioning the space required. Each object to be accompanied by a printed or written description attached to the article exhibited.

All parcels to be delivered on or after July 27th, and not later than August 3rd, and to be removed within three days after August 12th. They must be addressed to Drs. Spender and Cole respectively, at the Assembly Rooms, Bath. All expenses of carriage and all risk to be borne by the Exhibitors. A card bearing the name and address of the exhibitor to be enclosed in each package, ready to be fixed on the outside.

N.B.—Specimens and Instruments which have been exhibited at former meetings cannot be received on this occasion.

All communications to be addressed to Drs. Spender and Cole, as above.

GLASGOW AND WEST OF SCOTLAND BRANCH.

THE annual meeting of this Branch will be held on Tuesday, the 25th instant, in the Faculty Hall, 242, St. Vincent Street, Glasgow, at 2 P.M.: Dr. ANDREW FERGUSON in the Chair.

The subject of the Duke of Richmond's Medical Act Amendment Bill will be introduced; and it is expected that some interesting discussion will take place.

The members will afterwards dine together at 5.30.

Glasgow, June 18th, 1878.

SOUTHERN BRANCH.

THE fifth annual meeting of this Branch will be held at Salisbury, on Wednesday, June 26th.

1 P.M.—Luncheon at the residences of Mr. Blackmore, Mr. Darke, Mr. Gowing, and Mr. Bennett.

2 P.M.—The general meeting will be held at the Council Chamber, and an address will be delivered by the President-elect, B. G. GOWING, Esq.

During the afternoon, the members will have an opportunity of visiting the Cathedral, the Blackmore Museum, and other places of interest in the locality.

The dinner will take place at the White Hart Hotel at 5 P.M. Tickets 15s. each, including wine.

J. WARD COUSINS, M.D., *Honorary Secretary.*

Southsea, June 18th, 1878.

BATH AND BRISTOL BRANCH.

THE annual meeting of the Branch will be held at the Mineral Water Hospital, Bath, on Wednesday, June 26th, at 4.30 P.M., when H. MARSHALL, M.D., will resign the Chair to H. HENSLEY, M.D. The members will afterwards dine together at the York House.

R. S. FOWLER, } *Honorary Secretaries.*
E. C. BOARD, }

Bath, June 4th, 1878.

MIDLAND BRANCH.

THE annual meeting of the above Branch will be held in the Guildhall, Lincoln, on Thursday, June 27th, 1878, at 2 P.M.: President—C. H. MARRIOTT, M.D., Leicester; President-elect—A. MERCER ADAM, M.D., Boston.

After the transaction of the usual business of the Branch, the following papers will be read and discussed.

Cases of Obscure Diseases of the Liver, by Wm. Webb, M.D., Wirksworth.

Clinical Notes, by J. O. Brookhouse, M.D., Nottingham.

On the importance of establishing a temporary adhesion between the Upper and Lower Eyelids (Artificial Anchyloblepharon) in certain cases of disease, and in order to facilitate the performance of some plastic operations, with illustrative cases, by C. B. Taylor, M.D., Nottingham.

Demonstration of Dr. Howard's Direct Method of inducing Artificial Respiration, by J. Wright Baker, Esq., Derby.

The New Wards of the Stamford Infirmary: a contribution to Plans of Hospital Construction, by W. Newman, M.D., Stamford.

On Hospital Insalubrity, by T. Sympton, Esq., Lincoln.

Operations will be performed at the County Hospital at 11 A.M. The new County Hospital buildings are now completed.

Dinner at the Great Northern Hotel at 5 P.M. Tickets, 6s. each.

In order to facilitate arrangements, the Honorary Secretary will be obliged by receiving information from gentlemen who intend to be present at the dinner.

C. HARRISON, M.D., *Honorary Secretary.*

Lincoln, June 18th, 1878.

LANCASHIRE AND CHESHIRE BRANCH.

THE forty-second annual meeting of this Branch will take place at the Assembly Rooms, Blackpool, on Friday, June 28th, 1878, at 1 P.M.; Dr. STEELE (Liverpool) President; Dr. LESLIE JONES (Blackpool) President-elect.

Dr. Leslie Jones will give an address, the Report of the Council will be read, and the ordinary business of the Branch will be transacted.

The following communications have been promised.

1. Mr. Reginald Harrison: On the Use of Filiform Bougies with Tunnell Instruments (Gouley's) in the Treatment of Stricture of the Urethra.

2. Dr. Haddon: 1. Two Cases of Ulcerating Endocarditis, with Temperature Charts and Sphygmographic Tracings; 2. An Easy Way of Noting Cases in General Practice.

3. Dr. Howie: The Grape-Cure in Bilious Nausea and Early Pregnancy.

4. Dr. Bennett: Chronic Cervical Metritis treated by Interstitial Injection coupled with Dilatation.

5. Mr. Lund will show a case of Contracted Fingers, and a case of Ankylosis of the Digital Joints, successfully treated.

6. The Report of the Duration of Infection Committee will be read, and a summary of the results obtained will be given.

Luncheon will be provided at the Assembly Rooms from eleven to one o'clock.

The members will dine together at Bailey's Hotel, at five o'clock. Charge 7s. 6l., exclusive of wine. Gentlemen intending to be present at the dinner are requested to forward their names to Dr. Leslie Jones, Blackpool, not later than June 24th.

D. J. LEITCH, M.D., *Honorary Secretary.*

Manchester, June 13th, 1878.

SOUTH EASTERN BRANCH.

THE annual meeting of this Branch will be held at the Greyhound Hotel, Croydon, on Wednesday, July 3rd, at one o'clock; Dr. LANCHESTER of Croydon, President-elect, in the Chair.

CHARLES PARSONS, M.D., *Honorary Secretary.*

2, St. James's Street, Dover, June 18th, 1878.

SOUTH-EASTERN BRANCH.

A MEETING of the Executive Council of this Branch will be held at the Greyhound Hotel, Croydon, on Wednesday, July 3rd, at half-past twelve o'clock precisely.

CHARLES PARSONS, M.D., *Honorary Secretary.*

2, St. James's Street, Dover, June 18th, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, July 2nd. The Chair will be taken by the President, SAMPSON GAMGEE, Esq., at 3 P.M.

An address will be delivered by the President-elect, Dr. TIBBITS, of Warwick.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner tickets, exclusive of wine, 7s. 6d. each.

JAMES SAWYER, M.D., } *Hon. Secretaries.*
EDWARD MALINS, M.D., }

Birmingham, June 11th, 1878.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE annual meeting of this Branch will be held at Neath, on Thursday, July 11th: J. TALFOURD JONES, M.B., President; JOHN RUSSELL, Esq. (Neath), President-elect.

Any members desirous of reading papers, etc., are requested to communicate the titles to either of the Honorary Secretaries.

ANDREW DAVIES, M.D., } *Honorary Secretaries.*
ALFRED SHEEN, M.D., }

June 12th, 1878.

NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held at Hartlepool, on Thursday, July 25th, at 3 P.M.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, June 8th, 1878.

METROPOLITAN COUNTIES BRANCH: ORDINARY MEETING.

AN ordinary meeting of this Branch was held at 11, Chandos Street, Cavendish Square, on Wednesday, May 22nd, at 8 P.M.; S. W. SIBLEY, Esq., President, in the Chair.

VACCINATION.

Dr. J. GREENE (Birmingham) read a paper on Animal Vaccination, which is published at page 889.

Dr. E. C. SEATON read a paper on the Working of the Vaccination Law, which is published at page 887.

Dr. R. CORY said that it was known that cow-pox had been artificially produced by inoculating animals with the virus of small-pox; and thus it had been proved that small-pox could be converted into cow-pox. Again, it had been noticed by many observers on retrovaccination that the lymph, at its first removal, appeared to have undergone degeneration. He had used the Belgian lymph, and had found that the scars were small, and ran through their course more rapidly than those of ordinary lymph. One observer on animal vaccination had found that he could not transmit the lymph from calf to calf for more than ten generations; but, if children were inoculated with the lymph, it appeared to preserve its power indefinitely. Hence animal vaccination was a means of weakening the lymph, not strengthening it. By perseverance, however, and by a proper selection of cases, a weak stock of lymph might be improved. The only argument in favour of the adoption of animal vaccination was the transmission of syphilis, the risk of which, however, was extremely small.

Dr. J. W. TRIPE said that it had been very completely shown that vaccination with the human lymph in present use, if properly performed, was quite effective; and, therefore, it was unnecessary to go back to animal vaccination. Last year, he obtained permission of the London School Board to examine the children of a school in his district, and he found that twenty-five per cent. were inefficiently vaccinated; some had not been vaccinated at all, and others had very slight marks. The district-vaccinator vaccinated the children, but got no pay, having reported them as cases of revaccination. There ought to be better supervision over the vaccination-officers; they should not be under the control of the boards of guardians, but under that of the sanitary depart-

ment, and should be supervised by the medical officers. He did not blame them, or charge them with laxity in performing their duties; but they required better supervision, and he agreed with Dr. Seaton, that the number of vaccination officers was not sufficient. It was said that outbreaks of small-pox could not altogether be accounted for. But he thought that vaccination was done too imperfectly, and for too low fees. Again, if there were but one mark on the arm, the vaccinator, when he again operated, could not get pay, the case being regarded as one of revaccination. He thought that the epidemic of small-pox was not yet at an end; but it had not spread in his district as it did in 1871, because the cases had been isolated and removed early to hospital.

Mr. BONNEY called attention to the importance of revaccination. Practically, in the present epidemic, the public looked to the medical men to stop the course of the disease; and, it being supposed that they failed in doing this, a distrust of vaccination was being spread, which would be difficult of removal. He had removed many cases of small-pox from his district. When the epidemic broke out, if he had been able to vaccinate or revaccinate every person in his district, the disease would have been stamped out; but he was powerless. He was informed by the Local Government Board that they did not supply lymph for the purpose of revaccination.

Dr. SEATON said that the supply of lymph to individual vaccinators by the Government establishment could not be carried out unless a system of payment, etc., were adopted, which he would not like to see introduced. The public vaccinators, however, could make arrangements with the private practitioners for the supply of lymph.

Mr. BONNEY explained that he did not mean that the lymph should be supplied by the vaccination establishment to the practitioner for private purposes, but in aid of the performance of his public duties.

Mr. ALDERSON said that, while the present method of vaccination was successful, if done properly, he would not have recourse to animal vaccination. As regarded the supply, most medical men in good practice could supply themselves, taking care to use the lymph from children whose history was known. He had been able to supply himself and his friends with vaccine matter. He did not believe in the alleged insusceptibility to vaccination; he had failed three times in vaccinating a child, but had succeeded the fourth time. He never failed in vaccinating from arm to arm. He did not consider public superior to private vaccination. Public vaccinators had not time to go into the history of the children, and might thus disseminate the germs of disease. Revaccination ought to be carried out. He did not approve of the reduction of the number of vaccination stations. Every general practitioner ought to be allowed to vaccinate anyone who applied to him, and be paid by the Government for it.

Dr. DUCAT thought that, if public vaccination had not been taken from the district medical officers, the percentage of failures would have been much lessened. The medical officers of the districts would have a better knowledge of individual cases than the public vaccinators, and would be better able to avoid the selection of unhealthy subjects as vaccinifers. He was often in a difficulty when small-pox broke out from want of a supply of lymph. Again, the district medical officer met with many of the children not accounted for in the vaccination returns, but at present it was no part of his business to vaccinate them.

Mr. R. CREELY had used the lymph of Mr. Greene, M. Warlomont, and Dr. Martini with satisfactory results; but the lymph soon wore out unless there were a large stock for selection. Revaccination was a matter of very great importance; it should be cultivated and encouraged. He was much interested in the diminution of the efficacy of lymph by successive transmission through animals. All the animal lymph that he had received from Mr. Greene was as good as any that he had seen; but, without selection, it was liable to degenerate.

Mr. BROWNFIELD thought that, if the number of vaccinating stations were increased to any extent, there would be a difficulty in keeping up a supply of lymph. As regarded revaccination, the difficulty was the low rate of payment; the operation required more lymph and took longer time than ordinary vaccination.

Mr. BLACKMAN had been vaccinating for twenty years, and found the lymph as successful as at first. He was always glad to supply practitioners with lymph on Wednesdays, after he had secured a supply for himself. He thought that all public vaccinators should act in this way. There was a difficulty in getting persons to be revaccinated even from their own healthy children.

Mr. HUDSON said that one way in which small-pox was spread was the manner in which the patients were conveyed to hospital. He thought the age specified by law for revaccination was too far advanced; seven or eight years would be a very good time to begin. He had done revaccination in many cases, but had not been able to charge for it. Revaccination ought to be taken in charge by the Local Govern-

ment Board. He approved of the present system of vaccination; he had not a large district, but could always keep up a good supply. A system of weekly revaccination would be a good thing; but it was only in cases of epidemics of small-pox that people would attend to it.

Dr. HIBBERD was glad to hear that so small a proportion as five per cent. of the children escaped vaccination. It must, however, be remembered that, in some cases, births were not registered; and, in some instances, persons removed from one district to another, and the children were vaccinated twice; hence the number of cases of vaccination was liable to be apparently greater than it really was. He had been surprised at the number of unvaccinated children in schools. The vaccination officer or the medical officer of health should examine the children in schools, and the public vaccinator should be allowed to vaccinate them. Persons removing from a district should be required to register the fact, in cases of removal before a child was vaccinated.

Dr. DUDFIELD did not think that the public vaccinator had power to go into the houses in an infected district and vaccinate the inmates; but that the district medical officers could do this, and perform vaccination and revaccination.

Dr. W. V. LYLE thought the arm-to-arm lymph very good. He referred to cases of outbreak of small-pox in schools, in which the spread of the disease had been arrested by vaccinating other children.

Mr. GREENE wished that there had been more discussion on animal vaccination. He thought that there should be an opportunity of going to the cow from time to time when a supply was required.

Dr. SEATON would have been glad to hear more discussion on Mr. Greene's paper. He did not, however, admit that the prevalence of small-pox was due to the present system of vaccination. He would point out the duties of public vaccinators and district officers in cases of outbreak of small-pox. The vaccination officers were instructed by the Local Government Board to look up the children in the infected houses, and to give notice to the public vaccinator, explaining that the children could not be taken to the vaccinating station. A district medical officer attending a case of small-pox in any house was at liberty to vaccinate the other children, and was entitled to the same pay for this as the public vaccinator; but it was not compulsory on him to do so. In other words, a district medical officer *might* vaccinate the inmates of an infected house; a public vaccinator *must* do so, when the case was reported to him by the vaccination officer.

STAFFORDSHIRE BRANCH: ORDINARY MEETING.

THE third ordinary meeting of this session was held at the Board Room of the Mines Drainage Commissioners, 22, Darlington Street, Wolverhampton, on Thursday, May 30th, 1878; present, Dr. ARLIDGE, President, in the chair, and twenty-six members.

New Members.—The following members of the Association were duly elected members of the Branch: Mr. John Clare (Hanley); Mr. Dakeyne (Leek); Dr. Daniel (Stone).

Medical Acts Amendment Bill.—A memorial in opposition to the above was considered, and afterwards signed by the President on behalf of the members present. It was resolved that the memorial be at once presented to the House of Lords.

Habitual Drunkards' Bill.—A letter was read from Mr. STEPHEN ALFORD (London) which stated that Dr. Cameron would, on July 3rd next, propose in the House of Commons that the above Bill be read a second time; also the desirability of local members of Parliament being requested to be present that evening, and, if possible, to give their support to the Bill.

Specimens.—1. Mr. LAWSON TAIT showed an Ovarian Tumour.

2. Dr. MILLINGTON exhibited Ivory Dust, Chips, and Jelly.

Communication.—Mr. JOHN HARTILL (Willenhall) read a paper on Convulsions during Labour.

BORDER COUNTIES BRANCH: SPRING MEETING.

THE spring meeting was held at the Keswick Hotel, Keswick, on June 1st, 1878; Dr. LOCKIE, President, in the chair. There were present eighteen members and one visitor.

A considerable number of those present availed themselves of the invitation of the local members to drive round Derwentwater before the meeting commenced.

New Members.—Welby I'Anson, M.B. and C.M.; Charles A. Parker, M.D. and C.M.; and Thomas Hatfield Walker, L.R.C.P. and L.R.C.S.E., were elected members of the Association and Branch. Mark J. Symons, M.B. and C.M., was elected a member of the Branch.

Representatives of the Branch on the General Council.—The following gentlemen were elected: J. K. Burt, M.B.; J. Gilchrist, M.D.; S. Lockie, M.D.; M. W. Taylor, M.D.; R. Tiffen, M.D.

Papers.—The following papers were read.

1. The General Practitioner in his relation to Public Health and to Sanitary Officers. By Dr. KNIGHT.

2. Surgical Notes; Imperforate Anus; Inflammation of the Antrum; and Sayre's Treatment of Spinal Caries. By Dr. MACLAREN.

3. On the Removal of Cauliflower Excrescence of Uterus by Excision of the Cervix and by the *Ecraseur*, with Specimen. By Dr. TAYLOR.

Habitual Drunkards' Bill.—The following resolution, proposed by Dr. TIFFEN, and seconded by Dr. MACLAREN, was unanimously adopted: "That, in the opinion of this meeting, some legislative measure is necessary for the control and cure of habitual drunkards; and that the Habitual Drunkards' Bill, 1877, introduced into the House of Commons by Dr. Cameron, being calculated to secure this object, the Secretaries of the Border Counties Branch be instructed to request the local members of Parliament to support the second reading of the same."

Dinner.—The members and their friends dined together at 4 P.M.; Dr. Lockie in the chair, and Dr. Taylor in the vice-chair.

THAMES VALLEY BRANCH: ORDINARY MEETING.

A MEETING of this Branch was held at the Greyhound Hotel, Richmond, on June 13th; Dr. PRICE JONES in the chair.

Papers.—The following were read.

1. Mr. BALMANNO SQUIRE read a paper on the use of Chrysophanic Acid in Psoriasis and other Skin-Eruptions; and exhibited photographs, which showed the results of treatment.

2. Dr. ATKINSON read a paper on Vaccination and Revaccination.

Dinner.—The members and friends afterwards dined together.

EDINBURGH BRANCH: ANNUAL MEETING.

THE annual general meeting of the Branch was held at 5, St. Andrew Square on Tuesday. In the unavoidable absence of Sir ROBERT CHRISTISON, Dr. JAMES YOUNG was voted to the chair.

The Report of the Treasurer showing a satisfactory state of the funds was received.

Officers.—Sir Robert Christison, Bart., was re-elected President; Dr. Argyll Robertson and Dr. W. Rutherford were elected Vice-Presidents; Dr. Angus Macdonald, Dr. Brodie (Liberton), Dr. Blair Cunynghame, and Dr. P. A. Young were elected members of the Council of the Branch.

The Medical Act Amendment Bill.—A letter was read from Dr. Waters (Chester), asking support to the Medical Reform Bills now before Parliament. It was agreed that the letter should lie upon the table.

Habitual Drunkards.—Letters were read from Mr. Alford, asking the Branch to petition in favour of the Habitual Drunkards' Bill. The Chairman was empowered to sign and forward a petition in the name of the meeting; and the members present undertook to use their influence to obtain other signatures to the petition.

After a vote of thanks to the Chairman, the meeting separated.

CORRESPONDENCE.

PROXY VOTING AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

SIR,—It has been suggested to me that it would be desirable, in connection with the above-named matter, that petitions, as numerous as possible, should be presented at the time of the election of members of Council. I enclose a copy of a petition which will, I should imagine, meet the case. If you will publish the copy I enclose, I would ask the Fellows in various towns to copy and sign. If, then, they are forwarded to Sydney Jones, Esq., 16, George Street, Hanover Square, London, W., or to myself, they will be presented at the time of election.—I remain, yours obediently,

GEO. JACKSON, F.R.C.S.Eng. (Exam.)

18, George's Terrace, Plymouth, June 18th, 1878.

*. To procure any important number of signatures to petitions, it is usually necessary to circulate copies separately to those whose signatures are desired.—ED. B. M. J.

To the President and Council of the Royal College of Surgeons.

We, the undersigned Fellows of the Royal College of Surgeons, desire to bring under your notice the hardship and inconvenience which the Fellows of the College who reside at a distance from the metropolis labour under in exercising the right they possess of voting at the election of members of the Council. As matters stand at present, they cannot exercise their right of voting except at the expense and loss of time involved in a journey to London. Your petitioners pray that such an alteration in the by-laws be made as to permit Fellows who are prevented from any cause from attending the meeting to vote by voting-papers, properly attested, or by proxy.

THE BILL OF THE MEDICAL REFORM COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—The Medical Reform Committee of the British Medical Association has drafted a Bill for the amendment of the Medical Act of 1858, and it was introduced into the House of Commons by Messrs. Mills, Childers, and Goldney, and read a first time on 29th May last. This Bill provides for an uncontrolled free trade in medicine and surgery by any persons whomsoever, provided they do not take or use recognised medical titles. It permits persons holding disreputable foreign qualifications to take medical titles, and to practise under these titles just as freely as they please. It permits the Medical Council to register foreigners who hold no medical qualifications whatever. It permits registered medical men to fill up death-certificates in cases they have themselves never seen, but which have been attended by unqualified assistants who have never had one hour's medical education. It deprives persons of the power of prosecuting in cases of the grossest violation of its own provisions, without their at first going through the tedious and expensive process of obtaining the sanction to the prosecution of the Medical Council. In short, the best and most vital interests of the profession are surrendered as a concession for securing a representation of the profession upon the Medical Council—a representation which might turn out, even after all the fuss that has been made about it, to be a sham and a delusion, both mortifying and ludicrous.

The Government Bill, taken as a whole, is an exceedingly bad Bill; but this Bill of the Medical Reform Committee, so far as its supposed maintenance of the interests of the profession are concerned, is simply an infamous Bill.—I am, sir, your obedient servant,

June 17th, 1878.

R. H. S. CARPENTER.

P.S.—A little confusion appears to exist about the three Bills now in the House of Commons. Dr. Lush's Bill is Bill No. 1; Bill No. 2 is the Bill I am condemning; the other has come down from the Lords, and is not known by any number.

IS ALCOHOL FOOD?

SIR,—How Dr. A. Carpenter could have tortured anything in my note into an accusation of falsehood against himself, is beyond me to conceive. Let me assure him that the last thing in my mind, when I wrote it, was any thought of want of honesty in his statement. To question the value of the data on which a writer bases his conclusions is surely not to accuse him of untruth. On the face of the matter, as it stands at present, it is patent that the truth or otherwise of the assertion, that human life can be sustained for many months on alcoholic drinks alone, rests wholly on the averments of the drinker and his friends. Dr. A. Carpenter accepts such evidence as conclusive. I venture to say that it is not sufficiently trustworthy, nor rigid clinical proof such as science has a right to demand. If, as he says, cases of the kind are known to every medical man in extensive family practice, there should be no difficulty in finding proof abundant and overwhelming. But where is it? I took the liberty of asking Dr. A. Carpenter to give the data on which he framed his assertion, and he does so in your last number. Your readers can judge their value. He says that he has under his charge a patient who, "during three months, did not take two ounces of any other kind of food than stimulants. There was no deception in the case". But does Dr. A. Carpenter really say that the scientific world is to accept as a fact the food-power of alcohol on such a bare statement as this—on evidence supported wholly by the assertions of the drinker and his friends? He also refers to the cases of "two old ladies who lived on stimulants alone for several weeks before death, and I have no reason to suppose that I was deceived by the attendants". Further to strengthen his position, Dr. Carpenter adds: "Almost every large private lunatic asylum will probably contain cases which are of a similar character."

When I said that, until better informed, I should doubt whether a single case of the kind which would satisfy clinical demands could be

produced, I had in mind that a discussion on this very subject took place many years ago, and that no such case was then produced, nor, as far as I know, has one been recorded to this moment.

There is another fact touching the history of cases of this kind to which Dr. Carpenter has not referred, and that is the length of time which men and women have lived, under certain conditions, without either food or drink. Certainly, men buried in a mine have lived for "several weeks"—three weeks, as recorded. And Dr. Willan relates the case of a young self-starving religious maniac, in whom life was prolonged for sixty days, nothing else being swallowed except a little orange-juice.

In his *Physiology*, Dr. W. B. Carpenter says summarily: "There is no reason to believe that alcohol, in any of its forms, can become directly subservient to the nutrition of the tissues...It may be certainly affirmed that it is incapable of transformation into albuminous compounds, and there is no sufficient evidence that even fatty matters can be generated in the body at its expense." Such, I believe, is the opinion of our best authorities on the value of alcohol as food. Dr. A. Carpenter will, I am sure, on reconsideration, admit that evidence much more complete than any which exists is required to establish the assertion that alcohol is a food.—Your obedient servant,

W. O. MARKHAM.

London, June 17th, 1878.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, JUNE 12TH, 1878.

JOHN MURRAY, M.D., President, in the Chair.

Epidemic of Small-pox.—Dr. McCOMBIE read a paper on comparison of the small-pox epidemics, 1871-1876. After stating that the statistics on which the paper was based were exclusively those furnished by the reports of the medical superintendents of the hospitals of the Asylum Board, he indicated that it would be advisable that the official statistics of the Board should be constructed on an uniform plan, and hoped the managers would take this into their consideration. He then proceeded to indicate the points of interest to be noted in a comparison of two epidemics of small-pox, and hoped that some indication might be afforded from the experience of the present epidemic as to the working of the Vaccination Act of 1871. The proportion of vaccinated to unvaccinated cases remained the same as in 1871; but, while this was so, it was found that in the present epidemic a much larger proportion of vaccinated and unvaccinated (7 per cent. and 11 per cent. respectively) were attacked with small-pox under fifteen than in 1871. Dr. McCombie said that one would have expected that the natural result of the Vaccination Act would have been to increase the proportion of vaccinated admissions, but one would hardly have expected that the number of those attacked under puberty would have increased to the extent named. Under fifteen, it was to be observed that in the unvaccinated cases there was an increase in 1876 over 1871 to the extent of 11 per cent., and this is due in great measure to an increase of 7 per cent. in the admissions under five years of age in 1876 as compared with 1871, and this was precisely the period during which the Vaccination Act of 1871 had been in operation. Of the mortality in the respective epidemics, it was seen that the present was less fatal than the last only to the extent of 1 per cent.; but that the death-rate in the vaccinated was 2 per cent. less than in 1871, and that of the unvaccinated 1 per cent. greater. The mortality in the unvaccinated had risen from 37 per cent. in 1836 to 45.5 per cent. in 1876. Analysing the mortality under fifteen, it was found that in the vaccinated it was much less than before, and especially in those under five years of age; while in the unvaccinated it was much the same as in 1871. With regard to protection afforded by good and bad marks under ten years, it was found that those who were badly vaccinated ran no more risk of contracting small-pox than those well vaccinated, although the mortality was greater in those with bad marks. It seemed that the numbers of the vaccinated under five attacked with small-pox were largely on the increase; and, while this was a disappointing fact, it was encouraging to know that the mortality had diminished considerably. On the subject of revaccination, some particulars were obtained from the Asylum Board reports. While it was the unanimous testimony of the medical superintendents that none of the staff who had been revaccinated contracted small-pox, Drs. Collie and Layton recorded instances of patients who had been successfully revaccinated being attacked, and it would seem conclusively to be shown that revaccination was not absolutely preventive of small-pox, although severe or fatal cases after it were rare, and in these the operation had probably been performed under puberty.

Dr. McCombie then gave some statistics of the black or hemorrhagic form of small-pox. Of 121 cases, 64 were vaccinated and 57 unvaccinated. Under puberty, 33 per cent. were vaccinated; over puberty, 60 per cent. The majority of the vaccinated had bad marks, though two had four good, and others a less number of such marks. No mention is made of this form of small-pox after revaccination. From the fact that many vaccinated people fell victims to the black small-pox, some had supposed that vaccination had no influence over it; but it would be quite as reasonable to say that vaccination did not protect generally against the mild or the severe forms of small-pox because in a certain proportion of cases it failed. Good vaccination was absolutely protective against no form of small-pox, but the number of malignant cases with such vaccination was few. That this form of small-pox was more common than formerly was the opinion of those who had had experience of both epidemics; but it did not necessarily follow that vaccination was losing its protective power.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, MAY 1ST, 1878.

AQUILLA SMITH, M.D., in the Chair.

The Prevalence of Small-pox in Dublin.—Dr. T. W. GRIMSHAW opened a discussion on the present epidemic of small-pox in Dublin with an elaborate paper, in which he especially considered the questions: how the epidemic arose, how it has been promoted, how it may be ameliorated, and how similar outbreaks may in future be prevented. As to the relation between the prevalence of small-pox and the progress of the practice of vaccination in Ireland and in Dublin, statistics compiled from the Reports of the Census Commissioners show that deaths from small-pox decreased in the decade 1861-71 to one-tenth what they were in the decade 1831-41. These facts might, of course, be accounted for by some on the supposition of some obscure epidemic influence; but they were accounted for in a most satisfactory manner by the progress of vaccination during these decades. During the decade 1841-51, the first Vaccination Act—namely, the 3rd and 4th Vic., cap. 29—came into force in Ireland, and public vaccinators were provided by the Poor-law guardians; and thus vaccination was offered, but not made compulsory on the people. The result of affording these facilities was, that vaccination became more general, and the average death-rate from small-pox fell from 7.095 to 5.842 per 10,000 living. During the decade 1851-61, further facilities for vaccination were afforded by the passing of the Medical Charities Act, 14 and 15 Vic., cap. 68, by Clause 13 of which every dispensary medical officer was "required to vaccinate all persons who came to him for that purpose". Thus, all excuse for neglect of vaccination was removed by the State—the result being that this provision was largely availed of, and the average death-rate from small-pox fell from a ratio of 5.842 to 2.195 per 10,000 living. During the decade 1861-71, a most important change took place in the vaccination laws. On January 1st, 1864, during the prevalence of small-pox, the Compulsory Vaccination Act, 26 and 27 Vic., cap. 52, came into force, so that, during seven years of this decade, all persons born were bound to be vaccinated. The result of the enforcement of this Act was remarkable; for, during the decade, the mortality from small-pox fell to an average of 0.759 per 10,000 living—the total number of deaths returned to the Census Commissioners being but 4,113, of which 1,274 occurred before the Act came into force. In 1868 and 1869, vaccination had become very low in Dublin; in 1870, a few cases of small-pox appeared, and slightly stimulated vaccination; in 1871, a considerable number of admissions to hospital further stimulated vaccination, but it was not until after the disease had become widespread in 1871 that vaccination became excessive (if he might use the term). Thus, small-pox had reached its height before vaccination had reached its height. The present epidemic might be said to have commenced in July 1876, when two foci of the disease were established—one on the north, and the other on the south side of the river Liffey; both having originated through contagion introduced from Lancashire. About eighteen months, however, elapsed before the outbreak assumed formidable proportions. Its progress might be easily measured by the number of small-pox patients admitted month by month to Cork Street Fever Hospital, Dublin, viz.: October 1877, 3; November, 8; December, 23; January 1878, 19; February, 76; March, 106; April, 173. Up to March 31st, 1878, the records of Cork Street Hospital showed that, since the commencement of the epidemic in the autumn of 1876, 295 cases were admitted. The percentage of each variety of the disease was—discrete, 44.0; confluent, 50.3; and malignant (or purpuric and hemorrhagic), 5.7—compared with 61.8, 31.7, and 6.5 respectively, in the epidemic of 1871-73. The

mortality was 15.8 per cent. against 21.6 per cent. in the former epidemic. Not only was the total rate of mortality lower, but the mortality in each class was less. The mortality among the confluent cases showed a marked reduction from 47.6 to 21.6. This was easily accounted for by the fact that, of the confluent cases in 1871-73, only 60.2 per cent. were vaccinated; whereas, in the present epidemic, 70.9 were vaccinated. In the discrete variety, the mortality was, as usual, insignificant. The death-rate was 1.5 per cent. Of discrete cases, 3.1 per cent. were vaccinated. Among the confluent cases, only 70 per cent. were vaccinated; of these, 32 died, or at the rate of 21.6 per cent.; the rate of mortality of the vaccinated being only 9.4 per cent., while among the unvaccinated it was 51.1 per cent. Among the confluent cases, the mortality among the vaccinated was only 66.6 per cent., against 90 per cent. in the unvaccinated. Adding all classes together, the mortality among the vaccinated was only 6.8 per cent. against 50 per cent. among the unvaccinated. Up to the present, there had not been any case admitted to Cork Street Hospital who had been vaccinated. The author next considered what measures should be taken to avoid such visitations in future, and to limit the extent of the existing outbreak, the chief promoting cause of which was the neglect of vaccination. He pointed out the following defects in the Irish vaccination laws. *a.* A child may remain unvaccinated for a period of six months after its birth without its parents incurring any penalty. The period in England is but three months. *b.* Public vaccinators in Ireland have no power to take lymph as in England, thus limiting considerably the lymph supply. *c.* There is no inspection of vaccination in Ireland. *d.* The payments to public vaccinators in Ireland are so small that it is not worth their while to be zealous in the discharge of their duty. More than a year ago, a Bill to remedy these defects was drafted by the Council of the Irish Medical Association and presented to the Government, as also a Bill for consolidating and amending the vaccination laws in Ireland. No step has yet been taken to bring either of these Bills before Parliament. Besides neglected vaccination, other promoting causes of small-pox existed in Dublin which did not require any new enactment for their removal: 1. The disgraceful sanitary state of the city, as evinced by its high death-rate; 2. The want of proper sanitary organisation and supervision; 3. The want of proper means of removing infected persons to hospital; 4. The want of epidemic hospital accommodation; there being but one epidemic hospital in Dublin, and that not sufficiently large to cope with such an epidemic as the present.—Dr. HAYDEN said the first point that struck him was, what the paper proved as to the great value of vaccination, rather than the mere mortality than in preventing attacks of the disease. There could not be a doubt that where persons had been previously vaccinated the mortality was less than it would otherwise have been. On the other hand, every year's experience tended to show that the value of vaccination as a preventive measure was less than had been supposed. The epidemic had been imported. Then it was clear that it had a favourable domestic in, and had become rapidly developed, owing to the degraded state of the city as regarded vaccination and isolation. However, had been promoted was clear. People were not aware of the danger of intercourse with persons suffering from the disease. In two or three cases, he had seen the most extraordinary reluctance on the part of patients to be sent to hospital. There was also great danger from convalescent patients. Poor people returned home in the stage of desquamation, and with their clothes infected; and there could not be a doubt that the disease had been extensively propagated by the contact of clothes with them.—Dr. LAUR said it seemed to be the general opinion that the best means of preventing the extension of small-pox was to revert susceptibility by vaccination and revaccination, and also to isolate convalescent hospitals, and cut off the sources of the disease.—Dr. MAC SWINLEY observed that, notwithstanding the apparent clearness of the proof that the present epidemic had been introduced from Ireland, it was possible it might have arisen in some quarters from infection.—Dr. ASH spoke of an outbreak which had occurred four years ago in the Londonderry District Lunatic Asylum, in the presence of which he vaccinated the people as rapidly as he could.—Dr. HENRY R. said he wished he could put implicit confidence in vaccination, and regarded the keeping away of small-pox. In his opinion, the best vaccination was the modification of the disease. He had met small-pox in the arch of the aorta and in the mucous membrane of the throat.—Dr. CHURCHILL did not think vaccination could prevent small-pox; but a mere scrape on a person's arm was not a vaccination unless it had been properly performed—a specific cicatrix was necessary.—He approved of revaccination.—Dr. FINNY believed that revaccination was of the utmost importance in preventing the extension of the disease. He thought the idea that vaccination absolutely protected from small-pox was exploded. Isolation of small-pox patients was of the utmost importance, and so was the destruction of

their clothing. The last should be especially insisted on, as anyone acquainted with the poor knew that they would rather give the clothes of a member of a family who had died of scarlatina or small-pox to some other member of the family than destroy them. In former epidemics of small-pox, chicken-pox was very prevalent, and he looked on chicken-pox as a very mild form of small-pox.—The CHAIRMAN said he was sure small-pox pustules would be found in the aorta more frequently than they were if they were looked for, and also on the mucous membrane. He knew of a case of a lady who had natural small-pox five times, and died of the fifth attack. He entirely concurred in the statement that in a great many instances failure in vaccination arose from want of skill on the part of the vaccinator; and he believed that a great deal of the small-pox arose from defective vaccination.—Dr. GRIMSLEY said he had no doubt that revaccination put a stop to small-pox. As to the question of revaccinating people in the presence of small-pox, his opinion was that, whether small-pox were present or not, they should be revaccinated. He did not believe in the separate identity of chicken-pox. Small-pox attacked the inflamed eyes of strumous subjects.

The Society adjourned for the session.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, June 13th, 1878.

[SPECIAL REPORT.]

The Army Medical Service.—In Committee of Supply, on the proposal of a vote of £256,500 for the medical establishment and services, Mr. PARNELL said he wished to ask the Secretary for War whether the vote included any charge on account of hospital services in connection with the brigade of guards. He might mention, by way of explanation, that, whilst discussing the previous vote, before the right honourable gentleman came into his present position, the then Secretary for War stated that a portion of the stock-purse fund only was put down in vote 1 under certain headings, and that the remaining portion of the fund was distributed throughout the other votes. He (Mr. Parnell) was anxious to know in what votes the remaining portion of the stock-purse fund appeared, as he had not been able to trace it.—Colonel STANLEY said that that portion of it which related to medical purposes, such as hospital expenses, was included in the present vote; but he could not at the moment recollect under what heads the remaining portion of the fund appeared.—Mr. PARNELL said the precise information he wanted was this: whether the vote included any charge on account of hospital service in the brigade of guards.—Colonel STANLEY said he would endeavour to answer the question. He believed that the stock-purse defrayed all the medical charges of the guards, but, whether the actual surgeons doing duty there were included, he was not able to say. His impression, however, was that they were.—Mr. PARNELL said the right honourable gentleman did not seem to be aware that the original stock-purse fund, known as such, had been broken up into portions and distributed amongst certain items in the votes. He had been successful in tracing two items in vote 1, and perhaps he might be allowed to refer to them, as they might be a guide to the right honourable gentleman. In vote 1, there were, according to page 16, three portions of this stock-purse fund included, namely, £2,610 for contingent allowances, etc.; £700 for allowances in aid of band expenses; and £6,910 for the profits of the field officers of the foot guards in the shape of extra pay. Perhaps it would be better to take the items in order as they appeared on the vote. The first was infantry and foot guards' profits of the field officers in the shape of extra pay, £6,910; then, under the head of contingent allowances, deducting stoppage for repair of arms, £2,610; and then, under the head of allowances for band expenses, came the sum of £700. These were all the items which stood opposite an entry under the head of infantry and foot guards; and it was found out, in the course of the discussion of vote 1, that these items were paid out of the stock-purse fund. The right honourable gentleman the then Secretary for War further informed the Committee, that the remnants of the stock-purse fund, which amounted to considerably more than these three items—the total amount of the fund being £13,190—was distributed among the rest of the votes. According to a return which had been produced at the instance of the honourable member for Clonmel, he found that the remainder of the fund was applied to hospitals and recruiting purposes. The sum of £8,923 was applied to hospital purposes for the brigade of guards, and the sum of £145 was applied to recruiting purposes for the same brigade of guards, making a total of £9,074. He had been very anxious to trace this vote, and to find out what had become of the different items of this stock-purse fund; and he would have been able to obtain information, no doubt, if the former

Secretary for War had been still in office. At present, he would direct the attention of the Secretary for War to page 29, which referred to the present vote—vote 4. He found, under the head of allowance to private medical practitioners and medical bills, under subhead c, for home purposes, an item of £5,340, and for colonial purposes £5,840. There was an increase in the item for home purposes for last year of something like £2,300, and an increase in the item for last year for colonial purposes of something considerably more than that. He could understand that the vote for colonial purposes would be still more increased by the war at the Cape; but he could not understand the reason for the other increase, and, in any case, he could not account for the sum proposed to be applied. In the return produced at the instance of the honourable member for Clonmel, there was a sum of £3,000 odd, which was stated to be taken for hospitals in connection with the guards. He wished to know what had become of the sum applied to the hospitals of the guards.—Colonel STANLEY was afraid that he was not able offhand to trace the particular item. If he had been in the House when the previous discussion took place, his attention would have been directed to the subject probably, but unfortunately he was not. He thought the honourable member would find that provision was taken for part of this vote in the shape of hospital services in one vote, and in other shapes in regard to the other votes.—Mr. PARNELL: Which votes?—Colonel STANLEY said the honourable member would see that provision was taken for medical services in vote 4, and soon in regard to the other votes. He was unable to give more precise information at the present moment; but if the honourable gentleman would put the question on the report, he would then be able to give him every information in regard to the matter. He believed the way in which the vote is applied was traceable, though in the form in which it originally stood in vote 1, it was unquestionably open to some doubt. He would repeat the answer he had given to a previous question, that his impression was that the hospital services of the year were recorded in the vote about to be taken.—Mr. PARNELL said the difficulty he found himself in was this, that the whole of the stock-purse fund had been broken up. It was originally in one lump sum of £13,190; and a return was moved for by his honourable friend the member for Clonmel, asking for further details as to the appropriation of the fund and the application of the money. When the return appeared, it was found that it only accounted for a very small portion of the sum of £13,190; in point of fact, it only accounted for £502 18s. 4d. for pay and allowances, apartments for the field-major, fuel and light, recruiting, proceedings at courts-martial, etc. Altogether, there were five items, and they amounted to £502 18s. 4d. But the vast bulk of the sum of £13,000 was not accounted for at all, and was still put down as the stock-purse fund, so that, as far as any information to be obtained from the return was concerned, they might just as well have been without it. In consequence of the futility of the return, his honourable friend moved for another. The second return went much more into detail, but did not clear up this extraordinary matter, which was of a very complicated character, and very much required to be cleared up, and with regard to which he would suggest by and by a way of clearing it up. In the second return obtained by the honourable member for Clonmel, he found that this sum of £11,000 and odd, not accounted for in the preceding return, was accounted for in the following manner: the hospital services of the guards were to cost £8,929, recruiting services £145, band expenses £1,360; in addition to which, there was an item of £970 for staff allowances to non-commissioned officers, and an item of £6,708 5s. 6d. for average profits of field-officers and captains. It was not his present purpose to object to these large profits of field-officers and captains, though he thought they should be done away with after the present officers ceased to hold their offices. He wished more particularly to direct the attention of the right honourable gentleman to the hospital branch. They had there the expenses of hospitals and a number of contingencies, wages, washing, fuel, light, repairs, etc., amounting altogether to a sum of £8,029. Now, that amount had been stowed away somewhere, and he did not know where. It was not in vote 1, because they had accounted for that item, and he thought that a considerable portion of it must be in vote 4. The difficulty he felt was this, that when the report was brought on it was always difficult to discuss a question of this sort, because the report itself was not brought up until very late. He would suggest to the right honourable gentleman that, if he were unable to point out in this vote for medical establishment and services what portion of the sum of £8,000 and odd was included, he should postpone the vote until some future day.—Colonel STANLEY said he could not accept the suggestion. He had already endeavoured to explain, though he was afraid without success, to the honourable member that, so far as he was aware, charges which were made upon the stock-purse fund, except those which were included in vote 1, already voted, were distributed among the separate votes of the

estimates; that was to say, in the hospital vote the item for provisions, light, forage, fuel, and so forth, belonged to the stock-purse fund. He was not able to say precisely the amount of the charge included in each vote; but if the honourable member would be good enough to repeat his question on report, he should be glad to give every information. In the meantime, he had endeavoured to answer the question by stating that, to the best of his belief, the medical officers were included in the previous vote; that was to say, that the medical expenses were included in the present vote, and that the rest of the stock-purse charges, such as fuel, light, etc., were to be found in the other votes.—Colonel ARBUTHNOT said he had intended raising a question touching the medical department upon this vote, but, when he saw a matter brought forward in such a cavilling spirit, he had changed his mind, and abstained from occupying the time of the Committee with the subject. He was anxious to do all he could to forward the estimates, but he reserved to himself the right of using an independent member's day for the purpose of calling attention to the state of the medical department. He wished his right honourable friend to regard this intimation as made in a friendly and not an unfriendly spirit. He had no wish to interfere with any of the steps that were now being taken for the reorganisation of the department. His only object was to improve the present state of things.—Lord ELCHO said he had listened to what had been brought forward by the honourable member for Meath, and he could not help agreeing that the question was a very important one. On the other hand, it was not desirable that they should unduly interrupt the supply. It appeared to him that the question had been fairly met by the offers of the Secretary of State. He would, therefore, suggest to the honourable member for Meath that he should allow the vote to pass, on the understanding that the information would be given on the report.—Sir GEORGE BALFOUR said the honourable member for Meath had a perfect right to ask for information. It was certainly within his (Sir G. Balfour's) own knowledge that the origin of all the evil was allowing the Guards to conduct their own offices. In point of fact, the Guards had been allowed from time immemorial to manage their own offices, and the consequence had been a confusion of accounts. The Secretary for War had now, with the honesty that was characteristic of the right honourable gentleman, proposed to give all the information asked for, and he thought the honourable member for Meath ought not further to oppose the vote.—Mr. PARNELL said the only reason why he appeared to hesitate about accepting the offer of the right honourable gentleman was because he very much feared, from what he had previously seen in regard to the question, that the right honourable gentleman would not be able to give him the information he required. The subject was really in such a ravel and a tangle that until a new arrangement was made to place the officers of the Guards on the same footing as the officers of the rest of the army, it would be impossible to make head or tail out of this question of the stock-purse fund. This last attempt of the Government to distribute the items among the other votes instead of making them one bulk sum, only made confusion worse confounded. In point of fact, he did not think the right honourable gentleman knew very well what he was talking about when he answered the question in the first instance. The money was obviously hidden away, and where, as the right honourable gentleman the Secretary of State for War himself admitted, he did not know.—Mr. BIGGAR said the difficulty that was found in connection with all these votes was this. The honourable and right honourable gentlemen who had charge of the different departments were almost all new to their particular positions, and were quite as destitute of information as the House itself. He did not wish to make any special charge against the Government on this question, because he was disposed to make every allowance for the Secretary for War, but it was a very serious position to find themselves placed in, that on all occasions when a question was asked in reference to different departments they should receive the same answer from the honourable and right honourable gentlemen in charge of them. The evil was that they came into office since the estimates were framed, and that they did not know anything about them. Whenever information was asked for the practice was to say, "I really do not know anything about it; but if you will postpone the question until the report, then I will give you the information required." When the report came on, if they repeated the question, they were told that it would be wasting time to discuss it, and that the only time for raising the question was when the matter itself was brought forward. He would suggest to the Government that it would be well to postpone all these votes until the heads of the different departments got to know something about the subjects they had to bring before the committee. As the matter existed at present, there was a frightful waste of time involved, because the House was unable to get any information, and at the same time, the non-official members who really knew a good deal more about these matters than

the heads of the departments, did not wish to press too hardly upon gentlemen who were new to their offices. At the same time, he really did think that that system of asking time after time for the postponement of questions until the report, when it was well known there could be no opportunity for discussing the question, was most objectionable and ought to be given up.—Major NOLAN was sorry that the honourable member for Hereford had not brought the question of medical officers before the Committee. He also regretted that the members of the medical profession who were also members of the House, and who sat principally on the Opposition benches, were not present when the vote was under discussion. In their absence, he desired to bring forward a question which considerably affected the interests of medical officers, and which had been a subject of comment during the last two or three years. It was alluded to very recently in a letter that appeared in the newspapers from Sir D. Corrigan. The question to which he referred was that of providing a supply of surgeons for the army. It was a question in which great interest was taken by the medical profession generally, and particularly by what might be called the Medical Schools. The Irish members had a good deal of interest in the matter, because a large proportion of the surgeons of the army came from Ireland. The letter to which he referred really summed up the whole subject. It showed that there was at present a great want of medical officers in the army, and it put forward, as the chief reason, not the want of pay or of material advantage, but the fact that the medical officers in the army were not properly treated. One grievance was, that they were required to cease to be members of regiments and members of messes, this being carried out by an order of the Secretary for War. Personally, he (Major Nolan) had taken great pains at various times to put the question to various army surgeons with whom he had been brought into contact, and he certainly found that all the younger members were unanimous. The older members of the army medical profession took the same view, although perhaps not so strongly. All the younger medical men, however, felt very strongly indeed upon the fact that, at the present moment, they were not members of regiments and had no *locus standi*. They found that when they went into a mess, they had, as it were, no home. An ordinary officer had his home and his mess to which he could ask his friends, but the army medical officers were only there on sufferance and could ask no friends. He hoped the right honourable gentleman would read the very important letter to which he had referred, which fully summed up the views of the surgeons in the army. He (Major Nolan) had no doubt that it was a real grievance, and the effect of it was witnessed by the diminished number of candidates for appointments in the army. He believed that if it went on much longer the Army Medical Department would drift into a state of hopeless inefficiency. He was satisfied that the condition of the medical profession in the army would be much different if the Government would adopt measures for improving the present status of the medical profession. If something of this kind were not done, the army itself would suffer in the end, because if the country went into war, the medical department would certainly break down. It would be of no use then for Her Majesty's ministers to say it was not their fault, that they were anxious to employ the men if they could procure them. It would be the fault of the Government entirely if they did not take proper precautions to secure an efficient establishment in a time of peace. It was impossible to get an efficient staff in a time of war, because it required a certain amount of discipline, and civilian practitioners obtained on the spur of the moment would require considerable time and training before they could be rendered efficient. He believed that the application of the regimental system as far as medical officers were concerned would be wise economy in the end. The hard work entailed by the business of an efficient staff told hardly upon the private soldier as well as upon the surgeons themselves. At present, there were not a sufficient number of medical officers to enable them to obtain proper leave, and the whole of the profession was in consequence greatly dissatisfied. He was sorry that his honourable friend the member for Galway (Dr. Ward) was not present, because he knew that he was anxious to bring the question forward. In the absence of his honourable friend, he (Major Nolan) had ventured to introduce the question, and he would only add that, in regard to the medical officers themselves, they were all of them unanimous upon the subject. He wished to ask what steps the Government intended to take in the matter.—Colonel STANLEY said the House was already aware that his noble friend and predecessor had already referred to a small committee the very important case of the medical officers of the army, and had issued general instructions to that committee to confer with all the large medical centres, with eminent physicians, and the principal medical councils, so as to ascertain really what, in the eyes of the profession, were the practical difficulties in the way of obtaining a sufficient

supply of medical officers for the army. Of course, they all had a certain bias in the matter, and however carefully they might endeavour to weigh the question, they would have a prejudicial feeling either one way or the other. It must be borne in mind that the present system was adopted after very careful consideration. It was adopted mainly in consequence of the action taken by a number of the members of the profession in the view of what they regarded as their grievances. His predecessor in the office of Secretary for War, after weighing fully the representations of the profession and considering how their grievances could best be met, came to the conclusion that they were only to be met by the rearrangement of the medical service on a basis very distinct from that which they had hitherto obtained. Whatever merits might attach to the regimental medical service, Lord Cranbrook considered that it was not absolutely perfect with regard to the position of the officers in the regiment. All these things had to be considered carefully, and to be carefully weighed as to how they would press upon particular cases. But they would never be able to meet the individual grievances of everybody in a department of this sort. On the other hand, if it were possible to place these gentlemen on a satisfactory footing—if they found that the complaints were such that they could be fairly met—he should not scruple to come down to the House and venture to suggest a solution to the problem. At the present moment, however, he was speaking in the dark.—The right honourable gentleman continued: The hospital system, not only in military and naval but in civil life, is altering from day to day, and I am not at all prepared to admit that it is in the naval and military services alone that you find medical men who are dissatisfied with their respective positions. So far as the actual shortness of numbers goes, I may say that that is a difficulty we experience in common with all other countries. We are taking the best means in our power to meet the deficiencies when they occur. We are considering the views brought before us, and I can only say this, that no one has a more sincere desire to meet the medical profession than I have. I only hope that I shall receive such advice and assistance in the matter of evidence and otherwise as will enable me to put my hand on the defects that exist; but at the present time, I really do not feel justified without this evidence in prejudging the question to any extent. I am anxious to give it most careful consideration.—Lord ELCHO: Before the Committee passes this vote, there is one point to which I should like to draw the attention of the Secretary of State—a matter affecting the health of the troops in India. An important correspondence has been going on between His Royal Highness the Field-Marshal Commander-in-Chief and a field officer, with reference to the hour at which the soldiers should have their dinners in India. The field officer to whom I refer, who has had some experience in one of the most unhealthy parts of India, has found that through postponing the dinner-hour to three or four o'clock, his regiment has not suffered from those complaints that troops are usually subjected to in India. I should like to ask the Secretary of State whether his attention has been called to the correspondence in question.—Colonel ARBUTHNOT: May I ask whether this Committee that is sitting is likely shortly to complete its report?—Colonel STANLEY: Yes.—Colonel ARBUTHNOT: And whether it will be possible for us to see it, or whether it will be a private departmental report?—Colonel STANLEY: I cannot answer the last question, because it will depend on the form, not the substance, of the answers that will be received by the Committee from the medical profession. As to the report, I believe it will be complete shortly. The form in which eminent medical men in civil life may give their evidence may be of a confidential character. If it be not, I shall be happy to make the report public.—The vote was then agreed to.

Medical Act, 1858, Amendment (No. 2) Bill.—Mr. A. MILLS moved the second reading of this Bill.—Mr. W. H. JAMES thought that some explanation should be given of the objects of the Bill, and that it should not be read a second time without some statement.—Mr. A. MILLS said the Bill was almost identical with one which was introduced on a previous occasion (Lord Ripon's Bill of 1870). Its object was, among other things, to provide for a conjoint scheme of examination which would provide a uniform system, and also provide that there should be a direct representation of the medical profession in the medical councils and boards. The Bill also dealt with various medical and surgical qualifications. There were further provisions with regard to Colonial registration, etc. The measure was identical with the Bill introduced by the Government, with the exception of the provision for the direct representation of the profession on the Medical Council.—Sir CHARLES DILKE said he did not think the House ought to go on with a Bill of that kind at such an hour as that (half-past one). They understood they would have a very large and important measure of the Government on that subject, which they had already seen, because it had been printed in another place. It was a very intricate

and important matter, and dealt with a subject on which the Government had expressed their intention of legislating. Until they had the Bill before them, so that they could compare it with the Government Bill, he did not think they should go on with it, and therefore he would move the adjournment of the debate.—Mr. A. MILLS said he had no objection, and the second reading of the Bill was therefore adjourned.

Thursday, June 20th.

Army Medical Service.—Mr. MITCHELL HENRY: I beg to ask the Secretary of State for War whether the new warrant respecting the medical service of the army will include the first hatch of those gentlemen who entered the medical service under the ten years' system; and if not, whether he will take their case into consideration.—Colonel STANLEY: I have read the question of the honourable gentleman so far as concerns the existence of any new warrant; and what I have to say is this. There is a Committee now sitting to inquire into the position of medical officers of the army, and until that Committee has reported, I am not in a position to say what can be done in the case of those or other officers concerned. There is no warrant in contemplation at this moment.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

KING'S NORTON.—Mr. Hollingshead estimates the birth-rate at 36.3 and the death-rate 15.06 per 1,000 in 1877, against a birth-rate of 43.3 and a death-rate of 20.15 per 1,000 in 1876. The zymotic death-rate has been increased partly by seven deaths from typhoid fever, which were caused by the distribution of polluted milk in two villages; so that it was 3.07 per 1,000, against 2.23 in 1876. The death-rate of infants under one year was 10.4 per 100 births. There were five deaths from diphtheria, against one in 1876; but no special cause is pointed out, although the connection between deaths from zymotic diseases and imperfect drainage is especially mentioned. The water-supply of the district is chiefly derived from wells placed near to the houses and badly constructed, and the drainage of several of the villages is described as being very unsatisfactory.

DERBY.—This is the first annual report that has been presented to the Council by Mr. Iliffe, who estimates the population at 53,841, and states the registered births to have been 2,221 and the deaths 1,131, giving a birth-rate of 41.2 and a death-rate of 21.0 per 1,000 inhabitants. The deaths of children under one year were at the rate of 24 per cent. of the total deaths and 12.2 per cent. of the births. The deaths per 1,000 population from seven principal zymotic diseases were 2.4, from pulmonary diseases (other than phthisis) 3.6, from tubercular diseases 3.5, and from wasting and convulsive diseases of children 3.6, which latter is rather high. There were nineteen deaths from typhoid fever, which are less than usual, and were nearly all caused, in Mr. Iliffe's opinion, by imperfect sanitation, such as open cesspools, middens, etc., in close proximity to dwellings and drinking-wells; by bad connections with the sewers, allowing the entrance of sewer-gas; and other objectionable arrangements.

GREENOCK.—Dr. Wallace reports that the death-rate for April was 23.4 per 1,000 population, which is in excess of that for March. Diseases of the respiratory organs were unusually prevalent and fatal, owing to the cold and variable weather then prevalent. Croup and diphtheria caused five deaths, without any information being given as to the drainage of the houses; but there was no death from small-pox, typhoid, or measles. Dr. Wallace also states that 80 per cent. of the cases of infectious diseases were reported to him by the householders, which is very satisfactory.

SCARBOROUGH.—The meteorological table shows that the mean temperature at this seaside place was in defect half a degree for the whole year, and as much as 3.9 degrees in May and 2.3 in August, whilst it was 2.2 degrees above the mean in November. The rainfall amounted to 31.0 inches. There were 849 births and 469 deaths registered during the year, 54 of which occurred from zymotic diseases. The death-rate including visitors was 19.67, and excluding visitors 18.95, per 1,000 population.

MEDICAL NEWS.

MEDICAL VACANCIES.

THE following vacancies are announced:—

- BIRMINGHAM GENERAL HOSPITAL**—Assistant-Physician. Salary, £100 per annum. Applications to be made on or before the 29th instant.
- BRIGHTON HOSPITAL FOR SICK CHILDREN**—House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing.
- CLOGHER UNION**—Medical Officer for Ballygawley Dispensary District. Salary, £100 a year, with £15 as Sanitary Officer, and the usual Registration and Vaccination Fees. Applications to the 1st proximo.
- COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY**—House-Surgeon. Salary, £125 per annum, with lodging.
- DROGHEDA UNION**—Medical Officer for St. Peter's East Ward Dispensary District. Salary, £110 per annum as Medical Officer, £20 as Sanitary Officer, with Registration and Vaccination Fees. Personal attendance of candidates necessary on the day of election: viz., the 29th instant.
- EAST RIDING LUNATIC ASYLUM**—Medical Superintendent. Salary, £550 per annum, with furnished house, coals, and gas. Applications to be made on or before the 28th instant.
- GREAT NORTHERN HOSPITAL**—Surgeon to the Out-Patients' Department. Applications to be made on or before July 2nd.
- HOSPITAL FOR SICK CHILDREN, MANCHESTER**—Junior Resident Medical Officer. Salary, £80 per annum, with board and residence. Applications to be made on or before the 25th instant.
- HULL GENERAL INFIRMARY**—Assistant House-Surgeon. Salary, £50 per annum, with board and lodging. Applications on or before July 8th.
- KENMARE UNION**—Medical Officer to Kenmare Dispensary District. Salary, £100 a year, with £25 as Sanitary Officer, and the usual Registration and Vaccination Fees. Applications on or before the 26th instant.
- KENT AND CANTERBURY HOSPITAL**—Physician. Applications to be made on or before the 28th instant.
- LONDON FEVER HOSPITAL**—Resident Medical Officer. Salary, £200 per annum, with residence, coals, gas, and attendance.
- MAGHERAFELT UNION**—Medical Officer for Monymore Dispensary District. Salary, £115 a year, with £15 as Sanitary Officer, and Registration and Vaccination Fees. Election will take place on the 26th instant.
- MALE LOCK HOSPITAL**, Dean Street, Soho—House-Surgeon. Salary, £5 per annum, with board and lodging. Applications on or before July 2nd.
- MANCHESTER ROYAL INFIRMARY, DISPENSARY, and LUNATIC HOSPITAL**—Ophthalmic Surgeon. Applications to be made on or before the 29th instant.
- MIDDLESEX HOSPITAL**—Assistant-Physician. Applications to be made on or before July 2nd.
- NEWCASTLE-UPON-TYNE BOROUGH LUNATIC ASYLUM**—Assistant Medical Officer. Salary, £100 per annum, with board and lodging. Applications on or before July 23rd.
- OWENS COLLEGE**, Manchester—Junior Demonstrator in Anatomy. Salary, £100 per annum. Applications on or before July 15th.
- RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY AND SEAMEN'S INFIRMARY**—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, gas, firing, and attendance. Applications to be made on or before July 1st.
- SALFORD AND PENDLETON ROYAL HOSPITAL**—District Surgeon. Salary, £80 per annum, with board and lodging. Applications on or before July 2nd.
- ST. MARYLEBONE GENERAL DISPENSARY**—Honorary Physician. Applications to be made on or before July 1st.
- SEAMEN'S HOSPITAL, GREENWICH**—House-Physician. Salary, £75 per annum; and House-Surgeon, salary, £50 per annum, with board and lodging in each case. Applications to be made on or before the 27th instant.
- SOMERSET COUNTY LUNATIC ASYLUM**—Assistant Medical Officer. Salary, £120 per annum, with board, residence, and washing.
- SOUTH DEVON AND EAST CORNWALL HOSPITAL**—House-Surgeon. Salary, £80 per annum, with board. Applications to be made on or before July 8th.
- WEST BROMWICH DISTRICT HOSPITAL**—House-Surgeon. Salary, £100 per annum, with board and residence. Applications on or before July 1st.
- WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL**—House-Physician. Salary, £100 per annum, with board, washing, and apartments.—House-Surgeon. Salary, £100 per annum, with board, washing, and apartments.—Honorary Physician. Applications to be made on or before the 24th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- AMPHLETT**, Edward, M.A., M.B., appointed Assistant-Surgeon to the Central London Ophthalmic Hospital.
- CANTON**, G. Anderson, M.R.C.S.E., appointed Honorary Dental Surgeon to the Royal Isle of Wight Infirmary, Ryde.
- *CHURTON**, T., M.D., appointed Honorary Physician to the Leeds Fever Hospital, *vice* C. Chadwick, M.D., D.C.L., F.R.C.P., resigned.
- EDGE**, James J., L.R.C.S.E., appointed Resident Medical Officer to St. Mary's Hospital, Manchester; *vice* F. H. Folkes, L.R.C.P.Ed., resigned.
- JOHNSTONE**, J. Carlyle, M.B., C.M., appointed Assistant Medical Officer to the Fife and Kinross District Lunatic Asylum.
- LEAHY**, Albert W. D., L.S.A., appointed Resident Surgical Officer to Charing Cross Hospital.
- LE QUESNE**, Edwin, L.R.C.P., appointed Resident Medical Officer to the Jersey General Dispensary, *vice* Henry Dugan, M.R.C.S.Eng., resigned.

POPE, James A., M.B., appointed Surgeon to the Dublin Throat and Ear Hospital, vice Kendal Franks, M.D., resigned, on appointment as Surgeon to the Adelaide Hospital.

RY, Charles S., M.D., appointed Assistant at the Physiological Institute of the University of Strassburg.

WICKERS, Henry Adolphus, M.R.C.S. Eng., reappointed Resident Medical Officer to Charing Cross Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

POWELL-ADCOCK.—On the 17th instant, at All Souls, Langham Place, London, Lionel Lewis Powell, M.R.C.S., L.R.C.P., Melton Mowbray, to Jessie Kate, only daughter of W. Adcock, Esq., of North Lodge, Melton Mowbray.—No cards.

TESTIMONIAL TO DR. STANISTREET.—Last week, a most gratifying address, signed by Lord Talbot de Malahide and some of the most influential inhabitants of Malahide and its neighbourhood, together with a purse of sovereigns, was presented to Dr. Stanistreet, in recognition of his unwearied attention to his duties as Medical Officer of the district for a period of nearly twenty years.

ST. THOMAS'S HOSPITAL.—The annual distribution of prizes to the students of this Hospital took place on the 7th instant, before a large assemblage. The prizes were presented by Mr. Le Gros Clark, F.R.S., Consulting Surgeon to the Hospital; and Mr. Alderman Stone, the Treasurer, presided, supported by several of the Governors, the President of the Royal College of Surgeons, the Master of the Apothecaries' Company, etc. After the presentation, the Dean (Dr. Ord) referred to the progress of the School, not only in numbers, but also in the spirit of inquiry and original investigation amongst the students. The Chairman congratulated his colleagues on the progress of the School, which he could confirm from his experience, and considered that only one requirement remained unfulfilled to render the School complete—viz., residential accommodation for the students, which he hoped would some day be accomplished. A vote of thanks to the Treasurer and to Mr. Le Gros Clark was proposed by the Dean and carried unanimously, and the proceedings then terminated.

COTTAGE HOSPITAL AT KEITH.—A bazaar was held at Keith, Banffshire, on June 11th and 12th, for the purpose of supplementing the funds already subscribed to erect a cottage hospital there. Drs. Struthers and Stephenson of Aberdeen delivered admirable opening addresses, which were attentively listened to by large audiences. The sum of £950 was realised, which, with former subscriptions, brings the amount available for building and endowment to upwards of £2,000.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following are the names of the eligible Fellows who are candidates for seats in the Council of this College at the ensuing election on Thursday, the 4th of July next, at 2 o'clock P.M. 1. W. J. Erasmus Wilson, F.R.S., Henrietta Street; 2. Henry Lee, Savile Row; 3. Barnard Wight Holt, Savile Row (retiring from the Council in rotation); 4. John Gay, Finsbury Place South, nominated by John Wiblin, Southampton; Thomas Green, Bristol; James F. West, Birmingham; Jonathan Hutchinson, Cavendish Square; Henry Smith, Wimpole Street; William Adams, Henrietta Street. 5. Joseph Lister, F.R.S., Park Crescent, nominated by William Cadge, Norwich; Jonathan Hutchinson, Cavendish Square; William Mac Cormac, Harley Street; T. W. Nutt, Stratford Place; Thomas Smith, Stratford Place; M. Berkeley Hill, Wimpole Street. 6. Thomas Bryant, Upper Brook Street, nominated by Edward Cock, Dean Street; George Lawson, Harley Street; W. D. Hasland, York; Thomas Longmore, Netley; Thomas Smith, Stratford Place; Joseph Fayrer, Granville Place. 7. Henry Thompson (Kt.), Wimpole Street, nominated by Thomas Bryant, Upper Brook Street; Christopher Heath, Cavendish Square; William Cadge, Norwich; George W. Callender, Queen Anne Street; William Mac Cormac, Harley Street; T. Pringle Teale, Leeds. 8. John Wood, F.R.S., Wimpole Street, nominated by William Cadge, Norwich; T. Pringle Teale, Leeds; Jonathan Hutchinson, Cavendish Square; Arthur E. Durham, Brook Street; Christopher Heath, Cavendish Square; George W. Callender, Queen Anne Street. 9. Henry Power, Great Cumberland Place, nominated by Cesar H. Hawkins, Grosvenor Street; Thomas Smith, Stratford Place; Thomas Symson, Lincoln; John Wood, Wimpole Street; Christopher Heath, Cavendish Square; Arthur E. Durham, Brook Street. 10. Edward Lund, Manchester, nominated by Edward Cock, Dean Street; Alfred Willelt, Wimpole Street; John Wiblin, Southampton; T. H. Bartleet, Birmingham; Reginald Harrison, Liverpool; Arthur E. Durham, Brook Street. The Fellows will dine together at the Albion Tavern the same evening, when Mr. F. Le G. Clark, F.R.S., will take the chair.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. Frank Crisp, "On the Influence of Diffraction in Microscopic Vision".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

TUPELO-TENTS.—In the notice of tupelo-tents in the *JOURNAL* of June 8th (page 823) we accidentally omitted to state that they were introduced into this country by Messrs. Salt of Birmingham.

BRITISH PHYSICIANS ABROAD.

SIR,—Can you or some of your readers tell me under what restrictions and regulations an English medical man can practise in France, and in Switzerland?—I am, etc., R. R. S.

*. In France, he must either obtain special permission of the Minister, which was formerly accorded readily to any suitably qualified physician, but is now rigidly withheld, or he must pass the examinations of the Faculty. In Switzerland, we are not sure how the matter stands, but we believe that a similar rule prevails.

S. J. (Devonport).—Taking them in seniority, the following are the members of the Council of the Royal College of Surgeons residing in the country, viz.: Mr. Hancock, Andover, Hants; Mr. Le Gros Clark, St. Leonard's-on-Sea; Dr. G. M. Humphry, Cambridge; Mr. Baker, Birmingham; and Mr. Wheelhouse, Leeds; to which list may, it is hoped, be added the respected name of Mr. Edward Lund, Manchester, the President of the Surgical Section of the British Medical Association at the last most successful meeting in that town. He is a Fellow of the College by examination.

MUSCÆ VOLITANTES.

SIR,—Your correspondent Mr. Strong, in his letter which appears in the *JOURNAL* of June 15th, seems to imply that all persons perceiving muscæ in their own eyes must necessarily be jaundiced. I should like to ask him how he would account for their presence in my case, when I tell him that I have been a teetotaler for the last ten years, during which time I think I may safely say that I have abstained from all the articles of food which he mentions, or at least most of them, yet I can discover no symptoms of jaundice in my system; and the muscæ, from which I have suffered all my life, have remained obstinately by me.

As regards a theory of my own, to which I drew attention in a former letter, and which, I think, is now pretty generally accepted by ophthalmists—viz., that the muscæ proper are simply blood-corpuscles, how would Mr. Strong account for their presence in the "aqueous humour"? Is it due to the bursting of a minute capillary through "over-distension"?—I am, sir, your obedient servant,

F. R. GREENWOOD, M.R.C.S.

St. Bartholomew's Hospital, June 17th, 1878.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to **MR. FOWKE**, not later than *Thursday, Twelve o'clock*.

DR. PIERCE, THE DENBIGHSHIRE CORONER, AND THE LATE INQUEST AT RUTHIN.

SIR,—Having read in a recent number of your *JOURNAL* a summary of the proceedings at the above inquest, with your unfavourable comments upon the conduct of the coroner—based, doubtless, upon the one-sided reports supplied to you—I beg leave to place before your readers a few facts and observations, which may set in a more favourable light the reputation of a gentleman who has been most unjustly assailed. After having fully investigated the case, and spoken to several gentlemen who were present during the inquiry, I have come to the conclusion that the coroner's conduct was not simply free from blame, but was really beyond all praise. He not only elicited the true facts of the case, which is the main object of an inquest, but he fully maintained the dignity of his court by his intelligence, impartiality, and firmness. The "scenes" which occurred were the result of something approaching to a conspiracy to defeat the ends of justice. On the one hand, there seemed to be a desire to conceal a dereliction of duty on the part of certain officials; and, on the other, a determination to punish a harmless creature who was not responsible for her acts. The coroner had to conduct his inquiry impartially in the midst of these adverse interests—hence the unseemly disturbance.

The facts of the case were these. A half-idiot woman had the misfortune to bear an illegitimate child, and, while nursing it, was taken with her baby to a house where two bedridden women were the only inmates. While in that house, the child was neglected, and, after a lapse of time, died through the want of nourishment and proper nursing.

Mr. Henry Davies, who was prominent among the disturbers of the court, had volunteered his services as a witness without being summoned in the usual way by the police or the coroner. He had visited the house as nuisance-inspector: knew that the child was being neglected, and dying of want and proper treatment, and that there was no one to look after it but an imbecile woman. Mr. Humphrey Roberts, clerk to the guardians, was also present, and took upon himself to interrupt the course of the inquiry. He wished to make a statement. The coroner replied that he could not permit him to do that, but that he might be examined upon oath, and might ask any questions of the witnesses which he thought fit. Mr. Roberts complained, in an excited manner, that the coroner had allowed the inquiry to take place without giving notice of it either to him, as clerk, or to the Board of Guardians; and that he had, in his opening address, spoken against the guardians, which he (Mr. Roberts) thought was wrong, and very unfair. The coroner, in a kind and mild way, requested Mr. Roberts not to go any further, or he would have to be committed for contempt of court. It was not his (the coroner's) duty to give him or any one else notice of the inquisition. He also reminded him that he, as clerk to the guardians, and the relieving officer, had been among the first to be informed of the case, and he must, too, have known that the coroner had been told by the police of the death of the child, and that an inquest would be held. The court was one of inquiry, and he (the coroner) would be sorry to accuse any one. He had told the jurors while the relieving officer was being examined that the guardians, and especially the relieving officers, had rules from which they could not deviate. He had certainly drawn the attention of the jury to the fact that it was their duty to try to find out the cause of the great delay there had been from the time when the case had been first reported, to the time when the deceased had been taken to the workhouse. The relieving officer's attention was first drawn to the case by police-constable Hughes on February 12th, and on the 13th it was reported to him (Mr. H. Roberts). On March 1st, the medical officer (Dr. Jones) received an order to attend the deceased, whom he saw the same day. Dr. Jones entered the case in his report-book, and placed it before the guardians, and recommended that the deceased should be taken to the workhouse; but this was not carried out until the 5th April, almost seven weeks from the time the case was first noticed, and on the 7th April the child died.

The other disturber of the peace was a jurymen of the name of Mr. Goodman Jones, who, it appears, had not been summoned by the police, but had put himself on the jury unasked, his appointment being challenged in open court. He again showed an eagerness to criminate the lunatic mother by declaring his intention to bring witnesses to prove the bad conduct of the woman. The coroner very properly told him that it was not right for him, as one of the jury, to interfere and seek for witnesses, for that it was his duty to hear with an unbiassed mind the evidence of witnesses brought in by the police. This jurymen, with others of a like mind, refused to sign the inquisition, drawn out in a legal and formal manner, and expressed thus: "That the said Edward Davies, on the 7th day of April, through the want of the common necessities of life and proper nursing, did die," etc.; and wanted to substitute for it their own simple verdict of "Died from starvation and neglect". The coroner had to explain to them that, although the latter was their verdict, he was responsible for the proper wording of the inquisition, and he pointed out to them how he was obliged to qualify the words they had used in giving their verdict; as, for instance, the word starvation might be applied in the case of a perfectly well fed and well cared for person who had been frozen to death. Some of the jurors at first even objected to those words which are requisite to the completion of all inquisitions—"And so the jurors aforesaid, upon their oath aforesaid," etc.

Looking calmly over the whole of the circumstances, seeing that the coroner had to conduct his inquiry in the midst of conflicting motives and interests, I cannot find anything in this instance to detract from the fair fame to which he attained after the great Abergele inquest, when the press of England and Wales paid the highest tribute to his "coolness, experience, perception, and tactics"; and, if anything, it has enhanced his estimable qualities of "amiability, kindness of heart, and sympathy with the suffering". His address at the opening of the adjourned inquest, when the limits of the inquiry were distinctly defined, his control over the exuberance of witnesses, the insolence of officers, the ignorance of jurymen, and the judicial summing up of the evidence, were characterised with that determination to find out the truth, and to do justice regardless of personal consideration, which have been the leading features of Dr. Pierce's long official career.

The newspaper which has been the chief means of circulating certain reports of the Ruthin inquest has been actuated by an evident animus against Dr. Pierce, which may have had its origin in a recent libel case, from which the doctor came out triumphant, and during the hearing of which the unfortunate publisher received a severe rebuke from the Lord Chief Justice.

In the alleged starvation case now referred to, the coroner's conduct has been completely vindicated by the report of the medical officer, who has since declared the unhappy mother in question to be a lunatic, not fit to be at large, and by the decision of the guardians, who have ordered her to be confined under proper treatment in the union workhouse.

The Abergele inquest was admitted to be one of the most difficult ever held in this country. Dr. Evan Pierce officiated there as coroner; and his medical knowledge, as well as his judicial ability, helped to unravel the complications of that mysterious accident to the satisfaction of all concerned. The jurors on that occasion passed an unanimous vote of thanks to him in the form of an addendum to their verdict, in which they said: "We have known the coroner for the last twenty years, and his ability and integrity are well known; and in the present inquiry his foresight, great forbearance, judgment, and determination have been most clearly shown, and he really deserves the thanks of the public as well as the jury." At the following quarter sessions, held at Wrexham, the chairman proposed a vote of "confidence in the ability and integrity of the coroner" (Dr. Pierce), which was seconded by the Lord-Lieutenant of the county, supported by Sir W. W. Wynn, Bart., and carried unanimously. At first, several parties were dissatisfied at Abergele; but the relatives of the deceased and their professional representatives, which at one time numbered between thirty and forty, admitted at the close of the inquiry that everything had been conducted in the most satisfactory manner.

By this time Dr. Pierce has been thirty years a coroner, and during that period has conducted several important and difficult cases with signal success. He is proverbial for keeping up the dignity of his court, and is commended for wisdom and coolness, but he cannot bear any unwarranted interference with his authority. He has studied well the laws of evidence, and has mastered thoroughly every detail appertaining to the conduct of his court. His depositions and inquisitions are taken in the most accurate form, and he has been complimented by several judges of the superior courts for the correct manner in which these forms are returned by him.

When all the facts are known, it will be seen that the coroner was perfectly justified in threatening to commit for contempt of court certain parties who would not otherwise submit at the Ruthin inquest. Instead of being censured for not keeping up the dignity of the court, and showing proper respect for himself, it is the opinion of those most familiar with the proceedings, and who know the coroner best, that he only erred on the side of leniency towards the disturbers of his court.

Thanking you for an opportunity of defending one who is an honour to the medical profession, and who, as a coroner, has done, in his limited sphere of labour, as much good, proportionately, as Dr. Lankester and Mr. Wakley did in theirs, I am, sir, yours faithfully,

P. MOSTYN WILLIAMS.

Rhyl, June 1878.

SIR,—I shall be obliged if any of your readers can inform me if there be an institution into which can be received a soldier invalided from paralysis.—Yours obediently,

J. C. J.

CHOLECYSTOTOMY.

SIR,—I have had three cases very like that reported by Dr. Sims in his interesting article in your issue of June 8th. In none, however, were the gall-bladders so much distended as in Dr. Sims's case. I removed the contents of the gall-bladder by aspiration on several occasions—in one of them, without any benefit to the patient. I did not operate on the other two. All three died. I was not able to make out the exact hepatic disease present, as I did not dare to look for a *post mortem* examination, for the following reason. Some years ago, the Irish Local Government Board called on me to resign for getting a patient to will me a *post mortem* examination of his body. The result has been, that I have been since placed in doubt as to whether a necropsy would be allowed to me under any circumstances. I often thought that the ductus communis might have been closed in these cases, by some adhesions capable of being broken through if the bladder were opened, or by a gall-stone removable under like circumstances. It is to be regretted that a complete necropsy was not obtained in Dr. Sims's case.—Yours,

Cashel, Ireland, June 10th, 1878.

THOMAS LAFFAN.

ERRATUM.—In the *JOURNAL* of June 8th, page 845, column 1, line 9, for "pathological" read "physiological".

WHO IS A PHYSICIAN?

SIR,—We hear enough of the right, or rather want of right, of gentlemen with the F.R.C.P., M.R.C.P., and L.R.C.P., calling themselves "Doctors"; but, may I ask, if an M.D., who has not also F.R.C.P., M.R.C.P., nor L.R.C.P., has any right to style himself a "Physician"?—I am, yours faithfully,

IN DOUBT.

A MEMBER (Birkenhead).—Honorary degrees conferred without examination are not registrable qualifications at present.

BEDS FOR FEVER HOSPITALS; AND DRY-HEAT DISINFECTORS.

SIR,—In your issue of June 8th are two inquiries from a Medical Officer of Health. Your correspondent asks, What is the best material with which to stuff the beds of a fever hospital, and which is the best dry-heat disinfectant? As both these questions were presented to me for solution a short time since, when I was furnishing the Birkenhead Fever Hospital, I think I am in a position to answer them. At first I tried chaff-beds, but the trouble of frequently destroying the germs and refilling the ticks was inconvenient; and no doubt it would have been difficult to obtain sufficient supplies of chaff all the year round. The result was that I substituted curled hair; and as this is easily cleansed, not very absorbent, and approved by the patients, I have no reason to be dissatisfied with it. The best dry-heat disinfectant is, I believe, a simple iron box, heated by gas-jets from the bottom, and fitted with a thermometer. I had such an one made for me by a boiler-maker in this town, and it answers the purpose for which it was intended admirably well. In length and breadth it is a little larger than an ordinary single bed, and is four feet and a half deep. It opens from the top, the lid being balanced by counter-weights, opening and shutting quite easily; an arrangement by which much space is economised, and the danger and inconvenience of swinging doors is avoided.—I am, sir, yours very sincerely,

FRANCIS VACHER.

Birkenhead, June 12th, 1878.

MR. ROBINSON (Preston).—Duly received; and marked for insertion.

REMOVAL OF THE TONGUE.

SIR,—A member asks what I mean by a blanket pin. In reply, I beg to say that, in purchasing the article at a Graper's shop, I asked to see some very large pins, and I was shown some two-and-a-half inches in length, and otherwise proportioned to an ordinary pin, and was told, or I understood, that they were called blanket-pins. The second question—Why I transixed the tongue with the pin? I answer by saying, that it was to form a fixed boundary to prevent the cord slipping forward. I would have "A Member" note, if he wish to perform the operation as I did, that I transixed the tongue and placed the cord around its base, ready for immediate severance, before using the scissors in detaching the tongue from the floor of the mouth. The placed cord was not in my way at all in using the scissors; and its position, ready for immediate use, is obvious.—Yours faithfully,

June 1878.

W. FEARNLEY.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR,—Epsom College election for 1878 over again. Yes, it is over, and after the old fashion; and with what results? It exhibits, firstly, more and more the indigence and penury of our hard-worked profession by the long list of candidates; and, secondly, more than ever the unjust, imperfect, and unreasonable carrying out of charity voting elections. If any one will take the trouble to analyse this list (even though they know no more than I do, which is nothing, personally, of the candidates), to what conclusion can he come but that the present system of voting is altogether wrong? Here is a list of thirty-nine candidates: eleven are elected—viz., one, first application; three, second; four, third; one, fourth; and two, fifth. The one at the head of the poll has polled between 2000 and 3000 more votes than two others who have stood five elections (though, truly, they are returned with him). But what has become of a third, who has now unsuccessfully stood five elections, being so short of advocates that in the five elections he managed to poll (each year's election being carried accumulatively) 2951 against the head or first applicant, and the only child of his father, or mother if you will—viz., 5319? Now, who can doubt the hardship upon these remaining applicants, especially those who have stood four, five, and even six elections? Each election, at the lowest average computation, must cost from £20 to £30. Hard, indeed, it must be upon the poor widow: 8000 stamps upon as many pitiful pleading letters will amount to £33.

But, alas! what more do we gather from this last election? Why, palpably that this top man is fortunate in having overwhelmingly the greatest number of friends; showing, in support of my oft-repeated communications in JOURNALS on the same subject, that it is not, it cannot be, the really truly indigent candidate that is returned, but those who, happily, have the longest list of friends; proving that the charity is at first eked out to these many friends, by which they are at once, without cost of a penny, released from the future care and education of their *protégé*; and probably a very large proportion of these supporters are well-to-do, seeing that they are, or should be, life or annual governors; and therefore it is I for ever will hold that these "well-to-do" folk should make way for the truly indigent candidate, who in his second canvass shall only poll 207. And in the obverse, if they really wish to be charitable, let these 8000 and odd voters give 2s. 6d. per vote to their *protégé* (call it the Archer fund if they will), by which they will provide in interest £40 or £50 *per annum*, sufficient to educate him at this first-class school, and at the end start him in life with the principal, or £1000 worth of half-crowns. This I should call charity in the right direction. As, however, I have intimated, I have written and said so much upon this matter, I can add no more: enough to say, I did not record one single vote at this last election, though having one hundred and fifty votes of my own; neither do I propose to do so till the present system of election be remodelled and put upon a sounder basis.

I still hold to my original suggestion, that a Committee in Council be appointed, and that they, and they only, be the parties to make out, by careful inquiry, the really most indigent and pitiable cases brought before them, and that no poor widow or friends shall be made to stand four, five, and even six elections before success. Neither should a candidate be kept in annual suspense, while he might be acquiring the benefit of education, instead of allowing new candidates to step in over him.

I beg you, sir, to pardon me this long communication. Let it be remembered that after this last election there are still left two "third applications", one "fourth", and one "fifth" for another contest, if the means be forthcoming; the remaining twenty-four as "first and second applications", the lowest on the poll being a second with 207 votes.—I have the honour to be, sir, your most obedient servant, East Rudham, June 10th, 1878. FRED. MANDY.

We are much obliged to Dr. Dickson (Constantinople) for kindly drawing our attention to the interesting pamphlet which he forwards, of which an early notice shall appear.

HIGH TEMPERATURE AFTER PARTURITION. WARBURG'S TINCTURE.

SIR,—If any person said this was not an age of progress in regard to medical science and the treatment of disease, we should be inclined to look upon such individual with a feeling of pity, and respond that rational therapeutics had not enlightened his mind, or set his mental faculties into good working order. The case recorded by Dr. Walker of Golcar, Huddersfield, on page 822 of the JOURNAL of to-day's date is one calling for some comment. When a patient in imminent danger recovers, we feel gratified; but I am inclined to believe that upon many occasions we allow our feelings to be carried to an extraordinary length, and extol some agent which was employed in the cure of disease far above its merits or intrinsic value. I look upon Warburg's tincture in the above light, and think there is no reason for us to extol to the stars, and even beyond their immeasurable limits, any concoction of nearly a hundred ingredients, when a dose or two of quinine, the real "Warburg" ingredient, would have the same effect; and we should not enshroud medical men and patients' friends in some false mystery, and apply to Warburg's tincture a power which some other simple remedies are well known to possess. My object is to place before your readers something like a bird's-eye view of the composition of the Warburg tincture, and leave my fellow-members to form their own conclusions. Many—especially the junior members of the profession—have never heard of some of the articles which enter into the composition of Warburg's tincture. I can only say it is composed of diverse, divers, and adverse things, and is like the American quack doctor's black bottle, which contained a little of all medicines dispensed, and which was used as a *derrière ressource* in difficult, obscure, and complicated cases. Such, then, is the celebrated "Warburg"; and I hope, for the honour and glory of the medical profession, we are not going to dabble in the hundred and one nostrums of our great-grandfathers, and renake electuaries of fifty or sixty ingredients, which experience and common sense tell us are useless.

Now, Dr. Walker is, I think, astray in saying Dr. Broadbent published the formula for Warburg's tincture first. I use the word *first*, because the sentence leads one to infer that it was Dr. Broadbent. It was Dr. (Professor) Maclean of Netley to whom Warburg gave the formula, and Dr. Maclean published it in the *Lancet* and *Medical Times* of November 13th, 1875, in conjunction with a long letter. I do not wish to disparage Warburg's tincture, but here is the formula.

℞ Aloes (Socotr.) libram; rad. rhei (East India), sem. angelicæ, confect. Damocratis, ana uncias quatuor; rad. helenis (s. enule), croci sativi, sem. feniculi, cret. præparat., ana uncias duas; rad. gentiane, rad. zedoaricæ, pip. cubeb., myrrh. elect., camphoræ, boleti laricis, ana unciam.

The above ingredients to be digested with five hundred ounces of proof spirit in a water-bath for twelve hours; then expressed, and ten ounces of disulphate of

quinine added; the mixture to be replaced in the water-bath till all the quinine is dissolved. The liquor, when cool, is to be filtered, and is then fit for use. Two drachms of such tincture would represent about three grains of quinine.

But now, what is the composition of confect. Damocratis? According to one formula, forty-five ingredients enter into it, and the other gives forty-nine. A list of a few will show that it is composed of a little of everything, if I may use the expression: myrrh, saffron, agaric, ginger, cinnamon, spikenard, male frankincense, mithridate, mustard seed, opobalsam, coftus or zedoary, galbanum, castor, poley mountain, opium, red roses, asarum root, phu, bellies of skinks, honey, canary wine, dittany of Crete, Macedonian parsley seed, and a host of other things enter into it. Zedoary is the root of an Indian plant, which is somewhat aromatic and bitter, and angelica is a plant possessing aromatic properties, but a hundred years ago the seeds were thought to be inferior to the root. And such is the mysterious tincture—one which, I am certain, not a pharmacist in Europe would take the trouble to compound according to the old formula given for the preparation of some of its constituents. Many of the old articles of *materia medica* are not to be obtained.

In conclusion, I can only look upon the tincture as valuable simply on account of the quinine which it contains—about one grain in forty minims.—I am, etc., Northallerton, June 8th, 1878. HENRY BROWN.

SIR,—Allow me to rectify an error I inadvertently fell into in my recent communication. I find that Dr. Broadbent is quoting Professor Maclean in the article written by him in the *Practitioner* for February 1877; therefore, Dr. Maclean was the first to publish the formula for Warburg's tincture, Warburg himself having communicated it to Dr. Maclean. As I have received numerous inquiries by letter as to what Warburg's tincture is, I may add that full information is to be found in the article on Malarial Fever in Dr. Russell Reynolds's *System of Medicine*, or in the *Practitioner* for February 1877.—I am, etc., Golcar, Huddersfield, June 1878. J. BURNLEY WALKER, M.D.

DR. J. W. WATKINS (Newton-le-Willows).—Much as we regret it, we fear that the precedent desired would lead to inconvenient results.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courant; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fifehire Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. James Russell, Birmingham; Mr. T. Spencer Wells, London; Mr. F. A. Southam, Manchester; Dr. R. B. Low, Helmsley; Dr. J. G. McKendrick, Glasgow; Dr. Saundby, Birmingham; Dr. D. S. Bradley, Chesterfield; Dr. Coats, Glasgow; Dr. Adams, Ashburton; Mr. W. Whitehead, Manchester; Mr. H. Robinson, Preston; Dr. Laffan, Cashel; Dr. Bell, Bradford; E. H. R.; Dr. J. Lewis, Birmingham; Dr. Sheen, Cardiff; Mr. T. F. Bevan, Birkenhead; Mr. G. Anderson, Canton, Ryde; Mr. W. M. Knipe, Melbourne; Dr. Warner, London; Mr. Lawson Tait, Birmingham; Dr. Waters, Chester; Dr. J. Wybrants, Shepton Mallett; Dr. Wardell, Tunbridge Wells; Dr. J. W. Watkins, Newton-le-Willows; Dr. Marcet, Cannes; Mr. H. Brown, Northallerton; Dr. H. H. Vernon, Southport; Mr. James Startin, London; The Medical Officers and Lecturers of the Charing Cross Hospital; Dr. T. Churton, Leeds; Dr. McCook Weir, Leicester; Dr. G. B. Clark, London; Dr. Fletcher Beach, Clapton; Mr. Ward, Tooting; Mr. Mercier, Salford; Mr. A. Doran, London; Mr. S. Benton, London; Mr. Le Quesne, Reading; Dr. Edmonds, London; Mr. Burdett, Greenwich; Dr. Markham, London; F. T. B.; The Secretary of Apothecaries' Hall; Dr. Fairlie Clarke, Southborough; Mr. C. E. Steele, Liverpool; The Registrar-General of England; Dr. R. Douglas Powell, London; Mr. S. Lodge, Bradford; Mr. Greenwood, London; The Registrar-General of Ireland; Mr. G. Eastes, London; Mr. F. Trimmer, West Dulwich; Dr. C. Harrison, Lincoln; Dr. Edis, London; Mr. T. Turcerelli, Leamington; Mr. R. H. S. Carpenter, Stockwell; Our Dublin Correspondent; Mr. T. Jones, West Bromwich; Our Dublin Correspondent; Mr. A. Watkins, Worcester; Mr. W. E. Clendinnen, Stafford; Mr. J. Charlesworth, Hanley; Dr. Joyce, Staplehurst; Mr. G. Jackson, Plymouth; Mr. J. Hardie, Glasgow; Our Edinburgh Correspondent; Mr. T. Murphy, London; Mr. A. Woods, London; Dr. Malins, Birmingham; Dr. J. Robinson, London; Mr. W. Donovan, Whitwick; Surgeon-Major J. H. Porter, Netley; Dr. C. Dukes, Rugby; Mr. Trimmer, Merton; Dr. Startin, London; Mr. F. W. Bussy, London; Dr. C. McDowell, Carlou; Dr. C. Parsons, Dover; Mr. E. Amplett, London; Dr. E. H. Bennett, Dublin; Mr. G. Brown, London; Dr. G. H. Brandt, Porto; Mr. Talfourd Ely, London; Mr. T. Davidson, Cupar Angus; Dr. P. Best, Louth; Mr. R. Davy, London; The Secretary of the Royal College of Surgeons of Edinburgh; Mr. Ewens, Bristol; Mr. Mac Cormac, London; Mr. Ingpen, Putney; Dr. Leech, Manchester; Dr. Underhill, Edinburgh; Dr. Joseph Rogers, London; etc.

BOOKS, ETC., RECEIVED.

Du Décollement Hyaloïdien, Description Anatomique, Analyse et Iconographie de Vingt-deux Bulbes Enucleés; recueillis dans le service de la Clinique Ophthalmologique de M. le Professeur Gayet. Par le Dr. Eugène Auquier, ancien Interne des Hôpitaux de Lyon. Avec une Planche Chromo-lithographiée. Paris: J. B. Baillière et Fils. 1878.

THE HARVEIAN ORATION,

DELIVERED BEFORE
THE ROYAL COLLEGE OF PHYSICIANS,
Wednesday, June 26th, 1878.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Jodrell Professor of Physiology in University College; etc.

IN the deed by which Harvey provides for the delivery of the Harveian oration are set down three purposes which the orator was to place before him. One of these was that he should exhort the Fellows of the College to concord; the second, that he should call to mind our benefactors, and stir up others to follow their example; and, finally, that he should exhort the Fellows and Members of the College to study and search out the secrets of nature by way of experiment. As regards the first of these objects, the exhortation to concord, I have, I think, good reason for omitting it to-day—partly because I can offer no better motive to concord than that which Harvey himself offered, namely, that *concordiâ res parvæ crescunt, discordiâ magnæ dilabuntur*: but chiefly because we have so recently fulfilled in spirit another of Harvey's directions by partaking ourselves, and by inviting others like-minded, in reverence for Harvey's memory, to partake with us of a "feast of love and affection".

As regards our benefactors, I am required to mention them by name. I believe, however, that I shall sufficiently fulfil Harvey's wish if I name one benefactor who has recently aided us by the gift of a sum of money for the investigation of the nature and cure of Rabies and Hydrophobia. I do so not merely in expression of the gratitude which we all feel to Mr. Bennett-Stanford for his liberality, but in the hope that, to use Harvey's words, others may be led to imitate his good example. The investigation of so difficult a question must necessarily require the co-operation of many persons over long periods of time, but the object is well worthy of the liberality of enlightened and philanthropic men; for, although the number of sufferers from hydrophobia is small, there is none which is more formidable in its aspect; and, secondly, because there is good and reasonable ground for the expectation that the proposed inquiry, if undertaken in the right way and with sufficient means, will lead to valuable results as regards the prevention, if not the cure, of hydrophobia. If there ever were a disease to which the term "preventable" could be properly applied, it is hydrophobia. That efficient means have not before now been taken to prevent it is, no doubt, mainly attributable to the uncertainties which have existed as to its mode of origin; for in matters of prevention knowledge is power. Another reason why so little has been done may be that the number of cases of hydrophobia has hitherto been too inconsiderable to attract attention; but, now it has prevailed so extensively in Lancashire and the neighbouring counties, as well as in Somersetshire, that its elimination must be regarded as a matter of public interest.

And now let me pass on to the principal purpose of our meeting to-day, namely, that I should, to the best of my ability, exhort the Fellows and Members of the College "TO SEARCH AND STUDY OUT THE SECRETS OF NATURE BY WAY OF EXPERIMENT".

We have heard so lately from the eloquent lips of Mr. Huxley, as well as on former occasions like the present from Harveian orators more capable than myself, in what the merits of Harvey as a discoverer consisted, that I may venture to take for granted that all my hearers are already conversant with his life and work, and am the more willing to do so that there seems no reason to believe that Harvey intended that his own achievements should form any part of the subject of the oration which he instituted. What we have to-day to consider is, not what he did, but how to follow his example. It is as our example, therefore, that I shall speak of him. For he deserves our gratitude, even more than for the discovery itself, for this: that, in his investigation of the circular motion of the blood, he gave his successors a model of the method by which all discoveries in physiology and in pathology have been made since. The essence of that method is expressed by him in the one word—experiment.

In these memorable words of Harvey, Nature is presented to us, not as an arrangement of objects in a museum for our contemplation, but under the figure of a living personality, of whose unceasing activity we and all other creatures are the expressions, and whose will is opposed to our efforts. Nature has secrets which she desires to conceal from

us; her whole proceedings, indeed, are so recondite that the naturalist who contents himself with the mere contemplative study of her external aspects is, unless he wisely abstain from all attempts to interpret what he sees, more likely to fall into mistakes than to arrive at just conclusions—a fact which was expressed by Hippocrates in his often misquoted words *experientia fallax*. The idea which is expressed in the words of the injunction is that of struggle, of striving for the mastery. Nature on her part is at work on all sides of us, and desires to conceal from us her operations. We, on our parts, by virtue of the faculties with which she has herself endowed us, have the power, and along with the power the right and the duty to wring from her her secrets, as it were by force. Unquestionably there never was a more splendid exemplification of this struggle with Nature, than is afforded in the history Harvey has himself given us of the discovery of the circulation.

Actuated by that insatiable curiosity, that lust for knowledge of the unknown, which is the essential characteristic of the naturalist, not being satisfied with what he could learn of the motions of the heart and arteries by contemplation of the external phenomena of the circulation, or with any conjectures which he could draw from his very complete anatomical knowledge of the structure of the heart and blood-vessels, he had the boldness to open the chest of a living animal, to inspect the motions of the living heart, to feel with his own hands how it hardened in contraction and grew soft in diastole; to observe what happened when, by ligaturing the aorta, he prevented it from discharging its contents, or when, by similarly occluding its afferent veins, he deprived it of its supply of blood; his purpose in all these experiments being, not to verify a preconceived inference, but simply to strip nature of her concealments, and to force her, thus exposed to the light of day, to reveal her own secrets in language so plain, that it needed no interpretation, so convincing that, to those who believed the evidence of their senses, it required no enforcement by argument.

And here let me notice that Harvey has been represented by many of his most ardent admirers as much more of a reasoner and much less of an observer than he really was, and that some have been thus led to a mistaken view of his method. The discovery of the circulation may, in a certain sense, be truly described as "one of the most admirable and useful inferences ever given to the world"; but no one who had realised the nature of the moral and physical difficulties which Harvey had to overcome would so characterise it.

As a true interpreter of phenomena which his predecessors had seen but misunderstood, Harvey is worthy of all honour, nor will anyone who has attentively studied his writings, particularly the treatise *De Motu Cordis*, be disposed to underrate his power in this respect. But the essence of his achievement was, that he saw and felt for himself the motions of the heart and arteries, and displayed and demonstrated them to others in such a way that their meaning could not be misunderstood, nor their truth disputed. It was the certainty of the facts and the simplicity of the language they spoke that constituted the greatness of the discovery.

In the present lecture, I propose to illustrate, by reference to the history of some of the investigations which have served as the foundation of so much of our present knowledge in relation to the circular motion of the blood as was concealed from Harvey, the methods by which now, as in Harvey's day, all natural knowledge is acquired, and then to offer practical suggestions for the guidance of those who, being like minded with Harvey, desire to fulfil its injunctions and to follow his example.

The shortness of the time at my disposal compels me to limit myself to one subject; namely, to the researches by which, in the first half of the present century, the Harveian doctrine of the working of the circulatory apparatus was developed. I had intended to give some account of the still more important discoveries of the last thirty years, but have found it impossible. It is satisfactory to reflect that England, which gave birth to the author of the doctrine of the circulation, was also the country of the two men (living at intervals of a century from each other, and the first of them a century after Harvey) who, in great measure, completed it. Stephen Hales, a Doctor of Divinity and a benefited clergyman of the English Church, was an active member of the Royal Society when Sir Isaac Newton was President, a contemporary of Locke, of Cheselden, and of the anatomist Cowper. Hales was a genuine naturalist. His writings afford evidence that he was a firm believer in the religion of which he was the minister; but in matters of science he was a sceptic, accepting nothing short of "the united testimony of many good and credible experiments" as the foundation of knowledge. He was no less distinguished for his physical than for his biological experiments, most of which were undertaken for useful purposes (as, for example, those relating to the distillation of sea-water for ships, and those on the preparation of salt provision); but others, in the conviction that "the obtaining a better insight into

the nature of plants or animals would improve the arts of medicine and agriculture*.

The purpose of Dr. Hales's experiments was to measure the force and velocity of the circulating blood, and to obtain thereby data, as he expresses it, "on which to found just calculations". In planning his experiments, he was guided by as clear a comprehension of the relation between physical laws and vital phenomena as he could have possessed had he lived a century later. Inasmuch, he says, as "the animal fluids move by the same hydraulic and hydrostatic laws as those which prevail outside of the body", they must be investigated by the same methods of mensuration. Hence, if we compare his work with the best researches of the present epoch, the difference is found to consist only in the comparative incompleteness of his appliances; for his experiments on animals, although made by what we should call rough methods, were yet right in principle, were carried out with great care, and were frequently repeated under varied conditions. Hence his results, although they have been vastly amplified, have needed no correction. In this way, Hales acquired a title to the highest commendation that can be bestowed on a naturalist; he made no mistakes of observation; but it was also true that he made few errors of inference; for, while recognising that "from conjecture fresh discoveries take their rise", he was yet content "to imitate children who, for want of better skill and abilities, and of more proper materials, amuse themselves with slight buildings".* In point of fact, he did not extend his inferences so far as he might have done, leaving it, as we shall see, to another to give the full interpretation of his observations.

Dr. Hales had no immediate followers, nor did either of the three great physiologists of the eighteenth century—Haller, Spallanzani, and John Hunter—add materially to the knowledge which Hales gained by experiment as to the motion of the blood and its causes. As regards Hunter, indeed, it must be admitted that the doctrine of the "action of the arteries", to which he was led by his pathological researches, was a step in the wrong direction, though it might be shown that it contained the forecast of a great truth.

The next step was accomplished eighty years after Hales's discoveries had been communicated to the Royal Society, by a man who, though a distinguished Fellow of this College and an eminent physician, was a much greater mathematician and physicist. Dr. Thomas Young, to whose transcendent merits in the more exact department of natural science full justice has been done by his successors in the same lines of inquiry, was as far in advance of the other men of his time in physiology as he was in natural philosophy. That he was so must be attributed principally to his extraordinary intellectual powers—powers which, even in early youth, made him a prodigy of erudition in spite of great disadvantages of education; so that, at the age of eighteen, he had acquired such proficiency in the classical languages that, as Dr. Peacock says, he was already prepared, on questions of Greek criticism, to enter the lists with the most distinguished scholars of his time. That even at this early period his attainments in mathematics and natural philosophy must have been equally remarkable, we have evidence in the facts that he was only twenty when he offered to the Royal Society the paper (on the Mechanism of Accommodation) which procured him the honour of its Fellowship; and that he was only twenty-seven years old when he made the first of that series of investigations relating to the interference of sound and of light which have placed him, to quote from Sir John Herschel, in the "highest rank of scientific immortality". The same year that he became Fellow of the Royal Society, he entered as a student of St. Bartholomew's Hospital. Afterwards he went to Edinburgh, and thence to Göttingen, whence, like Harvey, he returned in due time to graduate in medicine at Cambridge.

In order that we may be in a position to discuss Dr. Young's researches as to the mechanism of the circulation, let me define the limits of the existing knowledge of the subject at the time when that he undertook them. As regards the fundamental facts of the circulation—viz., that every particle of blood which leaves the heart by the aorta comes back to its starting-point—Harvey's knowledge was, I need not say here, as nearly as possible complete, the only gap being that he was unacquainted with the nature of the channels by which the smaller arteries discharge themselves into the veins—a blank soon to be filled up by Malpighi. The gap was a very trifling one indeed; but Harvey deliberately avoided supplying the missing link by conjecture or inference, leaving the question of the channels of communication between arteries and veins entirely open. As regards the cause of the motion of the blood, Harvey's knowledge was also wonderfully complete; but there was one deficiency. There is evidence in his works that he knew much more clearly than many subsequent writers that the force

by which the blood is impelled along the arteries is a muscular one, and that the heart in its systole grasps and squeezes out its contents. All this is perfectly clear; but it is no less certain that he did not know what was the cause of the venous blood-stream. The explanation which he gives for the return of the blood from the periphery to the centre is very much this: the blood spontaneously inclines from the circumference to the centre, just as drops of water spilt upon a table concentrate to the mass of liquid. Consequently, although the progress of the blood "from the capillary veins to the larger trunks is aided by the compression of the muscles", it has an innate tendency of its own towards the heart, which, when it reaches, it becomes attenuated by its increasing heat so as to dilate the right auricle. It would be, I think, a mistake to allow our admiration for his intellectual character to blind us to the fact that in these passages* Harvey yielded to a tendency against which I do not think we have any need to guard ourselves at the present moment—a too great reverence for antiquity. The doctrines of diastole by innate heat or fermentation, and that of the innate tendency of the blood to return from the periphery to the heart, cannot be regarded as expressing inferences which he had himself made. But they are of interest, as proofs that he did not clearly understand what was the real cause of the venous blood-stream.

The proof that the flow of blood throughout the whole vascular system is dependent on one and the same cause as the arterial blood-stream—viz., on the difference of pressure between the arterial and venous ends of the system of tubes which constitutes the vascular apparatus—was really contained in the experiments of Hales; but it required the application of the trained mind of Dr. Young, a mind trained in the image of Newton, to expound and develop it. The principle of Hales, that the animal fluids move by hydrostatic laws, which, *mutatis mutandis*, we now accept in its applicability not only to the phenomena of the circulation, but to every other function of the animal body, was enunciated by Dr. Young in the opening paragraph of his Croonian Lecture,† in the following memorable words: "The mechanical motions, which take place in an animal body, are regulated by the same general laws as the motions of inanimate bodies. Thus the force of gravitation acts precisely in the same manner, and in the same degree, on living as on dead matter; the laws of optics are most accurately observed by all the refractive substances belonging to the eye. . . . As far, therefore, as the functions of animal life depend on the locomotions of the solids or fluids, those functions must be capable of being illustrated by the consideration of the mechanical laws of moving bodies; these laws being fully adequate to the explanation of the connection between the motive powers, which are employed in the system, and the immediate effects, which they are capable of producing, in the solids or fluids of the body; and it is obvious, that the inquiry, in what manner, and in what degree, the circulation of the blood depends on the muscular and elastic powers of the heart and of the arteries, supposing the nature of those powers to be known, must become simply a question belonging to the most refined departments of the theory of hydraulics."

Dr. Young had already communicated to the Royal Society a remarkable series of physical researches as to the motion of liquids in rigid and elastic tubes—researches which still constitute the basis of our knowledge on that subject. The purpose of the Croonian Lecture was to combine the results of his own investigations of the motion of liquids in elastic tubes with the measurements of Hales as to the arterial pressure and the velocity of the blood-stream in living animals; and on this double foundation of physiological and physical experiment to construct a true doctrine of the motion of the blood in the vascular system. In this purpose he succeeded. The most important result of his investigation being to show that everywhere, whether in arteries, capillaries, or veins, the blood moves forward with a velocity which is directly proportional to the difference of pressure, and inversely to the resistance to be overcome; and, secondly, that inasmuch as the pressure in the smallest arteries is less by only a fraction than the pressure in the aorta itself, the force which is still available at the commencement of the capillary circulation is nearly equal to the total force which is engaged in carrying on the circulation. It thus became evident that the difficulty which Harvey had had in understanding how it is that the blood returns from the peripheral parts to the heart (a difficulty which no physiologist, not even Hales, since his time had explained) arose merely from the circumstance that the laws which regulate the motions of liquids in tubular channels had not been investigated, and therefore could not be applied.

With reference to these inquiries of Dr. Young, there are two things worthy of notice; namely: first, that, being content with the data furnished by the measurements of Hales, he made no physiological experi-

* See Harvey's *Works* (Sydenham Society's edition), pp. 70 and 133.

† The Croonian Lecture "On the Functions of the Heart and Arteries", by Thomas Young, M.D. (*Philosophical Transactions*, 1809, pt. i).

* Preface to Hales's *Hæmstatics*, page 6.

ments himself; and secondly, that although his exposition of the theory of the motion of the blood was perfectly clear, and—supposing the data to be correct—absolutely conclusive, it had little or no influence on the teaching of physiology at the time; the general doctrine being that the motion of the blood was not regulated by the same laws as the motions of inanimate liquids, and, in particular, that the blood-stream in the capillary blood-vessels was aided either by what was called the *vis insita* of the blood itself—a mysterious tendency on the part of the blood to move onwards (as Kaltenbrunner supposed)—or to an equally mysterious vital attraction between the walls of the capillaries and their contents, the doctrine first advanced by Bichat. Possibly, if it had not happened that Young was engrossed in the prosecution of those more brilliant investigations which have made his name famous, it might have been otherwise. The reason of this want of influence is to be sought chiefly in the fact that the time for the development of physiology as a science dependent on measurement—that is, as a branch of physics or natural philosophy—had not yet come; for although, as regards the particular case of the circulation, the facts had been observed with sufficient exactitude and completeness to admit of the application to them of theoretical treatment, yet in almost every other direction this was rendered impossible from the absence of physiological data, and the insufficiency of the means which then existed for obtaining them.

It must not, however, be supposed that Young's work was lost, though at the time it appeared so fruitless. Just as his two most important discoveries in optics and acoustics have, during the last thirty years, been developed by Helmholtz, so in like manner his work regarding the motion of the blood has been continued and completed by the veteran physiologist, or rather physiologist and anatomist all in one, whose loss science has had to deplore during the current year.

Ernest Heinrich Weber, who was in many respects a man to be placed side by side with Young, entered on the study of medicine the very year that Young read his famous Croonian lecture. He began his career as a comparative anatomist, and had already achieved so great a reputation as to have become professor in the University of Leipzig, when he undertook those physical experiments relating to wave-motion, by which perhaps he is better known than by his anatomical discoveries. It seems that he was guided thereto partly by accident, for we are told that he was first led to the investigation of wave motion by the observation of the surface-undulations of the mercury which he used for his anatomical injections. But here, as in other instances, it was the character and training of the mind that received it that gave to the suggestion its value. Weber was a mathematician and physicist, and had already worked with Chladni at his well known researches on sound. The *Wellentheorie* appeared in 1825, and was soon followed by a dissertation in Latin on the arterial pulse. In this dissertation he showed, by the same methods which Young had applied to the progressive motion of the blood, namely, by combining physical with physiological experiments, the complete identity of the laws which regulate arterial pulsations with those which govern the propagation of pulsations in elastic tubes. The results of Weber's researches on the physics of the circulation were finally, in 1851, embodied in a treatise in which he established the science of hæmodynamics on the solid basis of exact measurement.

And now we have arrived at the middle of the present century, the threshold of a new epoch, differing from that of Harvey in consisting not of one discovery but of a rapid succession of them, agreeing with it, however, in deriving its importance quite as much from the complete revolution in the methods of investigation which marked it, and in the reconstruction of the science which has resulted from that change, as from the discoveries themselves.

We have already seen that Harvey's method was to strip Nature of her concealments, and thus force her, as it were, to reveal her own secrets. During the next century after Harvey, the same simple method of exploration was followed by Haller and Spallanzani; and in the present century by Magendie, all of whom were distinguished by the same wise scepticism, the same love of objective truth, that enabled Harvey to conquer the spirit of his time, even in his own person. But just as it happens in agriculture, that the rougher methods of tillage, which at first are found to be sufficient to produce abundant crops from the virgin soil, become later unavailing, and have to give place to others more systematic and refined; or, as in warfare, every improvement in the methods of defence necessitates a corresponding improvement in those of attack, so it has been in scientific investigation, and particularly in physiology.

By the time that Magendie wrote his celebrated *Compendium*, almost all that could be arrived at by the rougher modes of observation—the method which consisted in removing the veil from the hidden motions of the organism and exposing them to the scrutiny of the unaided

senses—had been already attained, and it was necessary to have recourse to more elaborate and more systematised methods of attack. But for this a leader was needful,—a generaliser even more than an explorer. Such an one soon presented himself in the person of Johannes Müller, a man of similar power to Young, with this important difference, that he was a consummate anatomist and morphologist, and combined therewith so considerable an acquaintance with the physics and chemistry of his time that he was able to grasp the whole range of physiological knowledge as completely as Young did the few subjects to which he exclusively directed his attention. As a mere investigator, he illuminated many obscure regions, as, for example, those relating to the specific endowments of nerves, and to the mechanism of voice and hearing; but it was not merely as a searcher, in the Harveian sense, that he has the chief claim to consideration. The great service that he rendered to physiology was that by the universality of his knowledge and by his power of separating the true from the false in observation and experience, he was able to bring together all that was known as to the chemical and mechanical processes of the body into a system, and thus to lay the foundation on which his pupils—Helmholtz, Brücke, Ludwig, Du Bois-Reymond, Max Schultze, Virchow—and their followers, during the last thirty years, have reared that newly constructed branch of natural science which we now understand by the word physiology.

The necessity for this reconstruction of physiology as a new science, on a new foundation, with new materials, became evident as soon as physics and chemistry were sufficiently advanced to furnish exact methods for the investigation, not merely of such comparatively simple questions as the mechanism of the circulation, but also of the more complicated ones relating to muscular contraction, to the transmission of molecular changes in nerves, to the chemical process of respiration. Thus, in the case of the last-mentioned function, the moment that it was seen that the actual relations of oxygen and carbonic acid in the tissues were entirely inconsistent with notions founded on previous observations—which though correctly made were made with insufficient methods—it became evident that the whole of the facts must be re-examined, whether actually proved to be incorrect or not, by comparison with standards of absolute certainty. For similar reasons, the experimental results of Magnus on the chemistry of respiration, of Matteucci on animal electricity, of Young on the mechanism of accommodation, and many others, have been compelled to give way to new ones, not because these great men made mistakes, but simply because other men, perhaps not so great as they, equally conscientious and trustworthy, and furnished with better appliances, have gone over the same ground and have obtained data which are not only more complete and comprehensive, but possess, so far as they are based upon measurement, an element of permanency which was wanting in those they have supplanted. Thus the modern physiologist aims at presenting, not his perception of a form or of a motion, but the result of his comparison of that form or motion with an invariable standard; and it is this which mainly constitutes the difference between his method and that of his predecessors. The process of investigation consists now as ever in searching out the secrets of Nature by experiment, but the experiments of modern physiology are much more difficult, require for their performance more previous training, quite as much devotion and self-denial on the part of those who engage in them, more combination of individuals of different capacities for the attainment of one result, and consequently more money and more time.

Nothing could be more interesting, had I the ability or the time to do it, than to trace in broad outline the progress of the great revolution of which I have endeavoured to indicate the nature.

But time warns me that the most important duty of the day still remains unfulfilled; namely, that we should endeavour (partially and incompletely it must necessarily be) to consider how best to follow Harvey's example. In all that I shall say on this subject, I must ask to be understood to address myself to those who are in the enviable position of being the youngest members of the College. For us, if we have not already learnt the lesson conveyed to us in our motto, it is too late to learn it now. But for those who have still the best of their lives before them the choice is open.

If research is to be done at all, it must be begun in the morning of life. One reason of this is the internal condition of intellectual fitness; the other the external one of leisure. Of the first I need say little. It can scarcely be questioned that it is in early maturity that the mind is most capable of the continuous struggle of which, as we have seen, research consists. For those qualities of mind which specially belong to the naturalist—the lust of knowledge, the love of truth, and the joy of successful effort—are apt to lose their power over us as life advances. As a rule, therefore, we should begin to work early, and work while it is day, for the night cometh, when no man can work.

As regards leisure, it is, I believe, the result of general experience, that a man who aims at the high professional position occupied by the Fellows of this College may reckon on ten or twelve years which are, for the most part, at his own disposal. How may these years be used as Harvey would have used them?

Harvey began his active career as a physician in 1609, and probably very shortly afterwards became engaged in lucrative practice. He left Cambridge, where he was educated, in 1597, spending the next six years of his life at Padua, and returning to the university to graduate as Doctor of Medicine in 1603. If, therefore, we reckon his mature life to have commenced from his bachelor's degree at Cambridge, he enjoyed at most eight years of freedom from business. Of these eight years, the first five were spent at Padua; and these, in relation to Harvey's development as a discoverer, must be regarded, with reference to their future influence, as among the most important of his life. For during his residence at Padua he was under the influence of the man whom he calls "foremost among the moderns", and places side by side with Aristotle. As to his mode of student-life in Italy we know nothing; but we may be sure that he worked very earnestly under the guidance of Fabricius, particularly at those anatomical researches relating to the formation of the chick which were afterwards to be the point of departure in his inquiries respecting generation. Had Harvey not gone to Padua, he might have been a favoured courtier, a successful physician, an influential citizen—all, in fact, that he actually became—but not the discoverer of the circular motion of the blood.

If we now compare Harvey's use of his leisure with that which is possible to the modern physician, we shall find contrasts which may suggest useful considerations. And, first of all, it is to be noticed that the conditions of modern professional life in London have deprived these first decades of much of their value; for in London, long before a man becomes occupied with patients, he ceases to be master of his time. I need scarcely say that I do not refer to the social engagements of London life, but to occupations of a more serious and less agreeable character—to the wearisome labour of the out-patient room, to the unattractive duty of systematically teaching some subject in which the teacher has no special interest, or, finally, to the literary labours which most men find it necessary to impose upon themselves—engagements which are all of such a nature as to render impossible that earnest and continuous devotion of time and energy to real study which is the first and preliminary condition of success in investigation.

Another contrast between the conditions under which Harvey lived and worked and those of the present moment relates more particularly to his life at Padua before his medical graduation. It is scarcely possible to imagine intellectual conditions more entirely different than the free converse which Harvey enjoyed with such a man as Fabricius, and the strictly regulated studies of an aspirant to the doctorate of the University of London; and out of the comparison arises the question, Which of the two is preferable? The advantage is not so entirely on the side of the modern method of training as it might at first sight appear; for, although it may be in some respects more useful that a man should be conversant with all branches of medical science than that he should be master of one or two, it is not the less certain that for the purpose which we have to-day in view—that of fitting a man for the searching out the secrets of Nature by experiment—that sort of encyclopædic knowledge which he acquires in order to prepare himself for the examiner is of little or no value.

In order to form a just conclusion on this subject, we cannot do better than follow the principle laid down by Harvey in his introductory essay *On the Manner and Order of acquiring Knowledge*, in which he says that no one can properly become a student of any branch of natural science until he is able to rely on his own observations and not on the observations of others. Now it is evident that this does not apply to the mere disciple in natural knowledge, who, so long as the *status pupillaris* lasts, must rely on the experience and knowledge of others. It begins to apply from the moment that the transition takes place from discipleship to studentship; and what we have to guard against in the interests of science—which I regard as identical with those of real study—is, that this transition, this liberation of the student, should not be too long deferred. Harvey was freed from academical restrictions at the age of twenty, when he went to Padua; Young left Edinburgh for Göttingen at the age of twenty-one. In London, a man graduates as Bachelor of Medicine at soonest at twenty-three. But, unfortunately, he does not yet enjoy that intellectual freedom which is one of the essential conditions for genuine and productive intellectual works. Does any one doubt that the undue prolongation of the bondage of examinations is a serious evil? Is it too much to hope that the University of London, to whom we owe the establishment of the important principle that scientific training is a necessary preparation for the study of medicine, will some day recognise that she

has still higher functions to perform, and that she has it in her power by bestowing her most valued rewards, not on proficients in the examination room, but on students in the Harveian sense; that is to say, on men distinguished for attainments in some branch of medical research, to do a far greater work than she has yet done for the advancement of medicine?

Having thus endeavoured to illustrate by antithesis the external conditions which I regard as essential to the development of a student after Harvey's model, namely, that he should enjoy sufficiently early in life leisure for real study, and perfect freedom in the choice of subjects and methods, allow me to say a word as to what I believe to be one of the best means of using it. Up to a comparatively late period, it was a common practice for men who aspired to the higher ranks of the medical profession to go abroad at the close of the curriculum. Now, partly owing to the external conditions to which I have already alluded, that is, to the absorption of time and intellectual energy in the work of preparing to meet the examiner, and partly, no doubt, to the improvement of the means of study which offer themselves in London and elsewhere in this country, the custom has been in great measure discontinued. I confess that it seems to me that in this respect our predecessors were more judicious than we are ourselves. If a man's whole object be to furnish himself with the skill and knowledge needful for the efficient exercise of his profession, the schools of London will afford him everything that he can require for the purpose. But it is not about technical training that I am speaking, but research; and, if that be his object, a man cannot do better than take Harvey as his example in this as in more important matters.

Harvey went to Padua, not so much to learn the medical or surgical art, but to study anatomy, the only representative at that time of medical science. He who desires to prosecute those branches of research on which medicine is now founded, can find quite as solid reasons for visiting the schools of Germany now, as Harvey had for going to Italy. What those inducements are, can be stated in few words. It is not merely because the imitation of Harvey is denounced by public opinion and impeded by legislation, that it is desirable that he should cross the Channel, but rather that during the last twenty or thirty years we in England have, like the foolish virgins, been quietly allowing our lamps to go out. While we have been contenting ourselves with putting up statues to Harvey, dining in his honour, recounting his great achievements, we have handed over to others the doing of his work. Until, therefore, England again takes the place that formerly belonged to her in physiological research, those who desire to devote some part of their life to searching and studying out the secrets of nature, will act wisely in so arranging their plans of study, that some years may be spent in the schools of other countries, where, along with leisure for work, they will derive advantages of the same kind with those that Harvey did from his residence at Padua—the co-operation and guidance of the very men to whom the sciences they profess owe their present development.

And let me add that all that has been said as to the study which Harvey had directly in view in the injunction which has served as the text for this address, applies with equal, if not greater, force to those branches of physiology which are more directly connected with the art of medicine.

Germany, recognising that the progress of the art of healing depends as certainly, though not so directly, on science as the art of war, has erected during the last ten years in all the great centres of medical learning specially endowed institutions or schools for the experimental study of those two sciences, which together make up the one science of medicine: namely, Pathology, the knowledge of the cause and nature of diseases; and Pharmacology, the knowledge of the mode of action of remedies.

How does it happen that we in England, who boast of being the countrymen of Bacon, of Harvey, of John Hunter, and of Charles Bell, and who believe that we know better than others the practical value of knowledge, whose material resources surpass those of every other nation, and who in certain favoured directions are willing to spend public money for purposes supposed to be scientific with lavish prodigality, should make no provision whatever, either in our universities or in our magnificently endowed schools of medicine, for the prosecution of experimental research either in pathology or in therapeutics? The question admits of but one answer, namely, that the time has not yet come. Sooner or later—perhaps twenty years hence—it will certainly be recognised that the scientific investigation of the essential nature and origin of disease and of the mode of action of remedies is a matter of no less importance to the public welfare than the application of the sciences of physics and chemistry to the invention of new methods of destroying human life.

LECTURES

ON THE

DIAGNOSIS AND SURGICAL TREATMENT
OF ABDOMINAL TUMOURS.*Delivered at the Royal College of Surgeons of England.*

BY

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LECTURE III—*June 14th, 1878.**Surgical Treatment of Ovarian Cysts and Tumours; Tapping, by Abdominal Wall, Vagina, or Rectum; Tapping, with Drainage; Injection of Iodine, or Antiseptics; Incision and Drainage; Ovariectomy—Selection of Cases—Preparation of Patient—Instruments—Anesthetics; Duties of Assistants and Nurse.*

I AM about to commence to-day by considering the question of the surgical treatment of ovarian cysts and tumours. I will begin with the treatment by tapping. There is still a great deal of difference of opinion amongst surgeons as to the amount of danger that attends tapping, and the amount of good that may be gained by it. I think the opinion of the profession is almost as unsettled now as it was when Stilling wrote, some years ago, in his paper upon the extraperitoneal method in ovariectomy, that "no surgeon should ever puncture an ovarian cyst". Tapping, he said, was a "crime"—"never tap". And the belief is general, that ovariectomy is rendered more dangerous when a patient has been tapped. There are still surgeons who entertain that belief; they object to tapping on two grounds: first, that it is dangerous in itself; and next, that it can only be of temporary use; and then, again, they fear that it is likely to be followed by adhesions or some other conditions, which very greatly add to the danger of ovariectomy when it is afterwards performed. With regard to the amount of danger in tapping, it seems to me many of the opponents of this simple proceeding fall into a considerable error in attributing to tapping what ought to be considered as due to the disease. If a patient die after tapping, she does not die because she is tapped; she dies because the tapping does not save her life. She would die if left alone, and tapping gives her relief for a time; the cyst fills up again, again requires tapping, and after one or more tapplings she dies. It is not the tapping that kills her; she dies because the tapping does not save her. I fancy if we make a clear distinction between operations that fail to save life and operations that kill patients, we shall make a distinction between tapping as a mode of relieving for a time a patient suffering from an ovarian cyst and ovariectomy, which if it do not succeed in saving life, kills the patient.

It is very seldom indeed that tapping is in itself dangerous. Occasionally, a blood-vessel in the abdominal wall, or in the cyst-wall, or in the omentum, may be wounded, and the patient may die of bleeding; but that is the rare exception to the general rule, that tapping is attended with very little danger. A greater danger than bleeding is when air enters the cyst, and with the air some elements of putrefaction; putrefactive changes are set up in the fluid still contained in the cyst, or which re-forms after the tapping, and then the patient dies from some form of pyemic fever or septicæmia. That may be now looked upon as the chief danger after tapping; and it may hereafter probably be lessened or averted altogether by the adoption of antiseptic measures.

With regard to the mode of tapping, it may be done either through the abdominal wall, the vagina, or the rectum; and in either case, we may trust to tapping alone, or to tapping followed by pressure; the punctured opening may be allowed to heal, or the opening may be kept patent by some form of drainage-tube, in the hope that a cure may be obtained by a more or less permanent drainage of the cavity; and with this drainage there may be associated the injection of iodine or some antiseptic fluid. There was a proposal at one time made which has not been very frequently followed, that of purposely leaving the opening in the cyst-wall patent, so that the fluid as it formed

might gradually escape into the peritoneal cavity and be absorbed, producing pretty much the effect of a ruptured cyst.

When tapping through the abdominal wall was performed in the early days, it was done with the patient seated on a chair, an assistant on each side of the patient, a long towel fastened round her, possibly an opening in front of the towel, a pail was placed between the patient's legs, and then the surgeon, taking one of these old-fashioned trocars, with considerable force plunged it into the abdomen. Sometimes a small incision was first made in the skin with a scalpel or lancet, in order to lessen the force necessary to pass the trocar inwards. But it was very soon apparent that the danger which followed tapping in this way was due a good deal, in the first place, to the position of the patient, and, in the next, to the instrument used. The fainting of the patient, even notwithstanding firm compression by bandages or towels, almost necessarily due to the upright position, could be avoided altogether by having the patient in a recumbent position, not taking her out of bed, simply bringing her to the edge of the bed lying on her side, and tapping in that position. In that way, no bandages were necessary, and a very large cyst might be emptied without any faintness being felt by the patient. In some cases, the surgeon would tap a patient with a trocar, and it would be what Sir Astley Cooper called "dry tapping"—no fluid followed. That arose from shortness of the cannula in patients having a thick abdominal wall. I suppose this trocar would hardly go through the abdominal wall of a patient having an inch or an inch and a half of fat; by the time it reached the cyst it would barely enter it; and then, when the trocar was withdrawn, the fluid, instead of passing through the cannula, escaped into the peritoneal cavity. Again, supposing one did with a trocar of this kind enter the cyst, and removed the trocar, leaving the cannula in the cyst, after a certain amount of fluid had escaped, the cyst contracted and fell off and sank into the peritoneum, so that no more fluid escaped, or it came away only gradually. I have seen all these things occur myself; and the first thing I did in altering the old instrument was to increase the length of the cannula; and by simply lengthening the cannula I avoided both the danger of not opening the cyst, and that of the cyst falling off the cannula. Then Mr. Thompson of Westerham made the great improvement, of which there is an exaggerated specimen here. He arranged the trocar in such a manner that, when it entered the cyst, the trocar was withdrawn beyond the point at which the fluid escaped down the long flexible tube; he thus effectually prevented any danger of air entering from the outside into the interior. He took a great deal of trouble to do this by putting the tube into a vessel of water, sucking at one end until the water rushed up through the tube. By advancing the trocar, he kept the tube full of water, and as the lower end was under water in the pail beside the bed, of course no air could come up and get into the cavity of the cyst when the piston was withdrawn. I soon found that filling the tube with water was quite unnecessary, because it was only a question of the level at which one passed the trocar into the cyst. But there were one or two objections to this instrument. In the first place, there is a little interval of time—a moment—between the entrance of the point into the cyst and the withdrawal of it, in which instant there may very possibly be some escape of fluid between the sides of the cannula and the punctured cyst. I have seen that occur in ovariectomy, and I have no doubt it occurs also in ordinary tapping; so that I was anxious to avoid that moment which is lost between the entrance of the trocar and the removal of the piston leaving the cannula free. It occurred to me that a common steel-pointed pen would do as well as anything; and I thought if that were passed into the cyst, the fluid would run freely away, and it would be easy to make a syphon trocar. After a little trouble, my suggestion was carried out, and the instrument I now show was the result of that trial, and it is the one which I have used ever since. The point is exactly like the point of a steel pen, and is so made that it does not cut a piece out of the abdominal wall, but simply enlarges the opening made by the scalpel. A small opening is made first by a lancet or scalpel, and then this instrument is easily passed into the cyst. It is evident that, if this were left in the cyst, it would be dangerous when the cyst was empty; a sharp point like this in the interior of a contracting cyst would be pretty certain to wound it; so I added a blunt cannula. I first put the cutting point inside, but afterwards found it better to slip up the blunt cannula inside the sharp tube, and that is the form of instrument now used, passing with the point directed downwards, so as to avoid any rush upwards of air which might occur if the point were at a higher level than the end of the tube. With the tube, the instrument at once becomes a syphon, and this calibre is large enough to allow the escape of viscid fluid. There are several small openings in the cannula; because, if one opening be too large, there is the possibility of the entrance of little bits of omentum or small shreds or clots, which may be in the interior

of the cyst. These would block the tube; therefore it does not do to make one opening too large. By fixing a long elastic tube on to the end of this instrument, the fluid is carried silently away into a vessel under the bed; the patient does not hear any splashing, and there is no possibility of any air entering into the cyst. Supposing the fluid—whether peritoneal or cystic—is in the peritoneal cavity, or there is a doubt as to where it is, it is desirable to remove such fluid without the possibility of wounding any uterine tumour, or any mass of cancer, or injuring the intestines or omentum. For this operation I contrived this form of blunt conical cannula, which is used after a simple lancet-puncture. On passing a lancet or small scalpel through the abdominal wall until fluid appears, then removing the knife and pushing this hollow tube into the cavity, the fluid at once rushes away. The tube may be moved about as a probe to feel whether any tumour is free or adhering, and we can do that without the slightest fear of doing any harm. With these several small openings, there is no fear of portions of omentum becoming entangled by the pretty strong suction that goes on through the long syphon.

There have been one or two modifications made in this instrument. Here is one by Dr. Fitch of New York, and he believes the form of protector is of some little consequence. He calls his the "dome-shaped" trocar. It is precisely the same as mine, except that the guard is made in a dome shape. It is quite easy, supposing one wishes to wash out a cyst, to fix an ordinary enema-syringe to the end of the elastic tube, and either to exert suction on the fluid contained in the cyst, or to inject any antiseptic liquid, and draw it out again by reversing the action of the syringe.

Tapping through the abdominal wall in some cases becomes not only a means of temporary relief, but if the cyst be really a single cyst it may be followed by the complete cure or recovery of the patient. I have known, now, a great many cases where, when the cyst proved to be really single or unilocular, it never refilled after the first tapping: the patient was by this very simple means completely cured. So I think we may lay down almost a positive rule, that, when we can be sure that the cyst is a single cyst, and we cannot discover any secondary growths in the cyst-wall, by examination by either the abdomen or the vagina, we must consider it a duty to see what tapping will do for a patient before adopting more serious measures. I think I have seen quite enough now to warrant me to endeavour to impress upon surgeons that, if the cyst be a single cyst, before they do anything else they should see what can be gained by one tapping. If the tapping be done with precaution, the risk is extremely small; the patient loses nothing, and may be cured. There are a great many cases recorded in my book to prove that fact, and also to show that the mortality of ovariectomy, supposing it afterwards becomes necessary, is very little affected indeed by previous tapplings. I gave a table showing what the effect of one, two, and many more tapplings, up to eighteen, had been upon the mortality, and the difference seemed to be very trifling.

In tapping through the vagina or rectum, a somewhat different instrument is used; either such a long instrument as that, or a similar trocar fixed upon an elastic catheter, which may be tied in and left, if necessary; or, if it be desirable to introduce a drainage-tube, then the instrument is much more curved. The point is carefully guarded by the finger, and, when one is quite sure where the point is, it is pushed into the cyst, and it is occasionally quite possible to introduce it near the uterus and bring it out nearer the rectum; to then attach a piece of drainage-tube to the slit in the point of the trocar, and draw it through, leaving it in the cyst after removing the cannula. That is not very easy to do; but I have done it, and in the days when more was thought of drainage than is the case now, it occasionally proved useful. It was used rather after ovariectomy, when a collection of fluid formed in the pelvis, than in treating ovarian cysts, because it would only be when the cyst was low down in the pelvis that it would be advisable. Sometimes, when there was a solid portion of the tumour high up in the abdomen and the more fluid portion in the pelvis, one could empty it in this way by the vagina or rectum. There was a discussion some years ago as to whether it was better to do it by the vagina or by the rectum, and at one time the argument was used that it was much safer to do it by the rectum, because there was a greater probability of air entering the cyst through the vagina; and the answer to this was manifestly that one would rather have an entrance of atmospheric air than of fecal gases.

Pressure following tapping was at one time very much the fashion; but I think it has entirely fallen into disuse. No surgeon now thinks very much of the use of long-continued pressure after tapping; it is very likely to inconvenience the patient, and may more probably occasion adhesions than if the patient be simply left alone with an ordinary amount of support. The formation of an intraperitoneal opening in a cyst-wall, I think, also is entirely abandoned. It was a proposition

made by Sir James Simpson of Edinburgh to cut a small piece out of the cyst-wall and then to let the cyst retract and empty. It is only in the single cyst that this could be of use, and in a single cyst the object would be much more simply and equally well effected by simple tapping.

With regard to the formation of a permanent opening through the abdominal wall or through the vagina, so as to cure a cyst by drainage, that may occasionally be useful, but I think only in very exceptional cases. It is a very tedious process; the patient remains for weeks, possibly months, in a state of great discomfort; she is exposed to the danger of suppurative action going on in the cyst, and to the fever which accompanies it, and it is only in exceptional cases that a cure is the result. I have seen patients cured in this way, but the cases have been few and far between.

Then, with regard to incision and drainage, making an incision into a cyst, and draining it when it cannot be removed, is not an intentional practice, but one to which a surgeon is driven who begins to do an ovariectomy and finds that he cannot complete it. The cyst is incised and emptied, and then it is found impossible to remove it. In that case, any portion of the cyst which has been separated may be fixed to the abdominal wall and the wound closed as far as is necessary, still leaving a sufficient opening for a tube to be passed low down to the bottom of the cyst, which may serve for drainage and for antiseptic injections. There are instances on record, apparently very hopeless, which have got well in this way. I have now a young woman acting as assistant to a nurse of mine, to whom last year this very thing occurred. The cyst was opened and was adherent everywhere; it was quite useless to attempt to separate it, so I closed the opening around a drainage-tube, and, after some months of drainage and syringing with carbolic acid, iodine, and other antiseptics, and at last with sulphurous acid, which seemed to act better than anything else in that case, it completely healed, and she is now in perfect health, and has made a recovery from what otherwise would have been a very hopeless condition indeed.

We will suppose now that we have a case to deal with in which tapping could be of very little use; or we will suppose that tapping has been tried; that fluid has re-formed after repeated tapplings; that all ordinary treatment has proved of no avail, then arises the question, "Is this a case in which ovariectomy should be recommended to a patient?" and the sort of common-sense rule that I have been in the habit of following has been to say to a patient, or to the medical man with whom I am in consultation: "So long as this patient is moderately comfortable, so long as she can walk a mile, or for half an hour, without much inconvenience, so long as she can get up and down stairs, so long as there is no great pressure upon any of the organs of the abdomen or pelvis, and she can breathe pretty well, and her heart is not interfered with, such a patient as that may be left to ordinary palliative treatment, with the usual attention to the general health." But I would also say that, if the operation be delayed for a time, she should not be subjected to any useless treatment; that it is quite useless to attempt, by iodine, or bromine, or lime, or by gold, or by any other remedy, to attempt to diminish the size of the tumour, or to check its growth. All that is quite useless, and might be very injurious to the patient. Then there comes a time when the patient is so far inconvenienced by the tumour, is so much distressed by its size, that she cannot move about without great discomfort; her general health is suffering; she is losing her rest, becoming thin, and some serious damage is being done by the pressure of the cyst; that is the time when the surgeon must interfere. The question then arises, With what prospect of success can the operation be done in any given case? Is this a case in which the patient will probably recover? or is it a case in which she will very likely die? Of course, that is the question which every patient presses upon the surgeon. She does not care to know that the mortality is 20 or 25 per cent.; she wants to know what the probability of her own recovery is, and that is the point one has to consider. Some patients will urge the operation upon the surgeon when they themselves are in very desperate circumstances. They may be almost at the point of death, and then wish the surgeon to step in and relieve them, they having previously resisted all advice from him. Quite lately, I saw a lady whom, a year ago, I strongly advised to have ovariectomy performed. She steadfastly resisted; she said she was old; she could get relief by tapping; she would get on as well as she could; and then, after some five or six tapplings, she gradually fell into such a state of suffering and exhaustion that, when the heart was almost stopping, she regretted that the operation had not been done earlier. It is necessary to explain to the patient that, if the operation have to be done, as it probably will have to be done, it must not be put off until there is no reasonable hope of its being performed successfully. In some cases, the surgeon, on the other hand, is pressed

to operate long before he thinks it is justifiable. A young woman wants to marry, or a wife wants to join her husband in India, or she does not like her appearance; unpleasant remarks are made about it, and then, in a case where the surgeon knows tapping will do but little good, the tumour being either multilocular or solid, he may occasionally, under such circumstances, operate quite legitimately and properly much earlier than he would if there were no such domestic reason.

With regard to the mode of estimating the risk of the operation in a given case, I should like to repeat the rule I laid down many years ago, that the probable result of ovariectomy can be estimated with far greater accuracy by a knowledge of the general condition of the patient than by the size and condition of the tumour; that from a patient with a good sound constitution one can remove a very large tumour having very extensive adhesions, and she will probably recover; whereas, among people who have been drunkards, or in whom the constitution has otherwise been impaired, or who have a feeble heart, unhealthy kidneys, or diseased liver, the operation is much more hazardous than in a healthy person. The size of an ovarian tumour alone has not appeared to me to affect the result very much; the removal of some very large tumours has been followed by recovery, whereas death has followed the removal of much smaller ones. And a patient who is accustomed to the life of a sick-room bears an operation much better than a person taken from the ordinary pursuits of active life and at once subjected to an operation. In consenting to operate upon patients who wished to go to the opera one night and to be operated upon the next day, I have learned by one or two rather painful lessons that it is far better to put off the operation till the patient is somewhat weakened or accustomed to the life of an invalid.

The size of an ovarian tumour alone, I say, does not very much affect the result; but, if it be a very large solid tumour, requiring a very large incision for its removal, the incision extending very nearly to the sternum, then the risk is very much greater. I have found, if a tumour could be removed by an incision not exceeding five or six inches in length, the mortality is considerably less than when it necessarily extends to nine, ten, or eleven inches. Adhesions, as I mentioned the other day, if only to the abdominal wall, do not much affect the result; if they be low down in the pelvis, the mortality is considerably increased by them.

Almost the only positive contra-indication to an operation, I think, would be the fact that the patient has some other disease which, if it pursued its natural course, would certainly kill her. I do not think it would be right to perform ovariectomy on a patient dying with phthisis, although I have had to do it in the Samaritan Hospital with a patient in a very advanced state of phthisis; but she was suffering so much from the presence of the ovarian tumour, and was so urgent for relief, that I removed it, knowing very well the condition of her lungs. She lived for a month, very much relieved by the removal of the tumour, and I do not think her life was shortened by the operation; still her death a month after operation does somewhat affect the statistics. I think it is very rarely that one would be justified in doing an operation of that kind supposing one knows a patient has serious kidney- or liver-disease, or disease of any kind which, independently of the ovarian tumour, would, sooner or later, certainly kill her.

With regard to the suspicion of cancer, and how far that should decide the surgeon not to remove an ovarian tumour, I think, if one were certain it was cancerous, one ought to be content with tapping, removing any peritoneal fluid that might be formed around it, and not attempting to remove it. The disease would almost certainly return. But still again I have seen some very extraordinary cases in which I have removed ovarian tumours which appeared at first sight to be ordinary multilocular tumours, and where a careful examination showed evident proofs of malignant growth, yet the patients for a long time remained in good health. In one case, it was ten or eleven years before there was any return. So I think even the knowledge that a tumour was in all probability cancerous would not allow one to put operation aside altogether; but it necessarily obliges the surgeon to be very much on his guard.

I was going on to some other points as to the influence of age, social condition, and so on, of a patient upon the probable results; but the time is so short that I will now suppose we are about to do ovariectomy; and I will refer for a minute to the conditions under which it ought to be done and the preparation of the patient, the place in which she should be operated on, and so on. The place, I need hardly say, should be as healthy a place as we can find. The patient should be lodged in the best house, in the best sanitary condition, and in the best room, that can be secured for her. Then I do not know that I need say anything about her medical treatment before the operation, except simply that her bowels should be relieved, and any evident concentration of urine corrected by citrate of potash or some

other simple saline. Then, having procured a room for her either in a hospital or a private house, or in one of the nursing institutions which are now becoming common in London, the room must be so arranged that, after the operation, she can be kept perfectly quiet. The room must be well ventilated, though she must be protected from any current of cold air, and at the same time not overheated.

The table on which the operation is performed (it is useless to try to perform it on the bed) should be arranged near a window, so that the light falls on the table diagonally; then the surgeon does not stand in his own light, and the assistants do not interfere with him. The patient is brought in and lies down on the table. Her feet and legs are carefully wrapped up; and she is covered by a blanket, and a strap is fastened over her knees, so that she cannot throw her limbs about. It is well also to tie the hands; and nothing is better for this purpose than an ordinary bandage, making a loop, passing it over the sleeve of the dressing-gown, and tying the hands down to the legs of the table. Each hand should be tied down, and then she cannot interfere with the surgeon; and one or two assistants are thus dispensed with. In the next place, one wants to protect the clothing. If she have simply a night-dress on, with a flannel about her shoulders, she and the bedding are completely protected by the use of a sheet of waterproof cloth with a hole in the centre, around which on the inside adhesive plaster is spread to the extent of an inch or an inch and a half. That is thrown over the patient, and adheres to the skin of the abdomen, which, I should say, ought to have been previously well cleaned. The upper part of the sheet comes up nearly to the chin of the patient. Lately I have had it made larger; and we have a simple contrivance by which the sheet can be held up in order to protect the patient's face from the carbolic spray, supposing it to be used. The patient lying thus, with the gentleman giving chloroform at her head, she is completely protected by the India-rubber cloth from the spray, which is directed from the spray-producer and plays upon the abdomen.

We now suppose the patient is lying upon the table, and fastened there; the next thing to be done is of course to put her under the influence of some anæsthetic. I have no doubt whatever myself, from long trial of it, that the bichloride of methylene, as it is called, is a far safer anæsthetic than chloroform. Since I have used it, I believe in more than six hundred cases of ovariectomy and more than three hundred operations of other kinds, I have never once been in the smallest anxiety about a patient. Now, every surgeon here must know how very frequently, when chloroform is given, he is looking at the patient to see whether he is, I will not say likely to die, but whether he is not injuriously affected by the depressing influence of the chloroform. I can say for myself that several times, when chloroform was given in my earlier cases, I was extremely anxious about them. In two cases, I had to stop the operation and commence artificial respiration. I have seen several other cases in which, either at the time of the operation, or from protracted chloroform vomiting afterwards, the patient, if not killed, certainly had her chances of recovery considerably diminished, simply by the action of chloroform at the time of the operation or some short time afterwards. I have never seen anything of the kind which I think could be fairly attributed to the action of bichloride of methylene. Provided it is carefully given in a proper apparatus, I have never seen the smallest cause for anxiety. This apparatus was contrived by Dr. Junker a good many years ago. The bottle is graduated to contain an ounce of methylene. The administrator fastens the bottle to his coat, and the mask is placed over the mouth of the patient. Then, by simply acting on the bellows, the air passes through the methylene, becomes charged with the methylene vapour, and the patient inspires it in the quantity of methylene vapour which the air will take up. I am told by chemists this cannot exceed 4 per cent., but, as a rule, at ordinary temperatures, it takes up scarcely more than 2 per cent.; at any rate, you cannot get it to take up more than 4 per cent.; and diluted vapour, 4 per cent. of methylene and 96 per cent. of air, is positively safe. I have heard of two deaths from methylene, but it was not given with this apparatus; it was given in a sugar-loaf cone made of leather, with a piece of sponge or lint put into the cone and saturated with the methylene. This was placed over the mouth of the patient, who breathed the vapour of methylene without any mixture of air. That is rather death from suffocation, or death from too strong vapour of methylene, than death from methylene properly administered. I believe there has been one other death from methylene, in which it was administered by this very apparatus, but the circumstances were peculiar. I am informed the patient had been drinking the night before. Full particulars of this case have been sent to the Committee at Glasgow investigating this subject, for report at the next meeting of the British Medical Association at Bath. The bichloride of methylene, of which this is a specimen, I am told by Dr. Oscar Liebreich, is not really bichloride of methylene. Chemists have found that, if they obtained true bichloride of methy-

lene, they could not keep it—it very soon changes; therefore, it has a certain amount of impurity, a certain admixture of alcohol with it, by which alone it can be kept. If true pure bichloride of methylene could be made, it would cost about a guinea an ounce, and would not keep half an hour, so that this is a mixture of pure bichloride and spirit. I have seen it made. The chloroform and alcohol are placed in a retort with sheets of zinc and boiled; as distillation goes on, one atom of chlorine leaves the chloroform, and the zinc is converted into a chloride. Some people say it is only a mixture of chloroform and spirit; but that certainly is not true, because the vapour of it burns, while, as you very well know, the vapour of chloroform does not.

The nurses have sponges and water all ready—sponges of a certain size, thoroughly well cleansed and in sufficient number, neither too large nor too small. If they be too small they may be lost, and if they be too large they cannot be introduced. The assistants are ready. There are only two required: one stands opposite the operator to be prepared to assist him in tying any vessel, and more particularly in preventing the coming out of intestines after the escape of the cyst from the abdominal cavity. If the assistant be not careful as the cyst is drawn out, the intestines follow, and give a good deal of trouble; but, if he carefully hold up the abdominal wall, keeping the edges of the wound together, it is impossible that any intestine can follow the cyst as it escapes. He passes the middle finger inwards under the umbilicus, and the forefinger to the right and the thumb to the left of the wound, and holding the edges closely together as the tumour comes out of the abdomen. When I first saw ovariectomy done, and when I first did it myself, we were told always to have wet flannels and warm water to wrap up the intestines if they came out. I have seen all the intestines of a patient on the table wrapped up in warm wet flannels; the result was a quantity of wool from the flannels adhering to the intestines, which had to be cleaned off before they were returned.

Then, as to the instruments one uses. First, an ordinary scalpel—working rather with the point of the instrument than with the shoulder. Next we have a number of what are called my torsion-forceps, to hold any vessel in the abdominal wall. Supposing a vessel is bleeding, it is caught in a moment, and the forceps hang down holding the vessel, so that, when the peritoneal cavity is opened, no blood drops into it. I have them plated with nickel, so that they never rust. The bleeding vessels having been stopped, the next step is to divide the peritoneum, catching hold of it previously with forceps or by one of these little hooks. The advantage of the hook is that one is less likely to catch a bit of cyst with it. If the cyst be lying close to the abdominal wall when you are catching up the peritoneum with the intention of dividing it, you may catch the cyst also, and sometimes divide it as well as the peritoneum. That is avoided by using this hook. One or two flat touches of the scalpel on the peritoneum are sufficient to divide it. Then a broad director is passed into the opening, and, with a blunt-pointed knife, the peritoneum is very safely divided. I rather insist upon this blunt point, because, with a sharp-pointed instrument, supposing there is a bit of intestine adhering to the abdominal wall, it may be injured, or a sharp-pointed knife might enter the bladder if it were high up. Having laid bare the cyst by the incision of the peritoneum to the extent of three or four or five inches, it then becomes necessary to empty the cyst, and this is done by the form of trocar I have here, which is just one of the trocars I showed you for tapping, but of a larger size, and furnished with outer spring-hooks to fasten the cyst. It is passed into the cyst, then the point is withdrawn, and the fluid rushes through the cannula into the pail below the table. As that is done, the outer hooks are opened, the cyst is caught hold of and easily fastened to the cannula, and pulled out through the opening in the abdominal wall; the fluid passes out, the cyst is held by these grasping claws, and, if the cyst be free, it of course readily and easily follows the instrument. If any adhesion be noticed as the cyst comes out, it may be separated; but I must reserve any further description of that till the next lecture.

BASFORD RURAL DISTRICT.—Mr. Whitgreave commences his report by congratulating his sanitary authority because they will soon have what they have patiently waited for years—viz., a plentiful supply of pure water. The birth-rate is calculated to have been 42.64, and the death-rate 19.58, or 19.36 if 518 colliers who came into the district in 1877 be included in the population. There were 1,986 births and 912 deaths, so that the births were more than double the deaths. Inflammatory diseases of the lungs caused a large mortality, especially in the Greaseley registration district, which Mr. Whitgreave cannot account for. The mortality amongst infants was high, as 35 per cent. of the total deaths occurred amongst children under one year old; and 16.4 deaths under one year were registered to each 100 births, which is much above the average of rural districts in 1877. There is a full account given as to the removal of nuisances by the inspector.

CONTRACTION OF THE FINGERS (DUPUYTREN'S CONTRACTION),

AND ITS SUCCESSFUL TREATMENT BY SUBCUTANEOUS DIVISIONS OF THE PALMAR FASCIA, AND IMMEDIATE EXTENSION.*

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CONTRACTION of the fingers takes place from a variety of causes; and the pathological conditions will be found to vary according to the nature of the producing cause, such, for example, as local injuries, with laceration of tendons, deep abscesses in the palm of the hand, burn-cicatrices, etc. But in the present paper I propose to direct attention to one form only of finger-contraction, commonly met with in men about the middle or beyond the middle period of life—very rarely at younger ages. I have never seen it in women.

The contraction may affect one finger alone; in which case, according to my observation, the ring-finger is most frequently drawn down towards the palm of the hand, but some authors state that the contraction most frequently commences in the little finger. The contraction having commenced in one finger, however, the adjacent fingers are in most cases gradually drawn down, though to a less extent. I have frequently seen the ring-finger severely contracted, so that its tip would nearly touch the palm of the hand, and the middle and little fingers contracted to about half this extent. I have seen the contraction sometimes limited to the little finger. The index-finger and the thumb usually escape. I have never seen them more than slightly contracted. In these contracted fingers, the articulations are generally in a healthy condition; the joints can be flexed freely, but any attempt at extension is painful, from the resistance offered in severe cases by a tense contracted cord passing from the finger into the palm of the hand, to which the skin of the palm is closely adherent. The skin in the palm of the hand near to the base of the contracted fingers is commonly drawn into thick knotty folds.

The pathology and treatment of this form of finger-contraction always has been and still is the subject of much difference of opinion; and Dupuytren appears to have been the first surgeon to investigate the anatomical conditions by dissection. In the report of his clinical lectures,† it is stated that when Dupuytren heard of the death of a man who was the subject of this affection, he “was determined that this remarkable disease should not remain unknown. The arm was given to him, and he made a careful dissection. The skin having been removed from the whole extent of the palm of the hand and the palmar face of the fingers, the fold or the puckering of this structure entirely disappeared; it was, therefore, very evident that the arrangement which presented during the disease did not depend on this cause, but was communicated to it; but how, and by what? The dissection being continued, the Professor discovered the palmar aponeurosis extended, retracted, and diminished in length, its inferior part being divided into cords, which passed on to the sides of the affected finger. In extending the finger, he observed that the aponeurosis underwent a kind of tension of crispation—this was a ray of light; so he considered the aponeurosis was something in the effects [to be the cause, W. A.] of the disease. He cut the prolongations on the sides of the fingers, and immediately the contraction ceased, the fingers returned to a state of semiflexion, and by slight force to complete extension. The tendons were natural; the sheaths were not open; the articulations, ligaments, synovial membranes, and bones, were in their normal or natural state.” Since Dupuytren made this important contribution to our knowledge of this affection, it has been sometimes spoken of “Dupuytren's finger-contraction”: a title as useful as it is also a just compliment to the great surgeon, distinguishing it from all other forms of finger-contraction.

M. G. Goyrand‡ of Aix also records the dissection of the hand of a man, seventy-two years of age, affected with this form of finger-contraction; and the description agrees very closely with that of Dupuytren, although he regards the lateral bands extending along the phalanges not as digital prolongations of the palmar fascia, but abnormal fibrous fasciculi, which extend from the fascia to the sheaths of the flexor tendons, into which they are inserted opposite the second phalanx.

* Read before the Royal Medical and Chirurgical Society, May 22nd, 1877.

† Selections from the clinical lectures delivered at the Hôtel Dieu, Paris; delivered in the session 1831 and 1832, by Baron Dupuytren. *London Medical and Surgical Journal*, vol. i, p. 267. London: 1832. Kershaw and Rust.—The observations of Dupuytren on this subject are fully recorded in his *Leçons Orales de Clinique Chirurgicale*, tome premier, p. 1. Bruxelles: 1832.

‡ *Gazette Médicale de Paris*, 1835, p. 481.

In the Museum of King's College is a dissected specimen of one of these finger-contractions, No. 1444-3 (see fig. 1), presented by the late Professor Partridge. In this specimen, the contraction is limited to the little finger, and shown to depend upon a strong contracted band of the palmar fascia *a*, by which the finger is drawn towards the palm of the hand, the fascial band stretching across like the string of a bow, and passing along the outer side of the little finger along the first phalanx to the beginning of the second. The flexor tendons *b* are seen lying deeply along the concavity of the curves close to the bones.

This dissection has also been figured in Druitt's *Surgeon's Vade-Mecum*, eleventh edition, fig. 301, and I am indebted to Dr. Druitt for permission to reproduce it here (see fig. 2). In this drawing, the direc-

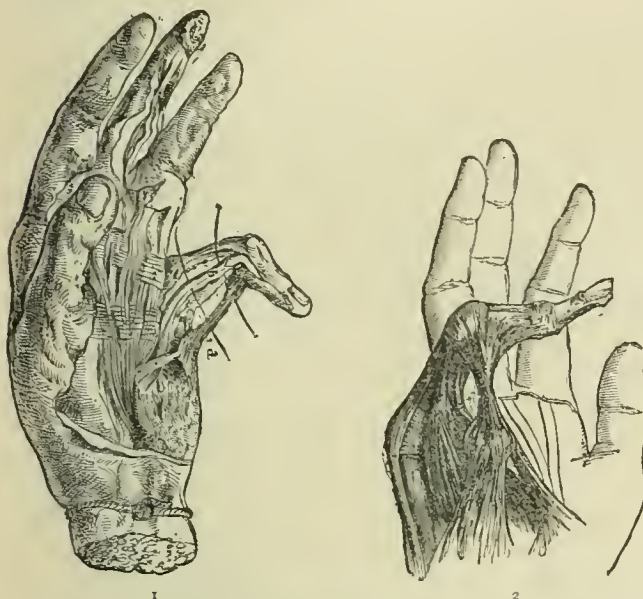


Fig. 1.—Dissection of a contraction of Little Finger: from specimen in Museum of King's College. *a*, Contracted Band of Palmar Fascia, stretching across like the string of a bow; *b*, Flexor Tendons lying deeply along the concavity of the curve, close to the bones.

Fig. 2.—Another view of the same dissection as Fig. 1, showing the contraction to depend upon a band of the Palmar Fascia. (From Druitt's *Surgeon's Vade-Mecum*, Fig. 301.)

tion and relations of the contracted band of the palmar fascia are more distinctly shown, but the relation of the fascia to the tendons had not been demonstrated by dissection at the time when this drawing was made.

There is a cast in the Museum of King's College apparently taken from the same subject previously to the dissection, as it corresponds in all respects with the contraction of the little finger, and shows the lateral direction of the contracted fascial band. (Fig. 3.) This cast has no number, but is engraved June 1853, and I am informed that Mr. Partridge always used it in lecture, together with the dissection.

It has never occurred to me to have the opportunity of dissecting one of these finger-contractions; but on April 15th, 1864, a gentleman, Mr. L., aged 50, residing at Hampton Court, who suffered from Dupuytren's contraction of the fourth and fifth fingers in each hand, and upon whom I had proposed to operate, met with an accident. In attempting to hold a restive horse, the contracted fingers on the right hand were suddenly torn open and the skin in the palm of the hand torn across. I saw him shortly after the accident, when the hand had been merely tied up by a handkerchief, and found a large gaping wound in the palm of the hand, reaching nearly half way across. The palmar fascia had been torn across, together with the skin, but the sheaths of the tendons were not torn, and it was evident that these structures had not been implicated in the contraction. The tendons in their sheaths were seen lying at a depth from the surface, running along the concavity of the curve in proximity with the bones, whilst the fascia had evidently been stretched across, like the string of a bow. After cutting away a few torn shreds of fascia, I found, on attempting to extend the fingers, that the previously transverse wound assumed a lozenge shape, in a perpendicular direction. I therefore approximated the edges laterally, and introduced sutures, so that when

sewn up it resembled a longitudinal instead of a transverse wound. The hand was firmly bound round with narrow strips of plaster, and bandaged to a splint, with the fingers in an extended position. On the third day, the wound presented a healthy appearance, without any suppuration, and I therefore removed the sutures; the healing process proceeded without interruption, and the fingers remained nearly straight, without their power of flexion being lost.

These, so far as I know, are the only facts to which we can appeal for the anatomical conditions presented in Dupuytren's finger-contraction; and they all agree in negating the supposition that the tendons or sheaths of the tendons are involved in these contractions. This is also confirmed by my own clinical experience, as I have invariably found that, after dividing subcutaneously a tense and prominent cord, which has generally been mistaken for a tendon, in the palm of the hand, the patient is immediately able to flex the finger as strongly as before the operation, at once disproving the opinion often expressed by surgeons that such fingers will remain stiff and inflexible after the operation.



Fig. 3.—Cast from the Hand represented in Fig. 1, previous to dissection.

The commencement of this form of contraction is sometimes to be traced in one hand, in patients in whom the contraction exists in a severe form in the other, and I have watched its commencement from a flattened nodular induration in the palmar fascia in or just above the transverse crease in the palm of the hand corresponding to the metacarpophalangeal articulations. In the beginning, the skin is not adherent to this flattened induration; but in one case now under my observation, the commencement of a fascial-cord contraction can be traced, leading from the transverse crease to the little finger in the left hand: a spot certainly not exposed to pressure.

In the *second stage*, the skin becomes adherent to the thickened fascia, and a puckered dimple is produced, extending from which towards the finger a thickened band of fascia can be distinctly felt.

The *third stage* consists of an increased thickening of the palmar fascia and the band leading to the finger; and also the formation of a thick cord-like band of fascia, leading from the central thickening towards the annular ligament of the wrist, accompanied with a gradually increasing drawing down of the finger or fingers towards the palm of the hand. Such I believe to be the gradual progress of the fascial contraction and its adhesion to the skin in Dupuytren's finger-contraction.

Cause.—With regard to the cause of this affection, most authorities agree in assigning it, in the great majority of cases, to a local cause, and believe it to be produced by pressure from the use of tools in various occupations; and it is said that carpenters, gardeners, and gunners, are specially liable to it. Sir James Paget refers to the elder men occupied in wire-drawing and lock and key-making, as being subject to this condition. It is also generally admitted that this form of contraction may take place from constitutional causes, independently of any local cause, and that it is then traceable to a gouty diathesis. Sir James Paget* points out the dependence of this contraction in some cases upon the gouty diathesis, and believes that the adhesion of the palmar fascia to the adjacent sheaths of tendons and the integuments forms a point of diagnosis. My own opinion is that it nearly always depends upon a constitutional rather than on any local cause, and essentially I regard it as depending upon a gouty diathesis. In favour of this opinion, I would refer, first, to the class of patients in whom it occurs. During a connection of more than twenty years with the Royal

* Abstract of Clinical Lectures delivered at St. Bartholomew's Hospital (BRITISH MEDICAL JOURNAL, May 22nd, 1875, p. 665).

Orthopædic Hospital, I have seen but very few cases of Dupuytren's contraction in the labouring class; and the cases that did present themselves generally occurred in butlers and in-door servants. It seems, however, to be an affection of common occurrence in the middle and upper classes of society. The cases which have fallen under my observation have occurred in clergymen, barristers, medical men, officers of the army and navy, and merchants; the only condition common to the whole series being a disposition to gout. Coexisting with the finger-contraction, in the cases which I have seen there have been generally other manifestations of a gouty tendency, more especially to that form we recognise as rheumatic gout affecting several articulations and often causing enlargement of the joints of the fingers rather than true inflammatory gout, affecting the great toe. Secondly, I would refer to the frequent occurrence of this affection in the left hand only, and to its occurrence in both hands, which we can hardly explain by any local cause. Thirdly, I would refer to the fact that in several instances I have known two brothers suffer from it; and in some cases, the father and son have been similarly affected; so that, for these reasons, I am disposed to attach far greater importance to the constitutional than to any local cause.

Treatment.—With regard to treatment, this must be either mechanical or operative; and there can be no doubt that gradual mechanical extension, by an apparatus worn night and day, or in slight cases only at night, would not only prevent increase of the contraction, but diminish, and possibly even cure it when slight and not of long duration. But in severe cases, and in those of long standing, mechanical treatment is useless, the only prospect either of benefit or cure being from operative treatment either by open wound or the subcutaneous method.

Dupuytren, in the year 1831, divided the contracted palmar fascia by open wound, making an incision ten lines in length; but a second and even a third incision was found to be necessary. Dry charpie was applied, and the fingers extended. Inflammation and suppuration followed; and at the end of nearly two months, it is reported that "the fingers regained their natural condition".* Two other successful cases are also reported in the same lecture.

Mr. South,† in his translation of Chelius, states that "Goyrand does not divide the skin transversely, as Dupuytren does, because in straightening the finger, the cut in the skin gapes too much; but he cuts through it longitudinally and through the bridge transversely".

Dr. Otto W. Madelung‡ has recently published an account of the treatment of these cases adopted in the Surgical Hospital at Bonn by Professor Busch. This operation belongs to the class of open wounds, and consists in dissecting up a triangular flap of skin from the contracted cord in the palm of the hand, and then dividing all the bands of the contracted fascia which can be reached; as the flap thus raised contracts, the lower points of the wound may be united by sutures. "A light bandage closes the wound; the hand is then kept by the patient in a sling, without the slightest attempt to preserve the extension. . . . Extension-movements with the fingers are only made when the wound has entirely granulated, and then only in a light gentle way. At first, wood cylinders of various sizes are laid in the hand; later, the hand is stretched on a back splint. Active and passive movements are now to be made in, and during the time the hand-bath is used for cleansing the wound. More complicated apparatus than the above are never required. The healing of the wound, accelerated perhaps by skin-grafting, is accomplished in three or four weeks."§ Successful cases under treatment are referred to, but one is added by the author in which, notwithstanding the use of Lister's antiseptic treatment, suppuration with sloughing of the flexor tendon of the little finger took place; but this is stated to be the only unfavourable case.

Professor Alfred C. Post, of New York also operates upon these cases by open wound, making incisions at a number of points, but not longer than absolutely required, as he believes that the adhesion to the skin prevents a strictly subcutaneous section from being made. He advocates immediate extension on a metal splint; the dressings to be removed every two or three days, and passive motion applied. Of the four successful cases cited by Professor Post, only one seems to have been of Dupuytren's contraction, the others depending on abscesses and traumatic inflammation.

All operations by open wound for these cases should be condemned as unnecessarily severe, involving a long and tedious reparative process, with the risk of suppurative inflammation, and also a liability to failure, in which event the condition of the patient would be worse than before the operation; contraction from cicatrix being one of the most difficult conditions to relieve. Nevertheless, in England, the operation by open wound has long been practised by the majority of surgeons, and is still recommended in some of the text books, when the subcutaneous operation has failed, as it is generally supposed to do. There is, however, in England, a very general distrust in all operative procedures in the treatment of this affection, which is regarded as incurable, the patients being advised to bear the ills they have, rather than run any risk from suppurative inflammation, with the doubtful gain of a stiff and useless finger.

The operation which I now propose to bring before the notice of the profession is not based upon any new principle in surgery, as the subcutaneous division of the palmar fascia for contracted fingers has been practised, both in this country and on the Continent, for many years. Within the last few years, I have materially modified the details, both with regard to the mode of performing the operation and the after-treatment. The success has been found much greater, and the treatment much less irksome to the patient, as well as of shorter duration, than the method of operating and the after-treatment which I adopted in the earlier part of my practice from the teaching of my late colleagues and predecessors at the Orthopædic Hospital, Mr. Tamplin and Mr. Lonsdale. They believed that both fascia and tendon were involved in the contraction, and divided the contracted cords in the palm of the hand in the same way as they divided tendons: subcutaneously, cutting from below upwards and making only one puncture. They also adopted the same method of after-treatment, by gradual mechanical extension; using complicated steel instruments, with cog-wheels opposite the joints of the fingers. Further study of these cases, and the opportunity which was accidentally afforded me of seeing that the tendons were not involved in a severe case of finger-contraction previously referred to, in which the palm of the hand was torn across by a horse, confirmed me in the belief that the tendons were not implicated in this form of contraction of the fingers, and that surgically we had to deal with contraction of the palmar fascia alone, as Dupuytren had described the affection. I therefore commenced the practice of making multiple subcutaneous divisions of the fascia, introducing the smallest tenotomy knife—smaller than any ordinarily used, as shown in fig. 4—and carrying it between the skin and the contracted cord, which I then divide by cutting downwards very slowly and cautiously, taking care not to dip the point or divide any structures, except the contracted band of fascia. In one case, where three fingers were contracted, I made as many as nine punctures and subcutaneous divisions; but where so much is required to be done, I think it generally advisable to confine the operation to one or two fingers, making not more than five or six punctures—in many cases, four will be found sufficient—and leave the other finger or fingers to be treated at a subsequent operation. As a rule, I make the *first puncture* at the greatest distance from the finger, in the palm of the hand, towards the annular ligament, a little removed from the point where the skin is adherent to the fascia, and where the skin is not tightly stretched over the contracted cord, so that the tenotomy-knife can be readily introduced between the two. The *second puncture* should divide the same cord as the first, but as near to the finger as possible, thus leaving the contracted band in the palm of the hand, when adherent to the skin, isolated and cut off from its connections at its upper and lower extremities. The *third and fourth punctures* divide the lateral bands or digital prolongations of the palmar fascia, which usually pass from the central cord in the palm to the adjacent sides of the fingers. These must be divided very carefully in order to avoid cutting the vessels and nerves along the sides of the fingers; the punctures should be made at the bifurcation of the cutaneous net between the fingers, and the incisions directed obliquely upwards and outwards towards the palm of the hand. These incisions will divide the strongest and most prominent bands, which produce the flexion of the first phalanx of the finger upon the hand, and if care be taken to avoid dipping the point of the knife, there will be no fear of wounding vessels or nerves. Sometimes lateral bands of contracted fascia require to be divided opposite the centre of the first phalanx, and this must be done by puncture at the edge of the contracted bands, the knife being directed transversely towards the bone; but this cut must be made very carefully, to avoid the artery and nerve; the surgeon remembering that the band, though tough and strong, is at the same time very thin. These bands are more readily cut through with the scissor-pointed tenotome, *i.e.*, with the point at the extremity of the straight cutting edge, represented in fig. 4. The central-pointed tenotome generally used does not divide

* *Op. cit.*, p. 267.

† *A System of Surgery*, by J. M. Chelius; translated by John F. South. Vol. ii, p. 194. London: Reinslaw. 1817.

‡ *The Causes and Operative Treatment in Dupuytren's Finger Contraction*, by Dr. Otto W. Madelung; translated from the German. London: Trübner and Co. 1876.

§ *Op. cit.*, p. 11.

"On Contraction of the Palmar Fascia, and of the Sheaths of the Flexor Tendons", by Alfred C. Post, M.D., of New York (*Archives of Clinical Surgery*, August 1877).

the fascial bands so readily or with the same precision. Occasionally a lateral band may have to be divided between the first and second phalanges, at a point corresponding to the articulation, and this must be done very carefully and with the precautions just described. I

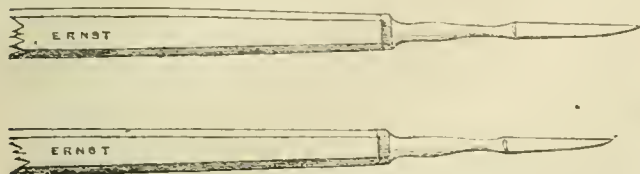


Fig. 4.—Small Knives used for division of the Bands of Fascia.

always avoid making any central incisions in front of either the first or second phalanx, as the sheath of the tendons, or the tendons themselves, may be readily divided by such incisions, and would lead to a loss of the power of flexing the finger after the operation.

Subsequently, I also adopted another important modification in the after-treatment of these cases; viz., the plan of immediate extension, bringing the finger or fingers as nearly as possible into the fully extended position at the time of the operation, and afterwards applying

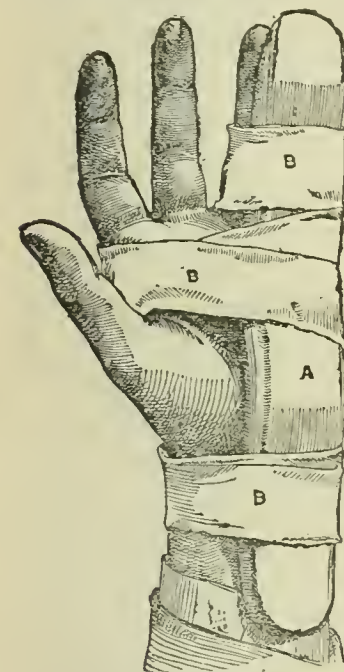


Fig. 5.—Retentive Metal Splint to which the Fingers and Hand are bandaged after the operation.

and after-treatment, I have had good reason to be satisfied with the results, and in the great majority of the cases operated upon, the contraction has been completely and permanently removed.

Anæsthetics.—With regard to the employment of anæsthetics in these operations, which must necessarily be done slowly and very carefully, several punctures being made, I have always advised the use of chloroform or ether. I abandoned the use of ether-spray, after employing it some years ago, because it was found to harden the skin, so as to make the puncture difficult and obscure the anatomical relations of the parts. It occurred to me, however, that if I rapidly thawed the frozen skin by rubbing it with my own hand, the deep anæsthesia would probably remain long enough for a subcutaneous operation; and this I have found to occur. In the case of a medical friend, Mr. R., upon whom I operated for contracted fingers in January 1877, and who objected to take either chloroform or ether from the condition of his circulation, I made four punctures, and he only felt one of them, and that very slightly. The objection of hardening the skin, therefore, being done away with, the local anæsthesia by the ether spray is now found to be applicable to tenotomy and some other subcutaneous operations, as its inventor, Dr. Richardson, originally thought it would

be. The hand of the gentleman alluded to, Mr. R., is represented in fig. 6, showing severe contraction of the middle and ring fingers of the right hand previous to operation; and its improved condition one

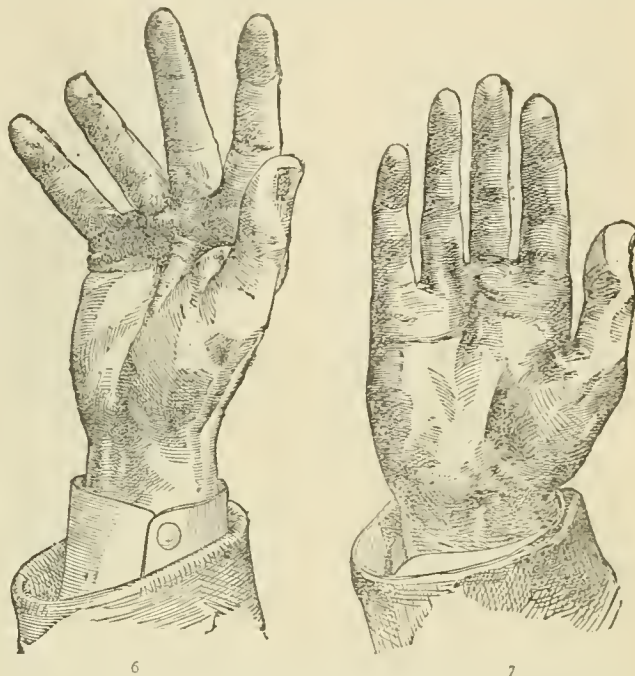


Fig. 6.—Hand showing Dupuytren's Contraction of Middle and Ring Fingers, with prominent Cord in Palm of Hand. From a cast.

Fig. 7.—The same Hand as shewn in fig. 6, one year after operation. From a photograph.

year after the operation is shown in fig. 7. The fingers are perfectly straight and useful, the voluntary power not having been interfered with by division of tendons.

A severe degree of contraction of three fingers is represented in fig. 8; and the same hand is shown in fig. 9, thirteen years after the operation. The middle and ring-fingers remain completely cured, with full power of flexion, and all trace of contraction in the palm of the hand has disappeared. The little finger, which never could be brought quite straight from alterations in the joint said to be the result of injury, remains contracted between the first and second phalanges. This gentleman held and still continues to hold a consular position, and the contraction of three fingers in the right hand so much interfered with his ability to write that his signature was scarcely legible. His writing powers were completely restored by the operation.

Summary.—The operation and treatment which I now practise may be described as follows.

1. The subcutaneous division of all the contracted bands of fascia which can be felt; the bands to be divided by several punctures, with the smallest tenotomy-knife passed under the skin and cutting from above downwards; a pledget of lint being at once placed over each puncture and retained in position by a strip of plaster.

2. Immediate extension to the full extent required for the complete straightening of the fingers, where this is possible, and the application of a retentive well-padded metal splint from the wrist along the palm of the hand and the fingers; the fingers and hand to be bandaged to the splint.

3. The bandage not to be removed until the fourth day, when the lint and plaster may also be taken off, as the cutaneous punctures are always found to be healed by the fourth day. The retentive metal splint to be reapplied, and the hand and fingers bandaged to it.

4. Extension to be kept up by the splint worn continuously night and day for two or three weeks; but the splint and bandage to be changed every two or three days. After this, the extension splint is to be worn at night only, for an additional three or four weeks, free motion being encouraged during the day.

Relapse of the deformity, I believe, is now guarded against by the plan of dividing all the contracted bands of fascia by as many punctures as may be necessary; and, in severe cases, not attempting too much at one operation; and also by the adoption of the plan of immediate ex-

tension. If partial relapse should occur—and I have never known more than this—any bands that may have escaped division, or any which may since have become prominent by the extension, may be

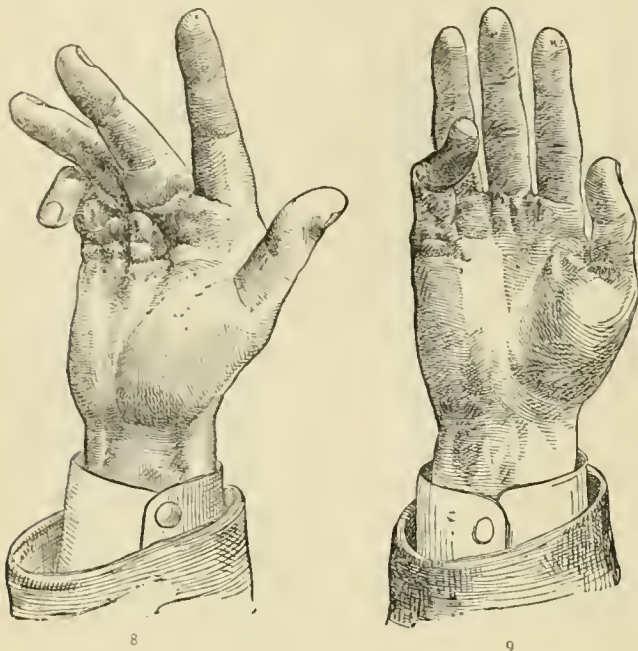


Fig. 8.—Hand showing Dupuytren's Contraction of Middle, Ring, and Little Fingers. From a cast.

Fig. 9.—The same Hand as shown in fig. 7, thirteen years after operation. The Middle and Ring Fingers remained completely cured, with full power of Flexion; and all trace of Contraction in the Palm of the Hand had disappeared. The Little Finger, which never could be brought quite straight, from alterations in the joint, said to be the result of injury, remains contracted between the first and second Phalanges. From a cast.

divided subcutaneously, and the disposition to recontraction prevented. This contrasts very favourably with the relapsed cases after open wound, which from the nature of the cicatricial contraction are incapable of further relief.

It has been my object in the present paper to give to the profession an increased confidence in the subcutaneous operation for Dupuytren's contraction of the fingers, and to point out a number of details in the mode of performing the operation and in the after-treatment, upon which I believe much of the success will be found to depend.

THE TREATMENT OF ACNE.

By JAMES STARTIN, M.R.C.S.,

Surgeon to St. John's Hospital for Diseases of the Skin.

AUTHORS and writers, from the earliest ages up to the present day, seem to have considered the successful treatment of acne, particularly that form known as acne rosacea, to be of some considerable difficulty. I have been much rewarded lately, in hospital and private practice, with some very good results by the carrying out of the following mode of treatment.

In the first place, vegetable acids, mineral waters, purgatives, arsenical preparations, and other specifics, are not indicated in this eruption of the skin, nor have I ever found them of much avail. The diet should be carefully regulated, all indigestible food avoided; and little or no stimulant should be allowed, except in those cases where the powers of digestion should require slight excitation to perform their proper function; and the discriminate use of chalybeates, combined with mineral acids, vegetable bitters, and tincture of iodine, I consider to be the most useful internal remedies. These are considerably augmented by the sulphur-vapour douche or vapour-bath.

But it is the external treatment that is most important, and it is to this that I wish to draw more particular attention. If, at the onset of the affection, the sebaceous glands and follicles become overloaded, they should be relieved by pressure between the finger and thumb-nail, and by frequent washings with warm water and oatmeal; after which a good rubbing with a flesh-brush will remove the contents of a

number of the pimples; and, if the disease be more advanced and the indurated spots become enlarged and painful, the vapour-douche is then of much service, followed by an ointment of the ammonio chloride of mercury and camphor, or the gentle application of iodide of sulphur ointment at bedtime, and the use of a cooling zinc or calamine lo ion, to be painted upon the face with a camel-hair brush two or three times a day. With the judicious use of the above remedies and applications, I may probably nearly remove and cure the disease; but troublesome redness, with often great vascularity, still remains in spite of treatment, and it is to this stage of the affection my remarks tend. To those small indurations and superficial venous enlargements and plexuses, I generally apply the acid nitrate of mercury with care by means of a spun-glass brush. One or two applications, with the immediate use of bibulous or blotting paper afterwards, will usually suffice to effect complete obliteration without a scar; and I find, after a few days, the morbid states of the capillaries have undergone a complete change for the better. Nevertheless, we may still have some of the larger capillaries, which keep up the localised redness and induration, to contend against; then the mercurial acid treatment does not hold good. I therefore divide each engorged vesicle with the point of the lancet; and, should the hæmorrhage be much, I apply a small ring of silver or steel, which I have fixed into a handle at right angles, and about the eighth of an inch in diameter, over the two divided ends of the vessel. I then insert a minute grain of nitrate of silver, which at once stops the bleeding and obliterates the engorged conspicuous vesicle, leaving only a small black discoloured spot, which may be easily removed by the application of a solution of iodide of potassium.

The above treatment may appear somewhat heroic for so common an eruption. I can only state that I have made use of it in a large number of cases, and find it to be the most successful mode of cure.

GOITRE AND THE HÆMORRHAGIC TENDENCY.

By R. BRUCE LOW, M.D.,

Medical Officer of Health, Helmsley Rural Sanitary District.

IN the course of my reading, I have been unable to find any mention of the fact that goitrous persons are peculiarly subject to hæmorrhages. As I reside in a district where goitre abounds, I have had opportunities of remarking the frequency of flooding among the women, and more especially among the women with goitres. During the last few months, I have collected notes of one hundred and eighty-three cases of goitre. Of these, there were ninety women who had borne children, and, out of these, thirty-one were habitual flooders; besides these, a considerable number of others showed a hæmorrhagic tendency, especially at their menstrual periods. There appears to be a great predisposition to flooding in the district, so much so, that the medical men of the neighbourhood are united in their opinion that more care and attention are requisite after labour is over here than in other districts. Even with the greatest care, flooding sets in. For example: in a case where a goitrous woman was confined safely and the placenta removed, I grasped the contracted uterus through the abdominal wall, and held it firm for more than an hour; but, feeling exhausted, I transferred my post to an attendant, with the effect of seeing the woman flood and faint exactly four minutes after I left hold of the uterus. In cases, again, where labour is over before the arrival of the medical man, flooding is very apt to go on to a very serious extent. The tendency to flood is not entirely confined to goitrous women in the district, but these are usually the worst cases.

The etiology of goitre is still far from being clear; but it is now accepted that the disease is endemic in certain well-defined geological districts, and also that it may be produced by some bad hygienic conditions, *e.g.*, dampness, overcrowding, and bad ventilation. The water-supply of the Helmsley district is pure and good, but, owing to its situation on the oolitic lime-stone formation, the water contains carbonate and sulphate of lime and, in smaller quantity, magnesia. The permanent hardness is not great, the water being used for washing and other domestic purposes. It contains no trace of iron. The district is extensively wooded, and is intersected by numerous small valleys, which are constantly filled with damp foggy emanations. The dwellings are small, badly constructed, ill-ventilated, and generally overcrowded. Many of them are in bad repair. The people, for the most part, are engaged in agricultural pursuits. Intermarriage has hitherto prevailed to a great extent, the isolated position of the district having prevented the inhabitants from mixing with those of other neighbourhoods.

Many medical men have called attention to the evils which arise from the continued use of water impregnated with lime and magnesian salts. Dr. Murray, in an able paper in the BRITISH MEDICAL JOURNAL for

September 28th, 1872, mentions a number of diseases which arise from water so contaminated. Among others, he names goitre, cretification of the arteries and valves of the heart, rheumatic arthritis, and calcareous deposits in various organs. In this district, anaemia is soon produced, when young females, especially from the South of England, come to reside here. This is a most frequent occurrence among the domestic servants of the neighbourhood. The majority of the young girls, living in the small farm-houses scattered over the moors and in the sequestered valleys, are highly anæmic in appearance, and are often under treatment for that condition.

Pregnancy has a powerful effect on goitre. Many bronchoceles appear during the first pregnancy, or are noticed immediately after the first labour; the popular notion being that the swelling is due to the exertion of bearing down during the expulsion of the child in delivery. An eminent continental observer has shown that, in pregnancy, there is enlargement of the thyroid gland; there are fewer red blood-corpuscles, and there is a watery state of the blood; the tone of the system is reduced, as in those who show a goitre from bad hygienic conditions or surroundings. The thyroid is a vascular organ; and those causes which reduce the tone of the system reduce the tone of the vaso-motor nervous system and dilate the vessels: thus the circulation is rendered slower. This allows exudation of white cells to take place into its tissue, and produces degeneration of the thyroid gland. Many goitres disappear after the climacteric period.

The results of these observations may be summed up as follows.

1. The water-supply in limestone districts has a powerful influence in deteriorating the blood, causing dyspepsia, anaemia, and a want of contractile power in the blood-vessels, as shown by the development of goitre and tendency to hæmorrhages, more especially flooding in child-bed.

2. Goitre and the hæmorrhagic tendency are aggravated, and sometimes even produced, by certain conditions: *e.g.*, overcrowding, bad ventilation, and damp dwellings.

3. Pregnancy assists in the development of goitre and the hæmorrhagic tendency.

4. The predisposition to goitre and "flooding" is affected by consanguinity and heredity.

5. The best treatment for both conditions is change of locality, and the prolonged administration of some preparation of iron.

CASE OF RETENTION OF MENSTRUAL FLUID IN THE FALLOPIAN TUBE: A REPLY TO DR. HARLEY.

By LAWSON TAIT, F.R.C.S.

I AM quite satisfied to accept Dr. Harley's criticisms in the spirit in which they are offered; but I greatly regret that he did not more fully investigate the subject before he made them. For what he is pleased to call his "speling", I trust he has better arguments.

First of all, he asserts that no menstrual fluid (proper) is secreted by the Fallopian tubes. Dr. Harley jumps to this conclusion, because he found no menstrual fluid in the tubes of a woman who was not menstruating, but only on the point of doing so. I have, on the contrary, more than once seen menstrual fluid in the tubes of women who have died during menstruation, though I am by no means certain that this is a constant phenomenon, as I can recall two instances where it was looked for and not found. On page 1 of the Sydenham Society's translation of Bernutz and Goupil's *Diseases of Women*, the following sentence may be found; and, so far as I have seen, Dr. Harley stands alone in his opposition to the view it expresses concerning the share the Fallopian tubes have in menstruation: "Soon the cavity of the tubes is dilated by a bloody mucus, which mixes in the uterus with the blood exhaled by its cavity, now lined by an imperfect decidua, and then escapes by the open cervix."

Besides this, we sometimes see menstrual fluid poured from the divided end of a Fallopian tube after ovariectomy. A few months ago, I was obliged to operate on a woman during menstruation, and, for reasons irrelevant here, I did not include the tube in the clamp. For several days after the operation, menstrual blood flowed from the tube in considerable quantity. Dr. Harley's division of menstrual fluid into "proper" and (by inference) "improper", I do not profess to understand. I am quite content with the evidence I have met with, that the Fallopian tubes, in at least some instances, contribute towards what is usually recognised as the menstrual fluid.

That my patient is not the subject of bifid uterus I am quite certain; and for this I have the evidence of my two hands, between which

I had the organ, after I had performed abdominal section. Even if the uterus had been bifid, the case would have been quite within the category in which I placed it, as I am sure Dr. Harley's knowledge of comparative anatomy will enable him to see. The point made by my critic, to the effect that it could not have been the Fallopian tube, because the wall of the cyst contained an abundance of unstriated muscular fibre, must be really amusing to any one familiar with Dr. Arthur Farre's observations. We all know that muscular cavities, when distended by such a condition as I suppose to have taken place in this Fallopian tube, have their walls hypertrophied, and that, when emptied, their walls contract vigorously; and, therefore, it was not surprising that the cyst contracted after being emptied. That I could not find a canal leading into the uterus was probably due to the closure of the aperture, as I suggested in my paper. If it had been a double uterus, I should have expected the cavity to run down for some distance alongside the other undilated half. But it did not. The cyst had an intimate relation to the cornu of a perfectly normal uterus; and this it was which chiefly led me to recognise at once that I was dealing with a dilated Fallopian tube.

I said, at the conclusion of my short and perhaps inadequate account of the case, that the recovery of the patient left a good deal of speculation; but certainly, what is so left does not include any of the points raised by Dr. Harley, and this he may easily satisfy himself upon by consulting the literature of the subject. Thus I may direct his attention to a case published by no less an authority than Dr. Meadows, in the eighth volume of the *Obstetrical Society's Transactions*, in which the conditions seem to have closely resembled those in the case I published, with this difference only, that both tubes were affected instead of one; and that, by the death of the patient, an opportunity was afforded of ascertaining what the exact pathological conditions were. Here they are described: "It was found that both Fallopian tubes were enlarged, not regularly or uniformly, but so as to form a kind of cyst. On the right side, there were two such enlargements, on the other, one. There was no evidence of any communication between these dilatations and the fimbriated opening. On the left side, there was not even an opening into the uterus, the ostium uterinum being completely occluded. They were all filled with a dark, thick grumous fluid, of a prune-juice colour. It is evident that, in this case, we have an example of what MM. Bernutz and Goupil contend for, viz., menstrual retention within the Fallopian tube. The one fact which is clearly revealed is, that the Fallopian tubes do, as well as the uterus, take part in the menstrual secretion; and hence, when any obstruction occurs to the passage of that secretion into the uterine cavity, and so externally, we get the resulting symptoms of menstrual retention."

Other cases of an exactly, or nearly, similar kind are on record; but I am quite satisfied to rank with such observers as Bernutz, Goupil, and Meadows, even at the risk of Dr. Harley's criticism, by which I have in no way been induced to modify the title under which I published my case, or to alter in the least my views regarding it.

THERAPEUTIC MEMORANDA.

MILK AS A VEHICLE FOR QUININE.

It is not, I believe, generally known that milk is an elegant and convenient solvent for quinine, and that it disguises to a great extent its bitterness. If one grain of sulphate of quinine be dissolved in an ounce of milk, we shall find that the bitterness of the draught is hardly perceptible; with two grains there is rather more bitterness, but it is not at all marked. A dose of five grains may be taken in two ounces of milk without an unpleasantly bitter taste; and if the same quantity be put into a tumblerful of milk, the bitterness is all but lost. This method of administering quinine must in some cases be preferable to the ordinary way of dissolving it in acid or spirit, especially where the bitter taste is objected to (as in the case of children), or where the required dose is large; and it will, doubtless, be found to possess other advantages.

R. L. BATTERBURY, M.B.Lond., Berkhamsted.

GLYCERINE IN INTERNAL HÆMORRHOIDS.

AFTER reading Dr. David Yeung's paper in the January number of the *Practitioner*, which is referred to in the *BRITISH MEDICAL JOURNAL* of June 1st, I was anxious to make a trial of glycerine for this troublesome complaint. I have now used it three or four times, and each time its administration was followed by marked relief. Especially was the relief most observed in a young man aged twenty-one, suffering from advanced phthisis. This patient's life was rendered miserable for

some time by the intense pain caused by some internal hæmorrhoids, his sleep was disturbed, and, as he said, he was not free from pain night or day. I used several remedies, including confection of senna, without any success; so I determined to try glycerine, which I did, giving it in one drachm and a half doses every three hours. After taking this for twenty-four hours, the patient's pain was much relieved, and after forty-eight hours it was entirely gone. I may say, however, that the cure was not permanent after leaving off the medicine, as he has had several attacks of pain since, but never so severe as before. He keeps some of the glycerine mixture by him, and a few doses always have the desired effect.

I think that, in such cases as these, we may find glycerine a most valuable therapeutical agent, the oleaginous nature of which may, perhaps, make it useful in other ways in phthisis. In the case of which I speak, the state of the patient's lungs entirely precluded operative interference, so that a remedy of this kind was particularly serviceable.

W. H. JALLAND, F.R.C.S., York.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW TRACTORS FOR MIDWIFERY-FORCEPS.

WHEN I had once thoroughly examined the ingenious new midwifery forceps of M. Tarnier, I saw immediately that his principle gave to those who used the instrument a new power, or rather the ability to use power, in a new direction. I set to work to try if the best part of his principle could be arranged in an effective, portable, and cheap form, so as to be applied to the different patterns of existing long curved forceps. My objections to M. Tarnier's instrument are, that it is bulky, cumbersome, costly, and not very easy of application, though it is most valuable when once *in situ*. After several experiments and much unavoidable delay, I have succeeded in getting made a pair of tractors, which can be hooked on any long curved forceps (after application), can be as readily detached (Tarnier's are fixed by a hinge-joint), and are very portable and cheap.

By means of my tractors, one can use power in a new direction—viz., in the middle of the curve of the forceps, instead of in the long axis of the handles; or one hand may work the tractors and the other the handles in some cases with advantage. The tractors alone give power in such a direction as can only be got in the ordinary way with both hands, or by a leverage of the wrist. I am accustomed to slip an India-rubber ring (about twice as large and strong as those used for umbrellas) on the handles of the forceps when *in situ*: this is better than tying with tape, as it yields somewhat, and accommodates itself to circumstances. The handles, when thus fastened (as shown in the woodcut), move in the direction in which traction ought to be

made, and so form a safe guide in what direction to pull.

I have been well satisfied with the performance of these tractors, so I make them known at once to the medical world, though I quite believe that they are capable of improvement. They can be supplied by Messrs. Maw, Son, and Thompson, of 12, Aldersgate Street, at a very small cost.

HERBERT M. MORGAN, L.R.C.P., M.R.C.S.

A NEW MODIFICATION OF THE TELEPHONE FOR MEDICAL PURPOSES.

INTERESTED in common with most people in the microphone and telephone, I have felt some hopes that the deaf might be in some way eventually benefited by these inventions, although I am not in a position to speak of such matters, beyond that I have always taken an interest in the physical sciences. However, I have just constructed a miniature telephone, so small as to fit, unperceived, into the external

auditory meatus; and with this stuck in my ear, I have been amusing myself this evening by listening in my kitchen to some songs sung by a friend shut up in my attic, my friend singing to a telephone in the attic connected by a wire down the staircase with the miniature telephone concealed in my ear in the kitchen. Here I was enabled to appreciate with relish his feeling rendering of "God Save the Queen", with *ad libitum* variations, by means of an instrument no bigger than the plug of wax which often occupies the auditory meatus; and as the wires coming out of my ear were so extremely fine as to be invisible except on the closest inspection, nobody could have observed that I was in telegraphic communication with anybody. My experiment proves that a telephone may be constructed of such insignificant dimensions as to be tucked completely out of sight, and yet to answer its purpose perfectly well; and I cannot help fancying that the discovery of this fact may eventually serve in some measure to pave the way for the construction of a serviceable—that is to say, an inconspicuous—sound-augmentor. It is well known that deaf persons dislike extremely to use any apparatus which shall render public or obvious their infirmity—such, for example, as the ordinary ear-trumpet; and, so far, one of the extremities of a serviceable apparatus may hereby perhaps have been obtained. What remains to be devised is a receiving apparatus of such sensitiveness that the voice spoken at a distance from it may be received by it in a transmissible shape; and such an apparatus might be placed on the patient's lap, or carried in his hand, connected by the minute wires with the invisible telephone stuck in his auditory meatus. But the microphone, I find, will not serve for that: however, it is quite possible that, sooner or later, some such contrivance may eventually be devised.

P.S.—I would recommend my contrivance as a convenience in auscultating stone in the bladder, by the microphonic catheter of Sir Henry Thompson. BALMANNO SQUIRE.

SALTS' DRESSING-CASE.

MESSRS. SALT and SON of Birmingham have submitted to our examination an extremely neat and portable case of dressing-instruments, specially designed for the waistcoat-pocket, and containing scissors, forceps, two probes and director, caustic-holder, two bistouries, Syme's knife, and tenotomy. The case is made of aluminium, and the engraving is drawn to a scale of about three-fourths actual size. The instruments, although inclosed in so small a case, are all large enough to be really useful, and are sufficient in variety to meet all ordinary requirements of the general practitioner. Many so-called "pocket-cases" are of such bulk and weight as to be anything but comfortable companions. This, although really practical for everyday use, may almost be carried in the waistcoat-pocket.

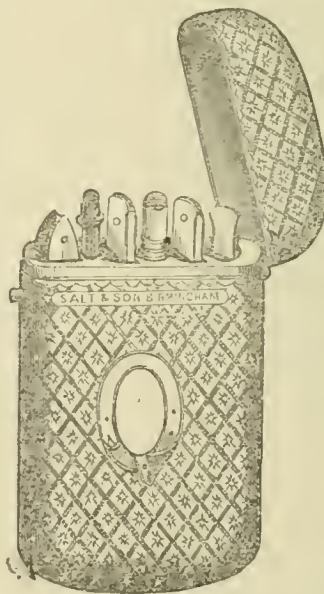
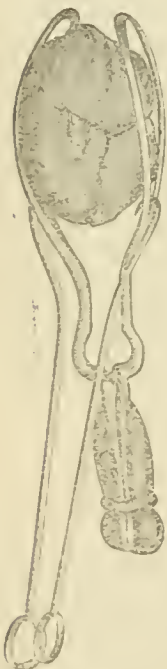
The list of instruments includes, it will be seen, all that are most commonly needed. The instruments commonly made for pocket-cases are unnecessarily bulky. A small knife will do a great deal of cutting; and some of the best surgeons have for many years used a little waistcoat-pocket knife (Pollock's knife) to do all their daily needs.

TUPELO-TENTS.

SIR,—In your issue of the 8th instant, you printed a description of a new kind of dilating uterine tent, made from the root of the tupelo tree, a sample of which we had the pleasure of submitting for your inspection. We have been at considerable trouble and expense in introducing these tents into this country; and should feel much obliged if you would permit us to state, through your JOURNAL, that our arrangements are now complete, and that we are in a position to supply them to any of your readers.—Obediently yours,

SALT AND SON.

21, Bull Street, Birmingham, June 11th, 1878.



BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1878.

SUBSCRIPTIONS to the Association for 1878 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 29TH, 1878.

PRISON DIETARIES.

IN no place so suitably as in a prison can we apply to practice the determinations of recent science regarding the bearings of diet on work. Indeed, distributive justice demands that these accurate scales, rather than the rougher machinery of experience, should be made the basis of the calculations according to which our unfortunate dependents are fed. There are three parties whose rights have to be weighed: the law, which demands that the life should be really penal; the prisoner, who has a claim to be restored to society in no worse condition than that in which he left it, and that his punishment should be definite and not greater than contemplated in the sentence; and the ratepayers, who require that the expenses should be kept down to the minimum consistent with other rights. It is obvious that mere experience and observation can never answer the questions raised in the endeavour to satisfy these claims. None of the parties concerned can be justly experimented upon; observations are collected from such a number of sources, and require correction by so many special circumstances of individual mental constitution and sphere of inquiry among the reporters, that they resolve themselves into mere personal authority; so that the *a priori* reasonings of science are perforce the bases of decision. We are glad to see that the Committee appointed to inquire into the dietaries of the prisons in England and Wales, subject to the Prison Acts of 1865 and 1877, have recognised this fact in printing the laborious analyses by Messrs. Gover and Briscoe, where each separate article of food is resolved into its component parts of nitrogenous matter, carbohydrates, fats, and mineral matters, and the totals compared with the expenditure of the body in generating force during rest and work. We are glad also that they recommend an uniform dietary for the prisons within the area of inquiry; and we hope that this dietary will not be merely set forth as a model, but enforced on each of the establishments included. The only arguments for variation are, first, the differing proportions of prisoners guilty of serious or light offences; and, secondly, the prices of food in various localities. To the first, a sufficient correction is afforded by the classification of diets according to the duration of imprisonment; and, if any place be happy in having a large proportion of its offences of a light character, punishable by short imprisonments, rendered cheap by the infliction of bare existence diet, by all means let it get the reward of its virtue and vigilance. The price of provisions at various places is a more serious objection to uniformity; but here it is to be observed that it is not the more bulky portions of the fare which differ greatly, but such things as salt, pepper, onions, and cocoa, according to the comparative table in the report alluded to. And these striking variations must, we think, admit of some compensating explanation; for there seems no commercial reason why Oxford, for example, should be paying 9s. 4d. per cwt. for salt, which at Birmingham costs but 1s. 8d.; or why the first should get its pepper at 7d. a pound, which in Cornwall costs 3s.

Of the dietaries suggested for local adoption by the Home Office, that of 1843 has been more generally followed, with variations, than that of 1864. This is apparently not by reason of its freedom from defects (for it is reported to be "strangely anomalous and eminently unsatisfactory"), but from its greater simplicity in the classification of

prisoners. This simplification of the otherwise better dietaries of 1864 the present reporters propose to attain by the ready expedient of rating women and children along with men not performing hard labour, the effect of which is to reduce the classes of diets from twelve to four, and thus to lighten greatly the duties of the administrative departments, and to avoid the waste and confusion arising from a multiplicity of dietaries.

Simplification, by reducing the number of classes, enables the proposers of the new dietaries in the recent report to obviate one of the impediments to the adoption by prison authorities of the Home Office scale of 1864; namely, the more extended use of fresh vegetables, which rendered that scale troublesome in application. The dietaries of 1864 are a great improvement in this respect on those of 1843; but, as before stated, the intricacy of their subdivisions has made them unpopular with officials. The alternative substitutes of greens, parsnips, and leeks in place of potatoes are judicious; but we question whether rice or "preserved potatoes" can be so regarded. The latter can hardly be ranked as antiscorbutics on land; and weight for weight, when cooked, they are too watery to replace the genuine fresh article in nutrition.

A noticeable feature in 1864 was the considerable reduction of the quantity of meat advised in 1843 for those undergoing hard labour—from 11½ oz. to 7½ oz. (chemical reckoning) per week. This seems to have answered well in the few establishments which adopted the last dietaries, and it has consequently been carried a little further by the suggestors of the new scale. It is certain that farinacea and other vegetables supply a temporary fund of daily force; and hard labour, though conventionally called "hard", does not so wear out the muscular and nervous systems as to require their extraordinary renewal. It is well pointed out by Mr. Gover that imprisonment, as now generally conducted, is a condition more or less akin to that of physiological rest. From the moment the gates close upon a criminal, there is a tendency in most cases to lessened waste of tissue, and he lives, in fact, less rapidly than before. He is free from the worry and anxiety entailed by the struggle for existence, by desire and passion and their inevitable reactions. He spends nine hours out of the twenty-four in bed; and, to judge from his manner and appearance, his mental peace is untroubled by any pains of the conscience. He is qualified for spare living by every possible circumstance—except his tastes; and these doubtless are in favour of indulgence. Is it necessary to gratify them in order to keep up his health? Our own experience of individuals inclines us to say "No", and to think that the health is the more improved the more complete the change; that is to say, that the most luxurious derive most benefit from being restricted to spare and unstimulating food, while the hard-livers do not bear so well a diminution of their bill of fare. This opinion is strengthened by the remarkable fact that in the agricultural districts, where little meat is habitually eaten, the prisons find it expedient to supply it on a more liberal scale than in the manufacturing towns, where the working classes in freedom consume a larger proportion of nitrogenous food. We cannot for a moment sanction, as an objection to a dietary, that a prisoner does not like it. The intention is to subject him to a discipline he does not like, and there is every reason for making his alimentation a part of this discipline. Perhaps the government of Nineveh may be accused of over-refinement when (as we learn from Mr. Smith's translations of the tablets) the prisoners were obliged to drink the water of the sewers; but the principle must not be overlooked, that a criminal must be fed on "the bread of affliction", provided always that he does not lose weight to an extent inconsistent with health.

A permissory substitution for meat of fish, beans and bacon, and peas, is capable of effecting a great saving. The prisoners will not look upon it as a luxury, and yet the variety is good for their digestion. But, a whole, we cannot congratulate the ratepayers on the promise of any beneficial change in the expenses of maintenance in the report we have just been reading; indeed, the reporters expressly declare that they have viewed the question of cost as of secondary importance.

This is unfortunate; for, with the materials they can command, they might have given advice of great value, which would facilitate the reception they must expect from county boards.

The correction of idleness and misconduct during confinement by reduction of food is a very serious matter. The habitual diet ought to be as low as is consistent with health; and we must understand that, in reducing it, we are administering corporal punishment. The victim will lose flesh and power of resistance as infallibly as he loses leather in a flogging, and he will certainly be put to pain. But let society beware of discarding in too great a hurry survivals of more barbarous states of civilisation, till it is proved that they are not needful safeguards. The reporters are of opinion that, to secure the purposes of punishment for prison-offences, the plan of reducing the diet to a scale as low as one pound of bread *per diem* should be continued. The worst of all corporal punishment is, that it cannot be fairly graduated to the offence; for, while three days' bread and water is not too much to act as a deterrent to very moderate offenders, to continue its infliction over that time results in injury beyond what is designed. It may be suggested, however, that the three days' fast can easily be repeated over and over again after an interval, just as floggings are administered in moderate doses weekly or fortnightly to brutal offenders. Thus the strong moral influence of anticipation is brought into play, whilst danger to health is not incurred. The power of the stomach as an implement of education, moral and intellectual, is the subject of a familiar quotation from an observant poet, and it is a pity to surrender any power left us of improving the manners of criminals.

OBLITERATIVE ENDARTERITIS.

THE almost universal part played in pathology by obliterative arteritis, its mode of origin and real nature, are, or have been until lately, ignored by British pathologists, or, if seen in some cases, they have been totally misunderstood. The facts are not new, but they are not recognised, perhaps because workers at histology limit themselves too much to a narrow field of special observation without preparing themselves by wide study of changes as they occur in all the tissues of the body, in inflammations, in new formations and tumours of all kinds. Apparently, MM. Cornil and Ranvier were the first to describe this change. They say, "Dans les plaies, dans les ulcères, et dans les phlegmons chroniques, il n'est pas rare de rencontrer, sur les coupes minces faites pour l'examen microscopique, des artères dont la tunique intime a végété de manière à oblitérer complètement le calibre du vaisseau" (*Manuel d'Histologie Path.*, pp. 554-5). But we owe to Friedländer and Köster the first precise descriptions of the condition, their observations having been published almost simultaneously at the beginning of 1876. (A paper on the subject, by Dr. Friedländer, was noticed in the BRITISH MEDICAL JOURNAL of March 18th, 1876.) They showed that in all growths, whether inflammatory, tubercular, syphilitic, sarcomatous, or other, it was not uncommon to find the lumina of the vessels narrowed by a small-celled circumscribing or laterally placed growth of embryonic tissue, which was accompanied by a similar infiltration of the outer coat in a more advanced state of organisation, and by a less degree of affection of the middle coat, which tended to lose its distinctive muscular character and become fibrous. They compared these changes to those which take place in the so-called organisation of thrombus, and held that the growth from the inner membrane was formed from elements which had migrated from the vasa vasorum. These observations were all the more opportune, as in these recent years we have had two forms of obliterative arteritis described, to each of which specific characters have been assigned and considerable pathological significance has been claimed for them. We refer to the arterio-capillary fibrosis of Gull and Sutton, and the syphilitic arteritis of Heubner. It is true that, so far as the renal arterioles were concerned, the facts brought forward

by Sir W. Gull and Dr. Sutton were not new, but our want of knowledge at that time as to the true nature of the process made them assign to it an importance which it by no means deserves. If they had known that the coats of the vessels universally take part in the surrounding connective tissue changes, they would not have ventured to find in their arterial thickenings evidence of a general primary disease of the blood-vessels. Other observers have failed to confirm their assertions that these changes are further distributed than surrounding processes fully account for. Most of the cases of so-called syphilitic arteritis also come under the same category of secondary processes presenting no anatomical distinctive features. The changes described by Oedmansson in the umbilical vessels, and Fränkel in the placenta of syphilitic foetuses, are now known to present nothing characteristic; and identical appearances have been described by Mr. Lawson Tait in non-syphilitic placenta (*Transactions of the Obstetrical Society*, vol. xvii). The same remark applies to the vessels figured by Dr. Batty Tuke (*Journal of Mental Science*, October 1874) as found in the brain of an insane patient who had had syphilis; while Friedländer goes so far as to say that the syphilitic arteritis of Heubner is "a typical obliterative arteritis, which presents no specific syphilitic peculiarities whatever, and, moreover, is in no way etiologically limited to syphilis alone".

The syphilitic arteritis of Heubner differs in one important feature from all the other affections we have alluded to in being an independent affection of the vascular system, that is, not necessarily dependent upon gummatous growth around. It is true that there is no difference between the changes that occur in the middle cerebral artery, for instance, which lies imbedded in a gummatous mass involving neighbouring parts, and that which is not so surrounded; but it is not the less a striking feature, that this disease may, and does frequently, arise primarily in the coats of the vessel, and shows no tendency to involve the surrounding parts, as in the case related below. Heubner considered it a "gummatous" affection of the vessel, originating in the intima, due to irritation by the syphilitic virus in the blood and growing by proliferation of the epithelioid lining of the vessel, and secondarily giving rise to changes in the muscular and outer coats from migration of cells out of the vasa vasorum.

Dr. Paul Baumgarten of Königsberg, already known by his contribution to our knowledge of the process of organisation of thrombi, has recently published some further observations (*Virchow's Archiv*, Band lxxiii, Heft 1) on syphilitic arteritis, and endeavours to settle the questions at issue between Heubner and Friedländer. On the general subject of endarteritis, he is completely at one with Friedländer, except as to the part played by the epithelioid lining; he finds that, in endarteritis artificially produced by ligature, the epithelioid lining first undergoes proliferation, and that the changes in the outer coats occur later and by migration of cells from the vasa vasorum. He relates a case of primary syphilitic arteritis in a man who died of general paralysis of syphilis, and in whose brain the arteries at the base were "generally thickened and white coloured, both middle cerebral arteries being changed into thick greyish white cords, no basal meningitis, and indeed no affection of the basis cerebri et crani". Microscopical examination of these vessels showed an indifferent non-vascular embryonic growth in the lumen; and in the adventitia a vascular, partly caseating, round-celled formation, containing giant cells, and encroaching upon the middle coat so far as in one case to be continuous with the growth in the intima. He considers the periarterial formation to present the characters of gumma, but the internal growth he regards as a non-specific indifferent production; so that he agrees so far with Heubner as to admit the disease to be gummatous and to deserve a specific title; but so far as the endarteritis is concerned, he considers it a non-specific change in a strictly anatomical sense. Reasoning from the analogy of his observations on artificial arteritis, he is quite willing

to accept Heubner's statement that the process commences by proliferation of the epithelioid lining, and that the changes in the outer coats are due to the migration of cells out of the vasa vasorum; but according to him, it is this latter growth only which takes on the characters of "gumma", the internal new formation retaining its indifferent character, and behaving throughout like ordinary granulation tissue developed in the same situation under non-specific influences. This view is not to be confounded with that held by some English observers, especially Dr. Davidson of Liverpool, who contends that the periarterial gummatous formation precedes the obliterative process, which latter, according to him, takes place by the organisation of a thrombus formed by the partial occlusion of the vessel through the pressure of the external growth—a mode of production already long ago put forward by M. Ranvier as that in which tubercular obliteration of the blood-vessels is effected.

LONDON SCHOOLS, TEACHERS, AND FEES.

WE mentioned lately the negotiations for increasing the fees of the London medical schools. These have now been carried on to the point that the majority of the London medical schools have agreed to raise their fees to the extent of about twenty-five per cent. The grounds for that increase are very well known and apparent on the surface. Medical courses are more numerous; medical teaching covers a larger field of study; its methods are more thorough and practical, and include practice in doing as well as seeing, and the study of objects of demonstration and of principles instead of merely theoretic discourse. The cost of the increased staff and the increased labour and time devoted to teaching by the staff has grown so much, that if the two or three dozen lecturers and tutors of each of the dozen metropolitan schools are "to live", the price of the whole curriculum must be raised.

But are they to live? It is a pity that this question was not discussed first. For ourselves, we shall have no hesitation in saying—what Talleyrand said to the gentleman who prefaced his apology for a questionable proceeding by explaining that he must live—the necessity is not clear. Is it a good thing, or is it not rather a bad thing, to keep up a dozen schools in London, each with its show of completeness, its staff of lecturers on botany, chemistry, materia medica, anatomy, histology, comparative anatomy, hygiene, and so forth, besides the staff of clinical teachers?

Such lectureships and such an apparatus of teaching have no natural or necessary relation to a hospital. Private rivalry and considerations of professional interest, the love of teaching, the tendency to follow precedents, the desire and the advantage of disciples, have contributed to attach a completely equipped medical school to every hospital—complete on paper, in skeleton, and commonly marked by an honest effort to supply reality to the scheme. But at what effort and what sacrifice of efficiency is this dismal pretence often maintained! What tedious apprenticeship of unwilling lecturers, to whom the only way to a hospital appointment is through the portal of a temporary professorship on a subject of which the lecturer often knows little and for which he cares less! On the one hand, great hospitals, such as the London, have magnificent clinical material running to waste, because the school cannot be brought successfully into competition with the more wealthily endowed or academically favoured schools of St. Bartholomew's, Guy's, University College, or King's College. On the other hand, University College Hospital is overpopulated with students, who find inadequate clinical material. There is more than enough scientific power for one or two great scientific schools, with clinical facilities at all the hospitals; at present, that power is largely wasted, dispersed, and ill paid.

The metropolitan student is badly off for teaching, as compared with what he ought to be. The fees already are high; and, after he passes all the examinations of all the colleges and gets all the diplomas, he is not allowed to call himself Doctor, and he is at a disadvantage as compared with the student of every other metropolis.

The hospitals of London are among the best in the world; but the same cannot be said of the medical teaching. Everybody undertakes to teach; and a large proportion of the teachers have not even the elementary qualities required for it—neither clearness nor application to the theory or practice of teaching, nor systematic study, nor method in tuition. We proceed on the supposition that every young aspirant for a hospital appointment is a heaven-born teacher in a great variety of subjects. The aspiration to hospital appointments is a frequent and pardonable weakness of young men of very mediocre attainments indeed and still feeble powers of tuition, but well provided with the financial means of waiting in London for years without income. Such men are dealt with commonly on the hypothesis that they must necessarily possess a heaven-born capacity for lecturing on any subject, and they are employed accordingly to fill up vacancies in succession. Experience, however, shows that it is an error to assume that the possession of such ambition and of a given number of pounds is always coincident with brains enough to study deeply, and application and clearness of intellect enough to teach well in almost any subject. Nevertheless, this is the principle on which a large proportion of the staffs of the metropolitan schools are appointed; and it is in virtue of this arrangement that a dozen schools will now raise their fees for teaching.

In our opinion, the raising of the fees is beginning at the wrong end. The schools need to be consolidated; the scientific teaching put on a higher footing; and, at the end of his studies, the student should be able to obtain a diploma of M.D., like the student of Edinburgh, Dublin, Cork, Belfast, Glasgow, Aberdeen, Galway, or Durham. The shepherds should think a little more of their sheep and a little less of themselves.

A MEETING of the General Medical Council has been summoned for Friday, June 28th, at 2 o'clock P.M., to consider the Amendment of the Medical Acts.

ANOTHER death is recorded this week—at Belgrave, near Leicester—from the accidental swallowing of a quantity of carbolic acid. The man poisoned drank it believing he was drinking out of a brandy bottle. The free use of carbolic acid as a disinfectant causes an immense number of fatal accidents.

It ought not to escape the attention of those who are occupying themselves with the details of the Medical Acts Amendment Bills, that the chemists and druggists are bestirring themselves very actively, although quietly, to "defend the interests of chemists in prescribing", and to procure the repeal of the securities afforded by the Apothecaries' Act against the unlimited generalisation of unqualified practice by pharmaceutical chemists. *Vide the Pharmaceutical Journal* of June 22nd, 1878.

AN inquest was held on Wednesday, before the deputy coroner for Manchester, upon the body of John Pritchard, aged five years, who, two months ago, was playing in the street, when a cat bit him on the right arm with great ferocity and was with difficulty got off the boy. He was taken to the infirmary, and in course of time the wound healed. On Thursday last, he began raving. He was taken to St. Mary's Hospital, when symptoms of hydrophobia appeared, and he was placed under treatment for that disease, and got better; but the attacks returning, he gradually sank and died on Monday. A verdict of "Death from hydrophobia from the bite of a cat" was returned.

DR. DUDFIELD has published a well-reasoned statement, in reply to the allegation, coming from a medical authority, that "the Small-pox Hospital at Fulham is the great focus from which the disease is spread to the neighbouring parishes". Such a statement is one which is always popular and easy to make, but experience has in every instance proved that it is contrary to the fact. Dr. Dudfield shows quite conclusively that it is so in this case. Each poor-house in which small-pox occurs is a badly isolated, badly administered "small-pox hospital", and

becomes a "focus of contagion". It is from the private houses of the poor that infection spreads, and not from well isolated and well administered hospitals, which, on the contrary, offer the surest means of arresting the spread of contagion.

THE HUNTERIAN MUSEUM.

THE annual collection of the preparations added to the museum during the last twelve months will be exhibited in the theatre of the Royal College of Surgeons on Tuesday, Wednesday, and Thursday next week.

THE CASE OF MR. DODWELL.

WITH reference to the recent report of Dr. L. J. Forbes Winslow and Dr. Winn concerning Mr. Dodwell, whom they have visited at Broadmoor, we have reason to believe that, as he is now declared free from excitement and perfectly sane, the main reason for his detention is that, having been committed as a criminal lunatic, the authorities require a substantial guarantee from his immediate relatives that they will look after him on release and be responsible for his good conduct; but, as they are without resources, they are unable to give any such guarantee.

INFECTION IN SCHOOLS.

THE frequency with which infectious diseases are spread by children attending large schools, especially national and board schools, has led to several plans being adopted for counteracting the evil. The most recent is one somewhat similar to that recommended by the Society of Medical Officers of Health at the instance of Dr. Dudfield; but the form to be filled up is much more simple, and is the production of Dr. Elliot, the Medical Officer of Health for the Carlisle Urban Sanitary District. The form consists of a small slip of paper whereon are printed the name of the school, a heading for the name of the scholar, the address, the name of the medical attendant, and the date of the first day of absence. To these might have been usefully added another line for the "supposed disease". There is also a counterfoil, and the forms are bound up in a small book. With the book Dr. Elliot sent a circular pointing out to the teachers of large schools that their own interests are involved in an early notification to the medical officer of health of the existence of cases of infectious diseases, as by early notice the disease may often be prevented from spreading, and the breaking up of these schools frequently avoided. As Dr. Elliot says, "a threatened pestilence, like a fire, may be quickly stamped out if promptly and skilfully dealt with; but, if neglected for a time, it quickly spreads, and can only be dislodged at a great cost, it may be, of both money and life". The mode of forwarding the information is not stated in the circular; and the medical officer would, therefore, probably expect the notice to be sent by hand, or post-paid through the post. This seems somewhat of an oversight, as it is found in practice that teachers will not pay the postage, or take the trouble to send the notice to the sanitary officer if at any distance away; so that the plan adopted at Hackney by Dr. Tripe, of using post-cards with his name printed thereon, with the following words on the other side, "case of infectious disease", "name", "address", and "supposed disease", with blanks to be filled up, seems decidedly preferable. The difficulty of obtaining information of the occurrence of these cases has induced medical officers of health to ask it from district visitors, clergymen, School Board visitors, and others, often with very good results.

CAUSES OF INFANTILE MORTALITY.

IN consequence of the great mortality at Macclesfield amongst infants, and a statement which was made in open court at a coroner's inquest that there was a large amount of child-murder in the borough, a committee was appointed by the Town Council "to confer with the medical profession, the health and sanitary officers of the corporation, and such others as they might deem fit, on the subject". After making due inquiry and taking evidence in the matter, the committee reported

that there was nothing to show that child-murder or criminal neglect occurred in the borough; but there was no doubt that the infant death-rate in Macclesfield is considerably in excess of the average throughout England, and that most of the causes of the excessive mortality are preventable. In 1876, the death-rate amongst infants under one year was as high as 21 per cent. of the registered births, having been above 19 on average of some years, which was attributed by the Committee to the following causes: 1. To the lack of maternal care of children, arising from mothers returning to their work too soon after confinement; 2. To improper feeding and exposure; 3. To the too frequent use of narcotics and soothing medicines; 4. To the ignorance and negligence of parents in not seeking promptly proper medical advice for their children; 5. To constitutional and hereditary causes arising from the immorality of parents, etc.; 6. To lack of personal cleanliness in neglecting the daily washing of children; 7. To residence in unhealthy and ill-ventilated houses; 8. To overindulgence in drink by the parents. To these we may add the not using the means of ventilation already provided by open doors and windows; by allowing unwashed bedding and other clothes, including rags, to remain in the shut-up bedrooms; and by overcrowding. This last cause of infantile mortality is too often lost sight of, as it was in this investigation, although it is a frequent cause of diarrhoea and general ill-health. The effete matters given off from the lungs and skin of a number of individuals crowded into one apartment, which is kept shut up for warmth, afford a very suitable atmosphere for the induction of tubercular affections and the spread of zymotic diseases. Dr. Bland, the medical officer of health, in his report for 1877, says that this mortality was much reduced in consequence of the moderate temperature of the summer and consequent diminution of deaths from diarrhoea, and of the large number of wet open midden-steads which have been abolished, and covered ash-pits substituted in their places. At Hanley, where the infantile death-rate was as high as 193 per 1,000 registered births, Dr. Swift Walker attributes the mortality to precisely similar causes; indeed, almost all medical officers of manufacturing towns are agreed in this matter. The sale of opiates, such as Godfrey's cordial, should be forbidden, except under a medical man's order, as no regulation less stringent will prevent the mortality arising from the continuous drugging of infants.

UNQUALIFIED PRACTICE.

DR. HARDWICKE held last week an inquest, in the course of which two of the prominent evils of the present system of unqualified medical practice by prescribing chemists came under notice. It will be observed that, as the chemist chose to call his shop a "medical hall", the poor people were confirmed in the common delusion that a pharmaceutical chemist is a person possessing professional skill in the diagnosis and treatment of disease; and moreover, an unworthy member of the medical profession assisted in maintaining the delusion and covering its results, by appending his signature to the death-certificates of the chemist's deceased patients. Both evils are rampant at the present moment, and it is these cases especially which it is desirable to meet by a suitable amendment of the fortieth penal clause of the Medical Act. In the case in question, Dr. Hardwicke held an inquest at the King's Head Tavern, Broad Street, Bloomsbury, as to the death of Alice Seage, aged sixteen months. Mrs. Seage, wife of a goldsmith, of 3, Great St. Andrew Street, St. Giles, said that for some time past the child had been ill. She was first taken with whooping-cough; and the witness went to a Mr. Andrews, who she thought was a medical man, of the Medical Hall, Little St. Andrew Street, St. Giles; and he attended the child, and it got better, but was afterwards taken ill with measles. On Saturday, the child grew worse, and her husband went for Mr. Andrews, who said that he would come over in a few minutes. Instead of him, a gentleman, who was the worse for drink and who could scarcely speak, came, and said that all the child wanted was a little powder on the tongue. Her husband told him that he was not in a fit state to prescribe, and he should not allow him, and ordered

him to leave the house, which he did. After the death of the child, she went to Mr. Andrews, who gave her the certificate of death. She saw him write it. It was as follows: "Alice Seage, aged sixteen months. Last saw her on the 15th of June, at 3, Great St. Andrew Street, St. Giles. Primary cause of death, measles; secondary cause, pneumonia. Duration of illness, two days. Joseph L. Kingston, L.R.C.P. Edin., of 1, Little St. Andrew Street, St. Giles." The witness took it to the registrar. She did not know Dr. Kingston, by whom the certificate was supposed to be signed. Mr. Faulkner said that he was the registrar of the district. He had received the certificate of death of the deceased, and also six other certificates like the one produced. He had never seen Dr. Kingston write. Dr. Joseph Linsey Kingston said that he was registered in 1865. No. 1, Little St. Andrew Street, St. Giles, was a medical hall. The place was not in his name, but in Mr. Andrews's, who was studying for the profession. The witness saw the child three times and signed the certificate. Mr. Andrews also signed it, because the witness did not know the name of the child. Mr. George James Andrews, of 4, Castle Street, Leicester Square, said he kept the Medical Hall, Little St. Andrew Street. He was a chemist, but was not qualified, and had been a pupil of Dr. Kingston for sixteen months. He had not attended any lectures, nor had he walked the hospitals, although he had been connected with the medical profession for twenty years. He was paying Dr. Kingston 9s. per week for reading up, and intended to enter the Charing Cross Hospital. He attended the deceased, who was at first suffering from whooping-cough, and afterwards from measles. He last saw her on Saturday, just before she died. Dr. Kingston was in a hurry to go somewhere, and left the certificate of death signed, so that the witness might fill it in. The jury returned a verdict, "That the deceased died from inflammation of the lungs after measles; and that they were of opinion that it was highly improper that George James Andrews, acting as a chemist and unqualified, should be allowed to attend patients and to procure certificates of deaths signed by a qualified practitioner for the purpose of registering deaths". It will have been noticed that Mr. R. H. S. Carpenter, who has rendered considerable professional and public services during the last year or two in this matter by enforcing the law and bringing the necessity for amendment of some of its provisions under the notice of Mr. Cross and the Duke of Richmond and Gordon, considers that the provision in Lord Ripon's old Bill of 1870, which has been adopted *en bloc* by the Medical Reform Committee as the Association Bill (or Medical Act Amendment Bill No. 2), is still more defective in this matter than the amended clause in the Duke of Richmond and Gordon's Bill. He expressed that opinion in a letter addressed to our members last week in these columns by the application of an adjective of unusual and, we think, regrettable strength; but we feel sure that Mr. Carpenter and his colleagues in the Medical Alliance and Defence Associations will find that the promoters of Bill No. 2 will be most glad to concert with them such further amendments in committee as may serve the purpose of promoting public and professional security.

HAMMOCK STRETCHER FOR INVALID TRAVELLERS.

ON Friday, June 21st, 1878, by the kind compliance of the managing director of the London, Chatham, and Dover Railway, Mr. Richard Davy had the opportunity of practically testing his improved hammock stretcher. The patient was an ex-policeman, suffering from disease of his pelvis and psoas abscess, the result of a fall received in the discharge of his duty. The distance covered was from the Westminster Hospital to the Royal Sea-bathing Infirmary, Margate. The net hammock was slung on the stretcher by four cords, playing on four India-rubber cylinders, which act similarly to intervertebral discs. The stretcher consisted of two shoulder-poles, connected by two iron cross-bars; this was slung to the roof of the railway-van by two cord pendants. The connection and disconnection of the whole mechanism was effected in an instant. The patient quite enjoyed his transit, stating that he was absolutely free from concussion, and capable of pro-

ceeding any distance under similar conditions. At Margate, two strong good-natured porters (London, Chatham, and Dover Railway) carried the stretcher and patient from the van to his bedside in the infirmary. Mr. Richard Davy will be pleased to show the whole arrangement, and its practical working, to any members of the profession, on Tuesday afternoons, at the Westminster Hospital.

BENZOATED ALCOHOL.

WE referred lately to the antiseptic value of benzoic acid and Gruber's recommendation of benzoate of soda, as an antimycotic medicine. Benzoated alcohol is much recommended by Dr. Templeton as a basis of valuable and pleasant antiseptic solution. It is recommended to dissolve half an ounce of the pure benzoic acid, prepared from the resin, in a pint of spirits of wine. Mixed with water, it makes a pleasant, effective, and innocuous lotion-gargle or spray.

ANTISEPTIC OSTEOTOMY.

IT will have been observed that the method of operating, especially recommended by Mr. Chiene, Surgeon to the Royal Infirmary, Edinburgh, for deformity of the lower extremities, has already recommended itself to several surgeons. The operation, as first practised by Mr. Chiene for knock-knee, consisted in removing, with antiseptic precautions, by means of a mallet and chisel, a wedge-shaped portion of bone from the internal condyle of the femur, without in any way interfering with or opening into the knee-joint. The two cases which Mr. Chiene thus treated with surprising success were shown at the Medico-Chirurgical Society, and referred to in the *Edinburgh Medical Journal* for September 1877. Since then, Dr. Macewen of Glasgow (*Lancet*, March 30th, 1878), in a similar way and with equal success, removed a wedge-shaped portion of bone from the anterior surface of the femur of a girl affected with a stiff bent-knee; and only lately, Mr. Barwell has described in this JOURNAL (May 18th), how he was able greatly to benefit two cases of almost hopeless deformity by breaking, after almost completely dividing, the bones of the leg in one case, and both leg- and thigh-bones in the other, and then keeping them in position by means of plaster-of-Paris. By similar operations—cutting down on, and either removing a wedge-shaped portion, or completely dividing the bone—much good may be done for many children. When the operation is done antiseptically, the danger is reduced to a minimum, as in the cases above referred to; and, seeing that it will seldom be necessary to open into the knee-joint, it may be hoped that those acquainted with the use of antiseptics will not hesitate to give their patients the chance of escaping from being confirmed cripples. It is but right to add that the practicability of this operation was proved by Mr. Chiene more than a year ago, so that Dr. Macewen can scarcely be justified in looking on his case as "the first of antiseptic osteotomy performed in Britain".

ASCENDING NEURITIS.

O. ROSENBACH has been carrying on a series of experimental researches in the Physiological Institute of Breslau, of which the object was to produce peripheral inflammation in nerves in order to study the upward extension of the neuritis and its implication of the spinal cord. This process, which has been affirmed in a number of cases, as is well known, from the results of *post mortem* investigations, Rosenbach expected to be able to produce by the irritation of the nerve-trunk in guinea-pigs. He experimented in fifteen cases on the sciatic nerve; and in six cases on the pneumogastric nerve. He employed sometimes turpentine injection as an irritant, and sometimes he drew a thread through the nerve-trunk. In the first series, he obtained only perineuritic inflammation; in the second, only inflammation, or more correctly speaking destruction, of the parts of the nerve-bundles which were pierced; in no case did even the smallest tendency to an extension of the neuritis to the neighbouring parts or to the spinal cord show itself. He admits that, notwithstanding these negative results, it is possible that, by the employment of other irritants, an irritation with a tendency to extension might be induced. He attributes, however, im-

portance enough to the failures of his experiments to justify the conclusion that the occurrence of ascending neuritis must be considered as seriously in doubt, so far as an affection is meant in which the real peripheral localised inflammation produces the more central affection and does not merely exist alongside of it. He considers it further doubtful, on the ground of these researches, whether that which has been in previously related cases ascending neuritis has been really an inflammation, and not perhaps only a trophic change.

SEPTIC AND ASEPTIC FEVER.

ACCORDING to Gentz and Volkmann, in addition to the recognised septic form of traumatic fever, a second kind, an aseptic traumatic fever, must be noticed. It occurs commonly under Lister's surgical dressing, even when the wounds go on healing, without any local reaction, without pain or collection of pathological fluids. Among a thousand carefully and quite successfully treated severe wounds or operations running the usually successful course under the antiseptic method, in about one-third there was no febrile temperature; in the second third moderate increase of temperature; and in the last third marked fever. The rise of temperature in this fever is the only clinical symptom, whilst the ordinarily accompanying symptoms which characterise septic fever are altogether absent. Persons suffering from this aseptic fever, with temperatures up to 102 and 104 deg. Fahr., go about feeling subjectively quite well, and have moist skin and tongue; the quantity of urine is exceedingly large and the chlorides are not diminished; the excretion of urea is increased corresponding to the pyrexia. Even in fever of this kind of long duration, the loss of weight is very slight as compared with that which would occur under similar conditions in septic fever. The aseptic fever occurs in the treatment of wounds even when these heal by first intention; it shows itself much oftener in subcutaneous ulcerations, severe contusions of the joints, and especially in subcutaneous bone-fractures where considerable extravasation of blood or compression of internal parts exists. Thus, of fourteen cases of subcutaneous fracture of the thigh in the hospital, only three were free from fever. In six of these febrile patients, the temperature did not exceed 102 deg.; in five it reached 102.2 to 104.2 deg.; whilst, on the other hand, in subcutaneous fracture of the leg, in about half of the cases observed no elevation of temperature was perceptible. The authors consider the aseptic traumatic fever to be a fever of absorption like the septic, only that in the latter heterologous and poisonous substances are absorbed into the blood, which undergoes a process of dissolution; whilst in aseptic fever there occurs in each an addition of substances which are not to be distinguished from those which are produced by physiological regressive metamorphosis of tissue and physiological products: the more abundantly as these products are formed by crushing or injury, the more intense is the aseptic fever.

THE CÆSAREAN SECTION IN A THEOLOGICAL ASPECT.

A MEDICO-THEOLOGICAL question has been lately agitated in the French journals in reference to children extracted by the Cæsaean operation. The performance of the rite of baptism has been hitherto restricted to those children that have presented any signs of life after removal from the body of the woman. This is also the rule in England. In France, the operation appears to have been recently performed as much for the purpose of procuring a subject for baptism, as for the saving of the life of the child. Judging by a case which is reported to have occurred at Champoly, the life of the woman is of secondary importance under these circumstances. A woman named Dumas is said to have died from the Cæsaean operation performed on her by a pork-butcher, under the direction of a priest. There was an inquiry, but it came to nothing. The reclamations of the press and the remonstrances of the profession have had no effect. The sole object of the priest was to have the child removed by extraction, in order that the rite of baptism might be performed on it; and he doubtless selected a non-professional operator from the difficulty of finding a member of the medical profession to assist him in his views. Dr.

Depaul, an eminent obstetric surgeon, in commenting upon the facts of the case, truly states that the conduct of both persons was illegal. Had such a case occurred in England, it would have led to a trial and conviction for manslaughter. In dealing with the theological question, *De baptizandis parvulis*, Dr. Depaul makes a few observations which may be of use to medical practitioners on these occasions. A medical man must not surrender his judgment for the performance of this operation to the dictation of a priest or any other person. If he perform the Cæsaean section, he must perform it on his own responsibility and on reasonable grounds, such as would be sanctioned by professional practice. It is a delicate question whether it should in any case be performed on a living woman, as it might accelerate her death. If performed in advanced pregnancy, within a quarter of an hour after death, the child may be equally removed living. The safety of the woman should in these cases predominate over all other considerations. The operation may cause the immediate death of a woman, and this act of vivisection would not be justifiable merely for the sake of baptising a child which might die immediately after its extraction from the uterus. In France, it is much more common to operate on a living woman than in England; but the English law, which allows a husband to inherit the property of his wife, renders it a necessary condition that the child must be born or extracted while the woman is living. Hence it is to the interest of the English husband to have the child extracted from his wife before her death. Medical men have nothing to do with the theological questions connected with this subject. They are of greater importance in Roman Catholic than in Protestant countries. The text of the law in France is that a child can only be baptised after its birth, and the moment of its birth is indicated by its appearance in the light of day, whether this appearance be the result of natural or violent causes—i.e., by delivery or the Cæsaean extraction. Theologians do not admit that baptism can be performed on the child *in utero* through the abdomen of the mother; and it is a moot point whether, in partial delivery, it can be performed unless the head of the child is presenting. The Academy of Medicine have had this subject under discussion, but they have come to no formal resolution. They discourage the performance of the operation on living women; and, even in reference to the dead, they advise that it should not be performed unless the child is viable, or unless it has reached such a stage of gestation as to enable it to live after its extraction.

SCOTLAND.

A PETITION in favour of the Habitual Drunkards' Bill is being extensively signed by members of the profession in Edinburgh.

THE Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh have each petitioned Parliament against the passing of the Medical Act Amendment Bill in its present shape; and praying that, as preliminary to further medical legislation, if any further legislation be required, the whole subject be referred to a Select Committee or a Royal Commission.

ANDERSON'S COLLEGE, GLASGOW.

THE annual meeting of the Trustees of Anderson's College was held on Monday. The Managers' annual report stated that during the session Professor Bowden had enrolled one hundred and sixty-nine students. It also stated that a gentleman, who had withheld his name, had given a £10 bursary, tenable for two years, in connection with the chair of anatomy. In the minutes of the Inquiry Committee, it was stated that the subject of the proposed removal of the College buildings had been under consideration. Some of the members had thought that the whole of the buildings should be removed, while others were of opinion that any removal should be confined to the medical school. The Committee were of opinion that, before any decision was come to, a Subcommittee should be appointed to meet a

deputation from the popular evening classes and from the medical faculty, with the view of ascertaining whether there was any locality which would be acceptable to all parties interested as a site for the College buildings, in the event of the Trustees deciding that a total removal should be carried out. This recommendation was agreed to.

VIOLET POWDER.

In a recent report to the Glasgow Town Council, Dr. Russell, the officer of health, comments on an analysis of three specimens of violet powder made to ascertain whether this article was mixed with arsenic. It appeared that one specimen was pure, consisting entirely of starch; that another was mixed with hydrated sulphate of lime (plaster of Paris); and that the third was mixed not only with that material, but with French chalk. It was evident that plaster of Paris was quite opposed to the purposes for which the powder was intended, being an irritant. The motive for the adulteration lay in the difference of cost of the materials; powdered starch costing 34s. per cwt.; white arsenic, 10s.; fine French chalk, 10s.; and plaster of Paris, 2s. 6d.

THERAPEUTIC RESULTS OF EXPERIMENT.

ON Monday, the 17th ult., Professor Rutherford communicated to the Royal Society of Edinburgh a most valuable and instructive paper on the action of a large number of drugs upon the liver with reference to their power as cholagogues. This paper, which was the continuation of one published in this JOURNAL some time since, contained the record of a very large number of observations and experiments carried on in his laboratory by Dr. Rutherford, assisted latterly by M. Vignal, in virtue of a grant from the Research Fund of the British Medical Association. These experiments were made with seventeen agents in addition to the twenty-nine which had been previously employed. It was pointed out that the great majority of the conclusions arrived at were in complete harmony with clinical experience; but they had at the same time largely supplemented these results and had given many new agents to the physician, of which some had been already, and others would be still more, taken advantage of. Further, they had proved that, if a purgative did not excite the liver, it lowered the secretion of bile; and it was interesting to note that, while they had discovered many new agents which stimulated the secretion of bile, they had found almost no substance, except acetate of lead and henbane, which directly decreased the amount of bile secreted by the liver. They had carried through these experiments in the face of strong opposition; but they would, nevertheless, be amply rewarded, if they should be found to have substantially promoted the cause of scientific therapeutics. The method of observation pursued—viz., by experiments on living animals—was necessary, in order to supplement the clinical method, which necessarily failed to give the exact knowledge desired by the physician. In the debate which followed, Sir Robert Christison characterised Dr. Rutherford's communication as of the greatest importance, and as one which would hand his name down to a very distant future. Dr. Rutherford deserved the commendation of the Society for his courage in going on, in spite of a sentimental opposition, with his researches; he thought the time would come when the public would wake up from the delusion in which it now rested upon this matter. Sir Wyville Thomson said that, in his opinion, if a man in a public position felt that he had knowledge and nerve enough to perform these experiments for lessening the sufferings and prolonging the lives of men, even though they should involve a certain amount of suffering to the lower animals, he was not only entitled but bound to perform them.

IRELAND.

SMALL POX IN THE BELFAST UNION HOSPITAL.

IN the Belfast Union Hospital last week, there were forty-two cases of small-pox under treatment, five fresh cases having been admitted, six discharged, and three deaths having occurred during the week.

FEE FOR CERTIFYING A LUNATIC.

AT a recent meeting of the Tullamore Board of Guardians, Dr. Barry, medical officer of Kilbeggan Dispensary District, wrote complaining that, although an order had been made by a magistrate allowing him two guineas for examining a lunatic, yet £1 only had been tendered. He declared that, if he were not immediately paid, he would apply to the Local Government Board. The guardians, after some discussion, declined to move in the matter, the clerk being directed not to notice Dr. Barry's communication. The fee for examining a lunatic varies from one to two guineas; but when an order is signed by the magistrates, we believe the guardians are obliged to pay the amount certified for.

PAYMENT OF MEDICAL SUBSTITUTES.

LAST week we referred to a resolution passed by the Board of Dundalk Union, that each dispensary medical officer should pay for those who should act for him during his absence, except in case of sickness. Since then, the Local Government Board have intimated to the Guardians that a resolution of this kind would not be binding on them at any future meeting; and have referred them to the provisions of Article twenty-seven of the Dispensary Regulations, as to the course to be taken under the circumstances.

LIMERICK WORKHOUSE.

AT a meeting of the guardians of this Union, held on the 19th instant, a communication was received from the Local Government Board, in reference to the case of Dr. Meehan, informing them that the Chief Secretary, having gone carefully into the matter, saw no reason for interfering with the decision already arrived at by the Local Government Board, and requesting them to appoint a successor to that gentleman, who had been removed by sealed order. The election of a visiting physician was not proceeded with; but in place of this, it was resolved to elect a second resident medical officer, at a salary of £200 a year, with apartments, but without rations. There were five candidates for this appointment, but only three being nominated—viz., Messrs. Dundon, O'Connor, and McDonnell—the contest lay between these; ultimately, Dr. O'Connor was selected. For the office of non-resident apothecary, at a salary of £100 *per annum*, there was only one candidate—Mr. Furlong—who was elected. This enlargement of the medical staff was urgently required, and we are confident that the change will be conducive of much benefit to the sick poor in the Limerick Workhouse.

ACCOMMODATION FOR LUNATICS IN IRISH DISTRICT ASYLUMS.

LAST year, eight thousand one hundred and eighty-three insane poor were returned as being resident in district asylums, but suitable accommodation does not exist in them for that number, there being located in some of these institutions from thirty to forty, and even more inmates, beyond their legitimate complement. The necessity for an increased provision for these classes is undoubted, and to a considerable extent of late has been carried out. At present, additions to various asylums are in process of construction, some being nearly completed; viz., at Cork, for 250 patients; at Killarney, for 120; Waterford, 130; Limerick, 150; and at Mullingar, for 50 hospital beds; besides minor works in other asylums.

THE REV. MR. DODWELL.—Dr. L. S. Forbes Winslow and Dr. Winn have published the following report. On the 21st inst., at the request of the friends of the Rev. Mr. Dodwell, and with the special sanction of the Home Secretary, we visited this gentleman, now confined as a criminal lunatic in Broadmoor Asylum. We found him calm, collected, and perfectly rational. He alluded—as he had done on our two previous visits to him in Newgate—to his alleged grievances, and to the motives which induced him to commit a breach of the peace. He admitted that it was an unwise course of action, but contended that he was driven, by the force of circumstances, to commit the act. We were unable to detect, either from his demeanour or conversation, any symptoms sufficient to justify his detention as a criminal lunatic.

THE ANNUAL MEETING AT BATH.

THE arrangements for the next annual meeting at Bath are, it will be observed, now complete, and the names of the Presidents and officers of Sections are published. It will be seen that the programme is well filled, including the usual business and scientific meetings, and other arrangements which conduce to a successful meeting. The meeting commences on Tuesday afternoon, August 6th; on Wednesday evening the corporation and citizens entertain the Association at a *soirée*; and on Friday evening the Bristol Branch gives a *soirée* at the Colston Hall. The intervening evening is filled by the public dinner of the Association. Some very interesting excursions will be arranged to the picturesque environs of the interesting city of Bath, and to other places.

HABITUAL DRUNKARDS.

THE following suggestions for the treatment of criminal habitual drunkards are offered by Dr. John Moore, Medical Officer of the County Antrim Jail, and are likely to attract especial attention just now.

Whereas excessive drinking is a fruitful source of disease, pauperism, lunacy, and crime, it is desirable to prevent its extension and diminish its attendant evils by facilitating the control and care of habitual drunkards. Any person convicted of drunkenness four times within twelve months should be considered a habitual drunkard. The present method of dealing with habitual drunkards by sending them to prison for short periods fails in its object, and is neither punitive, curative, nor preventative. Short sentences do not permit the effects of the drink to be eliminated from the system, and their discharge tends to break down any moral reformation, should such have been begun. It prevents any system of remunerative labour being carried out in prisons, and it exposes the public to the crimes committed, which otherwise would be prevented. It would be better, in the great majority of cases, to discharge prisoners from the police-cells, when sobered, than the plan at present adopted. This would place them face to face with difficulties, which would necessitate them, in the struggle for existence, to make an effort to help themselves; whereas the temporary home and comforts provided for them in the prison remove the necessity for any such effort. Habitual drunkards should be committed like prisoners under remand, but the remand to be for a period of not less than three months. A certificate from the governor, chaplain, and medical officer of the prison, as to the prisoner's fitness for discharge should be laid before the magistrates previous to such discharge. Habitual drunkards, when discharged, should be so conditionally—as on ticket-of-leave—and be called upon periodically to furnish evidence to the magistrates that they are conducting themselves soberly and orderly. A certificate to that effect from a clergyman, or from three householders, to answer this purpose. This supervision should extend over twelve months. All punitive treatment should be withdrawn, and only the necessary restraints employed. Prisoners might be permitted to reside in registered penitentiaries, but liable to arrest on leaving them before duly discharged. All prisoners earning more, while at work in prison, than would cover the cost of their maintenance should have such sums placed to their credit, to be applied to their use after their discharge, or given to their families in the meantime, if such were dependent on them.

In a statement appended to the suggestions, Dr. Moore says that, in 1876, 2,900 individuals were committed to the County Antrim jail; there being 5,196 committals. Of these committals, 4,138 were for drunkenness and for crimes arising out of drunkenness. He also gives a table, showing that, previously to January 1st, 1876, 162 women and 66 men had been committed twenty times and upwards—the number of convictions in the case of the women amounting to 8,411, and in that of the men to 2,336. Among the women, 15 had been each committed above 100 times (100 to 226); while one man had been committed 131 times. He estimates the yearly loss of wages through committals for drunkenness (to the Antrim jail) at about £15,000; and the expense of maintenance in prison at £7,000. The money earned by prison labour last year was £926.

THE MEDICAL ACTS AMENDMENT BILL.

THE week has been marked by a curious imbroglio of irritated corporations and conflicting reformers. The Duke of Richmond and Gordon must during the late months, and now more than ever, be reminded of the fable of *Æsop*, which tells the fate of the miller who tried to please everyone when he started out with his son and a beast of burden. To please the General Medical Council, he framed his Bill on lines to which they assented; then, to please the Scottish Universities, he took out of it the clauses which provided conjoint examining boards. To please the English corporations, our Association, the majority of the Council, and the profession at large, he consented, after much negotiation, to restore the clauses which he had taken out; then, to please Mr. Stansfeld, Lord Aberdare, and others, he announced that whatever privileges of title the conjoint boards examination gave should be common to women as well as to men. Next, to please some eminent representatives of corporations which object to women obtaining time-honoured medical titles, he accepted in committee an amendment from Lord Ripon drawn from his old Bill of 1870, and to be found in the text of the present Bill of the British Medical Association (Bill No. 2 in the House of Commons), which makes the certificate of the conjoint boards the registrable qualification. This, however, it has been pointed out, virtually shunts the corporations, since not only will women be refused their titles (which was the object aimed at by the advisers of Lord Ripon and the Duke of Richmond and Gordon), but men will not require, and probably will not purchase, them. Hence further indignation meetings and conferences of all the corporations, and petitions innumerable against a clause which the Duke accepted at the hands of a former chieftain of medical reform, which is to be found in the Association Bill, and in favour of which some hundreds of petitions have been presented. Now the Duke is alleged to be once more willing to restore, at the instance of these fresh remonstrants, what he had changed at the instance of previous remonstrants.

But, when once the work of chopping and changing has gone to this extent, people begin to lose confidence, and ask who are the real leaders in medical reform, and how it is that the "eminent representatives", who are always walking in and out at the Privy Council Office and presenting ultimatums to Mr. Peel, are all at loggerheads and do not seem to know either their own minds or those of their constituents.

Meantime the question of direct representation still awaits discussion, and it may prove to be the trump card played at the last moment.

RESOLUTION OF ROYAL COLLEGE OF PHYSICIANS OF LONDON.

At a meeting of the Fellows of the Royal College of Physicians of London, on June 21st, the Medical Act Amendment Bill was discussed. The two questions which were specially interesting to the Fellows, and on which their opinion was to be expressed, were the loss of privilege of granting licenses, enjoyed since 1518, to practise medicine; and the granting of a diploma to women.

The loss of the privilege of giving a licence to practise would, it was generally thought, be less felt by the College than by many other bodies; and among other changes which would probably follow, if this Bill became an Act of Parliament, would be some alterations in the existing arrangement of fellows, members, and licentiates; that is to say, those who came to the College would seek honour rather than privilege.

As the second question had been recently voted upon, and seemed to be distinctly agreed upon by the College, the first question was submitted in the following resolution, which was adopted:

"That, in the opinion of this College, the right of licensing to practise physic granted by Royal Charter in the year 1518 should not be withdrawn, as is proposed to be done by the Bill now before the House of Commons, entitled 'The Medical Act (1858) Amendment Bill', inasmuch as the withdrawal of such powers would be prejudicial alike to the public and the medical profession."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following alterations in, and additions to, the Medical Act (1858) Amendment Bill, have been proposed by the Council of the Royal College of Surgeons of England.

Clause 4. At end of Clause, page 2, line 38, *add*, as rider, the following: "provided, as regards the first case, that if the scheme of any joint board requires that any persons passing the examinations of the board shall become affiliated to any medical corporation or corporations concerned in the scheme, it shall be the duty of such corporation or corporations to affiliate, as the scheme requires, each such person on his application, and a person so required to be affiliated shall not be registered as a licentiate under the above enactment till he shall have been affiliated by the corporation or corporations."

Clause 8, subclause 7, page 4, line 42, after "this Act" *insert* "or which the Council sees fit to accept as testimonials of special esteem on the part of the medical authority which grants them".

Clause 13, preamble, page 7, in line 20, *omit* "superintendence of the"; and in line 23, after "the like" *insert* "and further".

Clause 13, subclause 1, page 7, line 27, after "The" *insert* "medical authorities of each part of the United Kingdom, or, if their scheme so provide, the medical board acting on their behalf, subject to the approval of the"; and after "shall" *insert* "frame and may"; and after "time to time" *omit* words from "cause" to "may" (in next line) inclusive; and in line 33, *omit* "superintendence" and *substitute* "supervision".

Clause 13, subclause 4, page 8, line 2, *omit* words after "examinations" to end of subclause, and *substitute* "with such distinctions (if any) as may be judged proper between the cases of men and women, so, however, that the examinations of men and women be in all general respects equal".

Clause 14, page 8, lines 35 and 36, *omit* the words "practise medicine and surgery", and *substitute* "obtain a qualifying certificate under this Act".

Clause 14, page 8, line 42, *omit* "passing", and *substitute* "commencement".

Clause 16, page 10, line 13, after "registration fee" *insert* "and subject to the other provisions of this Act".

Clause 25. *Omit* the clause.

THE UNIVERSITIES OF SCOTLAND.

The following statement has been issued by the Scottish Universities.

I. The *Senatus Academicus* in each of the Universities of Scotland engaged in medical teaching have carefully considered the Medical Act (1858) Amendment Bill, as brought from the House of Lords and ordered to be printed by the House of Commons.

II. They would desire to point out that, during the passage of the Bill through the House of Lords, the principle of the measure as regards the registration of medical practitioners has undergone fundamental change.—1. The Bill as originally introduced, and as read a second time in the House of Lords, whilst providing for the voluntary formation of medical examining boards by the conjunction of the medical authorities, and for the granting by these authorities of diplomas admitting to the *Medical Register* those persons who had passed the examinations of this board, yet reserved to the medical authorities the right to have their diplomas registered on their own examinations, if they were granted in respect of proficiency both in medicine and in surgery.—2. After the second reading of the Bill, amendments were suggested by the Lord President, the result of which would have been to require the medical corporations in each division of the United Kingdom to conjoin to form a medical examining board, and to debar them from conferring diplomas admitting to the *Medical Register* on persons who had not previously passed the examination of this board. The universities in each division of the kingdom were permitted, but were not enjoined, to unite with the medical corporations in forming this conjoint examining board; and their graduates would have been entitled to admission to the *Register*, without passing the examinations of the conjoint board. These amendments were not, however, discussed in the House of Lords.—3. In the Bill as amended on Report, all the medical authorities in each part of the United Kingdom, both universities and corporations, were required to unite in forming a conjoint medical examining board; and no person was to be admitted to the *Medical Register* unless he held a diploma granted by a medical authority, after he had obtained from this medical board a certificate that he had shown himself qualified to practise both medicine and surgery.—4. While the Bill was passing through Committee on recommendation, and on the third reading in the House of Lords, other fundamental changes were made in its registration clauses. According to the provisions introduced at this stage, the diplomas conferred by the medical authorities are no longer to be required for registration, and persons are to be registered as Licentiates in Medicine, Surgery, and Midwifery, on simply producing a certificate of having passed the examinations of the medical board. An important excep-

tion, however, is made in favour of a large class of persons holding colonial and foreign diplomas, who are to be permitted to register without having passed the examination of the medical board, a privilege thus being granted to them which is denied to graduates of the universities of the United Kingdom.

III. Should the Bill, in its present form, become law, the relation of the whole medical profession to the medical authorities would be completely changed. At present, a medical practitioner can be admitted to the *Medical Register* only when he has obtained, after examination, a title or diploma from one of the medical authorities, either an university or a corporation; but, under the Bill, he would not be required to connect himself with any of the medical authorities, nor to obtain a diploma from them, but would be admitted to the *Medical Register* independently of these authorities on a new registrable title specially created for him.

IV. In the opinion of the Scottish Universities, the introduction of such a change would prove injurious, not only to the universities themselves, but to the best interests of the medical profession and of the public. On an average, about two hundred candidates annually receive from these universities the Degree of Bachelor of Medicine and Master in Surgery. These degrees are conferred after a more extended range of studies, and more stringent examinations than would be required from candidates for the new licence to practise. As this licence would, however, be the sole portal for admission to the *Medical Register*, students would thereby be discouraged from attaching themselves to the existing medical authorities, and from applying themselves to the more extended range of studies required from candidates for university degrees, and thus the number of highly educated practitioners would be diminished, and the public interests would inevitably suffer.

V. From the fact that three successive and fundamental changes in the registration clauses of the Bill have been made within the few weeks that have elapsed since its introduction into the House of Lords, it is obvious that the Government have experienced great difficulty in deciding in what direction medical legislation should proceed. From the opposition which is being made in various quarters to the Bill in its present form, and from the great difference of opinion existing in the medical profession as to what should constitute a registrable qualification, it would seem that the subject is not yet ripe for legislation.

VI. The Universities of Scotland would, therefore, deprecate the passing of the Medical Act Amendment Bill during the present session, and would suggest that this and the other Bills for amending the Medical Act now before the House of Commons should be referred to a select committee of the House of Commons, or to a Royal Commission, to be appointed to inquire into the working of the Medical Act of 1858.

A. GRANT, *Principal of the University of Edinburgh*.
JOHN CAIRD, *Principal of the University of Glasgow*.
W. R. PIRIE, *Principal of the University of Aberdeen*.

PETITION OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

THE following petition against the Medical Acts Amendment Bill of the Lord President has been presented to the House of Commons by the Royal College of Physicians of Edinburgh.

Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled, the Petition of the Royal College of Physicians of Edinburgh, under their common seal, humbly sheweth—

1. That a Bill has passed the House of Lords, and has been introduced into your Honourable House, intituled "An Act to Amend the Medical Act (1858)".

2. That at the time the Bill was introduced into the House of Lords, this College petitioned in favour of it, on the ground that while it amended various of the provisions of the Medical Act (1858), it left in the hands of the Universities and Medical Corporations the power of admitting candidates to degrees and licences, subject to the supervision of the General Medical Council.

3. That while the said Bill was passing through the House of Lords, changes of a most important character were introduced, some of the principal of them at the very last moment, so that the character of the Bill, as affecting the condition of the various licensing bodies, was completely changed.

4. That *inter alia* the Bill provides that a joint board shall be established in England, in Scotland, and in Ireland, and that no one can in future be admitted upon the *Medical Register* until he has passed the examination of one of these boards.

5. That the power of granting licences to practise, hitherto enjoyed by the Royal Colleges of Physicians and Surgeons, will be practically

abrogated, and that hence their professional importance and power of usefulness will be most seriously impaired, if not entirely abolished.

6. That no higher qualification granted by the Colleges of Physicians and Surgeons can be admitted upon the *Register* without the sanction of the General Medical Council, and that there is no appeal against the decision of that body.

7. That the Colleges of Physicians and Surgeons having done much for the advancement of the medical profession, by establishing museums, libraries, and otherwise, and by promoting good feeling among its members, it would be a very serious step to deprive them suddenly of the privileges they have so long enjoyed.

8. That it cannot be said that the establishment of such boards as are provided for in the Bill is necessary in the interests of the public, for it is well known that a very great improvement has, within the last few years, taken place in the examinations of the various licensing bodies.

9. That this Bill, should it become law, would call into existence a new class of medical practitioners, merely holding a certificate of qualification from a board, and not connected with any corporate body.

10. That should it appear to your Honourable House that changes are required in the organisation of the medical profession, your Petitioners would humbly suggest that, previous to further legislation, the whole subject should be inquired into deliberately, either by a Select Committee of your Honourable House or by a Royal Commission.

May it therefore please your Honourable House to take the above premises into your consideration, and to take such steps as may prevent the Bill in question from becoming law.

And your Petitioners will ever pray.

Signed and sealed in name and by authority of the Royal College of Physicians of Edinburgh, the twentieth day of June, eighteen hundred and seventy-eight years.

ALEXANDER PEDDIE, M.D., *President*.

PETITION OF THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

The following has been presented by the Royal College of Surgeons of Edinburgh.

Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled, the Petition of the Royal College of Surgeons of Edinburgh, under their corporate seal, humbly sheweth—

That a Bill has been introduced into your Honourable House, sent down from the House of Lords, intituled "An Act to Amend the Medical Act (1858)".

That that Bill, amongst other matters, deals with the question of the licence to practise medicine and Surgery, and the registration of medical practitioners, and in doing so introduces a completely new system, which virtually disfranchises all the licensing medical authorities of the Kingdom, and deprives them of that licensing power which many of them have enjoyed for centuries, under Royal Charters.

That that licensing power has been exercised, and is still exercised in such a manner as to promote medical science, and to benefit the public and the medical profession.

That the licensing bodies have been careful from time to time, and more particularly since the passing of the Medical Act, 1858, to alter and modify, as circumstances seemed to indicate, and as recommended by the General Medical Council, their curricula of study, and also their tests by examination, which have been rendered more extensive, more practical, more searching, and in every way more efficient.

That the large proportion of rejections at their examinations, averaging about one-third of those examined, as ascertained from published official tables, testifies that no undue lenity has been shown by the licensing bodies generally.

That as the result at the present moment, the status of the medical profession is very high, and the general body of medical practitioners, in town and country, whether in private practice or in the public service, are so well trained, well informed, and skilful in their profession, as to deserve public confidence.

That while it was desirable that in an amending Bill provision should be made for preventing any person obtaining admission to the *Medical Register* who had not been educated and tested in all the branches of medicine, including medicine, surgery, and midwifery, there was neither necessity nor expediency for abolishing all the old licences, and for establishing, as the Bill proposes to do, new licences in which the names of all the licensing bodies are ignored (their diplomas being set aside and declared unregistrable), and with the granting of which these bodies will, if the Bill be passed, be only very indirectly connected.

That in past times, as at present, the connection of the licentiates with the respective bodies from whom they obtained their licences was

a beneficial connection, and had a tendency to maintain the character of the profession, and that the dissociation of the licentiates from the medical authorities seems calculated to have a deteriorating influence on the profession by diminishing a wholesome *esprit de corps*, and by removing the members of the profession from the observation, jurisdiction, and discipline of the respective medical authorities.

That the result of the proposed changes on the medical corporations will be to lower the prestige of these peculiarly British bodies, which give the profession an useful measure of self-government, unknown abroad, and to cripple their resources, which have been employed for no selfish corporate objects, but, after the payment of the expenses of their examinations, have been devoted to the erection of convenient halls for their meetings and for examination purposes, and to the founding of libraries and museums, which have greatly tended to promote the progress of medical science, and have proved not only important sources of instruction to students and medical men, but also sources of both instruction and gratification to the public, who are largely admitted to the benefits of them on liberal terms.

That your Petitioners would further call attention to this circumstance, that by the proposed Bill, Foreign and Colonial degrees and diplomas are to be allowed a privilege which home degrees and diplomas are to be deprived of, and to be registered without the necessity of the holders of them having been obliged to pass as licentiates, and that there is no guarantee that any equivalent reciprocal privileges are to be granted to British registered practitioners who may wish to settle abroad or in the Colonies.

That this Bill contemplates, as already shown, great and fundamental changes, some of the most important of which, it may be stated, have been introduced into the Bill at the eleventh hour, and hastily passed in the House of Lords, without the medical authorities having had time and opportunity maturely to consider them.

May it therefore please your Honours to take such steps as will prevent the Bill in its present shape from being passed into law; and, as preliminary to further medical legislation, to refer this Bill and the other Bills for amending the Medical Act which are at present before your Honourable House, and the whole question in all its bearings, for investigation, to a Select Committee of your Honourable House, or alternatively to a Royal Commission.

And your Petitioners will ever pray.

Signed in name and by authority of the Royal College,
PATRICK HERON WATSON, M.D., *Preses*.

A petition to the same effect has also been presented by the Faculty of Physicians and Surgeons of Glasgow.

THE MEDICAL ACT AMENDMENT BILL (No. 2).

PETITIONS from the following places and persons have been presented in favour of the Medical Act Amendment Bill (No. 2) up to June 20th.

Alton; Aylesbury; Atherstone; Ashton-under-Lyne; Antrim.
Birmingham (all the hospital staff); Bakewell (Derbyshire); Brecon (2); Bideford (2); Banbury; Bridlington; Brighton; Bourn; Dourton-on-the-Water; Bexley and Bexley Heath; Bournemouth; Bridgwater; Bridgnorth; Barton-on-Humber; Bury St. Edmunds; Birkenhead; Bacup; Brecknock; Bromyard.
Croydon; Chelmsford; Chester (3); Chesham; Callington (2); Cardiff; Carlou; Chesterfield; Mr. J. Cooper (Cromer); Calne; Crickhowell; Cottenham; College of Physicians (King and Queen's) in Ireland, praying the House not to pass either of the Bills for the Amendment of the Medical Act in their present form, and that they be referred to a Select Committee.
Dungannon (2); Dukinfield; Droitwich; Darlington; Drs. Darby, Leney, and Whistler; Dover; Doncaster.
Eye and neighbourhood; East Retford.
Fareham; Frome (2); Farnham; Fowey; Faversham; Fairfield.
Glasgow; Gravesend.
Holyhead; Huddersfield; Hythe; Hereford; Hanley.
Ilfracombe.
Knowle (2); Knaresborough; Kingston-on-Thames.
Lincoln; Llandudno; Leominster; Langport; Lyminster.
Monmouth; Manningtree; Monaghan County; Macclesfield.
Northampton; North Shields; North of England Branch, President and Council of; Nuneaton.
Oswestry.
Penzance; Portarlinton; Pontefract.
Rotherham (2); Ripon; Richmond.
Southsea; Southport; Shrewsbury; St. Athans; Spalding; Sutton Coldfield; Stamford; Staffordshire; South Shields (in favour of representation of profession in Medical Council).
Thames Valley Branch (2); Tredegar; Truro; Tiverton; Torquay.
Wirksworth; Wakefield.
Yeovil (2).

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:
NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 10th day of July next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., June 12th, 1878.

BRITISH MEDICAL ASSOCIATION:
FORTY-SIXTH ANNUAL MEETING.

THE Forty-Sixth Annual Meeting of the British Medical Association will be held at Bath, on Tuesday, Wednesday, Thursday, and Friday, August 6th, 7th, 8th, and 9th, 1878.

President: M. A. EASON WILKINSON, M.D., F.R.C.P., Senior Physician to the Manchester Royal Infirmary.

President-Elect: R. W. FALCONER, M.D., F.R.C.P., D.C.L., Consulting Physician to the Royal United Hospital, Bath.

An Address in Medicine will be given by HENRY F. A. GOODRIDGE, M.D., F.R.C.P., Bath.

An Address in Surgery will be given by C. G. WHEELHOUSE, F.R.C.S., Leeds.

An Address in Forensic Medicine will be given by DOUGLAS MACLAGAN, M.D., F.R.C.P., Edinburgh.

The business of the Association will be transacted in Five Sections, viz. :—

SECTION A. : MEDICINE.—*President:* T. Grainger Stewart, M.D., F.R.C.P. Edin. *Vice-Presidents:* B. Foster, M.D., F.R.C.P.; Thos. Clifford Allbutt, M.D. *Secretaries:* Thomas Cole, M.D., 17, Paragon, Bath; Chas. Albert Hingston, M.D., 3, Sussex Terrace, Plymouth.

SECTION B. : SURGERY.—*President:* G. W. Callender, F.R.C.S., F.R.S. *Vice-Presidents:* Furneaux Jordan, F.R.C.S.; W. Stokes, M.D. *Secretaries:* J. H. Morgan, F.R.C.S., 12, Chapel Street, Park Lane, London; J. F. Parsons, Esq., Frome.

SECTION C. : OBSTETRIC MEDICINE.—*President:* A. H. McClin-
tock, M.D., LL.D. *Vice-Presidents:* James Watt Black, M.D.; H. Macnaughton Jones, M.D. *Secretaries:* Heywood Smith, M.D., 2, Portugal Street, Grosvenor Square, London; A. E. A. Lawrence, M.D., 15, Richmond Hill, Clifton, Bristol.

SECTION D. : PUBLIC MEDICINE.—*President:* J. T. Arlidge, M.D., F.R.C.P. *Vice-Presidents:* D. Davies, Esq.; Francis Thomas Bond, M.D. *Secretaries:* F. Vacher, Esq., 35, Hamilton Square, Birkenhead; W. Harling Sissons, Esq., 3, Priestgate, Barton-on-Humber.

SECTION E. : PHYSIOLOGY.—*President:* John G. McKendrick, M.D., F.R.C.P. Edin. *Vice-Presidents:* Henry Power, F.R.C.S.; P. H. Pye-Smith, M.D., F.R.C.P. *Secretaries:* R. Shingleton Smith, M.D., Clifton, Bristol; A. W. Fox, M.B., 16, Gay Street, Bath.

Honorary Local Secretary: R. S. FOWLER, Esq., 6, Belmont, Bath.

Tuesday, August 6th.

11 A.M.—Service at the Abbey. Sermon by the Bishop of Bath and Wells.

2 P.M.—Meeting of Committee of Council.

4 P.M.—Meeting of Council, 1877-78.

8 P.M.—General Meeting.—President's Address.—Annual Report of Council, and other business.

Wednesday, August 7th.

9.30 A.M.—Meeting of Council, 1878-79.

11 A.M.—Second General Meeting.

11.30 A.M.—Address in Medicine.

2 to 5 P.M.—Sectional Meetings.

9 P.M.—Soirée at the Assembly Rooms by the Mayor and citizens of Bath.

Thursday, August 8th.

9 A.M.—Meeting of Committee of Council.

10 A.M.—Third General Meeting.—Reports of Committees.

11 A.M.—Address in Surgery.

2 to 5 P.M.—Sectional Meetings.

6.30 P.M.—Public Dinner at the Assembly Rooms.

Friday, August 9th.

10 A.M.—Address in Forensic Medicine.

11 A.M.—Sectional Meetings.

2 P.M.—Concluding General Meeting.

9 P.M.—Soirée at the Colston Hall, Bristol, by the Bristol members of the Bath and Bristol Branch.

EXCURSIONS.

On Saturday there will be excursions to Longleat, Bowood, Wells and Cheddar, Malmesbury, Berkeley Castle, and (if a sufficient number of excursionists) to the Valley of the Wye.

The Honorary Secretary will endeavour to arrange for gentlemen well acquainted with the locality to accompany the parties on each excursion.

Any information will be given by the Secretary to the Excursion Committee, 6, Belmont, Bath.

Members of the Association will receive cards for the above proceedings, evening meetings, etc., at the Assembly Rooms, Bath.

ANNUAL MUSEUM.

The Tenth Annual Museum of the British Medical Association will be held at the Assembly Rooms, Bath, and will be open daily from 10 A.M. till 6 P.M., on August 6th, 7th, 8th, 9th, for the exhibition of the following objects :—

1. Latest Inventions in Medical and Surgical Instruments and appliances of all kinds.

2. New Chemicals and Apparatus; New Drugs and their preparations; and New Articles of Diet for Invalids.

3. Drawings, Diagrams, or Models illustrating the Ventilation of Hospitals and Private Dwellings.

4. General Pathological Specimens; with Photographic Models, Drawings, etc., illustrating disease; and Microscopic Pathological Specimens.

The following is a list of the Museum Committee, to any member of which communications, etc., may be addressed. Sections 1, 2, and 3: Dr. Spender, 17, Circus, Bath; F. K. Green, Esq., 3, Gay Street, Bath. Section 4: Dr. Cole, 17, Paragon, Bath; G. E. Lawrence, Esq., Claverton Street, Bath.

NOTICE TO EXHIBITORS.

Application to be made as soon as possible, at the same time giving a list of objects, and mentioning the space required. Each object to be accompanied by a printed or written description attached to the article exhibited.

All parcels to be delivered on or after July 27th, and not later than August 3rd, and to be removed within three days after August 12th. They must be addressed to Drs. Spender and Cole respectively, at the Assembly Rooms, Bath. All expenses of carriage and all risk to be borne by the Exhibitors. A card bearing the name and address of the exhibitor to be enclosed in each package, ready to be fixed on the outside.

N.B.—Specimens and Instruments which have been exhibited at former meetings cannot be received on this occasion.

All communications to be addressed to Drs. Spender and Cole, as above.

FRANCIS FOWKE, *General Secretary.*

36, Great Queen Street, London, W.C., June 25th, 1878.

SOUTH EASTERN BRANCH.

THE annual meeting of this Branch will be held at the Greyhound Hotel, Croydon, on Wednesday, July 3rd, at one o'clock; Dr. LANCHESTER of Croydon, President-elect, in the Chair.

CHARLES PARSONS, M.D., *Honorary Secretary.*

2, St. James's Street, Dover, June 18th, 1878.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, July 2nd. The Chair will be taken by the President, SAMUEL GAMGEE, Esq., at 3 P.M.

An address will be delivered by the President-elect, Dr. TIBBITS, of Warwick.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner tickets, exclusive of wine, 7s. 6d. each.

JAMES SAWYER, M.D., } *Hon. Secretaries.*
EDWARD MALINS, M.D., }

Birmingham, June 11th, 1878.

SOUTH-EASTERN BRANCH.

A MEETING of the Executive Council of this Branch will be held at the Greyhound Hotel, Croydon, on Wednesday, July 3rd, at half-past twelve o'clock precisely.

CHARLES PARSONS, M.D., *Honorary Secretary*.
2, St. James's Street, Dover, June 18th, 1878.

NORTH WALES BRANCH.

THE twenty-ninth annual meeting of this Branch will be held at the Imperial Hotel, Llandudno, on Tuesday, July 9th, at 12.30 P.M.: President—R. ROBERTS, Esq.; President-elect—WM. JONES, Esq.

The following cases are promised.

Epileptiform Convulsions, with partial Hemiplegia: Recovery. By Dr. W. Williams, Liverpool.

Gangrene of A-scending Colon; Chronic Priapism. By Dr. Roberts, Chester.

Dinner will take place at 3 o'clock. Tickets, inclusive of wine, 12s 6d. each.

T. EYTON JONES, M.D., *Honorary Secretary*.
Wrexham, June 18th, 1878.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE annual meeting of this Branch will be held at Neath, on Thursday, July 11th: J. TALFOURD JONES, M.B., President; JOHN LUSSELL, Esq. (Neath), President-elect.

Any members desirous of reading papers, etc., are requested to communicate the titles to either of the Honorary Secretaries.

ANDREW DAVIES, M.D., } *Honorary Secretaries*.
ALFRED SHEEN, M.D., }

June 12th, 1878.

METROPOLITAN COUNTIES BRANCH.

THE twenty-sixth annual meeting of this Branch will be held at the Ship Hotel, Greenwich, on Friday, July 19th, at 4 P.M.: President—SEPTIMUS W. SIBLEY, Esq., F.R.C.S.; President-elect—ANDREW CLARK, M.D., F.R.C.P.

Dinner at 6 P.M. precisely. Tickets, 14s. each, exclusive of wine.

ALEXANDER HENRY, M.D., } *Honorary Secretaries*.
W. CHAPMAN GRIGG, M.D., }

London, June 24th, 1878.

NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held at Hartlepool, on Thursday, July 25th, at 3 P.M.

G. H. PHILIPSON, M.D., *Honorary Secretary*.
Newcastle-upon-Tyne, June 8th, 1878.

BORDER COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Crichton Royal Institution, Dumfries, on July 26th, 1878: President—Dr. LOCKIE; Vice-President—Dr. GILCHRIST.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to either of the Secretaries.

R. MACLAREN, M.D., Carlisle, } *Honorary Secretaries*.
JOHN SMITH, M.D., Dumfries, }

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 24TH, 1878.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

Sequel of a Case of Chylous Discharge from the Leg.—The PRESIDENT communicated for Dr. DAY the points in this case, which had been recorded in an early volume of the *Transactions of the Clinical Society of London*. Nine years had passed since the earlier report before the patient had died from exhaustion. Dr. Wickham Legg had examined the body, and Dr. Gowers had examined the tissues microscopically. The case was one of lymphatic elephantiasis.

Erythema, with subsequent Exudation and Crusting, allied to Herpes.—Dr. SANGSTER exhibited the patient, aged 13, a somewhat delicate-looking little girl, sent to him last February by Dr. Barlow. When

first seen, she had on the back of the left hand three patches (the largest about the size of half-a-crown) of livid desquamating skin; there was also on the back and outside of the same forearm, a little above the wrist, a patch, about two inches long, of dried sero-purulent crustation, abruptly margined and without any surrounding inflammation. The patient stated that the patches on the back of the hand had had crusts on them. When seen a week later, the condition of the large crusted patch was similar to that of the patches on the back of the hand; but there was, in addition, a patch nearer the elbow as large as half-a-crown, the appearance of which was quite peculiar; it looked precisely as if some mild escharotic had been painted over the surface; for the epidermis was dry, of a buff-brown colour, and commencing to crack at the margins; there was also a halo of congestion round the destroyed epidermis. The diseased part was hot and painful when touched, and the patient complained of a burning sensation in it. Patches continued to come out on different parts of the forearm and arm, later on the left leg and thigh; they did not follow any special nerve-distribution. In April, the patient was admitted to Charing Cross Hospital, and the disease carefully watched. While in the ward, several fresh places appeared in the distribution of the descending branches of the superficial cervical plexus; there were patches over the sternum, left clavicle, and left acromial regions. They commenced as erythematous areæ, the coming of which the patient said she could foretell by the pricking and smarting in the part. Subsequently, the epidermis involved turned brown and cracked; next, serum, sero-pus, and often blood, oozed through the cracks and dried on the surface; finally, the crust fell off at the end of about ten days, leaving the part livid and desquamating. At no time was there to be seen any appearance of pustules or vesicles. While the patient was in the hospital, the temperature in both axillæ was taken night and morning. On some occasions, on the affected side it was a degree higher than on the sound side. The spine was tender. There were no other facts of interest in the case to be elicited. The disease seemed to be allied to herpes in its clinical characters, inasmuch as—1. It pursued a definite course; 2. It was associated with pain, such as that experienced in herpes; 3. On one occasion, it followed a special nerve-distribution.

Dr. IRVINE, who had seen the case in the hospital, confirmed Dr. Sangster's description of it. Observation had shown that the skin-affection was not artificially produced.

Sequel of a Case of Cancer of the Tongue.—Mr. GEORGE BROWN read a paper on the sequel of a case of cancer supervening on ichthyosis lingue, for which Mr. Brown had removed the patient's tongue in November 1876, as reported in vol. x of the Society's *Transactions*. Seven months after the operation, the stump was attacked with cancerous ulceration, which spread rapidly, notwithstanding the application of various forms of caustic. About six weeks after the ulceration commenced, the case threatened to terminate speedily, as hæmorrhage was beginning to be troublesome. Mr. Brown then ordered an application consisting tannic acid dissolved in alcohol (six drachms to the ounce) to be applied to the ulcerated surface daily. The use of this application had a marked effect in checking the ulceration, and no further hæmorrhage took place, although the patient lived seven months after its use was begun. Mr. Brown believed that the alcoholic solution of tannic acid made as above or saturated (alcohol dissolved nearly an equal weight of pure tannic acid) would prove to be very useful in cancer of the womb, cancerum oris, and ulcerations of a sluggish and unhealthy character generally. In August 1877, the cervical glands, which had been indurated for several months, began to enlarge, giving rise to a good deal of difficulty in swallowing. The patient gradually became weaker, and he died from exhaustion on January 31st, 1878, fourteen months after the tongue was excised. Before death, the glands on both sides of the neck had enlarged to a great size, giving rise to considerable dyspnoea. During the last two months of his life, the patient scarcely took any nourishment but brandy and milk. Freedom from pain was insured by frequent and large doses of morphia.

A Case in which Gastrotomy was performed for Acute Intestinal Obstruction.—Mr. CRIPPS read notes of the case. The patient, a thin anæmic boy aged 17, five months ago received a blow on the abdomen, causing intense pain, but from which he quite recovered in a day or two. After this blow, he was much troubled with constipation. Five days before admission into the hospital, whilst bending over, he suddenly experienced intense pain in the right iliac fossa. The next day, vomiting set in, which became fecal on the fourth day. On admission into the hospital, the abdomen was slightly distended, not painful on pressure, the vomiting was almost constant. Injection, inversion, etc., failed to give relief. The patient was then given twenty-five drops of opium and a hot bath. After this, he expressed himself as much relieved. Vomiting entirely ceased, and he slept for several hours; this improvement lasted nearly twenty-four hours, but on the following evening

fecal vomiting set in again more obstinately than ever, and the patient appeared to be sinking. It was then decided to open the abdominal cavity. This was done under carbolic spray, by an incision three inches long in the middle line. The finger introduced into the opening failed to detect any obstruction. The bowel was then gently drawn out from the lower portion of the wound, and passed in again at the upper in such a way that only a few inches were exposed at a time. After several feet of gut had been examined in this way, a portion of the lower part of the ileum was found tightly strangulated, by a fibrous band thrown across from the termination of the ileum to the parietal layer of the peritoneum covering the psoas muscle. The bowel was easily liberated; the abdominal wound was closed, and covered with Lister's dressing. All vomiting ceased, and six hours later the patient had a copious fluid motion. The patient did well for the first few days, when obstinate diarrhoea set in, and he died from exhaustion on the eighth day. There was no rise of temperature or tenderness of the abdomen, and the *post mortem* examination showed no trace of peritonitis. Before admission, the patient had taken large doses of purgative medicine. Attention was drawn to the ease with which the bowel was returned into the abdomen by only drawing out a few inches at a time. It was a matter of regret that opium had been given; and probably this had much to do with the fatal issue. The symptoms at the time were completely smothered by the narcotic; twenty-four precious hours were thus lost, and the operation was ultimately performed upon a patient whose vital energy had slowly sunk below a possible rallying point.

The PRESIDENT thought the case most interesting and well narrated. The surgeon's decision as to the course to be pursued by him in such cases was highly momentous, inasmuch as the patient's condition, unless relieved, tended to death.—Mr. MARSH eulogised Mr. Cripps's method for discovering the seat of the obstruction. Mr. T. Smith had adopted it in a somewhat similar case, and had easily found the obstructed portion of bowel.—Mr. BROWN thought the operation of exploring the peritoneal cavity should be more frequently attempted. It might be done, as he had accomplished it in a case of abdominal tumour without bad result.—The PRESIDENT considered it essential to the performance of the operation to know the nature of the obstruction. All surgeons had seen cases of the kind, and doubted when to interfere; and occasionally the symptoms would rapidly disappear. In a recent case seen by himself, gastrotomy had been strongly advised; but the patient had recovered without it, the administration of opiates and of large enemata having alone been practised. Such cases should make one cautious in proposing this formidable operation.—Mr. CRIPPS replied, and thought the question rested between the dangers of waiting and of operating. Statistics were not ready to hand as to the frequency of recovery when surgical interference was not attempted. In this case, an accident had preceded the obstruction, which Mr. Gay had stated to be the case in one-third of all instances of obstruction.

Incubative Period of Scarlet Fever and of some other Diseases.—Dr. MURCHISON read an abstract of a paper upon this subject, based upon observations made in seventy-five cases, and extending over a period of twenty years. Observations upon the incubative periods of small-pox, of varicella, and of measles (about ten days), whooping-cough, typhus fever (supplemental to observation published some years ago in the *St. Thomas's Hospital Reports*), enteric and relapsing fevers, were given, and with the result that in neither of these diseases was the period of incubation fixed. The eruptive fevers in this respect fell, however, into two classes: one class comprised variola, varicella, measles, typhus, enteric fever, relapsing fever, and mumps; these had a long period of incubation; whilst erysipelas, diphtheria, dengue and scarlet fever had a short incubative period. As regards scarlet fever, its period of incubation was variously given as varying from two days to one month. In a paper published by himself in the *Lancet* in 1864, he had analysed twenty-three cases, in none of which did the incubative period exceed one week. The present paper comprised twenty-five cases, in two of which the incubative period was very short; in one, it did not exceed eighteen hours, and, in the other (that of two children on board ship), it was less than twenty-four hours. In the well known case at the West End, some few years ago, where guests at a dinner-party were subsequently attacked with scarlet fever, in none of them was the incubative period longer than five days. In fact, in none of Dr. Murchison's seventy-five cases was the period longer than six days; in forty-four, it did not exceed four days; in sixteen, it did not exceed two days; and in fifteen cases was not twenty-four hours. Dr. Richardson's personal experience, Trousseau's case, in which the incubation period was seven or eight hours, and other well recorded instances of short incubative periods were given; the result being the rule that if, after exposure to scarlatinal infection, a person were sub-

jected to a week's quarantine, and showed no symptoms of having been infected, he was safe. Dr. Murchison had adopted this rule, and never known it fail. As regarded the point whether it was possible for a patient to communicate an infectious disease during the incubative period, Dr. Murchison gave some instances of small-pox which rendered it probable that such might be the case.—The PRESIDENT thought the paper very important.—Dr. WILBERFORCE SMITH thought it possible there might be varieties of the same contagium, with various periods of development.—Dr. CROCKER mentioned an epidemic of scarlet fever in a children's ward, in which, in most cases, the incubative period lasted about four days, though, in one instance, it seemed to be eight days. In one case of enteric fever, the incubative period had seemed to be only three days.—Mr. G. BROWN mentioned a case of scarlet fever with an apparently conclusive history of incubation, lasting nine days.—Dr. MURCHISON, in reply, thought that differences in the force of the fever depended more upon peculiarities of the patient than upon varieties of the fever-poison. There were many instances on record of very short incubative periods in typhoid fever.

Sudden Death after the Tapping of a Hydatid of the Liver.—Mr. BRYANT read notes of this case, which was that of a man aged 40, who for three years had had a steadily enlarging tumour in the right side of his abdomen, which had produced no other symptoms than those caused by its size. It occupied the right hypogastric, epigastric, and lumbar regions, and around the median line of the abdomen for about two inches. On January 21st, 1878, a small trocar and cannula not larger than a silver probe were introduced into the tumour, and nine ounces of clear hydatid fluid drawn off. The puncture was made below the ribs on the right side, and enough fluid was withdrawn to relieve the tension of the cyst, but not to empty it. The operation caused no pain or distress. The cannula was then withdrawn, when in less than a minute the man's face became scarlet, and he was seized with an agonising pain in his jaws. This was succeeded by a death-like pallor, vomiting, stertorous breathing, and death in five minutes. After death, an immense hydatid cyst of the size of a man's head was found beneath the liver, full of fluid slightly blood-stained. The portal vein was in front of the cyst, and the trocar had passed through one of its large branches. The brain and lungs were healthy. The heart on both sides contained uncoagulated purple blood in small quantities, and was healthy. The inferior vena cava was much obstructed by the cyst, and its walls were adherent to a very considerable extent, although there was room for a passage of blood. No opinion was given as to the cause of death in this case, although the symptoms were those of nerve-shock. No air could have entered the blood-vessels through the cannula.

Dr. MURCHISON stated that rapid death after the tapping of hydatid cysts was not unknown in other instances. In a case recently recorded, the patient, who had some peritonitis, lived only eighteen hours after the operation; whilst, in another case, recorded at page 389 of the *London Medical Record* for 1875, by M. Martineau, death resulted within twenty minutes after the operation. In that case, there was no peritonitis.

A Case of Œsophagotomy.—Mr. MAC CORMAC read a paper by Dr. McKEOWN of Belfast on this case. The patient, Mrs. G. of Glenarg, in the county Antrim, consulted him on the 16th January last; three weeks previously, she had swallowed a set of false teeth, which stuck in the Œsophagus. Various attempts had been made to displace it, but without avail. By palpation, a body could be felt at the lower part of the neck on the right side, and by passing a whalebone with a smooth metallic end down the Œsophagus, the diagnosis of the presence of a foreign body was confirmed. The patient being able to swallow sufficient fluid to keep her alive, and the body being just within reach of forceps, Dr. McKeown did not propose Œsophagotomy till all other measures had failed. By manipulation on the outside, the body was moved from the right to the left side, and seemed to have been pushed upwards. On two occasions, it had been seized firmly by long strong Œsophageal forceps. On the second occasion, most alarming symptoms showed themselves. The plate had been so firmly grasped that it might have been extracted had it been at all possible. The plate could be moved easily from side to side, but when traction was exerted to bring it upwards the patient became livid, respiration seemed to cease, she could not speak, the tongue protruded from the mouth, and the eyes stared. It seemed as if tracheotomy would be necessary, but fortunately, on relaxing the grasp and removing the forceps, all the symptoms quickly abated. All further attempts at extraction by the mouth were definitely abandoned, and Œsophagotomy was performed on the 28th January by Dr. McKeown, assisted by Drs. James and John Moore and Dr. Johnston. The incision was made on the left side, and extended along the groove in front of the sterno-mastoid from a point about opposite the middle of the thyroid cartilage to near the sternum. The cervical fascia having been cut, the carotid sheath with its contained vessels

was carefully separated (chiefly by the handle of the scalpel and director, scissors and knife being occasionally used to cut resisting bands of fascia) from the laryngeal muscles, the thyroid body, trachea, and œsophagus. The œsophagus was then opened as freely as possible, but much trouble was experienced in removing the plate, because of its size, its inequalities, and hooks. The plate could neither be moved up nor down, because of the hooks; and it was only by rotating it that it was at last freed and extracted. The plate was found to be situate entirely in the œsophagus at its beginning, the long diameter being vertical. The patient made uninterrupted progress. She was fed for a week by the stomach-pump tube. On the seventh day, the œsophageal wound was healed; and on the fourteenth day the whole wound was closed. The wound was kept scrupulously clean by syringing with solution of Condy's fluid, and also by causing the patient to swallow frequently a little weak whiskey and water with chlorate of potash, so that a part might pass from within outwards whilst the œsophageal wound was open. On leaving town, the patient could swallow quite well, and her speech was quite unimpaired. Dr. McKeown concluded by remarking that, had he known beforehand the shape of the plate, he would not have so long persevered in attempting to extract by the mouth, but should have operated at once. He thought the operation should be more frequently performed than it was. The plate was exhibited to the Society. It had three incisor teeth attached, and a place for a fourth. Its length was an inch and a half.

The President thought the Society much indebted to Dr. McKeown for his valuable paper. He himself had seen three operations of the kind. One was that of a man who had swallowed a piece of bone, and who was under the care of the late Mr. Stanley. After repeated attempts at its extraction by the mouth had failed, œsophagotomy was performed, but too late, for the bone had already perforated the œsophagus, and caused an abscess in the anterior mediastinum, which opened into the pleura. The patient eventually died. In another case, a fish-bone from the œsophagus perforated the aorta.—Mr. BRYANT thought much force should not be used in attempts to extract foreign bodies lodged in the œsophagus; he mentioned a case in which rupture of the œsophagus had been so produced.—Mr. CRIPPS mentioned a case in which a small fish-bone lodged in the gullet. Pain was experienced for a week or so, without other inconvenience. A little while subsequently, there supervened sudden severe pain, a gush of blood from the mouth, and death, which was due to perforation of the œsophagus by the bone, and consequent ulceration of the carotid artery.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, June 21st, 1878.

[SPECIAL REPORT.]

Medical Act (1858) Amendment (No. 2) Bill.—On the order of the day for resuming the adjourned debate on the second reading of this Bill, Sir T. ACLAND said: The House is aware that in another place the Government has brought forward a very important Bill affecting the medical profession. That measure has been very thoroughly discussed elsewhere, and I think, before this Bill is read a second time, coming as it does from a private source, the House should know from the Government if they consent to its being read a second time before their own Bill, which stands for a second reading on Monday next. Whether they intend to let the whole matter go before a Select Committee and so delay legislation I do not know, but I hope the leader of the Government will state in what position the House will be if this Bill is read a second time to-night, before the measure introduced by the Government is read a second time.—The CHANCELLOR of the EXCHEQUER: I would appeal to the honourable gentleman the member for Exeter (Mr. Mills) not to press the second reading of this Bill until we have had the Government measure brought before the House. I do not wish to express any opinion at present on this Bill, because I have not given it any careful consideration; but I am aware that it goes into a question of a very important character—that of the construction of the Medical Council—and I think it would be unfortunate if the measure were read a second time before we have that of the Government before us. I would suggest that there should be a further adjournment of the debate. I will move that it be now adjourned.—Mr. MILLS: I should be quite content to act on the suggestion of the right honourable gentleman. I only wish to say, in reference to the remarks that have just been made, that this Bill has now been printed three weeks. Petitions have been presented from more than one hundred medical men, I think, in various parts of the country; it has

the very general support of the medical profession, judging from what is expressed in the medical journals, the accredited organs of the profession. An opinion in favour of this Bill has been expressed by those who attach importance to the one element in this Bill that differs from the Government Bill, namely, the direct representation of the profession on the Council; and a large number of the profession attach importance to this. I certainly shall not withdraw the Bill; on the contrary, I shall persevere with it, not in any sense of hostility to the Government, nor with a desire to delay legislation. I am as anxious for legislation as the honourable member opposite (Sir T. Acland); but what I do desire is that while you are about it you should pass a thoroughly complete Bill. I hope the Government will see fit to embody in their Bill that one condition that does not appear in it—that element that provides for the direct representation of the profession on the Medical Council. My reason for preferring direct representation is not because I have not confidence in the Medical Council, for I have every reason to have confidence in it, but because we have every proof before us that there is difficulty in the way of legislation, and that it would be satisfactory to the profession to have direct representation. If the element proposed to be introduced by my Bill were agreed to by Parliament, I think there can be no doubt that it would strengthen the Council. As to the mode in which the discussion is to be taken, I agree with the Chancellor of the Exchequer that it would be desirable that this Bill should be considered with the Government measure. I will, therefore, put it down for next Monday, for which day I believe the Government Bill stands for second reading. I shall be prepared whenever the Bill comes on to defend the measure so far as it embodies the principle to which I have referred. The Bill is not a party one, as honourable members will see when I state that it has on the back of it the names of the honourable member for Chippenham (Mr. Goldney) and the honourable member for Pontefract (Mr. Childers). As I have already stated, so far as it differs from the Government Bill, it has for its object to strengthen the Medical Council by introducing a provision for the direct representation of the medical profession.—Mr. RAIKES (Chairman of Ways and Means): I would point out to the honourable member who has charge of the Bill and to the Chancellor of the Exchequer, that it will not be satisfactory to the medical profession who are largely interested in this measure, and who greatly prefer it, as I am led to believe, to that of the Government, if it should be made to dance attendance upon the Government Bill at this late period of the session. The other Bill, to which I understand this is not a rival, but rather a supplement, has passed the other House of Parliament; and this is likely, therefore, to be postponed, and come in the wake of other business that has not yet passed the House. I think the honourable member for Exeter would do well to adopt such securities as he can to ensure that his Bill shall be read a second time before we reach the second week of August. It would be undesirable that it should be brought forward at such a time, and that we should not be able to discuss it until the conclusion of the Government measure. The honourable member for Exeter is rather in command of the position as regards legislation on this question, because it will be open to him to raise the question which this Bill is intended to bring before the House on the second reading of the Government Bill by an abstract resolution; and I will ask him whether it would not be a convenient course to take the debate on the main question of direct representation when the Government Bill comes before the House. At any rate, it seems to me that it would be well that the House should have that opportunity of considering the two Bills together, and that they should be discussed at a time when the House is able to give such attention to them that the importance of the matter demands. There is a widespread feeling of dissatisfaction throughout the medical profession—whether it is just or not I do not know—with the Government measure. That it exists, has been abundantly shown by the petitions that have been presented. Before the debate closes, I hope an assurance will be given that there will be an opportunity of raising the questions brought before the House both by this Bill and that the Government have introduced.—Mr. ERRINGTON: Perhaps I may be allowed to say a word or two, as I take great interest in the matter, having had a Bill on the same subject before the House myself. I would suggest to the Chancellor of the Exchequer whether it would not be well to do what the majority of the medical profession desire, and have this intricate question referred to a Select Committee. I do think that the clause which the honourable gentleman the member for Exeter wishes to introduce into the Government Bill can hardly be fairly discussed and introduced at this time of the session. It involves an immense question, and a question which, if settled this year, will be settled for a long time. There is no doubt it would be much more in accordance with the desire of the bulk of the medical profession, if this question were thoroughly thrashed out in committee. It would then receive the attention of the profession in

the autumn, and next year a measure of a satisfactory character might be brought forward.—Sir J. MCKENNA: I would add my voice as strongly as I can in support of the suggestion which has fallen from the honourable member who has just spoken. The measure is one that should not be carried through Parliament at this period of the session, as there are considerable medical interests involved in the matter. The Colleges of Surgeons and Physicians feel strongly on the subject, and I do not think these interests could be legislated for without the parties most interested in the legislation having an opportunity of giving evidence before a Select Committee. I hope the Bill will not be proceeded with, unless it is on that understanding. I do not disguise from myself, or from the House, that the effect of referring the Bill to a Select Committee would be to pass it over for another session; but I think that, as the matter stands, it would be infinitely better that it should be passed over to another session than that we should leave the Colleges of Surgeons and Physicians under the impression that their interests had suffered through the pressing forward of the measure.—The debate was then adjourned.

HOUSE OF LORDS.—Thursday, June 27th.

Dental Practitioners' Bill.—This Bill was read a second time.

MILITARY AND NAVAL MEDICAL SERVICES.

PROFESSOR LONGMORE'S INTRODUCTORY LECTURE.

SIR,—I shall be much obliged by your kindly granting me a space in the *BRITISH MEDICAL JOURNAL* for the following remarks relative to Professor Longmore's Introductory Lecture, delivered at Netley on the 1st instant. Mr. Longmore, in his commendations of the three medical services, begins with that of the Royal Navy. "If," says he to the naval medical cadets, "you have a disposition open to be pleased, you will meet with many pleasant companions; nor in whatever part of the world you may be stationed can you ever be without abundant means of enlarging your views and extending your knowledge. Ships do not remain at sea for long periods, and medical officers of the navy spend much of their time in hospital establishments on shore." These are the professor's recommendations as regards this branch. "Pleasant companions" may, doubtless, be found, and "knowledge" can be acquired in the Royal Navy, but certainly not more easily there than in many other spheres of life and action, so that these points of consideration are by no means special as regards the naval medical service. Then, as to the length of time Her Majesty's ships remain at sea and in foreign parts, "would Professor Longmore be surprised to hear" that four years continuously away from home and family is still no uncommon period of exile for naval medical men. Take, for example, the case of those naval surgeons serving in the South Pacific, on the East Coast of Africa, and in the China Seas. I know the case of a naval medical officer who, out of a total service of, say, thirty years, has been about fifteen years at sea. Perhaps Professor Longmore does not consider these instances of complete severance from "home and hearth" as meriting his description of fer "long periods".

"If you have a disposition open to be pleased." What will those fleet-surgeons, ranking with commanders in the navy and with lieutenant-colonels in the army, who in choice of cabins are postponed to junior naval officers, say to this quaintly conditioned utterance of the Netley professor? To be satisfied with such shabby and unjust treatment, their "disposition to be pleased" must be very "open" indeed.

Turning to the Indian Medical Service, the professor pronounces this to be "a magnificent field for the surgeon, whether in its technical, tutorial, or administrative aspects." The technical and tutorial advantages need not be dwelt on, and may be granted *quantum valent*. But as to the "administrative advantages", Professor Longmore's statement is open to serious comment and easy refutation. Surgeons-general of the Indian Medical Service, whilst ranking with major-generals, receive neither those official marks of respect, nor even the mere pay, due to major-generals. This may seem a somewhat bold assertion, yet it is literally and perfectly true. A major-general proceeding on duty in India receives, at each of the district stations which he inspects, a salute of eleven guns, both on arrival and departure. The surgeon-general of a whole presidency—certainly a not less important or responsible officer—receives not a single gun, nor other becoming acknowledgment of his relative rank and office. To civilians this may seem a small matter to notice, but its significance in the service is real, and is sufficiently and very disagreeably understood and felt. As to pay, will it be believed that, whilst a major-general draws 3,500 rupees *per mensem*, the surgeon-general of the Bengal Medical Service receives only 2,700 rupees, and the other two surgeon-generals of Bombay and Madras have each to be content with 2,000 *per mensem*. That is to say, the surgeon-general of Bengal, Madras, and Bombay are paid at rates which are from twenty-five to twenty-nine per cent. less than the military rank with which theirs corresponds. These are well known and indisputable facts; and, being so, how is it that Mr. Longmore, if aware of such damaging conditions, could declare to his audience that the Indian Medical Service is so "magnificent a field in its administrative aspect"? If not aware of such important facts as these, how can Professor Longmore be considered a safe guide in thus vaunting a service whose highest rank even is neither paid nor respected as it ought to be?

Lastly, Professor Longmore comes, as it were, reluctantly yet valiantly to the discussion of a very ticklish subject—namely, that of the merits of the Army Medical Department as a career for the young surgeon. Here the ground is very rotten; and the profession, being human, naturally takes up the less deceptive standpoints, whilst wisely avoiding the more treacherous. "Many sources of gratification are open to all who join its ranks. You may feel a patriotic pride in belonging to it. Its efficiency has been so persistently decried . . . so much obloquy

has been cast upon the officers at the head of it, that uncertainty and distrust have been propagated far and wide among those who have no personal acquaintance with it. You who have had the courage to come forward in spite of these deterring influences are not likely to regret the step you have taken. In organisation, in the quality of equipment, there is every reason for believing that the medical department will be found far better adapted to meet the demands that will be made upon it than it has ever been at any previous period."

Now, mark: there is not one word in this strange lecture, not even a syllable or hint, as to the grievous maladministration and wrong-doing under which the medical officers of the army now groan. To those who have read, unstudied, "the bare statement", as contained in your issue of the 9th ultimo, and the report of the Irish College of Surgeons just issued, the above remarks of the Netley professor must be exceedingly gratifying and reassuring. In that "bare statement" there were no fewer than fourteen paragraphs of, unfortunately, but too well grounded complaint; and as each and all of these fourteen paragraphs stand unrefuted and irrefragable, but still unredressed, it will be time enough for our zealous professor to "crack up" the medical department of the army as a fair field for youthful medical talent and enterprise when the many wrongs done to those medical officers who are now in the department have one and all been duly rectified.

Professor Longmore, in his friendly feelings towards "those who are at the head of the department", ought not to forget what is due to its seven hundred and odd executive members, so many of whom have done such inestimable service to their country in all parts of the world; and this, too, strange to say, with such peculiar treatment as is described in "the bare statement" already referred to. Equally was the professor bound to avoid misinforming, even unconsciously, the profession in civil life, as to the actual state of this department. No sort or degree of mere organisation, no amount or quality of equipment, can ever suffice, unless there be the requisite complement of able and willing medical officers to work the machine, whether in peace time or in war. As to the present efficiency of these officers, let the recent scandalous breakdown at Woolwich and the Cape bear significant witness. How about said sufficiency in a possibly great and prolonged European war? "Uncertainty and distrust," says the professor, "have been propagated far and wide among those who have no personal acquaintance with the department"; but not nearly so much as among those said seven hundred and odd executive medical officers who, unfortunately for themselves, have had too much "personal acquaintance with it".

Few army surgeons have been so fortunate as Professor Longmore and his friend Sir William Muir. Promoted to administrative rank in 1858, out of their turn, by personal favour alone, each with about sixteen years' service only, and over the heads of a large number of their seniors, many of whom were not less worthy of advancement, those gentlemen may well feel satisfied with a state of things by which they, at all events, were certainly not losers. Neither has Professor Longmore nor the present director-general suffered in any way whatever by the many violations of the celebrated Warrant of October 1st, 1858, because they were promoted before its issue, and none of these unscrupulous infringements have ever affected the administrative ranks of the department. These gentlemen, therefore, never having worn the ill fitting shoe, cannot, of course, be expected to know where and how it pinches; at any rate, so well as those who have been obliged to wear it through so many long and miserable years.

There is one remorseful sort of clause towards the end of the lecture. "I do not mean to say there are no matters connected with the department which one could wish to be different from what they are." An admission which, tardy and vague though it be, is one which, in a fractional degree, saves this introductory lecture of Professor Longmore from the imputation—otherwise well deserved—of being utterly biased and misleading.—Yours very truly.

April 1878.

PEREGRINUS.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

SANITARY RESULTS.

MAKING due allowance for the exceptionally favourable meteorological conditions that prevailed last year, the reports on the sanitary condition of our largest English towns during 1877, most of which have now appeared, are full of encouragement to the earnest sanitarian. Few of them are, on the whole, more encouraging than the report for Sheffield, which has recently been issued. Sheffield has not displayed any exceptional zeal in sanitary matters. Indeed, it stands almost alone amongst large towns in having no hospital provision for the isolation and treatment of infectious diseases; neither has it applied the provisions of the Artisans' Dwellings Act of 1875 to those parts of the borough in which extortionate death-tolls are being levied continually. Yet, in spite of this apathy on the part of the Town Council, the Officer of Health of the borough and his sanitary staff have undoubtedly done useful work in recent years, the results of which are plainly evident in the well arranged mortality statistics contained in Dr. Griffiths's last report. It appears that the death-rate in Sheffield in 1877 did not exceed 21.8 per 1,000, which was 5.1 below the average rate in the borough during the preceding sixteen years; this "signifies that 1,435 inhabitants of the borough survived last year who would have died had the death rate equalled the average rate in those sixteen years". The decline in the death-rate in Sheffield has been most marked during the past three years, 1875-6-7, in which the annual death-rate has averaged 23.7 per 1,000, or 3.5 less than the average rate in the preceding fourteen years. The improved sanitary condition of the borough is evidenced as strongly by the decline in the fatality of the principal zymotic diseases and in the rate of infant mortality, as by the general

death-rate from all causes and at all ages. Infant mortality, measured by the proportion of deaths under one year to births, which in the three preceding years had been equal to 188, 176, and 169, further declined last year to 145 per 1,000. It is pointed out, however, that whereas the rate among children born in wedlock did not exceed 138 per 1,000, it was equal to 296 per 1,000 among illegitimate children. Perhaps the most striking feature in Dr. Griffiths's report is the statistics relating to the "unhealthy area" reported upon by him last year, but with which the Town Council shows no signs of dealing. The population of this area in 1877 was enumerated at 23,261 persons, and the death-rate was equal to 35.3 and 35.9 per 1,000, respectively, in 1876 and 1877. The death-rate within this area exceeded the rate in the rest of the borough by 15.4 per 1,000, signifying "that the lives of no less than 309 persons were sacrificed, during 1877, within this unhealthy area", to its unsatisfactory condition. It is not easy to decide whether, in the report before us, the evidence of necessary sanitary reform is not as strong as that of the undoubted sanitary progress in recent years. Dr. Griffiths's report should, at any rate, secure the zealous support of the Town Council in the realisation of his practical suggestions.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board of Examiners, on June 25th.

Ackery, John, Camberwell
Bennett, Frederick Joseph, George Street, Hanover Square
Burt, Walter, Weymouth
Fothergill, Edward, Darlington
Galpin, George Luck, Great Marlborough Street
Henry, Martin, King William Street, E.C.
Heppburn, Duncan S., Nottingham
Keen, Edward, M.R.C.S., Chelsea
Kennedy, John B., Scarborough
Newton, J. N. P., Liverpool
Noble, Charles J., Acton
Stevenson, Louis, Edinburgh
Taylor, Arthur, Sutton Coldfield
Underwood, Arthur S., M.R.C.S., Bedford Square
Winterbottom, Augustus, F.R.C.S., Sloane Street
Woodward, Francis H., Princess Terrace, Regent's Park

Eight candidates were rejected.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received a certificate to practise, on Thursday, June 13th, 1878.

Whitehead, George Marsden, Greek Street, Stockport

The following gentlemen also on the same day passed their primary professional examination.

Batty, William Eaton Latham, Liverpool Hospital
Clowes, Herbert Alfred, Guy's Hospital

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 20th, 1878.

Leigh, William Watkin, Llanfabon, Pontypridd
Sharples, Charles William, 25, Albert Street, N.W.

The following gentlemen also on the same day passed their primary professional examination.

James, James Thomas, Middlesex Hospital
Mehta, Masekjee Sorabjee, Bombay

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the recent monthly examinations for the Licences of the College, held on Tuesday, Wednesday, and Thursday, June 11th, 12th, and 13th, the following candidates were successful.—For the Licence to Practise Medicine.

Barrington, Frederick Albert
Beattie, Joseph Aloysius
Dick, James Nicholas
Hughes, Richard Lawlor
Macan, Jameson John

Martyn, Robert Joseph
Roberts, Frederick Joshua
Spruille, Simon Davenport
Vavasour-Lane, Alfred
Walley, Thomas Bennett

For the Licence to Practise Midwifery.

Barrington, Frederick Albert
Beattie, Joseph Aloysius
Bell, Thomas Henry
Dick, James Nicholas
Hughes, Richard Lawlor

Macan, Jameson John
Roberts, Frederick Joshua
Smith, Thomas Orde
Walley, Thomas Bennett

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At the examination held on April 24th and following days, the undernamed gentlemen, having passed the several examinations for the second half of the

Letters Testimonial, and having made and subscribed the declaration, were admitted Licentiates of the College.

Banks, Henry
Bennett, Edward
Brennan, Henry Arthur
Carson, Walter Peter
Denning, Francis Arthur
Drury, Maurice O'Connor
Fitzmaurice, Joseph
Garland, James
Gibbons, James Barry F.
Gordon, Robert
Hawkins, John Sneyd
Hughes, Richard Lawlor
Mackie, William James
M'Muon, John Robert
Mullen, Vincent French
Nicolls, Archibald John
O'Donnell, Thomas Joseph
Oldham, George St. John
O'Shaughnessy, Patrick J. B.
Poole, Walter C. T.
Philip, Alexander
Powell, Blacker Castles
Rundle, Edmund
Smartt, Thomas William
Walley, Thomas Bennett
Warnock, Robert
Westropp, Cecil George

MEDICAL VACANCIES.

The following vacancies are announced:—

BIRMINGHAM GENERAL HOSPITAL.—Assistant-Physician. Salary, £100 per annum. Applications to be made on or before the 29th instant.

BRIGHTON HOSPITAL FOR SICK CHILDREN.—House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing.

CLOUGH UNION.—Medical Officer for Ballygawley Dispensary District. Salary, £100 a year, with £15 as Sanitary Officer, and the usual Registration and Vaccination Fees. Applications to the 1st proximo.

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.—House-Surgeon. Salary, £125 per annum, with lodging.

DROGHEDA UNION.—Medical Officer for St. Peter's East Ward Dispensary District. Salary, £110 per annum as Medical Officer, £20 as Sanitary Officer, with Registration and Vaccination Fees. Personal attendance of candidates necessary on the day of election; viz., the 29th instant.

GREAT NORTHERN HOSPITAL.—Surgeon to the Out-Patients' Department. Applications to be made on or before July 2nd.

HULL GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £50 per annum, with board and lodging. Applications on or before July 8th.

LONDON FEVER HOSPITAL.—Resident Medical Officer. Salary, £200 per annum, with residence, coals, gas, and attendance.

MALE LOCK HOSPITAL, Dean Street, Soho.—House-Surgeon. Salary, £50 per annum, with board and lodging. Applications on or before July 22nd.

MANCHESTER ROYAL INFIRMARY, DISPENSARY, and LUNATIC HOSPITAL.—Ophthalmic Surgeon. Applications to be made on or before the 29th instant.

MIDDLESEX HOSPITAL.—Assistant-Physician. Applications to be made on or before July 2nd.

NEWCASTLE-UPON-TYNE BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with board and lodging. Applications on or before July 23rd.

OWENS COLLEGE, Manchester.—Junior Demonstrator in Anatomy. Salary, £100 per annum. Applications on or before July 15th.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY AND SEAMEN'S INFIRMARY.—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, gas, firing, and attendance. Applications to be made on or before July 1st.

SALFORD AND PENDLETON ROYAL HOSPITAL.—District Surgeon. Salary, £80 per annum, with board and lodging. Applications on or before July 2nd.

ST. MARYLEBONE GENERAL DISPENSARY.—Honorary Physician. Applications to be made on or before July 1st.

SOUTH DEVON AND EAST CORNWALL HOSPITAL.—House-Surgeon. Salary, £80 per annum, with board. Applications to be made on or before July 8th.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and residence. Applications on or before July 1st.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

WHITMARSH.—On June 27th, at No. 1, Clapton Square, Lower Clapton, the wife of John Lloyd Whitmarsh, L.R.C.P., of a daughter.

MARRIAGE.

ROTH—BRIGHT.—On June 20th, at Wanstead Meeting house, Leytonstone, Essex, Bernard Roth, F.R.C.S. Eng., eldest son of Dr. Roth, of Wimpole Street, London and Gloucester Place, Brighton, to Lillie, third daughter of the Right Honourable John Bright, M.P., of One Ash, Rochdale.

THE COLLEGE OF SURGEONS' DINNER.—At a meeting of the Stewards of the annual festival of the Fellows of the Royal College of Surgeons on Tuesday last, the subject of the election of Chairman was discussed. It was decided to break through the rule heretofore observed, of electing alternately to that post a metropolitan and a provincial Fellow, in consequence of the difficulty of obtaining one of the latter of sufficient standing. On a recent occasion, it will be remembered, they were so fortunate as to secure a gentleman representing the army, and, at the same time, a provincial Fellow, viz., Surgeon-General T. Longmore, C.B., of Netley. As representing the Royal Navy, the Stewards have not yet been able to find one of sufficient standing; they have, accordingly, elected Mr. John Gay to occupy that position in 1879, in succession to Mr. F. Le Gros Clark, who will take the chair on the 4th proximo.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—London, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 3 P.M. Specimens and Microscopic Sections illustrating changes in the Uterus resulting from Pregnancy, by Dr. John Williams. Papers: Dr. John Williams, "On some Changes in the Uterus resulting from Pregnancy, and on their value in the Diagnosis of Parity"; Dr. A. W. Edis, "Case exemplifying the difficulty of Diagnosis in Abdominal Tumours"; Mr. Brewer, "Labour complicated with Ovarian Cyst".

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

STAFF-SURGEON and **NEMO**, not having signed the by-laws, will not be allowed to record their votes. They can, however, obtain tickets for the festival on application to the honorary secretary, Mr. B. T. Lowne, F.R.C.S., Colville Gardens, Bayswater.

A MIDDLE-AGE EXHORTATION TO TEMPERANCE.

A CORRESPONDENT sends us the following interesting quotation from William Langland's *Vision concerning Piers the Plowman* (written about 1360 or 1370).

"And drink whon thou driuest; but do hit not out of Resun,
That thou worthe be worse whon thou worche scholdest."

Dreede dilitable drinke; And thou schalt do the better;
Mesure is Medicine, thaugh thou much yerne.
All nis not good to the gost that the bodi lyketh,
Ne lyflore to the licam, that leof is to the soule."

This may be rendered in modern English as follows.

"And drink when thou art thirsty; but do it not out of reason,
Lest thou be worse for it when thou shouldst work.
Dread pleasant drinks; and thou shalt do better.
Moderation is medicine, though thou desire much.
All is not good for the spirit that the body liketh,
Nor sustenance to the body, that is pleasing to the soul."

SIR,—Can any of your readers refer me to any medical or other circumstantial account of the death of the Princess Charlotte, or of the case of Lady Flora Hastings—*I am, etc.*,
GYNÆCOLOGIST.

QUALIFICATIONS IN THE ARMY AND VOLUNTEER SERVICE.

SIR,—Am I right in saying that all medical officers of the army must have a qualification both in medicine and surgery? Is it necessary that a surgeon or medical officer, or assistant-surgeon to a battalion of rifle volunteers, be also doubly qualified?—Your obedient servant,
VOLUNTEER.

M.D.—Can any of your readers recommend any book which describes the treatment of the diseases of advanced life, in a scientific manner, and in accordance with modern pathology?

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, Twelve o'clock.

OUR CORRESPONDENT AT ERZERUM.

OUR readers will be glad to hear that Mr. Casson, our "special correspondent" with Chazi Moukhtar Pasha's army during the recent campaign in Armenia, whose able letters from head-quarters must be still fresh in the memory of many, has received an autograph letter from that General, unsought for, but expressing his regret at having seen an account of the unfounded charges brought against Mr. Casson by Captain Norman, the *Times* correspondent, in his recently published work on Armenia. Moukhtar Pasha in this letter entirely corroborates our special correspondent's statement, "as made before Vice-Chancellor Malins," "that he was strictly fulfilling his duty in leaving Kars", where he had been detained by the grave illness of his colleague, and "attempting to rejoin the Turkish army", to whose head-quarters he was attached. The circumstances under which he rescued his sick colleague were detailed in our special correspondent's letter published on the 29th of December last. This General, moreover, states that he gladly avails himself of this opportunity of bearing his testimony, coupled with a sense of gratitude, to Mr. Casson's brave and faithful discharge of his perilous duties whilst with him in Armenia. Captain Norman can now hardly fail to regret having allowed himself to be misled into the publication of unfounded charges against a professional man who nobly fulfilled duties of great peril, and involving much hardship and self-sacrifice; nor is his position improved by the fact, that he acknowledges obligations for kindly and effectual professional service rendered to himself in a fraternal spirit. The grateful and spontaneous testimony of the Turkish General shines by contrast.

THE MEDICAL ACTS AMENDMENT BILL.

SIR,—If I am correctly informed, one of the clauses of the Duke of Richmond's Medical Bill, if it pass through Parliament in its present form, will prevent licentiates of a college of physicians from using the title of "Doctor", and render them liable to be prosecuted for doing so. This is a very serious matter for those practitioners who for many years past have assumed the title on their door-plates and cards. The question of titles has been discussed in the medical journals times without number, and always with the same result—to leave it an open question; but no one ever thought of a legally qualified and registered practitioner being prosecuted for calling himself "Doctor". If you will publish this note in the *JOURNAL*, it will draw the attention of licentiates to the danger to which they may be exposed, and I hope the Council of the Association will at once direct their attention to the subject. What a triumph for a quack or a prescribing chemist to witness the prosecution of a qualified practitioner while he escapes scot-free, so long as he does not call himself "surgeon"!—Your obedient servant,
ALQUIS.

WHO IS A PHYSICIAN?

SIR,—In answer to the query by "In Doubt" on the above ever unsatisfactory subject, I would suggest that as a person holding the M.D. degree only could be entitled to be called a "Physician" merely by courtesy, so also courtesy should give to the holder of the F.R.C.P. diploma the right to call himself "Doctor". I took my degree when in America, in the autumn of 1871; but, under present rules, am not permitted to register the M.D. there obtained, though I consider, apart from this, I am fully warranted in calling myself "Doctor", having obtained the fellowship of an honourable and high standing college.—Yours, etc.,
F.R.C.P. EDIN.
June 22nd, 1878.

HAY-FEVER.

SIR,—Any of your readers who know of any remedy they have found useful for this disease, would confer a favour upon myself and several sufferers whom I have failed to cure after trying all likely remedies, by communicating their knowledge through your pages. As time is just now important, any gentleman who knows of a remedy and would at once communicate direct with me, would greatly oblige; and I would, after reading, forward his note to your *JOURNAL*.—Yours very truly,
75, Lever Street, Manchester, June 1878.
M.D.

PURCHASE OF PRACTICE: UNION APPOINTMENTS.

SIR,—Will you kindly give me your opinion in your next issue to the following query? I purchase a country practice, with two union districts attached, with the usual clause in the agreement that a sum of money is to be deducted from the purchase money, equivalent to the annual value of such appointments, in case I do not succeed in obtaining them. One district is £90, without extras; in the other £37. Are the extras part and parcel of the actual appointments (the yearly value of which is of course uncertain, as they may not return a single shilling, or it may be, several pounds), and to be estimated in the deduction aforementioned?—Yours faithfully,
June 17th, 1878.
A. B.

* The average annual value of the extras, if it can be agreed, is, we presume, a part of the remuneration for such appointments, which is to be taken in consideration.

THE MEDICAL ACT AMENDMENT BILL.

SIR,—Should the proposed Medical Bill become law, it strikes me that there will be a difficulty in deciding how to style the new diplomates. Probably "Medical Licentiate" would be an appropriate title to give them, and its abbreviation M.L. would not clash with any existing affix that I know of, and, in itself simple, would soon be understood by the public. University graduates will, of course, one and all, object to the new comers styling themselves "M.D." or using the term "Dr."—*I am, etc.*,
CHAS. MCDJEWELL, M.D. Dub., F.R.C.S.I.
Carlow, June 18th, 1878.

CHRYSPHANIC ACID STAINS.

SIR,—On reading Dr. Ogilvie Will's paper on "Chrysophanic Acid in Psoriasis", contained in your *JOURNAL* of June 15th last, I notice that he mentions, as one of the disadvantages attending its use, the stain it leaves upon the skin after application, and he seems to be of opinion that time is the only remedy to remove this. Allow me to say that, while at one of our metropolitan dispensaries, a similar case came under one of the physicians' notice, of a stain left on a lady's hand, which he fruitlessly tried to remove, till benzole was suggested (as that substance is used to hold the acid in solution during the manufacture), and the results were highly satisfactory. Hoping this remark to be worthy of the notice of the medical profession, I am, sir, yours obediently,
A. E. WOODS.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

ALCOHOLIC DRINKS.

SIR,—Any one studying the current literature of the day on the subject of alcohol cannot help being struck with the absolute laws that are laid down. This is not the way to cope with the evil. We must not make dogmatic assertions—that every glass of whisky or brandy, port or sherry, or even of good beer, which an individual takes is but knocking one nail the more into his coffin. This only weakens our position. The position we, as practitioners of medicine, should take, and take firmly, is moderation. There is no use in preaching the banishment of alcohol altogether to the regions of poisons, placing it on a par with strychnia, arsenic, etc., as we have the experience of ages that an ordinary healthy man may take a certain daily quantity with his food without undermining his constitution or shortening his life; and to override this single fact will require proofs stronger than any yet brought forward. If we have no better arguments to make use of than that, because animals only drink water, therefore men should only drink water, we had better be silent. Let us all face this fact, that we cannot, if we wished, hope to abolish the use of alcohol; therefore, let us use our utmost endeavours to keep it within bounds; let the whole weight of our profession be brought to bear against morning drinking, against drinking between meals, and against drinking at any time while the stomach is empty. Let us allow that a glass of beer, a glass or two of wines (even the stronger ones), or a glass of spirits well diluted with water, taken with the midday or evening meal, may be taken for a lifetime without injury by the vast majority; let us even admit that cases have been taken for years without which a few extra glasses of wine after dinner have been taken for years without apparent harm, and people will then be ready to listen to us and to meet us half way; and if every medical man throughout the kingdom would do his utmost to prevent the between-meal drinking, or "nipping," as it is called, we should do more good to the community at large than all the rampant teetotal lectures that have ever been delivered. *Punch* sees this evil, and hits it in his usual happy way. He portrays an octogenarian, who always makes a point of being civil to rich young men whom he sees drinking sherry and smoking cigars just before dinner, as they may then, perhaps, remember him in their wills.

With regard to legislation, let us not waste our time on Permissive Bills or Gothenburg systems, but fight night and main against adulteration. Let us, as a body, impress upon the legislature the great evil that is wrought by this adulteration, and do all we can to get the present laws made more stringent, and to get some competent person appointed in each district to see that they are enforced, and not slurred over as at present.

With regard to alcohol in disease, when and how to use it, let every man use his own judgment in the same way as for any other medicines. If any one imagine that our profession is convinced of its uselessness, and is abolishing its use, let them, as I have lately done, visit in turn our great metropolitan hospitals, and I think it will be found that alcohol, in one form or another, is in more common use than all the other remedies both in and out of the *Pharmacopœia* put together.

In conclusion, let me say that if our profession will concede three points, viz.—1. That moderate quantities of alcoholic drinks may be taken with or immediately after midday or evening meals without acting injuriously; 2. That all alcoholic drinks taken between meals during the morning or while fasting do act injuriously; 3. That of the chief causes of injury to health, especially amongst the lower orders, is the adulteration, which is allowed to pass unheeded—I say that if we, as a body, concur on these three points, and impress our opinion firmly upon the public, or, what is of more importance, get the public to act upon them, we shall have made a great stride in advance.—I am, etc.,

CHAS. F. HUTCHINSON, M.D.

BONDS WITH ASSISTANTS.

SIR,—For the information of "Medicus," and those whom he thinks likely to be interested in replies to his inquiries in your issue of the 8th instant, we beg to submit answers in juxtaposition with his questions.

Query 1.—What are the precise terms or items in a bond between master and assistant, in which the former binds the latter not to practise after he has ceased employing him?

Answer 1.—A precedent for such a bond may be found at page 401 of Glenn's *Manual of the Law affecting Medical Men*.

Query 2 and 3.—Does it require a lawyer to make the bond every time an assistant is changed? If so, what is the usual charge?

Answer 2.—Anybody may be his own lawyer and draw the bond himself, and so save the guinea charge which a certificated solicitor would make for it. Let, however, such a hold "Medicus" bear in mind the truth of the old adage, which present daily experience illustrates, "The man who is his own lawyer has a fool for his client." But if, in spite of the warning, any such reckless Æsculapius, with the help of Glenn, will run the risk, let him accompany the act by a transfer from one waistcoat pocket to the other of a fee of one guinea, so as effectually to neutralise the sin of cheating the educated professional expert.—Yours faithfully,

SLADDEN, SON, AND TURNER.

44, Bedford Row, W.C., June 13th, 1878.

MEDICAL TESTIMONIALS TO QUACK MEDICINES.

SIR.—Surely the use of the name of the late Sir C. Locock in the accompanying advertisement must be an impudent forgery. If so, there must be some way in which such an impostor as its author is can be dealt with and punished. Probably the name of the firm is as much a counterfeit as the other, and intended as a means of trading on another still more illustrious name. It is really time that the whole subject of quack medicines should be taken in hand; and the British Medical Association would be doing good service if it would undertake to move in it.—Yours truly,

June 1878.

. The advertisement to which F. T. B. refers is headed "Strength for the weak, and is issued by M. Liebig and Co., 17, Essex Street, Strand, London, and at Paris and New York." It sets forth the merits of "Liebig's Silver Salt" and "Liebig's Pearls of Strength," and contains the following.

"*Testimonial from Sir Charles Locock, Physician to the Queen.*—I have seen the effects of Liebig's Pearls of Strength, and regard them favourably as a general family medicine, pleasant to take, and beneficial in their action. I have also subjected the Silver Salt to some very severe tests, and find that the hot solution draws out pains and aches in a few minutes, and is, without doubt, the most powerful invigorator known, and these two remedies appear to me to fully bear out all that is claimed for them.—CHARLES LOCOCK, M.D."

The use of the name of Sir Charles Locock is obviously unauthorised, and the whole advertisement is one which we are surprised to see admitted into respectable papers.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

HYPODERMIC INJECTION OF QUININE IN PHTHISIS.

SIR,—I should be glad to be informed as to any experience there may be of the effect of the hypodermic injection of quinine in checking the night-sweating of phthisis. In a patient, male, aged 37, in whom excessive sweating had recurred several times, with high evening temperature (103 deg. Fahr.), and the general state such that I had given up all hope of his recovery—an opinion concurred in by a consulting physician, who saw him—I had used quinine in full doses with marked effect on the temperature; but it had produced such annoyance in the head, that the patient begged to be spared its further administration. I was consequently induced to try the drug hypodermically, being aware that these unpleasant symptoms do not accompany its exhibition in this way. I injected one grain and a half night and morning, and was surprised to find the second evening not only the temperature reduced two degrees, but the onset of the sweating postponed several hours. It has not recurred in the three weeks which have since elapsed. The temperature was fully controlled by the quinine; requiring, however, so much as six grains daily for some days. The amount was gradually lessened, and it is now discontinued, a mixture of three grains three times daily by the mouth being substituted. Not only, too, has the sweating ceased and the temperature moderated, but the patient's state was improved in every particular, except perhaps in the amount of sputa, which is very copious. He is now very cheerful, and has to-day taken half a roast chicken for dinner. A nasty bed sore, which had formed on the right great trochanter, has finally healed.

As my experience is based on but a single case, I should be glad to learn that of others; and if the treatment be new—as it is, so far as I am aware—that it be put to the test by those who have more opportunity. It has acted in my case like a charm, and in all probability has saved a life. I should add that the phthisis, which chiefly affects the apex of the left lung, supervened on an attack of pneumonia (single on the right side) in March last.—I am, etc.,

A. G. B.

DR. JAMES ANDERSON (Ulverstone).—Reports on the *technique* of Sayre's treatment will be found in the recent discussions of the Clinical Society in the JOURNAL, but the most complete account is to be found in Dr. Sayre's book on the subject, published by Smith, Elder, and Co., London.

MENSTRUATION OF THE WHALE.

A CORRESPONDENT writes:—The whale Beluga, who died last week at the Aquarium, menstruated so profusely a few days before her death, that the tank in which she was placed had to be emptied twice or thrice on account of the water being contaminated with blood.

T. E. S.—An L.S.A. is at present eligible for the appointment of medical officer of health, without possessing any other qualification.

VOLUNTEER SURGEONS.

"DRUM-MAJOR" asks: What is the amount of the government grant to volunteer rifle corps when the acting surgeon to the corps has passed the volunteer medical examination?

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News; The Yorkshire Post; The Coventry Herald; The Wisbech Advertiser; The West Briton and Cornwall Advertiser; The League Journal; The Liverpool Daily Post; The Newport and Drayton Advertiser; The Exeter and Plymouth Gazette; The Chicago Times; The Manchester Guardian; The Berkshire Chronicle; The Glasgow Herald; The Oswestry Advertiser; The Edinburgh Daily Courier; The Middlesex County Times; The Liverpool Evening Albion; The Daily Courier; The Kelso Chronicle; The Fife Herald; The Merthyr Express; The Carnarvon and Denbigh Herald; The Surrey Advertiser; The Stroud News; etc.

. We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Burdon Sanderson, London; Mr. T. Spencer Wells, London; Mr. J. Farrar, Morecambe; Mr. W. J. Coulson, London; Dr. J. M. Bennett, Liverpool; Mr. Davy, London; Mr. W. P. Swain, Devonport; Mr. Callender, London; Mr. J. C. Renton, Glasgow; Justice, Dr. Burgrave, Paris; Dr. A. E. Aust Lawrence, Clifton; M.D., Manchester; Dr. F. A. Pope, Dublin; Our Paris Correspondent; Dr. Pancoast, America; The Registrar of the General Medical Council; Dr. Cole, Bath; Dr. Bushell Annington, Cambridge; Dr. P. H. Bird, London; Dr. Clifford Allbutt, Leeds; Dr. Prall, West Malling; Dr. de Pietra Santa, Paris; Dr. R. Bruce Low, Helmsley; Dr. Duffield, London; Mr. Alban Doran, London; Mr. J. W. Phillips, Carmarthen; Mr. Balmanno Squire, London; Mr. Gruse, Melksham; Dr. Macnaughton Jones, Waterford; The Secretary of the Obstetrical Society; Mr. A. E. Durham, London; The Registrar General of England; Dr. A. S. Taylor, London; Dr. James Gairdner, Crieff; Dr. W. G. Coombs, Winford, Bristol; Dr. Griffiths, Sheffield; Dr. J. Anderson, Ulverstone; Dr. Walker, Peterborough; Mr. Whalley, Bradford; Dr. W. Bird, York; Dr. Lee, London; Dr. Tripe, London; The Registrar General of Ireland; Our Edinburgh Correspondent; Dr. Arthur Edis, London; Dr. John Williams, London; Mr. C. J. Corder, Brighton; Mr. W. H. Wright, Derby; Dr. W. A. Elliston, Ipswich; Mr. William Adams, London; Our Dublin Correspondent; Dr. Lory Marsh, London; Mr. E. Bellamy, London; Mr. Grayson, Sheffield; Dr. Norman Kerr, London; Dr. W. A. Sturge, London; Mr. W. Teevan, London; Mr. Summerhayes, Ramsey, Isle of Man; Mr. T. E. Smith, Stone; Aliquis; Janitor; Dr. Fairlie Clarke, Southborough; Dr. D. Christie, Carrigat; etc.

BOOKS, ETC., RECEIVED.

A Practical Treatise on Aural Surgery. By H. Macnaughton Jones, M.D. London: J. and A. Churchill. 1878.

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